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Teacher Retention in the Pacific Alliance for Catholic Education Residency Model

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Teacher Retention in the Pacific Alliance for Catholic Education Residency Model

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Abstract

Teacher attrition and retention has been a challenge that the educational world has faced for many years. Educators have tried to combat the attrition rates of teachers through the creation of meaningful induction programs and teacher training programs. Residency models are one form of a teacher training program whereby institutions of higher education partner with school districts to train new teachers in a clinical setting as they earn their state certification and teaching license.

The University of Portland (UP) has a Catholic residency program known as the Pacific Alliance for Catholic Education (PACE). PACE began in 1998 with 3 graduates, and its 2015 graduating class had 23 graduates. This study is the first analysis of the PACE program. This study analyzes the retention rates, the demographics of graduates who stay in teaching, and the impact of PACE's Three-Pillar Support Program (Academic Learning, Professional Service, and Community Living). This mixed-method study used a Qualtrics survey to analyze the retention rates and coded Reflective Exit Papers written by PACE participants upon graduation.

This study found that 88.29% of graduates were teaching in the first year after graduation, 84.81% of graduates were still teaching three years after graduation, and 81.34% of graduates were still teaching five years after graduation. It also found that of the graduates that stayed in teaching, 92.86% stayed in Catholic school teaching in the first year after graduation, 85.29% stayed in Catholic school teaching in the third year after graduation, and 85.71% stayed in Catholic school teaching five years after graduation. Finally, it found that the Three-Pillar Support program had a major impact

on PACE teachers' decision to stay in teaching, with Academic Learning and Professional Service having the biggest impact on graduates' decisions to stay in teaching, and Community Living having the biggest impact on graduates during their time in PACE.

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Chapter One: Statement of the Problem

The high attrition rate of teachers is expensive and has a detrimental effect on student achievement. The Alliance for Excellence in Education (2005) determined that the annual national cost to replace teachers who left or moved from teaching positions was $4.9 billion (Barnes, Crowe, & Schafer, 2007). Students achieve more when their teachers have at least three years of teaching experience. Studies have shown that teachers who are well prepared have the strongest correlation on student achievement in math and reading, even more so than the background factors of poverty, language, and minority status (Darling-Hammond, 2000). Students scored lower in both language arts and math at grade levels where districts have had trouble staffing classrooms due to turnover (Ronfeldt, Loeb, & Wycoff, 2013). This staffing problem is often due to a "revolving door" with large numbers of teachers leaving before retirement (Ingersoll, 2003).

There have been a variety of different reports and estimations on new teacher attrition. Ingersoll and Smith (2004) analyzed national Schools and Staffing Survey (SASS) data and reported that 29% of first-time teachers either moved or left teaching at the end of their first year teaching. A more recent longitudinal study on attrition and mobility of beginning teachers in elementary and secondary schools found that for teachers beginning in the fall of 2007:

1. 10% of all beginning teachers did not teach in 2008-2009;
2. 12% did not teach in 2009-2010;
3. 15% did not teach in the 2011-2012;

4. 17% did not teach in 2012-2013 (Gray & Taie, 2015).

There are many different reasons that teachers leave schools. Some teaching jobs were temporary, some teachers were asked to leave, and some teachers decided to leave based on their working conditions. New teachers generally struggled with "reality shock, the lonely struggle to survive, and a loss of idealism" (Feiman-Nemser, 2003, p. 26). Many teachers left the profession because they felt lost, isolated, and at times, extremely lonely (Feiman-Nemser, 2012). When considering the demands of new curriculum and ever-changing assessments, some teachers often "feel lost at sea" as they struggled to deal with the demands of teaching and preparing content for their day (Kauffman, Johnson, Kardos, Liu, & Peske, 2002). New teachers expressed that they had both an intense amount of learning to accomplish and an intense amount of professional loneliness (Feiman-Nemser, 2012).

One of the best ways to support new teachers has been for more experienced educators to assist new teachers as they transition into the world of teaching (Ingersoll & Smith, 2004). Teachers that have been provided with multiple supports were less likely to move schools or leave the teaching occupation after their first year. One of the most common ways to support new teachers is through the creation of meaningful and purposeful teacher induction practices that welcome teachers into a collaborative professional learning community (Feiman-Nemser, 2012). These practices have helped new teachers gain the confidence they have needed to succeed and to know that their students are learning. Patterson (2005) found that a large number of teachers receiving the support of induction and mentoring were still teaching after five, six, and

seven years, and that the teachers left because of desperation or frustration. New teachers have not left "because of the challenges of teaching, the long hours, or the low pay. They left because they believed that they were in impossible situations in which they would never experience success or career satisfaction" (Patterson, 2005, p. 21).

Residency Based Models

One type of teaching training program that has been used to combat low teacher retention rates was the use of a residency program. Residency models trained uncertified teachers by working with a mentor on the job (Papay, West, Fullerton, & Kane, 2012). Typically, members in residency models were also completing a set of coursework that leads to both state certification and a master's degree from a partner university (Papay et al., 2012). However, not all residency models have shown promising teacher retention rates.

One well-known classic residency model is Teach for America (TFA). A recent TFA study found that while 60.5% of teachers continued to teach past their two-year commitment, only 35.5% of TFA teachers were still teaching four years past their two-year commitment (Donaldson & Johnson, 2011).

Another model is Urban Teacher Residency (UTR). This is an intensive teacher preparation program where pre-service candidates complete master's degree coursework in education while teaching in an urban school. The candidates in an UTR were paid a stipend while learning to teach under the watchful eye of expert K-12 teachers (Berry, Montgomery, & Snyder, 2008). An examination of the retention rates

of an UTR in Boston found that the retention rates did not dramatically decline when their commitment had been fulfilled (Papay et al., 2012). In fact, the retention rate for teachers in the Boston Teacher Residency program showed that 88% of residents stayed to teach after two years, and 75% stayed to teach after four years (Papay et al., 2012).

Teachers prepared in faith-based residency models may fair better in terms of their attrition rates. These models support new teachers differently by helping them feel invested in the school's community. The University Consortium for Catholic Educators (UCCE) was a consortium of 15 universities that helped to provide qualified teachers in Catholic schools through a faith-based residency model. This consortium originated in 1993 with the Alliance for Catholic Educators (ACE) program which was a joint initiative created by the University of Portland (UP) and the University of Notre Dame (The University of Portland, 2000). Graduates of the ACE program earned a Masters degree from the University of Portland, and UP School of Education professors taught the ACE students until UP started its own independent residency model in 1998 known the Pacific Alliance for Catholic Education (PACE).

The key aspect of the UCCE program was that its new teachers lived in intentional Christian communities in order to support each other, pray together, and share in household responsibilities (Davis & Kennedy, 2009). These communities helped new teachers support each other and provided them with the energy needed to successfully continue to teach throughout the first two years. The support offered

UCCE teachers by their own teacher education professors and UCCE staff members contributed to their success both during their two years in the program and throughout their entire educational experience. All of the schools in the UCCE program shared the central idea of the three pillars of ACE: Community Living, Academic Learning, and Spiritual Growth.

Retention rates for UCCE program graduates have been high; with ACE reporting that over 70% of its graduates stayed in Catholic education after graduating from the program (Walch, 2012). In 2009, Davies and Kennedy examined the attrition rate of 439 UCCE graduates across all its schools. It similarly revealed that over 70% of graduates either remained in their Catholic school placements or became employed at another Catholic school. When looking at graduates one year after program completion who were still teaching (this included both public schools and Catholic schools), the percentage of graduates staying in teaching moved up to 93%. However, studies examining retention in these Catholic residency-based models were limited, and the one study completed focused on all 15 Universities combined. The purpose of this investigation was to identify the patterns of retention in the University of Portland's PACE program.

The University of Portland's PACE program was founded in 1998. Graduate student enrollment had increased annually. While the PACE Director at the University of Portland estimated that 90% of PACE teachers continued to teach after their two-year commitment, these numbers have never been formally analyzed.

Throughout the school year, PACE teachers work in Catholic schools and live together with three to six individuals in each community. After acceptance into the PACE program, PACE students spend three summers at the University of Portland campus earning a graduate degree in Education. During the academic school years, PACErs teach full time in assigned Catholic schools throughout the West Coast of the United States and take one or more courses to fulfill degree requirements. In addition to the courses offered each summer at the University of Portland, the program offers a formation course twice a week during the first year of teaching to learn about community living and spiritual development. The program also has scheduled retreats throughout the year that consisted of a three-day retreat in the summer, a three-day retreat in the fall, and a one-day reflection day in the spring. Throughout the school year, PACE teachers work in Catholic schools and live together with three to six individuals in each community (Pacific Alliance for Catholic Education).

The PACE program at the University of Portland adapted the three-pillar support system of ACE with a variation. While ACE focused on community living, Academic Learning, and Spiritual Growth, PACE's three-pillar support system has been defined as Community Living, Academic Learning, and Professional Service. Unlike ACE, PACE folded the Spiritual Growth pillar into the Community Living pillar.

The following is the theoretical framework for this study. This study is based on the theoretical framework of the situated learning theory (Lave & Wenger, 1999) and the importance of a mission in a community.

Theoretical Framework

Many of the new teachers who join the teaching profession have a desire to work with and not just next to their fellow colleagues (Johnson, 2004). The prospect of being isolated in a classroom troubles many new teachers (Johnson, 2004). PACE documents describe how PACE was designed to create a community where teachers feel invested in their jobs in under-resourced Catholic schools (Pacific Alliance for Catholic Education). The PACE program aimed to support new teachers through a comprehensive program which helps their new teachers, known as apprentices, feel comfortable in their new profession. In this model, PACE teachers have been trained by master teachers as they were learning the best practices for educators over their two-year residency model. PACE Directors have intended to create a professional community where teachers share understandings about the nature of good teaching and work together to enact effective practices in a supportive setting (Darling-Hammond, Hammerness, Grossman, Rust, & Shulman, 2005).

Elements of PACE's residency model have been aligned with the situated learning theory. Situated learning theory (Lave & Wenger, 1991) purports individuals learn by participating in communities of practitioners. The learning of these new members in the community often occurs in the form of some type of apprenticeship, especially where high levels of knowledge and skill are in demand, as in education (Lave & Wenger, 1991). The work that the master is doing with an apprentice impacts the learning that the apprentice is experiencing in the community. Lave and Wenger defined the concept of legitimate periphery participation, to describe how new

members in a community learn to transition on a trajectory of participation from the periphery where their knowledge and skill are limited to full participation on the inner bounds of the community as they gain mastery.

Feiman-Nemser (2004) found that new teachers often feel an intense amount of loneliness in teaching and struggle with having to address large amounts of information required of new teachers. These two issues would suggest that new teachers who leave the profession often remain on the periphery of participation in their education community. Rather than moving through interaction with more-skilled and more-experienced members of the community toward the core of teaching practice, they stay isolated on outside of the community without the support that could help them deepen their knowledge and skills. This peripheral participation ultimately drives them to leave the profession. PACE was designed to combat feelings of isolation by supporting teachers in their spiritual life, through Academic Learning, and finally through Community Living.

Rationale and Research Questions

While there is strong empirical evidence on the demands associated with retaining teachers and the link between teacher quality and improved instruction (Borman & Dowling, 2008), further analysis of teacher retention and attrition in a religiously-based model is necessary. There have been many studies that have reviewed attrition in varying ways. Many of the studies on teacher attrition looked at both the personal characteristics of the teachers (including background and

qualifications), along with the characteristics of their workplaces (Borman & Dowling, 2008).

This study examined the attrition, retention rate, and mobility of teachers who came from the same religious residency-based teacher preparation program and who believe in a similar mission of teaching in a Catholic school. Since most previous studies focused on the differences in the backgrounds of the teachers, the similarities of the candidates in this study provided a unique opportunity to analyze the patterns of retention of teachers with the same educational preparation model. Since findings on teacher attrition, retention, and mobility have been inconsistent and only tended to cover two years of teachers' careers (Ingersoll & Strong, 2011), this study examined the retention rates of PACE teachers one year, three years, and five years after program completion from 2000 to 2015. Additionally, there was an investigation of the impact on PACE graduates of a residency-model support program's three-pillar support system.

This study answered the following research questions:

1. What is the retention rate of teachers (stayers, movers and returners) in the PACE residency model after the first, third, and fifth year after program completion?
2. What are the characteristics (i.e., gender, race/ethnicity, degree earned, and school level) of the teachers who are:
    a. Staying in the teaching profession
    b. Leaving the teaching profession

3. What impact does each pillar in the three-pillar support provided to PACE teachers have on teacher retention?

Summary

Chapter One identified current research on teacher retention and looked at one of the key induction models used for new teachers, university-sponsored residency programs. It explained why PACE is a unique residency model to study. Finally, it noted the research in the situated learning framework, defined the rationale for the research conducted, and identified the key research questions.

Chapter Two: Review of the Literature

The University of Portland's Pacific Alliance of Catholic Education (PACE) was very closely unified with the University of Portland's School of Education and supported new teachers academically, through community living, and in the teachers' spiritual growth. This support system was based on a residency model where teachers were placed into a Catholic classroom to teach for two years while also earning either a Master of Arts in Teaching (MAT) or a Master of Education (MEd). This support system was designed to help new teachers feel connected to the mission of Catholic education and also to a similar community of educators. By creating a strong support system, teachers were then more likely to stay in the profession and not leave because of a feeling of isolation and loneliness (Feiman-Nemser, 2012).

The purpose of this study was to investigate the patterns and rate of retention in teaching in the PACE religiously based residency model for graduates from the year 2000 to the year 2015. This chapter starts with a review of literature on teacher retention. Then the changing teaching force is discussed to help transition this chapter into a review of two of the main types of support for new teaches, mentoring and induction. The theoretical framework of situated learning theory and belonging in a community is explained. After the theoretical framework discussion, there is a review of the literature of residency models. The chapter concludes with a description of the PACE program and the support PACE provides to participants.

Teacher Retention

Quantitative studies on retention. There have been many quantitative studies on teacher retention that have found diverse results. Ingersoll (2001) completed a study that analyzed teacher attrition using national data from the Teacher Follow-up Survey (TFS). The National Center for Education Statistics conducted the TFS, which was a follow-up survey to the larger Schools and Staffing Survey (SASS). The SASS survey has been conducted seven times: in the 1988-1989, 1991-1992, 1994-1995, 2000-2001, 2004-2005, 2008-2009, and 2012-2013 school years (Goldring, Taie, & Riddles, 2014). Teachers who responded to the SASS were eligible for the TFS survey. Those teachers who indicated they were no longer teaching were asked to identify why the left the profession.

Ingersoll (2001) used data collected from the 1991-1992 TFS partly to address the data shortcomings of past teacher attrition studies. His report was a large, comprehensive, nationally representative report focused on teacher migration (movers), attrition, and the reasons teachers give for their departure from the profession. He referred to teachers that migrated from one school to another as *movers* and teachers that left the profession as *leavers* (Ingersoll, 2001). Ingersoll did not examine those teachers that left the profession and then came back because of a lack of data. In a more recent study on teacher attrition, Gray and Taie (2015) labeled the teachers that left the profession and then came back as *returners*.

After one year, according to Ingersoll (2001), the overall turnover rate for movers (7.2%) and leavers (6.0%) was 13.2%. For teachers in urban, high-poverty

public schools the rate was 14.4%; for Catholic schools, the rate was 17.7%; and for small private schools the rate was 22.8%.

Ingersoll (2001) found that the teacher's age was the main predictor of teacher turnover. Younger teachers (less than 30 years old) were 171% more likely to leave the profession than middle-aged teachers (ages 30-50 years).

The TFS survey asked teachers that left to select reasons from a list of 15 different reasons; the reasons were: school staffing action, dissatisfied with teaching as a career, dissatisfied with the school, for better salary or benefits, family or personal move, pregnancy/child, health, other family or personal reason, to pursue another career, to take courses to improve career opportunities inside or outside the field of education, for a better teaching job, and retirement. Participants that participated in the survey were allowed to select up to three different reasons for leaving. Ingersoll (2001) found that; 27% left for retirement; 49% (25% movers and 24% leavers) left because of job dissatisfaction; 53% (41% movers and 12% leavers) left for school staffing reasons; and 78% (33% movers and 45% leavers) left for personal reasons.

Strunk and Robinson (2006) conducted another quantitative study on teacher retention; it categorized the many different factors that led towards teacher attrition into four different levels. These levels were categorized as: teacher characteristics, school attributes, district traits, and the larger state context. In this multilevel analysis, Strunk and Robinson further broke down the teacher characteristics levels into smaller categories. These smaller characteristics were teacher quality, subject specialty, gender, race/ethnicity, and salary. Strunk and Robinson asserted that these

characteristics “may make teachers more attractive to or attracted to alternate employers,” and thus influenced the attrition rate of teachers (p. 69). Strunk and Robinson then looked at different school and district traits/attributes that impacted teacher attrition including salary, working conditions, school, racial, and ethnic composition, matched teacher-student racial composition, poverty, and the schools’ urban environment. They recognized that the working conditions of a school were not easily measurable; since there were many different factors that made up the working environment, and those factors may be unobserved.

In contrast to Ingersoll’s approach, Strunk and Robinson (2006) used hierarchical modeling techniques (HLM) for their regression. They used data from the 1999-2000 SASS. The use of the HLM provided them with an advantage over fixed-effects regression analysis because it enabled them to examine how school-level variables correlated with retention while still accounting for the clustered structure of students within schools and states (Strunk & Robinson, 2006).

When disaggregating the results, Strunk and Robinson (2006) found that foreign language teachers had significantly higher probabilities of leaving the profession. Also, English and social science teachers had a lower likelihood of attrition compared to other teachers. The study found no evidence that men were more likely to leave than females, and after running the regression model, the also found no significant effect of age or gender.

When examining the impact of experience, Strunk and Robinson (2006) found that experience was not linearly related to the probability of leaving a teaching job.

However, it was clear that teachers with fewer than four years of experience were substantially more likely to leave their teaching jobs. This study found that 17% of teachers with three to four years of experience were likely to leave their job, which was significantly higher than the teacher with experience between 11 and 20 years and teachers with 5 to 10 years of experience (12%). This study also found that teachers were also more likely to quit their job as the percentages of students of color in their school increased over time.

Borman and Dowling (2008) examined 34 quantitative teacher retention studies and found that a young, white, married woman with a child was most likely to leave the profession. Also likely to leave the profession were those without a graduate degree and those assigned to an urban school with a high enrollment of poor, minority and low-achieving students.

A more recent report on teacher attrition and mobility from the 2012-2013 TFS found that of the 3,377,900 public school teachers who were teaching during the 2011-2012 school year, 84% were stayers, 8% were movers, and 8% were leavers during the following year (Goldring, Taie, & Riddles, 2014). When examining the retention rates of teachers with one to three years of experience, 80% were stayers, 13% movers, and 7% were leavers. An interesting result found in Goldring, Taie, and Riddles' report was that of the public school teaches that left in 2012-2013, 51% reported that their new job had a more manageable workload.

Many of the studies on teacher attrition, similar to the TFS, only looked at one or two years of retention rates (Ingersoll, 2001; Strunk & Robinson, 2006; Borman &

Dowling, 2008; Goldring, Taie, & Riddles, 2014), and with this in mind, the National Center for Education Statistics (NCES) conducted a longitudinal study of beginning public school teachers that began teaching in 2007 or 2008 (Gray & Taie, 2015). Raue and Gray (2015) and Gray and Taie (2015) disaggregated the data from this study. This study was able to track teachers over four years from the school year of 2007-2008 through the school year of 2011-2012. The study followed a cohort of about 1,990 first-year teachers that completed the SASS. Similar to Ingersoll (2001), this study separated teachers into three different categories. These categories were:

- Stayers: teaching in the same school in the year of data collection as the previous year;
- Movers: teaching at a different school in the year of data collection from the previous year; and
- Returners: teaching in the year of data collection, but not teaching in the previous year. (Gray & Taie, 2015, p. 2)

This study found that among all beginning teachers in the 2007-2008 school year:

1. 10% of all beginning teachers did not teach in 2008-2009;
2. 12% did not teach in 2009-2010;
3. 15% did not teach in 2012-2011;
4. 17% did not teach in the 2011-2012. (Gray & Taie, 2015, p.3)

In total, 77% of teachers who began teaching in the 2007-2008 school year taught for all five years of the study (Raue & Gray, 2015).

Additionally, this study found no difference between the number of teachers who started with a bachelor's degree and those that started with a master's degree. Moreover, teachers with a mentor were more likely to stay in teaching. After year one, 92% of those teachers with a mentor stayed, while only 84% without a mentor stayed after year two, the rates were 91% to 77%; after year three, the rates were 88% to 77%; and after year four, the rates were 86% to 71%. Overall, 80% of teachers that were assigned a mentor taught for all five years while 64% of teachers who were not assigned a mentor did not teach all five years (Raue & Gray, 2015). Since this study was a longitudinal study, it was able to examine teachers that left the profession but then returned; known as returners. About 3% of teachers that left had returned to teaching during this study. Also, after five years, 5% of the initial teaching population that was not teaching were still working in the field of education (Gray & Taie, 2015).

When examining the stayers, movers, and leavers after two years (in 2008-2009), the Beginning Teacher Longitude Study found that 74% of teachers were stayers, 16% of teachers were movers and 10% of teachers were leavers (Gray & Taie, 2015). Of those movers, 21% moved involuntarily because of their contracts. Finally, of the leavers 27% of them left the profession because their contract was not renewed after their fist year. This, however, changed over five years with only 48% of beginning teachers teaching all five years in the same school and 13% teaching in the same district but in different schools (Raue & Gray, 2015). However, of the 23% of teachers that did not teach for all five years, 26% of teachers returned to the profession, and 32% of teachers were expected to return (Raue & Gray, 2015).

Not only were female teachers (78%) more likely than male teachers (75%) to have taught all five years, more female teachers (64%) than male teachers (44%) returned or were expected to return (Raue & Gray, 2015). After five years, teachers who entered through an alternative certification program (78%) were slightly less likely to have stayed than teachers who did not enter through an alternative certification program (76%). Finally, when looking at the ethnicity of the candidates, 78% of White teachers taught for all years, and 74% of beginning teachers of all other races taught for five years.

When looking at induction programs, 80% of teachers who participated in an induction program during their first year of teaching taught for all five years, and 69% of teachers who did not participate in that program taught for all five years (Raue & Gray, 2015).

Finally, when breaking down the different teaching levels of the candidates, 78% of primary teachers, 79% of middle school teachers, and 79% of high school teachers taught all five years. Yet, a larger percentage of teachers who taught primary either returned or were expected to return to teaching (79%) in comparison to middle school teachers (44%) and high school teachers (46%) (Raue & Gray, 2015.)

In 2015, at the Festival of Education in Brekshire, England, LKMco, and Pearson launched a project known as “Why Teach?” (Menzies, 2015). They asked festival attendees why they decided to join the profession and what advice they would give themselves on their first day of teaching. In addition to asking these festival

attendees why they teach, they conducted a major research project in England and survey teachers to understand:

- Why they went into teaching
- Why they have stayed in teaching
- Why they teach in the area they currently teach in and what would encourage them to teach elsewhere
- Whether they are considering leaving teaching and why
- What has helped them become a better teacher. (Mezies, 2015)

This final research report from the "Why Teach" initiative was released in November, 2015 (Mezies, Parameshwaran, Trethewey, Shaw, Barrs, & Chiong, 2015). They conducted a YouGov survey of over 1,000 current teachers in England and had a smaller focus group with interviews of 40 teachers (Mezies et al., 2015). They found that many of the teachers that decided to stay in the profession did so because they felt they were good teachers, and they enjoyed making a difference in their students' lives. However, they found that factors such as pay and holidays played an important role in the retention of teachers. Science teachers were the most likely to leave the profession. The teachers that left the profession most often cited the teaching workload as the primary concern, with dissatisfaction with leadership and management also playing an important role. The authors noted that retention depended on "ensuring teachers feel they can have an impact: letting them 'get on with it' is therefore key in maintaining a motivated and committed workforce" (Mezies et al., 2015, p. 4).

When examining the school-based motivators of retention, this study found that teachers stayed in the profession when they felt confident that they could help their students. It was interesting that of the teachers in the survey and in the focus group, 59% considered leaving teaching in the last six months with 76% of those teachers claiming it was because the workload was too high (Mezies et al., 2015). The next highest reasons for why teachers decided to leave the profession was because they were unhappy with the quality of leadership and management (43%), pay was insufficient (43%), and they did not receive enough high quality support (29%).

When analyzing minority teacher retention, Ingersoll and May (2011) found that of the 47,6000 minority teachers that entered teaching in 2003-2005, about 20% had left teaching by the following school year. This most likely was due to the fact that minority teachers were employed in schools serving more disadvantaged students, which were the same schools that had high attrition rates for all teachers (Ingersoll & May, 2011). In their study, they found that the strongest factors by far that led towards teacher attrition were "the level of collective faculty decision-making influence in the school and the degree of individual instructional autonomy held by teachers in their classroom" (p. 64).

One last quantitative study involving teacher retention was connected to teachers that moved or changed their jobs. Jackson (2013) used longitudinal data of teachers in North Carolina to determine the extent of math quality in education. The goal of his study was to connect the role of teacher "match quality" and student achievement. Match quality looks at the match between workers and the job in which

they work (Jackson, 2013). It is a term used often when researchers were examining labor markets and worker mobility. The goal of a job with strong match quality was to match candidates seeking positions with appropriate jobs. In the labor market, match quality "is hypothesized to efficiently allocate workers to firms through workers leaving (seeking) jobs where the productive match between the worker and firm is low (high)" (Jackson, 2013, p. 1098). While his study primarily focused on match quality between teachers and schools, it also analyzed teacher mobility. He found that most teachers that moved tended to move to schools where the mean reading test scores were 2.3% higher and had classes that were 23% smaller in size than their previous school. He also found that teachers moved to schools where the percentage of Black students in their new school was 2.5% lower than their previous school and 3.8% percentage points lower in their low-income students.

Ingersoll and Strong (2011) explored why teachers were leaving the profession and found that based on most qualitative and quantitative studies, teachers cited the fact that their decision to leave was because of a lack of support from the school administration or frustration with their working experience.

Qualitative studies on retention. It is important to disaggregate why teachers leave, and qualitative studies help to determine if it was the teachers' choice to leave the profession or if the teachers were being forced out because they should not have been teaching in the first place.

Olsen and Anderson (2007) conducted a qualitative investigation of urban teacher retention. They studied who entered the teaching profession, where they

entered the profession and for how long, and what compelled teachers to stay or leave teaching altogether. They examined these questions among graduates of a teacher education program at UCLA known as Center X. The mission of this "teacher education program is to prepare teachers for successful work as social justice educators in urban communities" (Olsen & Anderson, 2007, p. 7). In this program the candidates were put into small teams where they met regularly for two years and participated in seminars, student-taught their first year, and were resident teachers their second year in the program. Center X partnered with high-needs schools in high-poverty neighborhoods. Olsen and Anderson (2007) conducted three 2-hour interviews with 15 elementary teachers in the program during the 2003-2004 school year. Similar to the identification noted by Ingersoll (2001), Olsen and Anderson (2007) were able to identify the teachers into three categories: leavers, stayers, and uncertains (those who did not know if they were going to leave education or not).

Of the teachers in the study that were identified as stayers, 6 of the 15, Olsen and Anderson (2007) found that many of the teachers had a variety of plans for their growth as educators. A common theme found in some of the stayers' stories was that the support they felt from the administration had a major impact on their career decision. Also a focus on community in the school and the strong school community was something that was present in many of the stayers' interviews.

When looking at the individuals identified as uncertains, Olsen and Anderson (2007) divided the teachers into three subcategories. Of the six uncertains; two teachers wanted to pursue administration, two said they wanted to start families, and

two teachers felt "reluctant to speculate on their future, though when pressed, they reported they would probably not stay in classroom teaching forever" (p. 13). All of the stayers admitted to struggling with the workload and believed that perhaps they could not maintain the busy work demands. Of the 15 teachers, 3 were identified as leavers, however uniquely they were leaving the classroom as teachers but were not leaving the educational field. The three leavers all had been teaching for at least four years and believed that they had experienced urban teaching. All of them took on many different roles in their schools, which might have led to feelings of burnout, and all wanted to return to UCLA for graduate studies. One interesting note was that all the teachers admitted to loving teaching; however, they felt that it was difficult to maintain such a hectic lifestyle. This study also found that often dissatisfaction was connected to the administrative approach in the different schools. Olsen and Anderson (2007) concluded that the teachers remained committed to urban education; however, they wanted to find a new way to help improve social justice. They admitted this might be due to the fact that Center X in UCLA tended to accept individuals with a heart for social justice. The biggest challenge this study found was how to best support the careers of these educators. Many of the leavers and the uncertains wanted to continue to work in urban education, but they felt burnt out and overwhelmed by the many different job constraints.

Kauffman, Johnson, Kardos, Lui and Peske (2002) interviewed 50 first and second year teachers in Massachusetts and found that new teachers received "little or no guidance about what to teach or how to teach it" (p. 273). This caused many of

them to struggle as they transitioned into a new profession, leading to high teacher attrition and teachers that could have succeeded in the classroom deciding to leave the profession altogether. Kauffman et al. (2002) specifically focused on the impact of curricular expectations and state-mandated assessments and how they affected the new teachers' experiences in the classroom. They examined the experience of new teachers and not on the actual assessment or curriculum support. After interviewing the teachers, they found that there was a sense of urgency among many new teachers; and when they did not feel supported, they often chose to leave the profession. Of the teachers that considered leaving teaching, a feeling of being "lost at sea without any map or anything, without an astronomer" was present amongst many of the teachers (p. 281). New teachers had this heightened sense of anxiety, especially in connection with the standardized testing requirements, and they felt the pressure was too much to handle. This pressure led to many of the new teachers leaving their jobs, even new teachers who, if trained properly, could have become good teachers. The researchers suggested that there should be action in "three different arenas: state policy, curriculum research and development, and collaboration around curriculum at the school site" (p. 293). By helping new teachers as they dealt with the curriculum and by providing them with communities of assistance, new teachers could meet the demanding needs of teaching. In a few of the schools, there were veteran teachers that helped new teachers and who were engaged in supporting their new teacher. School-based collaboration helped to induct and orient these new teachers to their profession and helped them figure out both what to teach and how to teach it.

Changing Teaching World

There were many different studies on the changing face of teachers in American education (Ingersoll, 2012; Ingersoll & Merill, 2010; Ingersoll & Smith, 2004; Feimen-Nemser, 2012). The researchers anticipated that with the aging of baby boomers, mass retirement would follow in the mid-2000s (Ingersoll, 2012). Yet, in a study completed in 2010, Ingersoll and Merrill found that the number of retiring teachers actually slowed between 2005 and 2009, and instead there were six larger, but lesser known changes to the teachers in the teaching profession (Ingersoll & Merrill, 2010). These trends in the teaching profession were:

1. Ballooning
2. Graying
3. Greening
4. Becoming More Female-Dominated
5. Becoming Less Stable
6. Holding Steady in Academic Abilities. (Ingersoll & Merrill, 2010)

Of the six tends, Ingersoll (2012) believed that three of these trends had a major impact on the teaching profession. The three that Ingersoll (2012) identified were “ballooning,” “greening,” and “becoming less stable” (p. 49). Ballooning was defined as the massive growth in the American teaching force since the 1980’s. However, different then the post-war era, the rate of increase for teachers was currently growing faster than the rate of increase for students. Using data from the SASS and the TFS, they found that the student enrollment had risen 19% since the

mid 1980s; yet the number of teachers had risen by 48% (Ingersoll & Merrill, 2010). With this ballooning of teachers, there was a massive increase of new teachers, which led to the second main trend, known as the "greening" of the teaching force (Ingersoll, 2012).

Ingersoll and Merrill (2010) found that the age difference between teachers has become very segregated, with a large amount of teachers either near retiring age or just starting in the profession. The mode of teachers that were teaching in 1987-1988 was 15 years of teaching experience; while in 2007-2008, the mode of teachers was in the category of beginning teachers in their first year of teaching (2010). The number of new teachers had grown from 65,000 first-year teachers in 1988 to 200,000 first-year teachers in 2008 (Ingersoll, 2012). This influx of new teachers led to the final major trend from their study, which was that the teaching force had become less stable (Ingersoll & Merill, 2010).

As previously cited throughout Chapter One and Chapter Two, the high rate of teacher attrition is something that educators need to pay attention to, both because of the cost of hiring new teachers (Barnes, Crowe, & Schafer, 2007) and because of the impact of student learning (Darling-Hammond, 2000; Ronfeldt, Loeb, & Wycoff, 2013). Ingersoll and Merrill (2010) found that the increase in teacher turnover had increased by 28% since the early 1990's. They found that there was teacher turnover of 13.2% in 1991-1992 and 16.9% in 2004-2005. With this major shift in the teaching profession, experienced educators have worked hard on supporting the new teachers,

and there have been many different practices that have been put into place to support this new fragile teaching force.

Practices to Support Retention

There have been many different practices that educators have used to try to improve the retention rates in teaching. Two of the main practices educators utilized in schools were the creation of strong meaningful induction programs, and/or the assigning of mentors for new teachers (Ingersoll & Smith, 2004).

Teacher induction—or a support, guidance, and participation in an orientation program—was designed to help beginning elementary and secondary teachers during the transition into their new teaching jobs (Ingersoll & Smith, 2004). Induction programs were designed for new teachers that have already completed basic training, yet needed support to prevent the common feelings of "sink or swim, trial by fire, or boot camp" (Ingersoll & Smith, 2004, p. 682). There were a lot of different activities that were connected to teacher induction programs including different classes, workshops, professional development sessions, and even mentoring.

Teacher mentoring programs became a popular support for new teachers in the early 1980's (Wang & Odell, 2002). Mentoring has been one of the most important and vital components of a teacher induction program where beginning teachers were paired with either one experienced teacher or a team of experienced teachers for guidance, support, and a helping hand (Brewster & Railsback, 2001). According to Rowley (1999), the characteristics of a good mentor was one that was committed, accepting of new teachers, skilled at providing support and capable to handle the

different interpersonal skills necessary to lead new colleagues. Mentoring became the dominant form of teacher induction, and the two terms were often used interchangeably (Smith & Ingersoll, 2004). The main goal or focus of teacher mentoring programs was to help new teachers by providing them with an experienced teacher that can guide and support them in their first few years (Ingersoll & Smith, 2004).

Feiman-Nemser (2012) determined that high-quality, intensive induction helped to increase teacher retention. However, the challenge of creating sustainable comprehensive programs with such observable benefits as high teacher retention and overall better instruction for all students was that it was difficult to keep the cost down on these programs (Kapadia, Coca, & Easton, 2007).

Over the past 50 years, induction has evolved from a temporary bridge designed to ease the new teacher's start in teaching, to a view that calls for greater professionalism and a deeper understanding of teachers learning through professional development and induction models that incorporate new teachers into collaborative professional learning communities (Feiman-Nemser, 2012). The focus on induction situated new teachers' development within a professional teaching community that, along with a strong school community, can help to support the learning of all the teachers in that school (Fulton, Yoon, & Lee, 2005).

In a study of 50 new Massachusetts teachers, researchers identified three schools that had comprehensive induction programs; they examined how they worked and their impact on their teachers (Johnson, 2004). The settings of the different

schools differed, as did the philosophies of the school induction programs; yet the researchers found important features that they all shared. For starters, all the programs were "deliberately school-based," meaning they met the new teachers where they were (p. 221). The induction programs were all centered in the new teachers' schools and were created and implemented by teachers with teaching experience and knowledge about the school and how it operated. New teachers learned about the mission of the school and the culture of the school and were given opportunities to translate these ideas into specific strategies and practices for classroom use. Additionally, the induction programs were "integrated into the professional life and practice of the school" (p. 223). These induction programs were "constantly changing and being refined…dependent upon additional resources… [and] develop and use professional capacity" (pp. 224-225). In order to have an effective induction program, there needed to be a system of supports set up that was a long-term investment and not a short-term fix.

The amount of time that teachers met with their mentor also has been found to impact the retention rates of teachers. Fletcher, Strong, and Villar (2008) conducted a study in California to investigate the effects of variations in mentor-based induction on the performance of students. They found that if a program allowed for weekly contact and mentor selectivity, then mentor-based induction had a positive effect on student achievement.

In an exploration of the literature that was present on teacher recruitment and retention, it was discovered that schools that provided mentoring and induction

programs, "particularly those related to collegial support, had lower rates of turnover among beginning teachers" (Guarino, Santibanez, & Daley, 2006, p.199).

The key question, of course, was does induction actually matter. Smith and Ingersoll (2004) and Ingersoll and Smith (2004) examined the effects of induction on teachers' decision to stay in the teaching profession at the end of their first year on the job. They found that when teachers participated in both mentoring and group induction activities the retention rates of the teachers increased both in regards to moving or changing schools and/or leaving the profession all together (Smith & Ingersoll, 2004).

Ingersoll and Smith (2004) conducted a study using NCES, SASS, and TFS data to determine the differences in induction programs across the nation and to identify how the programs had increased or decreased the activities that they provided to teachers. They found that many of the induction supports, activities, or "practices rarely exist in isolation" (p. 35). Thus, by getting multiple induction components, there was a "strong and statistically significant effect on teacher turnover" (p. 35). And to expand on that, they found that "as the number of components in the induction plans increased, both the number of teachers receiving the plan and the probability of their turnover decreased" (p. 35). They also found that as time went on, the number of teachers who received some kind of induction or mentorship had grown rapidly, with a growth of 4 in 10 beginning teachers in 1990-1991 and 8 out of 10 teachers in 1999-2000. They examined the relationship between teacher turnover and different forms of support for new teachers and found that the components that had the most positive impact on teacher turnover were having a mentor and common planning time with

teachers in the same subject area, and being part of a network of teachers (Ingersoll & Smith, 2004). In this study, 16% of first year teachers received none of the induction or mentoring supports, and they were able to predict accurately that 40% of those teachers would leave at the end of their first year.

In a more in-depth look at teacher induction in connection to retention, Smith and Ingersoll (2004) described three different levels of intensity in induction programs:

- Basic induction: An assigned mentor, supportive communication with administrators;
- Basic induction plus collaboration: Everything included in basic induction and the addition of seminars for beginning teachers and collaboration with other teachers on instruction;
- Basic induction plus collaboration plus teacher network plus extra resources: Everything included in the basic induction plus collaboration plan with the addition of participation in an external teacher network, a reduction in the number of classes for which they needed to prepare, and a teacher's aide. (p. 705)

Smith and Ingersoll also found that 56% of new teachers received basic induction support, 27% received basic induction plus collaboration, and less than 1% received the final level of induction support. The probability of turnover after the first year was 41% for teachers receiving no induction, 39% for teachers receiving basic induction support, 27% for teachers receiving both basic induction and collaboration support,

and 18% for those in the all-inclusive induction support program. If a new teacher had a mentor in his or her field, then the risk of leaving at the end of year one dropped by about 30%, and having a mentor that was outside of the teacher's field still reduced the risk of leaving by 18%. Teachers who participated in a network outside of the school reduced the likelihood of leaving by about 33% (Smith & Ingersoll, 2004).

Ingersoll (2012) found little research investigating the cost versus the benefits of implementing an induction program. While the studies found that induction could help retain teachers and improve instruction (Ingersoll & Strong, 2011), trying to find the appropriate assistance programs that were most cost effective had not been studied. It was suggested that universities could help cover this cost to schools of providing induction programs by the universities having residency-based programs similar to PACE.

Theoretical Framework

Belonging and meaning in a community. There are many different theoretical perspectives that support the idea that individuals are more invested in their jobs when they have a sense of purpose connected to the mission of the organization for which they work. Oftentimes, individuals in a work place consider themselves part of a team or a community when they invest in the mission. Tajfel (1982) defined social identity as "the *part* of the individuals' self-concept which derives from their knowledge of their membership of a social group (or groups) together with the value and emotional significance of that membership" (p. 24).

As discussed earlier in Chapter One and Chapter Two, an important contributor towards attrition or persistence within teaching was the degree of connection and identification of teachers socially. Individuals get a lot out of belonging to an organization. Organizations can foster or slow the growth of those individuals by supporting their sense of belonging in the organization; a way to have individuals develop that sense of belonging is through a strong mission. In the educational world, Postman (1996) argued that without a narrative or meaning, a school has no purpose. Postman believes that educators need to solve a metaphysical problem and need to have a "god to serve" (p. 5). This "god" or narrative helps educators give purpose to their job and helps them clarify their learning.

Labaree (1997) broke down the mission of schooling into a political debate. Labaree claimed that educators and the public needed to debate about "what goals school should pursue" and broke down the three main goals schools as the pursuit of democratic equality, social efficiency, and social mobility (p. 41). Labaree (1997) and Postman (1996) both believed that in order to have a good school, the school must have a defined mission. Good teachers need to find their social identity in the school to feel as though they are a part of the team and are connected to the central narrative or mission of the school. In order for the school to have a defined mission, the mission of the school needs to be reified, and teachers need to participate in a community where they negotiate meaning together.

The idea of reification simply can be defined as "making [something] into a thing" (Wenger, 1998, p. 58). However, Wenger used reification in a much larger

sense including a wide range of "making, designing, representing, naming, encoding, and describing, as well as perceiving, interpreting, using reusing, decoding and recasting" (p. 59). Wenger asserted that reification and participation, which he described as the "social experience of living in the world in terms of membership in social communities and active involvement in social enterprises," are mutually constitutive (p. 55). Reification, along with participation, works together to shape the human experience of meaning and helps a community negotiate meaning (Wenger, 1998). People participate in a community using reified elements that help to shape how they participate in the community. Wenger looked at the interaction between the organization and the individual commitment. This idea of negotiation of meaning can best be characterized as the process by which individuals experience the world and engagement in the world. It helps individuals live meaningfully.

By being able to live meaningfully, individuals feel as though they are connected to the inner trajectory of participation of a community (Wenger, 1998), and thus their job has a purpose. As discussed in chapter one, teachers can participate in this trajectory of participation when master teachers train new teachers through a model of apprenticeship. In order to better understand this concept, an example of this happening can be found in Wenger's (1998) discussion of a claims processor within a community of practice.

Wenger first described different claim processors as they worked on training and moving up the ranks in their office. Most of the training that a new claims processor received was focused on the steps and procedures and how to follow them.

The new trainees were taught how to fill in forms (even if they did not understand them). In this community, the forms were reified for them. Figuring out how to fill out the forms was how the claims processors participated in their community. They were trying to figure out just how to get it done and survive it while trying to figure out how to negotiate the meaning of their jobs. Wenger categorized all of the skills that new processors were learning as discrete skills and "pieces of information that are useful or harmful, functional or dysfunctional" (p. 40). Wenger argued that they learned how not to learn and how to live with a sense of ignorance. In a sense they were learning to follow the patterns and rules without understanding what the patterns and rules actually meant. The way that they helped each other get through this process was how they negotiated the meaning of their jobs.

The issue with this style of training was that the claim processors were an example of a negative community of practice (Wenger, 1998). However, the relationship between reification and participation can be positive in a community of practice, and this positive community of practice can be applied to teaching and schools. By participating in a community and having a strong reified mission, teachers are able to embrace a school's mission, buy into the mission of their school and the larger mission of education. This helped them to realize why they were teaching, and more importantly, the purpose of the work that they were doing. It is important for a new teacher to negotiate the meaning of his or her decision to teach, and when a new teacher was able to negotiate the meaning of teaching, the idea of a central purpose would help make a teacher feel as though he or she was a part of the social

community. Being engaged in their practice and the mission of the school would help teachers feel connected to the meaning and purpose of their job. The engagement in the practice of teaching has patterns, and it is these patterns that are said to give rise to the experience of meaning (Wenger, 1998). As new teachers work to negotiate the meaning of a school, they are deciding whether or not they feel a part of the school and whether their own identity aligns with the purpose of the mission. It is required that teachers sustain attention and are open and willing to readjust as they negotiate meaning in schools.

In a strong community of practice where meaning is both reified and participated in, individuals are able to place themselves in the trajectory of participation of their community. The mission becomes a thing that the members of the community can support and strive to achieve together, because it is both reified and participated in by the members of the community. Johnson, Berg, and Donaldson (2005) explained that, "the evidence strongly suggests that students learn more and teachers experience greater satisfaction and commitment when they engage with their colleagues, improving instruction and strengthening schools" (p. 72). This runs contrary to the idea that teachers want to work on their own and, in fact, supports the concepts of creating a strong community of learners. In connection to this study, Ingersoll and Smith (2004) found that "a lack of a community in a school may have a negative effect on teacher retention" (p. 32).

In a school that has reified their mission, the school will have a set of teachers and leaders, also known as masters, which can help new teachers (apprentices) move

on the trajectory of participation from a peripheral participation role to an insider role (Lave & Wenger, 1991). This naturally transitions into consideration of situated learning theory.

Situated learning theory. Situated learning theory is based on the idea that learners participate in communities of practitioners and that the "mastery of knowledge and skill requires newcomers to move toward full participation in the sociocultural practices of a community" (Lave & Wenger, 1991, p. 29).

Schools can create an environment where teachers are a part of a community of sustained learning. Sustained learning embodies the structural characteristics of communities of practices. In a community, the process of community reproduction must be understood to create legitimate peripheral participation (Lave & Wenger, 1991). By creating a social reproduction of the community in the school, new teachers are trained by master teachers and are brought from the peripheral trajectory towards the inbound and inside trajectory. When looking at the transition along the trajectories of participation, teachers can fall in Lave and Wenger's (1991) idea of apprenticeship and mastery. The concept of apprenticeship and mastery can best be understood by examining a triadic set of relations in: a) apprentices; b) young masters with apprentices, and c) masters (Lave & Wenger, 1991). In the school setting, new teachers (apprentices) need to be trained by experienced teachers (young masters with apprentices) in order to create more experienced teachers (masters).

This directly applied to the program design of PACE and how PACE teachers worked with master teachers in their schools and master teachers from the University

of Portland. The master teachers and university supervisors worked to make the new PACE teachers feel comfortable in a school setting—to create an inbound trajectory. PACE was designed to allow new PACE teachers to have personal relationships with master teachers and university supervisors that help them to feel supported and as though they were colleagues in the educational world. PACE also accepts and markets towards candidates that are connected to the mission of PACE.

New teachers are able to learn from other teachers in a school if they share a sense of responsibility for the success of all students, along with an agreement and a partnership between new and experienced teachers (Fulton, Yoon, & Lee, 2005). By training new teachers about the school, and by bringing them into the mission of teaching, schools are able to create a community that has social reproduction that will benefit student achievement. As previously discussed, students scored lower in both language arts and math at grade levels where districts had trouble staffing classrooms due to turnover (Ronfeldt, Loeb, & Wycoff, 2013). By creating a school that had strong social reproduction, schools were able to negate the lack of teachers students experienced with turnover.

The intense amount of learning a new teacher goes through in the first two years of teaching is a vital time for educators as a community to help these teachers transition into the inside trajectory of participation. A programmatic goal of PACE is to help these new teachers through there three pillar support system as they negotiate the meaning of their job, as the mission of education becomes reified, and as the new teachers transition to the inside trajectory of participation.

Teacher Preparation

Since the 1980s, many reports and organizations including the National Commission on Excellence in Education (1983), the Holmes Group (1986) and the Carnegie Forum on Education and the Economy (1986) have been trying to reform the preparation of teachers (Borman & Dowling, 2008).

The debate around teacher preparation tends to focus on subject matter knowledge versus teacher pedagogical skill (Ingersoll, Merrill, & May, 2012). Ingersoll, Merrill and May conducted a study about teacher preparation and the impact it has on retention. They found that "teachers who receive less pedagogical training are more likely to leave teaching" (p. 30). Their study, which focused on math and science teachers, examined the impact on retention rates of teachers coming from traditional teacher preparation programs with those coming from alternative routes. Using the NCES 2003-2004 SASS and the 2004-2005 TFS, they found that "pre-service education and preparation for new mathematics and science teachers are strong related to their retention—but it depends on which aspects of preparation" they on which they focused (p. 31). Based on the subject-matter background of teachers, there was no connection between whether teachers stayed in the profession or not. However, as stated earlier, that was not true based on the pedagogical training a new teacher experienced in his or her teacher-training program. They found that teachers who had taken more courses in teaching methods and strategies were significantly less likely to depart. In fact, 24.6% of teachers who left after one year had little or no pedagogy training, while of the teachers that had a comprehensive pedagogy training, 9.8% left.

The comprehensive pedagogy training was one with many classes on methods, theory, and psychology (Ingersoll, Merrill, & May, 2012).

In 2011, Feistritzer used the U.S. Department National Center for Education Statistics (NCES) and data from the National Center for Education Statistics' Baccaluarate and Beyond Longitude study to analyze new hires to the teaching profession. In the 2007-2008 school year, 4.3% of teachers were new hires who had never taught before. Then using the National Center for Education Information (NCEI) surveys, Feistritzer found that 33% of first-time public school teachers hired post 2005 entered the teaching profession through an alternative program. This was a drastic change from 1980 when almost 97% of teachers entered the profession through an undergraduate (88%) or a graduate (9%) campus-based teacher education program. Feistritzer found that of the teachers that earned a Bachelor's degree in 2007-2008, in 2009, 16% had prepared to teach but had not taught, 3.7% were considering teaching but had not taught, and 15.4% had not prepared for teaching, had not taught, or were not even considering teaching.

A movement began to connect campus courses with field experiences for teachers (Zeichner, 2010). This problem has been central in college and university-based pre-service teacher preparation for years. In many education communities, there began a shift in creating "hybrid spaces in teacher education where academic and practitioner knowledge and knowledge that exists in communities come together in new less hierarchical ways in the service of teacher learning" (p. 89). In order to create these hybrid pre-service programs, universities and schools worked on bringing P-12

teachers and their knowledge into campus courses, along with incorporating examples of teachers' practices into campus readings and learning. Many institutions also established faculty positions at their school that primarily focused on the clinical side of teacher education. These clinical positions have faculty that created partnerships with local schools that helped to support the placement of their student teachers into the classroom (Zeichner, 2010).

One final approach to help support new teachers was through the creation of communities in pre-service teacher education to help these teachers begin to feel a part of the community. By creating this community feeling, the goal was to help these new teachers feel as though they were a part of a strong community of practice (Wenger, 1998) that would, in turn, support them as they became educators.

Darling-Hammond (2010) purported that in the educational world in the early 2000's educators had a chance to build strong communities between teacher education programs in universities and the schools their graduates go to teach in. She stated that we needed to connect learning educational strategies while students were actually in practice in order to connect theory and practice, but that educators need to think about a major change on the relationship between these universities and the schools. By creating these partnerships, new teachers will be able to get both clinical practice while also learning the pedagogy necessary to be a good thoughtful teacher.

Professional development schools. Professional developments schools (PDS) were a descendent of the laboratory schools of the early twentieth century; they emphasized the practice of learning in communities (Darling-Hammond,

Hammerness, Grossman, Rust, & Shulman, 2005). In these schools new teachers worked alongside more experienced teachers to design and implement learning experiences for new teachers and students. The key was that the university program and the school developed a shared conception of good teaching that informed the work to help new teachers learn best practices both theoretically and practically (Darling-Hammond et. al., 2005). One caution with professional development schools has been the uneven implementation, or different interpretations of how to actually run a professional development school, causing uneven results (Teitel, 1999).

The goal of PDS was to create school-college partnerships to help improve teacher education programs and improve student learning (Teitel, 1999). These PDS attempted to be seen as places to resolve the tensions between schools and universities. Corporate foundations, like Exxon and Ford, supported many of the PDS. PDS were often seen as a part of the alternative certification movement, and some saw PDS as trying to make teacher preparation programs credible again. (Teitel, 1999). A more modern approach to PDS has been the creation of residency models to train teachers.

Residency models. Residency programs provided classroom immersion integrated with coursework for a supporting institution. This combination between classroom apprenticeships carefully aligned with a sequence of master's-level coursework provided residents with both theory and practice in their programs (Urban Teacher Residency United, 2015). A goal of the residency model was to help address issues pertaining to urban teacher preparation and teacher attrition. New teachers that

teach in high-poverty schools are 50% more likely to leave than in low-poverty schools (Ingersoll, 2003), making the need for strong residencies even more important. Teaching residency programs (TRPs) were designed to attract and prepare new teachers to succeed in high-need schools and to retain these teachers over time (Silva, McKie, & Gleason, 2015). One of the main residency models in America in 2015 was the Urban Teacher Residency (UTR). This was an innovative response to the longstanding challenges of "recruiting, preparing, and retaining bright and capable teachers for high-needs urban schools" (Berry, Montgomery, & Snyder, 2008, p. 1).

The first UTR program was created in 2001 with the partnership between National Louis University and the Academy for Urban School Leadership (Gardiner & Salmon, 2014). UTRs recruited candidates who wanted to teach in urban schools. Two of the main UTRs were Chicago's Academy for Urban School Leadership (AUSL) and the Boston Teacher Residency (BTR). Residents in these programs were not fully responsible for teaching children, (they co-teach generally four days a week). This allowed them to have more time than other teachers to participate in pedagogical coursework that was helpful in their intense student teaching experience (Berry, Montgomery, & Snyder, 2008).

A residency model helped to emphasize the importance of the "clinical component of professional preparation" (Berry, Montgomery, & Snyder, 2008, p. 15). It is important to remember that the core principles of UTRs called for long-term induction support and coordination among Higher Educational Institutions to prepare

new teachers and support these new teachers in the schools where the graduates were placed.

The Chicago and Boston programs were designed with a set of principles that described the components of their residency program. These included:

1. Weaving education theory and classroom practice tightly together in a *year-long* residency model of highly relevant teacher education;
2. Focusing on resident learning alongside an experienced, trained and well-compensated mentor;
3. Preparing candidates in cohorts to cultivate a professional learning community, foster collaboration and promote school change;
4. Building effective partnerships and drawing on community-based organizations to promote a "third way" for teacher preparation;
5. Serving school districts by attending to both their teacher supply problems and curricular goals and instructional approaches;
6. Supporting residents for multiple years once they are hired as teachers of record; and
7. Establishing incentives and supporting differentiated career goals to retain residents and reward accomplished and experienced teachers. (Berry, Montgomery, & Snyder, 2008, p. 5)

The Boston Teacher Residency (BTR) program was affiliated with the University of Massachusetts (UMASS) where candidates were awarded a master's degree; it was founded in 2003 (Berry, Montgomery, & Snyder). In Chicago, the

Academy for Urban School Leadership (AUSL), which partnered with Chicago Public Schools, also provided candidates a Master of Arts in Teaching (MAT) degree through National-Louis University (NLU). NLU created a university liaison that worked on fostering the partnership between NLU and AUSL (Berry, Montgomery, & Snyder 2008). Berry, Montgomery, and Snyder suggested the following three major lessons that policymakers along with K-12 schools and university practitioners need to consider in order to ensure success:

1. Teacher educators should demand preparation pathways are held to same quality assurance standards;
2. Policymakers should create financial incentives so the "best providers" are rewarded for responding to high-needs schools and content areas;
3. UTRs should offer an opportunity for school districts to begin managing a portfolio of pathways in order to get teachers that are well-prepared and committed in the most cost-effective way. (Berry, Montgomery, & Snyder, 2008, p. 9)

Papay, West, Fullerton, and Kane (2012) analyzed the BTR and found that 88% of teachers continued to teach past two years, 80% for three years, 75% after four and five years. In this study they found that teachers from BTR were more likely than other similarly experienced teachers to continue teaching in Boston with 75% still teaching after five years versus only 51% of other teachers still teaching after five years (Papy et al., 2012). This study found that most of the retention that happened in

teaching happened in the first three years with 20% of BTR teachers leaving by the third year and only 5% of BTR teachers leaving between year three and year five.

In contrast to the UTR in Boston and Chicago, in New York City, Bank Street College created a residency program from the starting point of a university. Throughout the creation of the program clear lessons learned show that there must be district involvement for structure and support, there must be stability in the schools for the programs for which they would be preparing candidates, programs needed to provide financial compensation for post-graduate teacher candidates, and preparing non-traditional teacher candidates required carefully created opportunities for new teacher learning (Berry, Montgomery, & Snyder, 2008).

Another TRP that was initiated to respond to the staffing problems the American education system was facing in the late 1980s and early 1990s was Teach for America (Borman & Dowling, 2008). Wendy Kopp developed Teach for America (TFA), and it focused on attracting talented students from disciplines and fields other than education to enter the teaching force.

TFA was established in 1990 with a goal to close the racial and socioeconomic gaps in U.S. education (Donaldson & Johnson, 2011). Donaldson and Johnson found that there was an increase in applicants to TFA with 18% of Harvard University seniors applying for the program in 2010. Donaldson and Johnson explained the differing views educators had towards TFA. People in favor of TFA claimed that it recruited academically strong and motivated people who otherwise would not have considered teaching in high-poverty schools, while others argued that by only

requiring a two-year commitment it was undermining the efforts to stabilize the staffing issues in schools. Also, the argument was that TFA minimized the importance of pre-service preparation, seeing that they only offered a five-week course before teachers were placed in the classroom.

Donaldson and Johnson (2011) were able to analyze TFA teacher turnover and identified which TFA residents left the profession along with some possible suggestions as to why they left. In 2007 they surveyed members of three cohorts (2000, 2001, & 2002) and asked them to provide information about their work lives in the four to six years after they began teaching. They were asked to report on whether and when they left public teaching and then explain why. In their study they found that:

- 60.5% of TFA teachers continued as public school teachers after their two-year commitment;
- 56.4% leave their initial placement in low-income schools after two years, but 43.6% stay longer;
- After five years, 14.8% continue to teach in the same low-income school they were assigned. (Donaldson & Johnson, 2011)

When looking at the retention rates of TFA teachers beyond their two-year commitment, the numbers showed:

- 60.5% teach one year past commitment
- 44.6% teach two years past commitment
- 35.5% teach three years past commitment

- 27.8% teach four years past commitment
- 23.9% teach five years past commitment. (Donaldson & Johnson, 2011)

After examining the survey responses, Donaldson and Johnson found that the top three reasons the teachers decided to leave education were to pursue a position outside of education (34.93%), to take courses to improve career in education (11.79%), or to take courses to improve career outside of education (10.26%). When looking at returners in TFA, Donaldson and Johnson found that of the teachers that left teaching, 21% held positions in K-12 schools, and 10.7% had returned to the classroom after leaving.

In a study on 12 TRPs, the National Center for Education Evaluation and Regional Assistance was able to examine teacher retention rates and the characteristics of schools that teachers transferred to and from (Silva, McKie, & Gleason, 2015). This study addressed two main research questions:

1. What are the retention rates of novice TRP teachers and other novice teachers?
2. What are the characteristics of schools that novice TRP teachers leave and enter? (p. Silva, McKie, & Gleason, 2015, p. 2)

This study examined new teachers from spring 2012 to fall 2012 that were transitioning from their first to second year, or their second to third year in the teaching profession (Silva, McKie, & Gleasn, 2015). In the districts they studied, they found that retention rate for TRP teachers was about 89%, while retention rates for

non-TRP teachers was about 87%. When examining movers in novice teachers, it was found that about 77% of TRP teachers stayed in the same school in which they started teaching, and 79% of non-TRP teachers stayed in their school. None of these were statistically significant differences. When expanding this over two years (either teaching in same school in year one and three or in same school year two and four), they found that 62% of TRP teachers stayed in the same school over a two-year period, and 60% of non-TRP teachers stayed in their school. However, when examining to what schools teachers moved, this study compared six main school characteristics: "percentage of students who were black, percentage of students who were Hispanic, percentage who were English language learners, percentage who were eligible for free or reduced-price lunch, percentage who scored proficient or better on state tests in reading, and the percentage who scored proficient or better in math," and found that the only statistically significant difference in teacher movement was where the percentage of students were black; TRP teachers left 45% of those schools and only 36% joined those schools (Silva, McKie, & Gleason, 2015, p. 2). On average, this study found that TRP teachers who changed schools moved to a school with a smaller percentage of Black students and a higher level of student performance. This is similar to the study conducted by Jackson (2013) discussed earlier in Chapter Two.

Weitzel (2009) used reflective exit papers to evaluate a Catholic, residency-based, teacher preparation program. The goal of his study was to determine if the papers could provide evidence as to the effectiveness of a program and to see if the Reflective Exit Papers (REPs) could help to prove if the residency model was effective

or not. After coding the essays and connecting the responses to the conceptual framework of the School of Education at the University where the residency-program was based, the study found that 26.3% of the responses focused on knowledge of pedagogy, 23.4% focused on theory into practice, 17.5% focused on communication, and 11.7% focused on being a lifelong learner. Overall, the candidates all focused on the central theme of community, with four subthemes of community becoming clear in this study. The study did reveal that the reflective exit papers could be used as a program evaluation tool, and also demonstrated how "reflective exit papers could be employed to capture the perceptions and perspectives of graduating candidates" (Weitzel, 2009, p. 67).

The University Consortium for Catholic Educators

Overview. The University Consortium for Catholic Educators was a religiously-based residency model. The UCCE supported collaboration between Catholic colleges, universities, and schools (Davies & Kennedy, 2009) to provide teachers to Catholic K-12 schools. The UCCE started with the University of Notre Dame's Alliance for Catholic Education (ACE) program in 1993 (Davies & Kennedy, 2009). The University of Portland initially provided ACE students their teacher education courses, designed the curriculum, and ACE students earned a Masters of Arts in Teaching from the University of Portland. In 1998 the Notre Dame ACE program was duplicated to similar models at Seaton Hall University, the University of Portland, Valparaiso University, Loyola Marymount University, and Providence College (Smith, 2007).

All UCCE participants were college graduates who committed to two years of teaching in a Catholic school while living in Christian communities and while being trained to become Catholic educators (Davies & Kennedy, 2009). One key aspect of the UCCE program was that UCCE members lived in intentional Christian communities in order to support each other, prayed together, and shared household responsibilities (Davis & Kennedy, 2009). These communities helped new teachers support each other and provided them with the energy needed to successfully continue to teach throughout the first two years. The support offered UCCE teachers by their own teacher education professors and UCCE staff members contributed to their success both during their two years in the program and throughout their entire educational experience (Davis & Kennedy, 2009). All of the schools in the UCCE program shared the three pillars of the Alliance for Catholic Education (ACE): community living, Academic Learning, and spiritual growth.

UCCE members completed graduate course work at their universities, which helped them become Catholic educators (Davis & Kennedy, 2009). UCCE candidates also found a lot of support available through UCCE program staff. This occurred through mentoring relationships in their schools' faculty and staff, in the education department at the cooperating Universities, and through community living mates (Davis & Kennedy, 2009). This intentional support helped the UCCE teachers feel supported not only during their two years in the program, but through their entire induction into the teaching world and beyond. Since UCCE programs were located primarily at Catholic universities, it was easy to enrich and inform the instruction of

their educators based on the Catholic environment (Davis & Kennedy, 2009). The curriculum was not limited to formal course work, and many programs had classes focused on the community and spirituality pillars.

Davis and Kennedy (2009) conducted a study on the UCCE program using data gathered at the Director's meeting during the annual summer conference. These data included the number of participants and graduates, participating schools, diocese and states, and the undergraduate institutions of participants. They also sent out a survey to identify what graduates chose to do after completion of the program. Finally, they looked at testimony from program alumni and conducted interviews with University administrators either in person or via e-mail to gather views on the programs hosted at the specific University. They found that since the establishment of ACE in 1993, as of 2009, 2,219 teachers graduated from host universities. When looking at graduates from 2006-2009, they found that most teachers continued to teach in Catholic schools. In total, 47% continued to teach in their placement school at least one year after graduation, and 24% continued to teach in other Catholic schools, for a total of 71% of UCCE graduates still teaching in Catholic schools. An additional 22% of UCCE graduates continued to teach in public schools, for a total of 93% of UCCE teachers still teaching one year after program completion.

PACE. The Pacific Alliance for Catholic Education (PACE) was founded in 1998 at the University of Portland. Uniquely, PACE was comprised of two years of teaching in a Catholic School and three summer sessions, allowing time for participants to complete a two levels of authorization (Smith, 2007). Participants in

PACE started living in a community during their first summer session which helped participants identify a firm foundation in the program's commitment to the community living pillar (Smith, 2007).

PACE teachers participated in a residency cohort-based program for two years earning a Master Degree of Education (MEd) or a Master of Arts in Teaching (MAT) degree. PACE teachers took summer courses at the University of Portland, and then lived in communities throughout the Western United States while teaching at Catholic Schools. PACE communities included: Fairbanks, Alaska; Seattle, Washington; Tri-Cities, Washington; Portland, Oregon; Bend, Oregon; Red Bluff, California; Sacramento, California; Ogden, Utah; Salt Lake City, Utah; and Draper, Utah. In addition to the three-credit courses offered each summer at the University of Portland, the program offered a formation course twice a week during the first year of teaching to learn about community living and spiritual development. The program also offered retreats throughout the year that consist of one three-day retreat in the summer, one three-day retreat in the fall, and a one-day reflection day in the spring.

A University of Portland Research Fellow completed a data analysis provided for the program in the spring of 2015. This report looked at the following questions:

- How many students have PACE teachers impacted since the program's inception?
- What trends were present in PACE applicant data? What region of the country and from what undergraduate institutions were PACE applicants?

- How much money has PACE saved Catholic schools per year and over time?

There was a steady increase in the amount of PACE teachers signing up for the program with three students enrolling in 1998 and 41 students enrolling in 2015.

PACE supported participants in their program through the use of a three-pillar support system first created by ACE. However, PACE's three pillars were unique to the University of Portland with a focus on professional service, community living, and academic support. This support system helped PACE teachers feel as though they were connected to a community of teachers and were connected to a community of educators that work together to achieve the same mission of teaching in Catholic education.

Professional Service. PACE defined professional service as a commitment to making a difference in the lives of children and bringing faith-based idealism into the classroom. The components of professional service focuses on their time in the classroom, specifically focused on regularly scheduled formal observations by a university supervisor, mentoring by an on-site teacher, ongoing supervision and support from the school, subsidized housing on site, health coverage arranged by the program, and a "simple living" stipend of approximately $1,150 per month in 2015.

It was both demanding and rewarding to teach full-time while completing a teacher preparation program (Davis & Kennedy, 2009). The extensive support received by PACE participants helped them serve as Catholic educators. Their

vocation became one of a Catholic educator working to help educate with a spirit of Catholicism that permeated through the entire curriculum (Davis & Kennedy, 2009).

Community Living. For the community living prong of the three-pillar support system, PACE teachers lived in intentional community groups of three to six members. The key components embedded within the community living pillar were living in community with other PACE teachers for mutual support, four communal dinners weekly prepared and shared by community members, planned recreation activities with community members, weekly community meetings to discuss school and lives, shared household responsibilities, and meeting as a community with the PACE Coordinator for support and reflection on the community experience. Also included within the community living pillar was a focus on spirituality. PACE teachers were given the opportunity to experience growth in the community by being involved in their own spirituality. In order to do this, there were opportunities including a weekly evening of community prayer, a weekly Sunday Mass, and a cycle of six retreats where PACE teachers experience spiritual growth and reflect on their teaching in light of their faith journey.

Living in an intentional Christian community was countercultural (Davis & Kennedy, 2009), or it tended to fly in the face of current cultural practices for young adults. These communities become a microcosm of the church today, with participants being formed in the doctrine of the faith. These communities became powerful centers of growth through simple living, support, and encouragement (Davis & Kennedy, 2009). It helped them to feel connected to a community and to feel supported as they

participated in their first two years of teaching. In effect, this community they lived in becomes their community of practice (Lave & Wenger, 1991), which helped them feel supported and encouraged as they were invested in a new school.

In Weitzel's (2009) study on the reflective exit papers of a Catholic residency-based program, four clear sub-themes emerged around the concept of community. The four subthemes were:

1. Community: Local and Residential
2. Community: Academic and Social
3. Community: Spiritual and Professional
4. Community: Professional Acceptance and Leadership (Weitzel, 2009).

The first sub-theme "repeatedly emphasized the benefits and challenges of simultaneously being a part of a shared cohort residency and of a broader civic and spiritual community (p. 64). The second sub-theme focused on the development of a community within the candidate's classroom, both academically and socially. The third sub-theme discussed the sense of mission that the graduates felt, along with their own professional growth. Finally, the last sub-theme focused on the acceptance or struggles they felt from their school administrators and fellow teachers in their school. Weitzel (2009) determined that the responses "illustrated these sub-themes of community as they related to contextual (both civic and residential), personal/spiritual, and professional communities" (p. 67).

Unlike other UCCE schools, PACE folded the spirituality pillar under the community living pillar. This pillar strived to make participation in the Catholic faith

possible for all participants in the program (Smith, 2007). The goal was that the children UCCE teachers instruct are able to discover the truth of the Gospel (Smith, 2007).

Academic Learning. The final pillar in the three-pillar support program provided to PACE teachers was academic learning. PACE teachers attended classes at the University of Portland's Graduate School in Education and earned either a M.A.T or a MEd. They were also eligible for teacher certification at the end of their two-year commitment.

Summary

This chapter explored the retention rates that have been reported in different quantitative and qualitative studies. It then looked at induction as a method to support new teachers and improve the attrition rate of teachers. It based this study in the need to belong in a community and situated learning theory. It then looked at the field of teaching preparation, and finally focused on residency-based teacher preparation models.

Chapter Three: Methods

This mixed-method study examined the retention rates of PACE teachers after their first year post-graduation, third year post-graduation, and fifth year post-graduation. This research described the retention rates of the teachers and identified the characteristics and patterns of PACE teachers who remained in or left the teaching profession. Additionally, this study examined the impact of the three-pillar support system on teachers' decisions to stay in or leave the profession one-year after program completion.

Research Design and Rationale

For this study a mixed-method approach was used to analyze the retention rates and patterns of retention for teachers in the PACE program. A quantitative approach was needed to identify the retention rates of PACE teachers. The access to PACE teachers, both those that were still teaching and those that were no longer teaching, led naturally into a unique analysis of teacher attrition. The qualitative aspect of this study helped examine the impact of the three-pillar support system used by PACE to support its residents. So while the quantitative approach sought to answer *how many* teachers stayed, the qualitative aspect sought to investigate *how* the support that PACE provided impacted the teachers' decision whether to stay in teaching. As stated in Chapter One and Chapter Two, most findings on teacher attrition, retention, and mobility tended to cover two years of teachers' careers (Ingersoll & Strong, 2011). Unlike the previous studies, this investigation examined teachers' careers and the

characteristics of teachers that stayed, moved, and left the profession over the entire timeline of a residency-model.

Participants. PACE started in 1998 with three female candidates. The first male PACE teacher entered in the third cohort starting in 2000. In total, 141 students have participated in the PACE program as of 2015, 104 females (73.76%) and 37 males (26.24%). The ethnicity of the students who entered the PACE program was not formally collected in the past database. Of the 141 students that have entered PACE, 3 students did not complete or finish the program. This brings the total sample size of PACE graduates down to 138.

A research fellow at the University of Portland collected geographic information on applicant data and found that of the 597 PACE applicants from 2001 to 2015, 224 (37.2%) came from the Northwest region of the United States, and 217 (36.0%) came from the Midwest. There also have been three applicants from countries outside the United States. Of all the applicants, three institutions made up more than 30% of the total applications, close to evenly split among University of Portland (14.6%), University of Notre Dame (13.7%), and Gonzaga University (10.8%).

PACE teachers had the option to earn a MA, MAT, or a MEd. Of the 138 teachers that graduated from PACE, 76 candidates (55.07%) have earned a MAT, 2 candidates (1.4%) earned a MA, and 60 candidates (43.4%) have earned a MEd. PACE teachers chose either to teach in an elementary setting (K-8) or a high school setting (9-12).

Data Sources. The first data source this study used was the Alumni Database completed by the program Director of the PACE program. From 2005 to 2012, the PACE program was managed by AmeriCorps. During this time, data were not diligently collected regarding PACE teachers or their employment status. This database has been updated in May of each graduation year since 2000, with PACE teachers completing an exit interview with the Director or co-Director of the program. Data retrieved from the database were the degree they completed, gender, and entry age.

In 2007, a survey was sent to update employment status of PACE graduates. The survey asked whether they were still teaching in Catholic education; and if not, were they still teaching. The survey also requested a contact information update. Results of this survey were included in the Alumni Database provided by PACE. The Alumni Database identified PACE teachers' current job and their current employer. The database also identified the most updated contact information for each of the PACE teachers including phone number, mailing address, and e-mail. It did not include information on the number of years PACE teachers had been teaching after year one.

In order to update this database, a Qualtrics (2012) survey was created and administered to PACE alumni (See Appendix A). Qualtrics is an online survey where "one can set up sophisticated survey, publish them, and collect the results" (Barnhoorn, Haasnoot, Bocanegra, & Steenbergen, 2014, p. 919).

For the qualitative aspect of this survey, Reflective Exit Papers written by PACE teachers were analyzed. Every graduate from the School of Education at the University of Portland was asked to answer three questions in the Reflective Exit Paper. In addition to those three questions, PACE teachers were asked to respond to three additional questions specifically focused on PACE. These questions were:

1. Address how your learning about the four pillars of PACE; spirituality, community, service in teaching, and professional preparation; have positively affected your personal and professional development over the past two years.
2. How has mentoring—at the school and from PACE—affected your personal and professional development?
3. How has living in community affected your personal and professional life?

For this study, it was only these last three questions that were analyzed and coded. While question number one asked students about the four pillars, conversations with the PACE Director explained that spirituality is actually folded under the community living pillar at PACE, and all of the materials for PACE speak of the three pillars. It was an oversight not to change the question to reflect three pillars versus four pillars. Exit paper data from graduating year 2009 through graduating year 2015 was collected. However, for graduating year 2012, PACE had lost access to data, so they were not provided. In 2009 (and the years pervious to 2009), the PACE students did not answer the same questions as stated above; so for this study five years of graduating Reflective Exit Papers were analyzed. These five years were graduating

years 2010, 2011, 2013, 2014, and 2015. PACE provides each cohort with a number. These numbers correlate to the order in which the different cohorts graduated. The first cohort graduated in 2000 with three students. This cohort naturally was called Cohort Number 1. So, in connection to the graduating years, the following cohort numbers were analyzed: Cohort Number 11 (graduating year 2010), 12 (2011), 14 (2013), 15 (2014), and 16 (2015).

Instrument. In order to update the Alumni Database and to analyze the retention rates of PACE teachers, the Qualtrics survey was e-mailed to all 138 PACE graduates using their last known e-mail provided during their exit papers or e-mails they provided PACE informally, which had been updated in the Alumni Database. This Qualtrics survey was divided into three sections: (a) teacher demographics; (b) employment; and (c) PACE Three-Pillar Support. This survey had a total of 29 different questions. Skip logic was used during survey construction in order to ensure teachers were only asked questions that applied to their specific teaching experience. For example, if a teacher had only been out of the program for two years, then that teacher was not asked questions about year three and year five post program completion. Similarly, if a teacher responded that he or she was no longer teaching, then he or she was not asked if his school was Catholic or not, and instead skipped to a question on why the individual decided to leave the profession. Teachers that were still teaching were not asked the question on why they decided to leave the profession.

***Teacher demographics*.** To capture PACE teachers' ethnicity, participants were asked to report their ethnicity, using the same categories as those who completed

a National Center for Educational Statistics survey (Gray & Taie, 2015). These options were: White, Hispanic or Latino, Black or African-American, Asian, Native Hawaiian or other Pacific Islander, American Indian or Alaska Native, and two or more races.

Teachers were also asked to fill in their first name, along with their gender, the degree they earned while at University of Portland (UP), the grade level they taught while a member of PACE, and the year they graduated from PACE. They were also asked to identify if they had pursued or earned any other graduate degree since PACE completion. Finally, the last question in this section of the survey asked PACE teachers to identify how often they made contact with other PACE teachers that were not in their family. The reason they were asked not to include family members is there were some PACE members who were siblings, and also some PACE members married each other.

Employment. This section of the survey asked PACE teachers if they were still teachers and to identify how many years they had been teaching. It also asked if they left teaching for at least one year and then returned to teaching. In order to calculate the correct number of years, PACE teachers were given a list of criteria in their survey. This list was:

- Do not include your time while you were in the PACE program
- Do not include substitute teaching (unless as a long-term sub in a single position for more than ½ the school year)
- Include this current year in your calculation

- Include as a full year any school year you spent teaching at least ½ time

Then, PACE teachers were asked to identify their job post-program completion. Also they were asked to identify their job one year, three years, and five years post-graduation, along with their current job as of completion of the survey. When identifying their job, they selected whether their job was in teaching, higher education, administration or another field. If they selected teaching, they were asked to identify whether they taught elementary (K-5), middle (6-8), high school (9-12), or were in an administrative position. They also identified whether they were still working in a Catholic school, if it was the same Catholic school in which they were placed during PACE, or if they moved to a public school. As explained above, skip logic was used to ensure PACE teachers were only asked questions that applied to their current situation.

If a PACE teacher had left the profession, they were then asked to select the main reason for dissatisfaction with their job. PACE teachers that left the profession were given the same list of reasons Ingersoll (2001) used in his analysis of teacher attrition.

Support. The last section of the Qualtrics survey asked teachers about PACE's three-pillar support system to identify which aspect of PACE's three-pillar support system had the largest impact on PACE teachers' retention. In order to ensure each PACE teacher defined the different aspects of the three-pillar support system in the same way, a definition of each pillar was provided on the survey. The definitions provided were:

- Professional Service: A commitment to making a difference in the lives of children and bringing faith-based ideas into the classroom.
    - Key Components:
        - Regularly scheduled formal observations by the University of Portland supervisor
        - Mentoring by an on-site teacher
        - Ongoing supervision and support from the school
        - Subsidized housing on site
        - Health coverage arranged by the program and a “simple living” stipend
- Community Living: Living in intentional community groups of three to six members.
    - Key Components:
        - Mutual support from fellow PACE teachers
        - Communal dinners
        - Planned recreation activities
        - Weekly community meetings
        - Shared household responsibilities
        - Regular site meetings with PACE Team Members
        - Weekly community prayer & Sunday Mass
        - PACE formation programs & Cycle of retreats.

- Academic Learning: Participants will earn either an MAT or an MEd from the University of Portland School of Education after spending three summers on the UP campus.
    - Key Components:
        - Tuition scholarship for a graduate degree in Education
        - Academic program customized to meet the requirements for teacher licensure
        - Eligibility for teacher certification
        - One level of authorization for initial license candidates
        - Room and board on campus for the academic summer sessions
        - Opportunity to take courses in specialty areas with the opportunity for license endorsements
        - Distance-learning courses while on-site during the school year

The survey asked participants to rank the importance of each aspect of the three-pillar support system in order of importance connected to their teaching experience. Subsequently, they were asked to identify the percent of impact on a scale of 0-100 that each support pillar had on their experience in PACE using a sliding scale on Qualtrics.

Procedures

While working with the PACE faculty members of The University of Portland, the following procedures were followed in order to ensure the validity and reliability of the survey and to collect the data from the qualitative Reflective Exit Papers.

Pilot of the survey. Prior to distribution of the survey, three EdD cohorts in September 2015 analyzed the survey. The purpose of this analysis was to test the validity and reliability of the survey.

Two of the EdD cohorts had already completed an Advanced Quantitative Methods and Statistics class, while the third EdD cohort was about two months into their Advanced Quantitative Methods and Statistics class. This class addressed the construction of the survey for both validity and reliability. The professors of the class also described to the candidates prior to piloting the survey the importance of feedback on a survey and the fact that any small detail of confusion or frustration should be noted. Of the participants in the EdD cohorts, most were either teachers or administrators in P-12 schools, giving them a unique perspective of a teacher that could be directly applied to the PACE graduates.

Most of the questions asked were regarding the overall flow of the survey, the wording of questions, and the order of the questions, and any other suggestions on which the pilot group wanted to comment. During this pilot of the survey, there were many different comments on the layout of different questions. One question that many of the candidates struggled with was based on the importance of PACE during their time in PACE. This question was:

- Please rank in order of importance, with 1 being most important. Which aspect of the PACE Three-Pillar support system did you find most impactful during your time in PACE?

The question originally asked candidates to drag and drop the three pillars into rank order. The first and second cohort that read this question struggled with the drag and drop aspect of this question. Thus, the question was changed from a drag and drop format to a radio button format. The last cohort class tried the updated radio button format and had no issues with this question.

Additionally, candidates were confused if they were answering questions about year one-post graduation, year three-post graduation or year five-post graduation. While some of this confusion was natural because they were not PACE teachers, directions on the top of each section were added to the survey. Also, the words "answer for the first year-post program graduation" were bolded and capitalized to help them be easily recognized on the survey. This also helped to clear up the confusion a few individualized had about answering the same question twice. When the headers were added to each question, they were able to identify if they were answering it after year-one, year-three, or year-five.

EdD candidates were asked to complete the survey two to three times in order to test the skip logic provided in the survey and to ensure the test-retest reliability and validity of the survey. Test-retest reliability and validity are measures of how reproducible the results are (Litwin, 2003). After the responses were recorded, the results were reviewed, and a practice multi-level logistic regression was run on the

fake results to see if the necessary results were present from the survey. While completing the survey, a second or third time, EdD candidates were asked to pretend they had left teaching early, had left and returned to teaching, and to answer questions differently then they did the first time through the survey. There were a few typos found throughout the pilot of the survey. These typos were fixed, along with the addition of a submit button at the end of the survey.

After piloting the survey, two professors from the University of Portland read through the survey and discussed the different answer choices found on the survey. The main feedback from this meeting dealt with the calculation of years teaching. Based on this discussion, the directions were changed from a paragraph format to a bulleted list that explained how to calculate the total number of years taught.

Finally, the current PACE Director looked through the survey, which helped to ensure the content validity of the survey. Content validity, or the subjective measure of the appropriateness of the items and scales to a reviewer with knowledge of the subject mater (Litwin, 2003), helps to make sure that the survey made sense to the PACE graduates. Based on conversations with the PACE Director, a question was added to the survey that asked the candidates what degrees they had earned after PACE graduation. Additionally, the idea of adding the UP Banner to the top of the survey was discussed and eventually was added to increase the credibility of the survey. Otherwise, it was decided that the

survey made sense for candidates, and that PACE graduates would understand how to answer the different 29 questions throughout the survey.

Distribution of the survey. After completion of the pilot administration with the EdD candidates, the PACE Director, and the University of Portland professors, the survey was e-mailed to all PACE participants in October of 2015. Participants were asked that it be completed within two weeks. This email (see Appendix B) was written with the joint signatures of the researcher and the Director of PACE. Since the PACE Director had relationships with the graduates, having his signature on the e-mail helped to make it more credible. The e-mail went out from the PACE Director's e-mail with a link to the Qualtrics survey attached. The names of those who completed the survey were entered into a drawing for a $50 gift card to Starbucks. Two Starbucks gift cards were provided by PACE for the drawing. After the two-week time period, 75 of the 138 PACE students had completed the survey for a total of 54.35% of possible PACE graduate respondents.

A reminder notice was sent to PACE participants after two weeks of the initial survey distribution. This e-mail was sent by PACE's administrative assistant (see Appendix C) and reminded PACE teachers to complete the survey. After this e-mail, the number of PACE graduates that completed the survey jumped up to 96 students or a total of 69.5% of the population of PACE graduates.

A target response rate of at least 70% of PACE graduates was set for the response rate of PACE graduates. Baruch (1999) conducted a study of 175 different academic studies and found that the average response rate for surveys was 55.6% with

a standard deviation of 19.7. Despite the average being around 55.6%, this study included surveys sent both towards top management (36% return rate with a standard deviation of 13) and the conventional population of an organization (60% return rate with a standard deviation of 20). Since the PACE graduates could be classified as the conventional population of an organizational, it makes sense for the target response rate to be 70% of all graduates. In order to achieve the target return rate of 70%, the PACE Director added an additional follow-up procedure of making a personal communication with some remaining PACE graduates with whom he had worked. He sent personal e-mails to a few of the PACE graduates and then called a few other PACE graduates and asked them to complete the survey. After these communications, the total number of surveys completed was 115, which was an 83.33% return rate. Of these returned surveys, two were not completed fully and thus were eliminated. It would not have been possible to use statistical imputation to estimate how the respondents would have responded, thus the decision to eliminate their results (Fink, 2003). Two additional surveys were started by the graduate but then stopped and resumed. When they resumed the survey they started over on the survey instead of completing their old survey, thus creating two surveys from candidates with the same name. The two surveys with the candidates that had the same names and were started and stopped were also eliminated so that the candidates were not counted twice in the results. Due to this, the total number of completed surveys was 111, which resulted in an 80.43% return rate. One interesting note from the surveys was that there was at least one PACE teacher from each cohort that completed the survey, which helped

provide a wide range of responses. Also, at least one candidate from each of the cohorts responded to the survey. With this in mind, most likely the nonresponses were not very different than the people that responded to the survey. Also by examining the Alumni Survey and the admission statistics of the PACE candidates, it is clear that most of the PACE graduates were similar in both their belief and demographic details, thus showing that the nonrespondents were not that different than the respondents to the survey.

The PACE Director and the researcher received many e-mails from PACE graduates about the survey. All of the e-mails expressed excitement about the results and were looking forward to reading the survey results. Most of the e-mails praised the survey and said they found it easy to complete. One e-mail had a critique about one of the questions in the survey. The issue with the question was that this candidate had completed another degree from PACE and was working on her second degree post-PACE; yet, the option for selecting two choices was not available for that specific question. All of the results from the survey were downloaded and saved behind the University of Portland firewall both in Qualtrics and in Microsoft Excel.

Qualitative procedures. The PACE Reflective Exit Papers were scanned by the PACE Director to provide an electronic copy, the resulting PDF documents were then placed in a shared, password protected Dropbox that was located behind the University firewall. As stated earlier, five years of PACE Reflective Exit Papers were analyzed, cohort number 11 (5 total graduates), 12 (13 total graduates), 14 (11 total graduates), 15 (13 total graduates) and 16 (23 total graduates). All of the graduates'

essays from these cohorts were read and coded. Cohort number 13 responses were not included in the program records. In total, 65 different PACE Reflective Exit Papers were coded; providing data from 47.10% of all PACE gradates.

Data Analysis

Descriptive statistics were calculated for the following variables: gender, ethnicity, degree earned, and teaching level of candidate (elementary, middle, high).

Individuals were classified into two groups: teachers and non-teachers (leavers). For the teachers group, there were three subcategories of stayer or mover. The terms stayer, mover, and leavers, were present throughout the literature on teacher attrition (Ingersoll, 2001; Gray & Taie, 2015; Strunk & Robinson, 2006). Additionally, a group of teachers were identified as returners based on their response to the question addressing PACE graduates leaving and returning to the program. The additional term of returner came from Gray and Taie's (2015) study on teacher attrition in public schools. These definitions were:

- Teacher
    - Stayer: teacher in the same school currently as in their original school after completion of program.
    - Mover: teacher that changed schools at least once since his or her completion of PACE.
    - Returner: Teacher that left teaching but decided to return to the profession.
- Non-Teacher

- Leaver: No longer teaching (either because he or she left the profession or did not complete the PACE program).

Descriptive statistics were calculated for the PACE teachers (stayers, and movers) still teaching in the first, third, and fifth year post-graduation. Descriptive statistics were also used to analyze the number of teachers that left the profession for one year and then returned to the profession (returners). Results were disaggregated for the teacher and non-teacher group by gender, degree earned, contact with other PACE teachers, ethnicity, teaching in Catholic school, and teaching level of the candidate (elementary, middle, high).

Comparison Analysis within PACE. Teachers were divided into the different categories of teachers or non-teachers. A multilevel logistic regression to predict whether or not teachers were staying in the profession was calculated in order to determine which, if any, variable significantly predicted teacher retention while accounting for multiple factors at once – i.e., allowing for the consideration of one independent variable while accounting for other independent variables. In order to calculate this test, the dependent variable—teacher turnover—needed to be binary (1=teacher still teaching; 0= teacher not teaching). The independent variables analyzed were race, gender, degree earned, and level of teaching (elementary, middle, or high). Similar regressions – with only the dependent variable changed – predicted whether or not teachers were movers or non-teachers. The same regression was run to predict if the teachers would stay in or leave Catholic Education.

Teacher support. PACE based its support system on the three key pillars of professional service, community living, and academic service. In order to examine the impact of these three pillars, both a quantitative and qualitative approach was implemented.

Quantitative analysis. Descriptive statistics indicated the level of importance of each support pillar for both PACE candidates identified as teachers and non-teachers. Teachers were also asked to determine the percent of impact of each one of the pillars separately during their time in PACE using a sliding scale with the anchors of 0 as a low limit and 100 as a high limit. As described above, a multilevel logistic regression was calculated to analyze the impact of each level of support (Professional Service, Academic Learning, and Community Living) on the candidates and compared the data of teachers and non-teachers. The dependent variable was whether a teacher decided to stay or leave, with independent variables of the influence of each identified pillar of support during their time at PACE.

Qualitative approach. For the qualitative section of this study, PACE teachers' Reflective Exit Papers were read and coded in order to identify key themes about the three-pillar support system. These themes were used to help understand *how* the three-pillar support system influenced candidates while they were in PACE. The qualitative section of this study connects directly to the third research question: What impact does each pillar in the three-pillar support provided to PACE teachers have on teacher retention? In order to analyze these essays, four distinct steps were used:

1. Analysis: involves organizing raw data into an understandable form that reveals basic patterns and constitutes the evaluations' empirical findings;
2. Interpretation: involves determining the significance of and explanations for the findings
3. Judgment: which brings values to bear to determine merit or worth and decide whether the results are positive or negative; and
4. Recommendations: which involve determining the action implications of the findings. (Patton, 2008, p. 478)

Pre-coding. First, the Reflective Exit Papers were pre-coded, and the answers were deductively chunked into three different word documents. The three chunks were based on the different pillars of PACE support, with one Word document on Professional Service, one on Academic Learning, and one on Community Learning. While the responses were chunked into the different Word documents, they were labeled based on the cohort number and the individual person (by number selected alphabetically) in each cohort in order to keep track of the different responses. In order to determine which pillar each response addressed, the definitions of the three different pillars (as written above) were used to identify the key components of each pillar. The second question graduates were asked (How has mentoring—at the school and from PACE—affected your personal and professional development?) was clearly addressing the Professional Service pillar while the third question graduates were asked (How has living in community affected your personal and professional life?) was clearly addressing the Community Living pillar. The first question that graduates

were asked: Address how your learning about the four pillars of PACE; spirituality, community, service in teaching, and professional preparation; have positively affected your personal and professional development over the last two years; broke the pillars down into four distinct groups. PACE combined the spiritual and Community Living pillar, which was also done in the study. Graduates tended to respond to each of the pillars in a few paragraphs consecutively, thus allowing the pre-coding of the data into the different three chunks based on the pillars.

First Cycle of Coding. Following the pre-coding, the responses were then coded using description coding, where the researcher read through and in a separate column described the key idea each of the different candidates were saying in the different responses. In descriptive coding, different labels were inductively assigned to the data to summarize in either a single word or in short phrases the basic topic of the response (Saldana, 2013). During the first cycle of coding if a response fit better in a different pillar than the response it was pre-coded in it was moved into that pillars chunk.

Magnitude and Evaluation. The Reflective Exit Papers were then coded using magnitude coding. Magnitude coding involves adding either a supplemental alphanumeric or symbolic code to existing coded datum to help to determine how intense was that specific code (Saldana, 2013). It is appropriate for "descriptive qualitative studies that include basic statistical information such as frequencies or percentages, and qualitative studies…that also support quantitative measures as evidence of outcomes" (Saldana, 2013, p. 73). Responses were broken into four

different groups identifying the response as positive, negative, neutral, or mixed. Supplemental shorthand was used to add texture based on the intensity of the response to the codes, which allowed the researcher to add a number to each of the responses. The responses were coded as:

- 4 = positive experience in PACE
- 3= neutral experience in PACE
- 2= negative experience in PACE
- 1= mixed experience in PACE.

In order to determine if a code was positive, neutral, negative or mixed the words that the graduate used were analyzed to determine what experience the graduate had with the specific aspect of the program they were describing. For example, when a candidate explained that "professional preparation was another strong suit in PACE" it was coded positive (Graduate, 11.3). However, a graduate that complained that, "I don't think we ever really saw each other as our brother's or sister's keeper when it came to faith" was coded negatively (Graduate 12.8). The difference between a neutrally coded response and a mixed coded response was based on the feeling of the graduate. If the graduate was simply describing something that happened and not discussing his or her feeling, it was coded neutral. If the graduate was discussing how his or her feelings changed from negative to positive, or how the experience was both positive and negative then it was coded mixed.

After the magnitude coding, the evaluation coding method was used (Saldana, 2013). This method applies nonquantitative codes to qualitative data that assign

judgments about the merit, worth, or significance of the programs or policy (Miles, Huberman, & Saldana, 2014). The responses were placed into one of three choices based on evaluation coding. These codes for the responses were:

- Describe: focus on patterned observation or participant response of attributes and details that assess quality;
- Compare: explores how the program measures up to a standard or ideal;
- Prediction: provides recommendation for change, if needed, and how those changes might be implemented. (Saldana, 2013)

This coding helped to discriminate between participants' observations, their view of the program's purposes/goals and their suggestions for improvement.

In summary, the different responses had a total of two different codes after being separated into different groups based on the pillar to which the candidate was responding. These two different codes were their magnitude codes (positive, negative, neutral, or mixed) and their evaluative codes (describe, compare, or prediction) based on the responses provided.

Second Cycle. After the first cycle of coding was completed, recoding occurred with a more attuned perspective for a second cycle of coding (Saldana, 2013). Responses within each pillar were coded into different themes and subthemes, which helped to refine the data. Each of the pillars had different themes and subthemes present based on the second cycle of coding. These themes and subthemes for the three pillars are:

- Community Living

    - Relation to Others
        - Emotional Education Support
        - Individual Growth
        - Intentional Relationships
    - Accountability
    - Spiritual Growth/Individual Faith
- Academic Learning
    - Courses
        - Instructors
        - Teaching Skills and Resources
        - Work Sample/Capstone Research
- Professional Service
    - Mentorship
        - Assigned School Mentor
        - School Community
        - U.P. Advisor
    - Vocation
        - Service
        - Religion
    - Skills

Triangulation and Reliability. In order to ensure the credibility of the codes and the themes, triangulation was used. Triangulation helps to "shore up the internal

validity of a study" (Merriam, 2009, p. 215). This study had two primary sources of data, the Qualtrics survey and the Reflective Exit Papers. Based on the responses to the last two questions in the Qualtrics survey, comparing and cross-checking of the data occurred to ensure validity. Also, another EdD candidate read and coded two to three essays from each cohort using the same coding method and the pre-defined themes and subthemes to increase the interobserver reliability of the results.

Summary

In this mixed method study, tests identified the retention rates of PACE teachers and determined characteristics of teachers who stayed or left the profession. This study compared the rates and patterns of retention of PACE teachers to that of public school teachers. Finally, this study analyzed the self-reported reasons teachers left the profession; comparing those reasons based on individual teacher characteristics, and analyzed exit papers for themes around the impact of each pillar of support.

Chapter 4: Results

The purpose of this study was to examine the retention rates of teachers who graduated from the Pacific Alliance for Catholic Education (PACE) residency-based teacher preparation model at the University of Portland between the years of 2000 and 2015. This study provided a unique view on patterns of retention of teachers with the same educational preparation model and followed teachers that graduated from PACE over a 15-year period. The study was a mixed-methods study that analyzed three different research questions. The first two research questions that this study analyzed were:

1) What is the retention rate of teachers (stayers, movers, and returners) in the PACE residency model after the first, third, and fifth year after program completion?

2) What are the characteristics (i.e., gender, race/ethnicity, degree earned, and school level) of the teachers who stayed in the teaching profession and leaving the teaching profession?

In order to answer these questions, a survey was sent to all PACE teachers to update an already existing Alumni Database on graduates. The survey asked respondents to identify their employment history after graduating from PACE and to update demographic information, if necessary. This survey was then analyzed to identify the retention rates of teacher's one-year post program completion, three-years post program completion, and five-years post program completion. Finally, a multilevel logistic regression was performed to predict which, if any, characteristics significantly

predicted teacher retention. A multilevel logistic regression test was able to consider the impact of one independent variable while also accounting for other independent variables at the same time.

The final research question of this study examined PACE's three-pillar support system for teachers in this residency-based model. This question was:

3) What impact does each pillar in the three-pillar support provided to PACE teachers have on teacher retention?

It was analyzed both quantitatively and qualitatively. For the quantitative approach, one question asked graduates to rank the three pillars in order (1-3) based on the impact each pillar had on them individually during their time in PACE, while the other question asked respondents to select on a sliding scale from 0 to 100 the percent impact each pillar had on their decision to stay in teaching. These results were both analyzed descriptively and also with a multi-level logistic regression. Finally, PACE graduates were also asked to complete a Reflective Exit Paper upon completion of the program. Graduates were asked three questions about the different pillars. These questions were coded using magnitude coding and evaluation coding.

This chapter presents the results from both the quantitative and qualitative aspects of this study. It starts with a description of the graduates that participated in the survey, then moves into a discussion of the results found from analysis of the survey, and finally moves into the results found from the analysis of the qualitative coding of the Reflective Exit Papers.

PACE

PACE began at the University of Portland in 1998 with three candidates, and there have been a total of 141 individuals who enrolled in the PACE program through 2015; this included 104 females (73.76%) and 37 males (26.24%). The ethnicity of the students who completed the PACE program has never been part of the database prior to this survey. PACE graduating classes continued to grow from the first graduating class in 2000 of three candidates to a total of 23 total candidates in the 2015 graduating class. Two graduates (1.42%) earned a MA, while 76 (53.9%) graduates earned a MAT, and 60 (42.55%) graduates earned a MEd. Three candidates (2.13%) started the PACE program but did not complete the program.

Survey demographics of participants. A survey was sent to all 138 PACE graduates. In total, 115 surveys were started. Of the total surveys begun, four of the surveys were not completed, reducing the total number of completed surveys to 111, or 80.43% of the PACE graduating population.

When examining the characteristics of the respondents, 93.69% were White, 6.31% were Hispanic, 2.7% identified as Asian, and 2.7% identified as Mixed. Most of the responding sample was female (75.68%). More than half of the sample (55.86%) earned a MAT, with most other graduates (43.24%) earning a MEd; one individual earned a MA. The teaching level of the PACE graduates was almost the same between those who taught in elementary schools (40.54%) and those who taught in middle schools (43.24%). Less than a third (28.83%) taught at the high school level. Of those who responded to the survey, 80.18% had not earned another degree after

completing PACE. Table 1 illustrates the demographics of the 111 graduates who responded to the survey:

Table 1

*Demographics of Respondents to PACE Alumni Survey (*N = 111)

Characteristic	n	%
Gender		
Female	84	75.68
Male	27	24.32
Ethnicity[a]		
White	104	93.69
Hispanic	7	6.31
Asian	3	2.70
Mixed	3	2.70
Degree Earned		
MAT	62	55.86
MA	1	0.90
MEd	48	43.24
Teaching Level During PACE[b]		
Elementary	45	40.54
Middle	48	43.24
High	32	28.83
Another Degree Post PACE		
Not earned another degree	89	80.18
Earned another degree	10	9.01
In process of earning another degree	12	10.81

Note. Total percentages are not 100 for every characteristic due to rounding.

a= Multiple selection was possible for candidates.

b= Multiple selection was possible for candidates.

Of all the responses, 21 (18.92%) came from the most recent graduating class of 2015, which was Cohort 16, and all three of the 2000 graduates in the first cohort responded to the survey. Table 2 illustrates the percent of responses from each graduating year:

Table 2

Percentage of Respondents' Graduating Year from PACE (N=111)

Graduation Year	n	%
2000	3	2.70
2001	1	.90
2002	3	2.70
2003	2	1.80
2004	7	6.31
2005	3	2.70
2006	5	4.50
2007	6	5.41
2008	8	7.21
2009	6	5.41
2010	4	3.60
2011	7	6.31
2012	14	12.61
2013	12	10.81
2014	9	8.11
2015	21	18.92

Note= Total of percentages are not 100 because of rounding.

Of the respondents, 39 (35.13%) stated that they were still in weekly contact with other PACE gradates. Respondents were asked not to include family member contact in their calculation, because there had been siblings and spouses that graduated from PACE. Table 3 illustrates the frequency of contact PACE graduates had with each other after PACE program completion:

Table 3

Frequency of Contact with Fellow PACE Graduates After Graduation (N=111)

Characteristic	n	%
Never	2	1.80
Daily	32	28.83
Weekly	39	35.14
Monthly	21	18.92
Quarterly	12	10.81
Yearly	5	4.50

Note= Total of percentages are not 100 because of rounding

Respondents were asked to report the total number of years they had been teaching, whether they had left teaching; and if they had left teaching, whether they returned to teaching. On average, respondents had been teaching for a total of 5.43 years (SD = 3.95). A total of 29 (26.13%) of respondents had left teaching for at least one year. Of the 29 that left for one year, 16 (55.17%) returned to the teaching profession, with the average amount of time out of the classroom of 1.88 years (SD = 1.82).

Retention Rate

When analyzing the overall retention rate of teachers in the PACE program, 88.29% of the 111 respondents were still teaching in the first year after graduating from the PACE program, 84.81% were still teaching three years after graduating from the PACE program, and 81.34% were still teaching five years after graduating from the PACE program.

The total number of participants that completed the survey was 111. Some of the participants that completed the survey had not been out of PACE for three years or for five years. When accounting for this, the sample size of candidates that had been out of PACE for three years was 79 and for five years was 58.

If respondents indicated they were employed in a non-teaching job, they were asked to select if they were in higher education, in school administration, or in another profession. Table 4 illustrates the retention rates and employment of the teachers in the first year after program completion:

Table 4

*PACE Graduates' Job in the First Year After PACE Graduation (*N=111*)*

Employment	n	%
Teacher (P-12)	98	88.29
Higher Education	2	1.80
School Administration	0	0.00
Other	11	9.91

Participants were then asked to identify their job three-years after PACE graduation. A total of 32 (28.83%) of the 111 respondents had not been out of PACE for three years, bringing the new sample size to 79. Of the 79 eligible participants, 67 (84.81%) selected teaching as their employment. Table 5 illustrates the employment of the respondents three years after program completion:

Table 5

*PACE Graduates' Job Three Years After PACE Graduation (*N=79)

Employment	n	%
Teacher (P-12)	67	84.81
Higher Education	2	2.53
School Administration	2	2.53
Other	8	10.13

Note=Total of percentages are not 100 because of rounding.

Of the 111 total participants in this survey, 53 (47.75%) had not been out of PACE for five years bringing the new sample size to 58. These 58 selected their employment 5 years after PACE program completion with a total of 47 (81.03%) selecting teaching. Table 6 illustrates the retention rates and employment of the teachers five years after program completion:

Table 6

*PACE Graduates' Job Five Years After PACE Graduation (*N=58)

Employment	n	%
Teacher (P-12)	47	81.34
Higher Education	2	3.45
School Administration	2	3.45
Other	7	12.07

Note=Total of percentages are not 100 because of rounding.

Catholic teachers. Participants who were teachers were asked if the school they were teaching in was Catholic. A total of 91 (92.86%) of the 98 teachers were teaching in a Catholic school in the first year after PACE graduation.

For the third year after PACE graduation, one of the administrators identified answered the question for Catholic schools bringing the sample size of eligible candidates from 67 to 68. Of the 68 participants in that sample, a total of 58 (85.29%) were still teaching in a Catholic school.

In the fifth year after PACE graduation, in addition to the 47 teachers, two respondents who identified themselves as administrators also answered the questions about teaching in Catholic school, creating a total sample size of 49. A total of 42 (85.71%) of those teachers were still teaching in a Catholic school five years after program completion.

First Year After PACE Graduation Teacher Characteristics

In the first-year after graduating from PACE, 88.28% of the respondents were still teaching, 1.8% of them had moved on to administration, and 9.91% had moved on to another job. Candidates were separated into two groups, teachers and non-teachers.

Teachers. To give a snapshot summary of the teachers that stayed in the profession (n=98), 91 (92.86%) continued to teach in a Catholic school, 45 (45.92%) remained in the same school in which they taught when in PACE, 76 (77.55%) were female, 92 (93.88%) were White, 53 (54.08%) earned a MAT, and 42 (42.86%) were teaching in an elementary school. Table 7 illustrates the characteristics of the respondents that were teachers the first year after PACE graduation:

Table 7

*PACE Teachers in First Year Post PACE Graduation (*N=98)

Characteristic	N	%
Gender		
Female	76	77.55
Male	22	22.45
Ethnicity[a]		
White	92	93.88
Hispanic	6	6.12
Asian	0	0.00
Mixed	3	3.06
Degree Earned		
MAT	53	54.08
MA	1	1.02
MEd	44	44.90
Teaching Level[b]		
Elementary	42	42.86
Middle	38	38.78
High	26	26.53

Note. Total percentages are not 100 for every characteristic because of rounding.

a= Multiple selection was possible for candidates.

b= Multiple selection was possible for candidates.

Retention rate by demographic. Participants in the survey were divided into two groups, one for teachers (n=98) and one for non-teachers (n=13). Of the 111 graduates, 27 were male, and 84 were female. When further examining the retention rates of PACE teachers in the first year after PACE graduation, 22 (81.48%) males were still teaching, and 76 (90.48%) females were still teaching after year one.

Participants were able to select more than one ethnicity on the survey. In total, 104 candidates identified themselves as White, and 13 candidates identified themselves as non-White. Then when examining the retention rates of PACE teachers in the first year after PACE, 92 (88.47%) of those individuals who identified as White were still teaching one-year after PACE graduation, and 9 (69.23%) respondents that identified as non- White were teaching after year one.

Retention rate by contact. Teachers were asked to identify how often they were in contact with fellow PACE teachers who were not a member of their family. They could respond whether they were not in any contact, had yearly contact, quarterly contact, monthly contact, or daily contact with fellow PACE teachers who were not a member of their family. Candidates who made daily contact with their fellow PACE teachers had a retention rate of 93.75%. Table 8 illustrates the retention rate for teachers and non-teachers in relation to the amount of contact they had with fellow PACE teachers.

Table 8

Retention Rate for Teachers and Non-Teachers One Year Post PACE Graduation Based on Contact (N=111).

Characteristic	Still Teaching		Not Teaching	
	N	%	*N*	%
Never	2	100.00	0	0.00
Daily	30	93.75	2	6.25
Weekly	34	87.18	5	12.82
Monthly	19	90.48	2	9.52
Quarterly	9	75.00	3	25.00
Yearly	4	80.00	1	20.00

Retention rate by degree earned. Candidates were able to earn a MEd, a MA, or a MAT while a member of PACE. Of the 111 respondents to this survey, 62 earned a MAT, 48 earned a MA, and one candidate earned a MA. The one candidate who earned a MA was still teaching in the first year after PACE graduation, 53 (85.48%) of the candidates who earned a MAT were still teaching in the first year after PACE graduation, and 44 (91.67%) teachers who earned a MEd were still teaching.

Retention rate by grade level taught. Teachers were also asked to identify what grade level they were teaching while in the PACE program. For this question, teachers were able to select more than one choice. Forty-five participants selected

elementary as their teaching level during PACE, 48 participants selected middle school as their teaching level during PACE, and 32 participants selected high school as their teaching level during PACE.

Then, in the first year after PACE graduation, 42 (93.33%) of the teachers who taught in elementary school during PACE were still teaching, 38 (79.17%) of the teachers who taught in middle school during PACE were still teaching, and 26 (81.25%) of the teachers who taught in high school during PACE were still teaching one year after PACE graduation.

Stayers versus movers. A total of 45 (45.92%) of the 98 teachers stayed in the same school in which they were teaching while in PACE, while 53 (54.08%) teachers moved to a different school.

Logistic regression teaching. After running a logistic regression to determine if any variable (contact with other PACE teacher, degree earned, gender, or race) had a statistically significant ($p < .05$) impact on a teacher's decision to stay in teaching one year after PACE graduation. The results indicated that none of the aforementioned individual variables had an impact on the graduate's decision to stay in teaching.

Logistic regression Catholic teaching. A logistic regression was also run to see if there was any statistically significant ($p < .05$) predictive variable as to whether a PACE graduate would teach in a Catholic school. The results of the logistic regression indicated that a PACE graduate was 1.47 times more likely (standard error - .284; $p < .046$) to teach in a Catholic school the more contact the individual had with fellow PACE members after graduation.

Teachers were then asked to identify if they were teaching three years post PACE graduation.

Three Years After PACE Graduation Teacher Characteristics

There were a total of 111 participants that responded to the survey. Some of the participants that responded to the survey had not been out of PACE for three years; thus they were not included in the sample of questions pertaining to PACE graduates that had been out of PACE for three years. In total, 79 participants had been out of PACE for three years. Of those candidates that had been out of PACE for three years, 67 (84.81%) were still teachers, 2 (2.53%) were in higher education, 2 (2.53%) were in school administration, and 8 (10.13%) were in another profession.

Teachers. Of the teachers that stayed in the profession (n=67), 58 (86.57%) were still teaching in a Catholic school, 32 (47.76%) were still teaching in the same school in which they were teaching one year after PACE graduation, and 27 (40.3%) were teaching in a middle school. Table 9 illustrates the characteristics of the respondents that were teachers three years after PACE graduation:

Table 9

PACE Teachers Three Years Post Program Completion (n=67)

Characteristic	N	%
Gender		
Female	55	82.09
Male	12	17.91
Ethnicity[a]		
White	65	97.01
Hispanic	3	4.48
Asian	1	1.49
Mixed	1	1.49
Degree Earned		
MAT	38	56.71
MA	1	1.49
MEd	28	41.79
Teaching Level[b]		
Elementary	26	38.81
Middle	27	40.30
High	17	25.37

Note. Total percentages are not 100 for every characteristic because of rounding.

a= Multiple selection was possible for candidates.

b= Multiple selection was possible for candidates.

Retention rate by demographic. Of the original 111 participants in this survey, 10 males had not been out of PACE for three years, and 22 females had not been out of PACE for three years resulting in the new sample sizes of 17 and 62 respectively. Then, when comparing the retention rates of teachers (n=67) vs. non-teachers (n=12) three years post PACE completion, 12 (70.59%) of the males were still teaching, and 55 (88.71%) females were still teaching.

Twenty-eight participants who identified themselves as White had not been out of PACE for three years, and 7 participants who identified themselves as non-White had not been out of PACE for three-years. Teachers could select more than one race. When excluding from the sample the participants that had not been out of PACE for three-years, the sample sizes for these two groups was reduced to 76 individuals who identified as White and 6 who identified as non-White participants. Of these respondents who had been out of PACE for at least three years, 65 (85.52%) of individuals who identified as White were still teaching, and 5 (83.33%) of those individuals who identified as non-Whites were still teaching three-years post PACE completion.

Retention rate by contact. When comparing the teachers and non-teachers that had been in contact with fellow PACE members, 90.48% of PACE graduates that had daily contact with their PACE cohort members were still teaching three years after PACE graduation. Table 10 illustrates the retention rates for teachers and non-teachers in relation to the amount of contact they had with fellow PACE teachers.

Table 10

Retention Rate of PACE Graduates Three Years After Graduation Based on Contact (n=79).

Characteristic	Still Teaching		Not Teaching	
	N	*%*	*N*	%
Never	1	50.00	1	50.00
Daily	19	90.48	2	9.52
Weekly	19	86.36	3	13.64
Monthly	16	88.89	2	11.11
Quarterly	8	72.73	3	27.27
Yearly	4	80.00	1	20.00

Retention rate by degree earned. When analyzing the total number of graduates who had been out of PACE for three years by the degree they earned, 18 graduates who earned a MEd had not been out of PACE for three years, and 14 graduates who earned a MAT had not been out of PACE for three years. The one graduate who earned a MA had been out of PACE for three years. This resulted in a sample size of 30 MEd graduates; the sample size of MAT graduates was reduced to 48 individuals. Participants in these aforementioned samples were divided into the two groups of teachers and non-teachers. When examining the sample of teachers, 28 (93.33%) of those individuals that earned a MEd were still teaching, 38 (79.17%) of

the candidates who earned a MAT were still teaching, and the one graduate who earned a MA was still teaching.

Retention rate by grade level taught. The final characteristic examined was the retention rates of teachers who were teaching in an elementary, middle, or high school during the time they were in PACE. Due to the overlapping categories of jobs in education, candidates were able to select multiple positions for their teaching position while in PACE. There were a total of 45 participants that selected elementary as their teaching position during PACE, 48 participants selected middle school as their teaching position during PACE, and 32 participants selected high school as their teaching level during their time in PACE. This results in a sample size of 125. Of that sample of 125 individuals, 15 participants that selected elementary had not been out of PACE for three years, 16 participants that selected middle school had not been out of PACE for three years, and 9 participants that selected high school had not been out of PACE for three years. When reducing the sample by these 40 individuals, the sample size of elementary teachers became 30 participants, the middle school sample size became 32, and the high school sample size consisted of 23 participants. Of these 30 elementary teachers, 27 (90%) of participants who were teaching elementary during PACE were still teaching after three years; 24 (75%) of the middle school individuals who were in PACE were still teaching; and 19 (82.61%) of the individuals who were teaching high school during PACE were still teaching three years after graduating from PACE.

Stayers versus movers. There was an invalid response when an administrator incorrectly answered the question about teaching in a different school three years post PACE graduation resulting in a valid sample size 68. A total of 32 (47.06%) of the teachers were still in the same school in which they were teaching in their first year after PACE graduation, and 36 (52.94%) were teaching in a different school than the one in which they taught the first year after PACE graduation.

Logistic regression teaching three years post graduation. A logistic regression analysis was conducted to determine if any characteristic (contact with other PACE teacher, degree earned, gender, or race) had a statistically significant ($p < .05$) impact on a teacher's decision to stay in teaching three years after PACE graduation; the results showed that no characteristic had a statistically significant impact on the graduates' decision to stay in teaching.

Logistic regression Catholic teaching three years post graduation. A logistic regression analysis was conducted to determine the impact that each characteristic had on a graduate's decision to stay in Catholic education. Similar to one-year post PACE graduation, teachers that had more contact with fellow PACE teachers were 1.704 times more likely (standard error -.357; $p < .011$) to teach in a Catholic school. Finally, candidates were asked to identify what was their job five years after PACE graduation.

Five Years After PACE Graduation Teacher Characteristics

Of the 111 participants that responded to the survey, 53 of the participants had not been out of PACE for five years reducing the sample size of PACE graduates that

had been out of PACE for 5 years to 58. Of the 58 participants that had been out of PACE for 5 years, 47 (81.03%) were still teachers, 2 (3.45%) were in higher education, 2 (3.45%) were in school administration, and 7 (12.07%) were in another profession.

Teachers. Of the teachers that stayed in the profession (n=47), 42 (89.36%) were still teaching in a Catholic school, 21 (44.68%) were teaching in an elementary school, and 30 (63.82%) were teaching in the same school they were teaching in three years post PACE graduation. Table 11 illustrates the characteristics of the respondents that were teachers five years after PACE graduation:

Table 11

PACE Teachers Five Years Post Program Completion (n=47)

Characteristic	N	%
Gender		
Female	40	85.11
Male	7	14.89
Ethnicity[a]		
White	46	97.87
Hispanic	2	4.26
Asian	0	0.00
Mixed	0	0.00
Degree Earned		
MAT	27	57.45
MA	1	2.13
MEd	19	40.43
Teaching Level[b]		
Elementary	18	38.30
Middle	18	38.30
High	11	23.40

Note. Total percentages are not 100 for every characteristic because of rounding.

a= Multiple selection was possible for candidates.

b= Multiple selection was possible for candidates.

Retention rate by demographic. When looking specifically at the demographics of the PACE graduates that had not been out of PACE for 5 years, 5 more males than graduates three years after PACE had not been out of PACE for 5 years, and 16 more females had not been out of PACE for 5 years bringing the sample size to 12 total males and 46 total females. Teachers were then separated into two groups of teachers and non-teachers. Seven males (58.33%) were still teaching 5 years after PACE graduation, and 40 females (86.96%) were still teaching 5 years after PACE graduation.

The sample size of participants who identified themselves as White that answered the question about teaching 5 years after PACE teaching was 56, and the sample size of participants who identified themselves as non-White was 3. Of that sample of individuals, 46 (82.14%) of Whites were still teaching after 5 years, and 2 (66.67%) of those who identified as non-Whites were still teaching after 5 years.

Retention rate by contact. When comparing the teachers and non-teachers that had been in contact with fellow PACE teachers, 88.24% of teachers who were either in daily or quarterly contact with their fellow PACE graduates were still teaching five years post PACE graduation. Table 12 illustrates the retention rates for teachers and non-teachers in relation to the amount of contact they had with fellow PACE teachers.

Table 12

Retention Rate for Teachers and Non-Teachers Five Years Post PACE Graduation Based on Contact (n=58)

Characteristic	Still Teaching		Not Teaching	
	N	*%*	*N*	%
Never	1	50.00	1	50.00
Daily	15	88.24	2	11.76
Weekly	12	85.71	2	14.29
Monthly	10	76.92	3	23.08
Quarterly	7	87.50	1	12.50
Yearly	2	50.00	2	50.00

Retention rate by degree earned. When analyzing the total number of graduates who had been out of PACE for 5 years by the degree they earned, only 21 graduates who earned a MEd had been out of PACE for 5 years, 36 had earned a MAT, and 1 had earned a MA. Then when comparing the teachers vs. non-teachers by degree earned, 19 (90.48%) who earned a MEd were still teaching, 27 (75%) who earned a MAT were still teaching, and the one graduate who earned a MA was still teaching.

Retention rate by grade level taught. Finally, the last characteristic to compare between teachers and non-teachers was the percent of teachers who taught in an elementary, middle, or high school during PACE and their retention rates. When

accounting for the participants who had not been out of PACE for 5 years, the sample size of participants that taught in elementary during PACE was 21, the sample size of participants that taught in middle school during PACE was 25, and the sample size of participants that taught in high school during PACE was 14. Of the teachers that taught in an elementary school during PACE, 18 (85.71%) were still teaching after 5 years, 18 (72%) of middle school teachers were still teaching after 5 years, and 11 (78.57%) of high school teachers were still teaching after 5 years.

Stayers versus movers. When looking at the stayers and movers of the teachers (n=47) including administrators (n=2), 30 (61.22%) PACE graduates taught in the same school 5 years after graduating from PACE as they had also taught in the 3 years after graduating from PACE. However, there were 19 (38.78%) individuals who were teaching in a different school 5 years after graduating than where they were teaching 3 years after graduating. Thus, they would be classified as "movers."

Logistic regression teaching five years after PACE graduation. The logistic regression also was conducted to determine whether candidates were more likely to stay in teaching based on the characteristics (contact with other PACE teachers, degree earned, gender, or race) five years after PACE graduation. Similar to year one and year three, no characteristic was statistically significant at the $p < .05$ level.

Logistic regression Catholic teaching five years after PACE graduation. Finally, the logistic regression was conducted to determine whether individuals continued to teach at a Catholic school five years after PACE graduation. Again, the same result that was found after year one and year three was found at year five. This is

that the more contact the graduate had with other PACE teachers, the more likely (1.641 times) that graduate would stay in Catholic teaching (standard error = -.389; $p < .037$).

The last research question that this study addressed was:

What impact does each pillar in the three-pillar support provided to PACE teachers have on teacher retention? In order to answer this question, two quantitative questions were asked in the survey and PACE Reflective Exit Papers were coded qualitatively, which are discussed after the discussion on the survey results.

Impact of Three Pillars During PACE

Participants were asked to rank the three pillars in order of importance (1-3 scale with 1 being most important) based on the impact of those pillars during their time in PACE. All respondents were asked this question, regardless if they were currently a teacher. Professional Service was scored as the most important pillar during participants' time in PACE with 55 (49.55%) of the 111 candidates selecting this choice. Academic Learning received the fewest Number 1 rankings, with only 21 (18.92%) of the 111 participants selecting Academic Learning as the most important pillar. Community Living had a bi-modal distribution of choices, with 35 (31.53%) selecting it as the most important pillar and 47 (42.34%) selecting it as the least important pillar. Table 13 illustrates the responses to each of the pillars' importance.

Table 13

Percent Responses for Most Important Pillar During PACE residency (N=111)

Pillar	Most Important		Second Most Important		Least Important	
	n	%	n	%	n	%
Community Living	35	31.53	29	26.12	47	42.34
Professional Service	55	49.55	33	29.73	23	20.72
Academic Learning	21	18.91	49	44.14	41	36.94

Note: Percentages might not add to 100 because of rounding.

A final analysis on these data examined the retention rates of teachers who selected Community Living, Professional Service, or Academic Learning as the most important pillar.

Retention rate of most important pillar during PACE. Participants were asked to select which of the pillars had the biggest impact on them while a member of the PACE residency. Of the entire population of participants (N=111), 55 candidates selected Professional Service as the most important pillar, 35 selected Community Living as the most important pillar, and 21 selected Academic Learning as the most important pillar. When examining the retention rates of teachers in the first year after PACE, 51 (92.72%) of the 55 candidates who selected Professional Service as the

most important were still teaching, 30 (85.71%) of the 35 candidates that selected Community Living were still teaching, and 17 (80.95%) of the 21 that selected Academic Learning as the most important pillar were still teaching in the first year after PACE graduation.

When looking at retention rates of teachers 3 years after PACE graduation, the sample size of participants drops from 111 to 79, because 32 of the participants had not been out of PACE for 3 years. Of the 79 participants that answered the question, 25 (31.65%) selected Community Living as the most important pillar during their time in PACE, 36 (45.57%) selected Professional Service as the most important pillar during their time in PACE, and 18 (22.78%) selected Academic Learning as the most important pillar during their time in PACE. Of the participants that selected Community Living as the most important pillar (n=25), 20 (80%) were teachers. Of the participants that selected Professional Service as the most important pillar (n=36), 32 (88.89%) were still teachers 3 years after PACE graduation. Finally, of the participants that selected Academic Learning as the most important pillar (n=18), 15 (83.33%) were still teachers.

The total sample size of PACE participants who had been out of PACE for 5 years was 58. Of the 58 candidates that had been out of PACE for 5 years, 20 (34.48%) selected Community Living as the most important pillar during their time in PACE, 28 (48.28%) selected Professional Services as the most important pillar during their time in PACE, and 10 (17.24%) selected Academic Learning as the most important pillar during their time in PACE. When looking at the retention rates of

teachers, of the participants that selected Community Living as the most important pillar (n=20), 17 (85%) were still teaching. Of the participants that selected Professional Services as the most important pillar (n=28), 23 (82.14%) were still teaching, and of the participants that selected Academic Learning as the most important pillar (n=10), 7 (70%) were still teaching.

The final question on the survey asked candidates to rank on a sliding scale of 0 to 100 the impact that each of the pillars had on their decision to stay in teaching.

Impact of Each Pillar on Decision to Stay in Teaching

Only 110 of the 111 participants answered the question on the percent impact that each pillar had on their decision to stay in teaching, so the total sample size for this question is 110. The average percent impact that each participant self-selected for Professional Service on a participant's decision to stay in teaching was 81.19%, SD 24.08%. The average percent impact that each participant self-selected for Community Living on a participant's decision to stay in teaching was 50.09%, SD 31.67%, and the average percent impact that each participant self-selected for Academic Learning on a participant's decision to stay in teaching was 70.26%, SD 26.30%.

Teachers and non-teachers were separated into two different groups to determine the average impact and standard deviation for teachers one year, three years, and five years post PACE graduation. Table 15 presents the average impact and standard deviation for each of the pillars for teachers one year, three years, and five years post PACE graduation.

Table 14

Average Self-selected Percent Impact of Each Pillar That Teachers Felt One Year, Three Years and Five Years after PACE Graduation

Pillar	One Year after PACE Graduation		Three Years after PACE Graduation		Five Years after PACE Graduation	
	M	SD	*M*	SD	*M*	SD
Academic Learning	70.46	24.90	78.44	21.13	78.80	21.66
Community Living	48.71	31.42	53.77	30.33	55.43	29.68
Professional Service	82.88	22.29	83.43	22.13	79.62	24.31

A logistic regression was run to determine if a participant that selected a higher percent impact on one of three pillars was more likely or less likely to stay in teaching.

Logistic regression. A logistic regression model was constructed to determine the predictive value of whether a teacher was more or less likely to stay in teaching dependent on the percent of impact for each specific pillar. This regression analysis indicated that respondents with higher percent impact scores for Academic Learning were more likely to stay in teaching than those respondents with lower percent impact scores. These finding remained statistically significant and consistent when measured at both the three year (B = 1.034; SE = .014; p <.012) and five year (B = 1.044; SE =

.018; p <.012) interval after PACE graduation. This analysis also indicated that as candidates selected higher on the scale for the impact of Professional Service, they were statistically significantly more likely to stay in teaching (B=1.025; SE=.012; p <.029) in the first year after PACE graduation than participants who selected that as having less of an impact on their decision to stay in teaching.

Finally, after the above test and analysis were run on the survey, a constant comparative qualitative analysis was conducted on the PACE Reflective Exit Papers to identify any emergent themes present in those essays and to connect those themes to teacher retention.

Qualitative Analysis

The final question that this study addressed was: What impact does each pillar in the three-pillar support provided to PACE teachers have on teacher retention? This question was analyzed both quantitatively as seen above, and qualitatively using descriptive coding, magnitude coding, and evaluation coding methods (Saldana, 2013). PACE graduates were asked upon graduation to answer six different questions about their experience in PACE. Three of the questions were standard School of Education questions all education graduate students were required to answer, and three questions were PACE-specific questions on the three pillars of support provided to PACE teachers throughout their time in PACE. One question asked about the impact of all of the pillars, one asked about the impact of mentorship, and the final question asked about the Community Living aspect of PACE support. The first cycle of coding chunked the data into the three different pillars of PACE support based on the

graduate's response: Professional Service, Academic Learning and Community Living. The data was then analyzed using the constant comparative method and descriptive coding, which helped to summarize the essence of the response of the graduate. During this step, graduates' responses that were originally chucked in the Professional Service category but actually fit in the Academic Learning category were moved and shifted and vice versa. Then, during the second round of coding emerging themes and subthemes within each of the three pillars were identified and assigned to each of the responses. These themes were grouped together during the second round of coding to find the repetitive patterns and responses. Evaluation coding and magnitude coding were then used to determine if the graduate was describing, comparing, or making a recommendation, and to determine the intensity or feeling (positive, negative, neutral, or mixed) of the response. In order to understand the different themes present in the data, the responses were reported based upon each pillar.

Graduates were also able to respond to these PACE questions anonymously, so each graduate was numbered in relation to their cohort number. Cohort 11 (graduating class 2010) had five total graduates. They were numbered 11.1 through 11.5. Cohort 12 (graduating class 2011) had 13 total graduates (12.1 - 12.13). Cohort 14 (graduating class 2013) had 11 total graduates (14.1 - 14.11), Cohort 15 (graduating class 2014) had 13 total graduates (15.1 – 15.13), and Cohort 16 (graduating class 2015) had 23 total graduates (16.1 – 16.23). Overall, PACE has graduated 138 individuals. Of the 138 total graduates, 47.1% (n = 65) of their exit essays were analyzed.

Community Living

The pillar that the graduates wrote the most about in their Reflective Exit Papers was the pillar of Community Living. After the second round of coding, the following themes and subthemes were present:

- Relation to Others
    - Emotional Educational Support
    - Individual Growth
    - Intentional Relationships
- Accountability
- Spiritual Growth/Individual Faith

PACE folded the spiritual pillar under the Community Living pillar in their support program, which is different than ACE and other UCCE schools. This means that a lot of the responses for this pillar focused both on the spiritual/faith aspect of the graduate, along with the intentional community groups in which the graduates participated.

A total of 208 different responses were coded from the graduates. Of those 208, 171 (82.2%) were coded as "relation to others." Then based on the responses, three subthemes emerged from the 171 responses. These subthemes, "*intentional relationships*" (n=72; 34.6%); "*emotional educational support*" (n=38; 18.3%), and "*individual growth*" (n=61; 29.3%) were grouped together based on the graduates' response.

The last two themes present in the Community Living pillar were "accountability" (n=10) and "spiritual growth/individual faith" (n = 61). The themes varied in different cohort years. For example, "accountability" showed up in every graduate's response in Cohort 11; yet did not show up at all in Cohort 16.

Relation to Others. When examining the "relation to others" theme, graduates responded both positively and negatively. The Community Living aspect of PACE was seen as a struggle for most of the graduates, but it was a worthwhile struggle. Many of the graduates reported that through the intentional communities and the relations they had with other members in the community, they learned how to be a part of a family and discovered that they needed to be more open and understanding. Graduate 12.1 clearly described this theme by saying "through intentional community living, I have deepened my understandings of collaboration, compromise, and conflict resolution." The relationships that the graduates had with each other was also a positive emotional support system for the graduates and helped the graduates grow as individuals.

Intentional Relationships. PACE graduates were asked to live in intentional relationships with their community members. It is clear that the graduates that had a positive experience with these relationships were in communities where everyone felt like they had a voice, collaboration was strong, and clear and common expectations were set for the community. Deepening their understanding of collaboration was present throughout the different cohorts and was something that graduates felt they could use in their classroom. The necessity to be intentional with their community

members helped them to increase their communication skills. Graduate 15.2 stated that, “I found great comfort and joy in spending an hour or two talking and sharing a meal with my housemates. I am definitely going to take my experience of community meals and make meals a focus while sharing a meal with my new housemates.” Often graduates reflected on how they personally did with these intentional relationships. A clear example of this self-reflection can be found in Graduate 11.1’s response, “I should be willing to take more and be more flexible. It took quite a lot for me to truly accept certain people and I don’t know if I have after two years.” It was important that the graduates worked hard on making the intentional relationships work. Graduate 14.1 wrote about how much work was put in the intentional relationships saying, “community living made me work to better understand other as well as myself.” One common idea that continued to become clear throughout the graduates’ writing about this pillar was that PACE helped graduates know what it meant to be in a family. These intentional communities were not just communities, they were “a place that feels like home, a place where routines are set, a place where difficult topics are discuss, a comfortable place” (Graduate 15.3).

Like any family, there were also negative interactions within the intentional relationships created in PACE. Many graduates discussed how difficult it was to live in a house with others, and as Graduate 15.4 commented, “I constantly felt trapped by drama and the fear of awkwardness should the issue come to a head.” These negative relationships that some of the graduates had with their housemates put an intense amount of stress on the different graduates. Many of the recommendations that

graduates made in regards to this theme was that PACE needed to keep the communities small to ensure everyone feels valued and that individuals who are not ready or do not want to live in an intentional community should not be accepted into PACE. Graduate 16.2 believed that the community he or she was in was rare because, "we all got along great and were clear and up front about our expectations from the get-go." The idea of being clear about expectations is something that graduates said they could use in their classrooms, along with being able to reflect on their own actions and the effects that their actions have on others.

Individual Growth. The idea of reflecting on one's own actions naturally ties into the next subtheme that was present throughout this pillar, which was centered on individual growth. Unlike the previous theme, almost all of the graduates' responses were positive in regard to how they grew individually. Graduates found that by living in these intentional communities, they were able to learn the consequences of their actions and were able to identify their individual identity. Often this was connected to their professionalism, and Graduate 12.6 stated "after an immense intentional effort to rebuild the bridges I had badly charred during my first year, I am pleased to say that I have certainly turned a corner in my professionalism." While many of the responses on growth started negatively, graduates realized that Community Living helped them learn different skills that they never knew they lacked, such as "learning about opening up to people and also sticking up for what you think is right" (Graduate 14.6). The graduates talked about the respect they learned and how they learned to, "respect other people who are different from you and love those differences," skills necessary

for successful teachers (Graduate 12.2). This closely connects to their teaching and retention in teaching because they learned how to collaborate together and learned that in a community "you cannot shut down on others, because this only hurts yourself. This is true as a teacher, I cannot shut down on a student" (Graduate 12.8).

Emotional Educational Support. The subtheme that was most closely tied to teacher retention in this pillar was focused on the support that graduates felt during their first two years of teaching. Having other new teachers that were there for advice, created almost unofficial mentors for the teachers. Graduate 14.6 said that, "living so closely with people who have the same desires, foundation, and love for teaching as I do, has allowed me to become vulnerable and share a side of me that only my closest family members and friends know." This sense of support was felt throughout all cohorts, with Graduate 11.5 who reflected, "I always had someone to lean on with an academic question about my work or that of my students" and Graduate 16.3 reflecting that the community was "a constant source of emotional and professional support." This support that they felt helped them feel listened to and understood as a teacher. Graduate 16.4 believed, "I don't think I would be teaching next year without this built-in support network; it truly made the difference in making these last two years a growing experience as a professional, rather than finding it frustratingly difficult and nearly impossible." The ability to bounce ideas off of other teachers was often referenced throughout the Reflective Exit Papers. The graduates were able to engage in "intellectual, educational conversation about elementary and secondary

schools. Furthermore, we were able to brainstorm, share ideas, ask for suggestions or problem-solve about school and classroom issues" (Graduate 15.5).

The PACE leadership and director were constant levels of support for the different PACE graduates, especially in the later cohorts. Cohort 14, 15, and 16 all had graduates that discussed how the PACE director was there for them when they struggled and provided them with tools and skills necessary to help improve the relationships in their community. The leaderships created a feeling in the later cohorts where candidates "felt comfortable asking them questions and talking through various thoughts and decisions I needed to make" (Graduate 16.5). The PACE staff was able to "recognize that I was struggling and took the time to meet with me individually to check in on my personal well-being" (Graduate 16.6). All three of the final cohorts mentioned how available and supportive the PACE leadership and staff was during their time in PACE and how the support helped them to become successful as PACE teachers. The responsive attitudes of the PACE leadership were clear throughout the final three cohort essays.

PACE was also able to provide tools when intentional living was difficult. Graduate 16.13 discussed the support of "PACE's explicit rules and teachings [that] make community something that was valuable in my personal formation. Exercises like first to five and 100% were great tools that were taught during the first summer." While some graduates (particularly in the Alaska community) felt forgotten by the PACE leadership, overall the openness and willingness to be reached by PACE

graduates was noticed and appreciated. However, this positive feeling was not always present in PACE graduates, as can be seen in the next theme on accountability.

Accountability. One clear difference in the various cohorts' responses was the theme of "accountability." This theme, which was present in every graduate's response in Cohort 11, diminished with subsequent cohorts until Cohort 15 and Cohort 16 did not have a single response that was focused on accountability. Accountability was primarily present in Cohort 11; graduates did not feel it was fair that certain participants were not held to the same standards as other participants. Most of the responses around accountability asked for PACE leadership to intervene more after initial communication in the community broke down. Graduates were frustrated that "every time that our community voiced a concern, it got turned on us and we were seen as the problem in the community. It was very frustrating to never see any accountability from the other community member" (Graduate 11.1). This theme of accountability was also found in Cohort 12, with different graduates feeling as though all the community members were not held to the same standards. Graduate 12.5 stated, "I often never saw a consequence and it is frustrating for individuals who do their work on time." However, as the cohorts continued to graduate, the theme of accountability dropped out of the essays.

Spiritual Growth/Individual Faith. The final themes found in the exit essays were associated with the pillar of spiritual growth. As stated before, PACE was unique to other UCCE schools, because PACE folded the spiritual pillar under the Community Living pillar. This folding under the Community Living was seen both

positively and negatively amongst graduates, and it seemed to grow more positively over time.

Cohort 11 often stated that they saw little or no change in their faith throughout the time in PACE and believed they had to mature in their faith alone. They found that in their community there was little desire to share their faith together, which was something they had wanted. This changed with the addition of more intentional communities, but it was clearly different in each of the different communities. Cohort 11 only had one intentional community (five total graduates), and together their faith was not united or strong. However, Cohort 16 that had many different intentional communities experienced faith differently amongst groups. While some communities found that it was not often discussed, others found that it "helped them transition into adulthood" (Graduate 16.5). The idea of a community of faith, while present in some communities, was not present in others. Graduate 12.8 stated that even though the lesson of respecting each other's faith was clear during the time in the community, "I don't think that we ever really saw each other as brother's or sister's keeper when it came to faith."

Overall, most graduates found that they were really challenged on the way that they practiced their own personal faith. Graduates were challenged to accept many different styles of faith. Graduate 14.2 stated that the different styles helped the graduate to "slowly grown into my own faith."

Academic Learning

Of the three pillars, graduate spent the least amount of time writing about Academic Learning. In fact, some graduates did not even comment on Academic Learning in their Reflective Exit Paper. This is most likely due to the fact that Academic Learning did not have its own specific question while Community Living and Spiritual Growth did have specific questions asked by PACE. Overall, this pillar was extremely positive among the different cohorts. The main theme of *courses* showed up throughout all of the cohorts. Within the theme of *courses*, three subthemes were clear in the data:

- Courses
    - Instructors
    - Teaching Skills and Resources
    - Work Sample/Capstone Research

Courses. An overwhelming amount of graduates had a positive experience with the different courses they took at the University of Portland, and they believed these courses would help them in their future teaching careers. A total of 74 different responses were coded based on the Academic Learning pillar. Of those 74 responses, 16 were coded under the main theme of *courses*. The other 58 responses were broken into three smaller subthemes of "instructors", "teaching skills" and resources and "work sample/capstone research."

The responses coded *courses* focused on the overall courses and the School of Education's graduate program for both MAT's and MEd candidates. Most of the

graduates appreciated how practical the classes were and how they helped the graduates develop into leaders in their school. Graduate 16.1 reflected that, "the classes on campus were all very interesting and practical…[they] helped me to develop into a leader in my school community." Many of the graduates appreciated how the classes gave them a "glimpse at what teaching would be like" and provided them with "new ideas about managing my personal life" (Graduate 16.3). This notion of being appreciative or grateful was present throughout all cohorts, with Graduate 14.5 clearly summing up this feeling of gratitude by reflecting, "I am most especially grateful for the education and wide range of classes I took because it will set me up for success in the years ahead." It was clear that the majority of graduates decided that they would continue to be a teacher because of the preparation they were provided at The University of Portland (UP). Graduate 12.4 realized that the more "preparation I put into my work, the better educator I continue to be" and that the UP courses made the graduate feel "not burnt out from teaching classes, but rather excited to see where else I can learn like I did during the summers." Graduate 12.3 summed up what many expressed in writing "[courses] played a significant role in my development as an educator."

However, not all responses were positive about the courses. A few graduates thought the courses needed to be more challenging. For example, Graduate 16.16 wished that the courses had "been more intellectually stimulating" and that the courses felt like "a hoop to get through to earn that diploma." One graduate claimed that the courses were not "the most rigorous graduate programs from an academic standpoint,

but it did push me in two ways: learning to budget my time and learning how to think like a teacher" (Graduate 16.23). Also, a few candidates wished that they had more instruction around teaching religion. Since many of them had to teach religion in their schools, a recommendation that graduates felt was necessary for the Academic Learning with PACE at UP was an increase in how to teach religion classes to P-12 students. Graduate 14.2 thought that teaching religion "can often be a daunting and intimidating and challenging task."

There were also the three subthemes that emerged during the second round of coding. Fifty-eight responses were broken down into the three subthemes. The subthemes were connected to the courses that the graduates took during their summers at the University of Portland, but they focused on three distinct aspects of the courses. These subthemes were: "instructors", "teaching skills and resources," and "work sample/capstone research." These subthemes were also overwhelming positive, with "teaching skills and resources" (n = 25) and instructors (n=28) getting nearly the same amount of codded responses.

Instructors. The most positive theme or subtheme throughout all the essays were how the graduates felt about the University of Portland instructors. They felt as though the professors valued who they were as individuals, had superior knowledge, and were always willing to help even if a candidate was far away. The instructors' use of e-mail allowed graduates to receive "prompt answer from all who I contacted," which was something noted by many graduates (Graduate 14.10). This feeling of acceptance into the University of Portland's School of Education Graduate Program

was clear, and graduates felt that "if I needed help with any of my roles as a teacher that I could reach out to a professor at UP for assistance" (Graduate 14.11). Having access to the professors was a comfort allowing the graduates to know that "even from afar, it was nice to have the support of my fellow UP professors" (Graduate 15.3). These "tremendous professors" taught "relevant classes" and were "teachers who were teaching me how to teach through delivering important information as well as modeling effective strategies" (Graduate 14.2). Many graduates mentioned the experience and knowledge of the different UP professors, as Graduate 11.2 stated, "every instructor from whom I have learned demonstrates his or her superior knowledge of the field of education" and that "the graduate level classes I have taken at UP are far and away the most engaging, best managed, and most informational classes that I have take, in all my academic experience." Multiple graduates had similar reflections in their essays, often naming different professors and describing how they were excellent and the best they ever had. The professors at the University of Portland provided the graduates with "personal role models of teachers who indeed chose teaching because of the outcome, not the income. Professors at UP have served to form me both professionally and personally over the last two years" (Graduate 16.5).

Teaching skills and resources. Another subtheme that became clear during the coding of the Reflective Exit Papers in regards to the Academic Learning pillar was the "teaching skills and resources" that the University of Portland provided to the PACE graduates that allowed them to become successful teachers. Graduate 12.3

stated, “The resources and knowledge that I have should be enough to have me prepared for almost any teachable moment.” This was constant throughout the essays, with graduates who were excited about the “behavior strategies, reading strategies and the latest research that allowed me to be prepared for the demands of my job” (Graduate 16.13). Graduates were very positive about the practical skills they could use in the classroom, as Graduate 16.22 shows when discussing the use of skills in the classroom:

> I was able to use some of the strategies and theory that I learned in the ESOL classes when working with the intentional students at Prep. I also integrated some of these practices into my general classroom [and] I changed my approach to introducing new vocabulary works after taking courses.

Having these skills caused the graduates to write about how they thought they were becoming effective teachers because the “Master’s courses have allowed me to develop new skill and acquire new strategies to differentiate instruction to best meet the needs of my students” (Graduate 15.1). The ability to use the skills the graduates were learning in their classroom helped them to feel confident in their teaching. Graduate 14.5 described the cycle of “taking classes and then using some of the concepts in class and then going back to talk about them during classes. This cycle has been helpful in leading discussions and trying to figure out what works and what does not in education.” The graduates often mentioned how the skills they learned in the UP summer classes helped them to feel like they could continue to teach and that they have “learned classroom techniques, lesson ideas and have grown in my reading

knowledge while getting my reading endorsement and completing my capstone reading research…it was never too much to handle but the perfect amount that kept me thinking and allowed me to learn and engage in the career I care so much about" (Graduate 12.9).

There were some recommendations about the skills provided by UP. Overall, these recommendations were both positive and negative with Graduate 16.14 stating, "I believe that the professional development that PACE provides is extremely helpful in expanding your knowledge based on educational topics and pedagogy, but is not extremely helpful with concrete practices." Another graduate (16.9) mentioned "I still don't really feel like I know how to assess and teach reading skills, even though I teach middle school Language Arts, and some of the MATs teach elementary readers." Finally, one last recommendation that was present in some of the graduates' responses was the changing of the courses, because a few thought that the first summer classes were not practical enough and even though "the first summer of classes helped… I feel that I learned the most through immersion in my first two weeks of school" (Graduate 14.9).

Work sample/capstone research. The final subtheme that emerged from the data was focused on the two work samples that graduates needed to complete at the end of each year of teaching, and the capstone research projects they conducted while a student at UP. In regards to the capstone research project, responses were positive as seen in Graduate 16.1's response: "despite the long hours and struggles with my research project, I am very glad that PACE had all of us go through this process."

Graduates also felt as though the capstone research project helped them learn how to study and research, with Graduate 16.5 describing how "using the search database helped me create my own research project. I was able to use past studies to give me new ideas or better ways to implement my own research ideas." This was a constant theme present when graduates discussed the capstone research project, with the idea of learning how "to drive my decisions in the classroom by analyzing the data and seeing the correlations between different teaching practices and their effect on student learning gains" (Graduate 15.10).

Graduates were more mixed in their responses to the work samples. A few graduates thought that participating in these work samples "were also informational for me; I appreciated the requirement to truly get to learn about my school community and plan out a full unit of lessons" (14.9). Of course, not every comment on the work sample was positive with Graduate 11.3 feeling "a bit lost on the work sample front…I had no idea what was included in a work sample" but after getting past the initial confusing realizing that "work samples helped me to grow as a better planner and a better teacher."

Professional service. Finally, graduates wrote about their actual experience in the classroom and in the schools in which they were teaching during their residency in PACE. In total, there were 157 responses that were coded as a part of the Professional Service pillar. There were three main themes that were present in the data on Professional Service: "mentorship" (n=98), "vocation" (n=43), and "teaching skills"

(n=16). The "mentorship" theme had three subthemes, and the "vocation" theme had two subthemes. These themes and subthemes are:

- Mentorship
    - Assigned School Mentor
    - School Community
    - U.P. Advisor
- Vocation
    - Service
    - Religion
- Skills

Mentorship. The mentorship theme was present the most throughout the Professional Service responses. There was one specific question on the PACE Reflective Exit Paper focused on mentorship, and the graduates discussed three different types of mentorship that happened for them while they were in PACE: assigned school mentorship; UP Advisor mentorship; and mentorship from the school community.

Assigned school mentor. Of all the responses on the Professional Service pillar, the assigned school mentor was discussed the most in the graduates' essays. Graduates had good experience with assigned school mentors that actually wanted to assist and help the PACE graduates. They also had a good experience with mentors that provided strong usable feedback from the observations. Graduate 11.3 discussed how with the mentor "He and I actually had a working relationship and I did go to him

for advice; I also received feedback from the observations." This idea of the mentor providing good feedback and checking in on the graduates was constant throughout all cohorts, and the graduates believed the feedback helped them grow as teachers and encouraged them to stay in the profession. Graduate 12.1 commented how the mentor was "attentive and checked in with me often without ever being overbearing. She saw our relationship as a partnership from which we could both benefit as she both gave feedback but also asked questions about strategies or ideologies expressed in my classroom." The feedback became valuable for the graduates, and many "valued the opportunity to 'debrief' after formal and information observations" (Graduate 12.13). This feedback helped the graduates feel confident, and the mentors helped the graduates "grow from a first year teacher into a teacher confident in my ability to adapt to different situations and instruct my students with pride" (Graduate 15.13).

Graduates also appreciated the positive relationship and were able to grow when their mentor "became my friend and my guide through my first year of teaching," which helped them stay encouraged in their jobs. They felt as though their views were valued and that, "bouncing ideas back and forth with someone who was as dedicated to education and was often surprisingly progressive was an awesome experience" (Graduate 12.4). Having a relationship with the mentor increased the positive experience graduates felt with the mentor. Graduate 14.2 discussed how the mentor "took us on tours, took us out to gallery hops, got us tickets to the theater, and took us out to eat." This concept of friendship with the mentor was important for

graduates, because they felt that the mentor was then able to "answer my questions and pick me up when I needed it" (Graduate 16.1).

Graduates also liked when mentors were able to provide them with teaching strategies and skills. Graduate 11.2 mentioned how "my teacher mentor…has done a wonderful job of giving me teaching strategies," and Graduate 12.12 mentioned that "her organization skills were impeccable and surely something I will carry with me as I continue my career in teaching."

Most of the negative feedback around the school mentors was that the mentor "wasn't particularly interested in being my mentor and I felt as [though] I was a burden to her" (Graduate 11.3). Graduates wanted more time with interested mentors who were focused on them as teachers. It was hard for graduates when "they both had very busy schedules and could not, understandably, allocate the amount of time that I would have liked to observe me and provide me with feedback" (Graduate 11.5). One MAT candidate wanted more feedback and wished that the University of Portland had higher requirements, because "in comparison to my MEd colleagues, I missed the depth of mentoring they received in their student teaching experiences" (Graduate 12.13). Mentors that were not teaching the same subject or in the same content were also an area of concern for graduates, because they were "approaching it from a middle school perspective" (Graduate 14.5). It is clear that the strength of the mentor was based on the different schools in which graduates were teaching. Most of the graduates that did not have a strong sense of a mentor complained that the mentor "couldn't help me with content area, as she didn't delivered lessons in the same sense

that a science teacher would, and she didn't have a traditional classroom so she couldn't help me with issues in classroom management" (Graduate 14.1). Others mentioned that at their school their "was not a mentoring system set up at my school" (Graduate 15.9), which caused them to look for mentoring in other places often times in the larger school community.

School community. For many of the graduates, having a strong school community where they could ask for help was a blessing for their teaching and encouraged them to stay in the teaching profession. As they became a part of the community, they were "able to feel more comfortable which allowed me to transition smoothly into the school and collaborate with my co-workers" (Graduate 16.15). Schools where the graduates "never felt like I was viewed differently from a veteran teacher" helped them as they "struggled with self-doubt and insecurity my first year of teaching" (Graduate 16.4). Often times, graduates talked about how they spent a lot of time at their school and that the school "had become my second home, where I was welcomed with open arms, and actually looked forward to going" (Graduate 15.6). Graduates also realized they could help a school community, and Graduate 15.4 was "frequently shocked at how many times the older teachers came to me for ideas and advice on activities, asked me for input on rubrics, and gave me the duty of planning events." The schools where PACE teachers taught were set up for these teachers, which caused them to feel support in their first few years. Graduate 14.10 remembers "different faculty members stopping by in the first few weeks of my first year checking in with me and seeing if they could help in anyway." Graduates felt

supported and believed that they could ask for help. Graduate 11.1 explained, "I did not hesitate to go and ask a staff member anytime that I had a question." In addition to the positive experience the graduates had with their school communities, they also had very strong and positive experiences with their University of Portland (UP) Advisors.

***UP Advisor*.** The ability for UP Advisors to "balance criticism with compliments" (Graduate 11.1) helped the PACE teachers feel supported and encouraged that they could continue teaching. Graduates appreciated the "practical ideas and concrete things to work on in teaching" provided by the advisors (Graduate 11.3). UP Advisors that were able to "identify my strengths as a teacher and hone those skills" helped the graduates feel like they were improving in their practice (Graduate 14.4). Primarily, the most constant comment throughout all the cohorts was that the UP Advisor provided positive feedback that encouraged the candidates in their daily jobs. Graduate 15.1 clearly sums this up by saying that the UP Advisor "is the strongest mentor I have been privileged to have in my career thus far. With her gentle guidance, encouragement and support I am now a confident teacher which was a 180-degree switch from the anxious mess I was for the first couple months of my first year teaching."

However, some UP Advisors were tough to get in contact with because of the distance of the programs. Graduate 12.11 mentioned how "the university mentors were very helpful, but it was simply difficult for him to get to us." Other graduates complained that they "sometimes felt abandoned and forgotten by PACE," because their school was in Alaska and so remote from the advisor (Graduate 14.3).

Vocation. In addition to the mentorship provided by PACE, the Professional Service pillar also helped teachers realize if they wanted to continue teaching. Many graduates discussed how they "discovered a passion greater than I expected and became really invested in wonderful classes of young people" (Graduate 15.9). Graduates have realized that "becoming a Catholic educator is a vocation rather than just another job" (Graduate 16.18) and that "this forced me to be a better educator" (Graduate 16.8), and graduates now feel "ready for a variety of teaching jobs" (Graduate 16.13). Some negative comments from graduates mentioned that PACE needs to do a better job providing candidates with "full disclosure of the situation they are about to enter" (Graduate 15.6) because of the demands of the teaching profession. However, despite these few comments, PACE, and especially the Professional Service pillar, helped the graduates "see that teaching is my passion and does require a special person; and I know I can be one of those special people" (Graduate 14.5). PACE helped the graduates know that this is the job they want to have in the future. It helped to "confirm this notion into a conviction. I feel passionate about education and believe that I am called to have some small impact on high school students" (Graduate 12.1). Graduate 15.9 sums up the theme of vocation the best in saying, "I couldn't imagine myself doing anything else and feeling as fulfilled in my work, at least not at this point in my life. I think I needed to just be pushed into it as I was with PACE, and that's what showed me that although it can be hard—I am capable and effective as an educator."

Service and religion. While graduates discussed their vocational call to teaching they developed in the Professional Service pillar, many mentioned how important it was to serve the students they were serving. PACE graduates often mentioned how important it was that they were serving underprivileged students and how that was always a calling for them. Graduate 12.13 stated, "I found deeper meaning to the work I was doing in the classroom and moments of realizing what a difference I could make in students' lives." Similarly, Graduate 12.3 found that "I want to serve my kids well so that Catholic education grows into a force in many communities." This service theme was present throughout PACE graduates; and "while it was frustrating to not receive the 'normal' pay check that my peers who are teaching outside of PACE were earning, I wouldn't change my choice to do PACE if I had the opportunity. It was actually refreshing to know I was serving" (Graduate 15.7). This service in teaching "forced me to make decisions with greater independence than in my other work or school opportunities." Service was so big for the graduates that Graduate 14.11 was disappointed after realizing that "the students I would be serving were going to be mostly affluent, privileged students."

Graduates also discussed that while the spiritual aspect might be missing from the community living pillar, they were able to find it while teaching religion to their students. Graduate 12.11 mentioned, "I gained a better understanding of the elements of the Liturgy, which added a degree of spiritual depth to my own experience at mass." Having these strong religious conversations with kids helped them to "find moment of grace" in their lives (Graduate 15.1).

Skills. The final theme that emerged from the data on Professional Service involved the different skills, both in the classroom and in life, which the graduates learned on the job. Graduate 15.4 discussed how through teaching "I have a new perspective on teaching" and have learned "multiple moves to use," as his or her teaching career continues. This experience has helped teachers to see that "it is ok that not everything in life can be prepared for" and that teaching is a never-ending job (Graduate 15.3). Being in the classroom helped the graduates to feel like they "matured and grew up a lot within the past two years…now as I graduate I can say that I feel like an adult" (Graduate 15.2).

Summary

In this chapter, the answers to the three research questions were presented. Research question number one and two were answered quantitatively based on the survey conducted on 111 PACE graduates. Research question number three was answered quantitatively, using the survey and qualitatively, using PACE Reflective Exit Papers written by PACE graduates in five different graduating years. Chapter Five will highlight the key results, connect those results to the literature, and then provide recommendations for further studies.

Chapter 5: Discussion and Recommendations

Introduction

The following chapter discusses the key findings of the investigation and connects those findings to the current literature surrounding teacher retention. Also, conclusions, limitations and recommendations are addressed.

Summary of the Problem

The purpose of this study was to examine the attrition, retention, and mobility rate over an extended time period of teachers who came from the same religious residency-based teacher preparation program. This study also examined the impact of the Pacific Alliance for Catholic Education's (PACE) three-pillar support system on the retention rates of PACE graduates. In order to examine the retention rates and analyze the support system, the following research questions were examined:

1. What is the retention rate of teachers (stayers, movers, and returners) in the PACE residency model after the first, third, and fifth year after program completion?
2. What are the characteristics (i.e., gender, race/ethnicity, degree earned, and school level) of the teachers who are:
    a. Staying in the teaching profession
    b. Leaving the teaching profession
3. What impact does each pillar in the three-pillar support provided to PACE teachers have on teacher retention?

This study was unique because it was able to analyze the patterns of retention of teachers that were prepared in the same educational preparation model (PACE), and the impact that PACE's support program had on new teachers. It was also able to examine teachers prepared in the same model over a longitudinal period (one year, three years, and five years post-program completion). This is in contrast to other studies on teacher attrition, retention, and mobility that tended to cover only two years of teachers' careers (Ingersoll & Strong, 2011). A recent study examined attrition rate of teachers over a longitudinal period, but it did not provide data on teachers from the same preparation program (Gray & Taie, 2015).

This study had access to both quantitative and qualitative data that helped to provide a clear picture of the PACE residency-based model. By examining both the quantitative retention rates, and the qualitative Reflective Exit Papers, this study was able to determine both the retention rates for PACE and how the PACE's residency-based model impacted new teacher retention. This study provides valuable insight about a model that educators can use to battle the high cost of teacher turnover (Barnes, Crowe, & Schafer, 2007). The data indicated that the PACE support structure negated the feelings of isolation and loneliness experienced by many new teachers (Feiman-Nemser, 2003).

This chapter reviews the methodology used in this study, summarizes the key major findings from the study, and connects the study to both the theoretical framework and the key literature around teacher retention. The chapter also identifies

limitations in the study, discusses the significance of this study, and provides suggestions for further research.

Review of the Methodology

This was a mixed-method study that examined the retention rates of PACE graduates after their first year post-graduation, third year post-graduation, and fifth year post-graduation. It also determined the impact of PACE's three-pillar support program. In order to examine the retention rates of PACE graduates, an update of the PACE Alumni Database was necessary. A Qualtrics survey was sent to all of the 138 PACE graduates; 111 (80.43%) graduates responded to the survey. This survey addressed all three research questions, and was the base for the quantitative analysis of the study.

In order to qualitatively analyze the impact of the three-pillar support program on PACE graduates, five graduate cohorts' Reflective Exit Papers were read and coded using both magnitude and evaluative coding methods. Themes and sub-themes were then identified to describe the impact of the PACE three-pillar support program on the graduates.

Discussion of the Key Findings and Connection to Literature

This study was a mixed-methods study that analyzed three separate research questions that focused on the retention rates and support provided by the University of Portland's PACE program. The first two research questions were analyzed quantitatively using a Qualtrics survey, while the final research question was analyzed

both quantitatively and qualitatively using the Qualtrics survey and the Reflective Exit Papers.

Retention rate of teachers in PACE. The first research question explored the retention rates of teachers in the PACE program in the first year, third year, and fifth year after PACE graduation. This current study found 88.29% of graduates were still teaching in the first year after graduating from PACE, 84.81% were still teaching three years after graduating from PACE, and 81.34% were still teaching five years after graduating from PACE. These results are similar to the results found in Gray and Taie's (2015) *Beginning Teacher Longitudinal Study* (BTLS) on attrition of beginning teachers in elementary and secondary schools for year one and year three. However, in this current PACE investigation 19% of teachers were no longer teaching after year five, whereas 23% of teachers were no longer teaching after five years in the BTLS (Raue & Gray, 2015). Another difference between Gary and Taie's study and this PACE study is that the Gary and Taie's study could not account for the preparation models of its participants. Gary and Taie (2015) had teachers that have come from many different teacher preparation models, since it was an examination of beginning teachers. This current study on PACE is different because it examined teachers only that were prepared in the PACE residency model.

Another study that examined the attrition of new teachers found that 20% of teachers with one to three years of experience remained in the profession (Goldring, Taie, & Riddles, 2014). In contrast, PACE had higher rates of retention than this in their first year (only 12% attrition) and in their third year (only 16% attrition).

Ingersoll (2001) used the *Teacher-Follow Up Survey* to find that the overall turnover rate for teachers after one year was 13.2%. While this is similar to PACE's attrition rate, it is important to note that Ingersoll's study reported data on both new teachers and teachers with extensive experience. This complicates the comparison between this study and Ingersoll's (2001) findings because this study focused on only teachers one year, three years and five years after graduation. In fact, Ingersoll (2001) found that generally younger teachers (less than 30 years old) were 171% more likely to leave than older teachers. Similarly, Strunk and Robinson (2006) found that teachers with fewer than four years of experience were substantially more likely to leave their teaching jobs than teachers with more experience.

Since the PACE teachers in this study generally were young teachers (under age of 30) with less experience, the attrition rate is more impressive considering that age was often the main variable identified as a predictor of attrition (Goldring, Taie & Riddles, 2014; Ingersoll, 2001; Stunk & Robinson, 2006).

Perhaps a better comparison to the retention rates found in PACE is a comparison between residency models. Teach for America (TFA), while different from PACE in its mission, had much higher attrition rates. Teach for America had only 60.5% of their teachers continuing to teach after their two-year commitment (Donaldson & Johnson, 2001), notably lower than PACE's 88%. This is not surprising given that a majority (56.59%) of TFA residents indicated on a survey that they only planned to teach for two years (2001).

The Boston Teacher Residency (BTR) model found almost exactly the same retention rate (88%) as this study of PACE teachers one year after program completion (Papay, West, Fullerton, & Kane, 2012). However, PACE had higher retention rates over a longer time period (81% for PACE; 75% for BTR). The finding of this study with PACE teachers' retention of approximately 88% in the first year after residency completion is remarkably consistent with Silva, McKie and Gleason's (2015) finding that 89% of teachers continue to teach after their residency commitment. Silva, McKie and Gleason were studying 12 different Teacher Residency Programs (TRP) for the National Center for Education Evaluation and Regional Assistance.

Movers and returners in PACE program. In addition to examining the retention rates of teachers versus non-teachers, this study also examined the percentage of teachers that left the profession and returned (returners), and the teachers that moved or changed schools (movers). Of the 29 teachers that had left teaching for at least one year, 16 returned to the profession. When examining the moving rate of teachers, 54.08% moved or changed schools in the first year after PACE graduation, 52.94% moved or changed schools before the third year after PACE graduation, and 38.78% moved or changed schools before the fifth year after PACE graduation.

An interesting note is that a similar percentage of TFA teachers (43.6%) remained in their initial school in the first year after they joined TFA (Donaldson & Johnson, 2011). One avenue for further exploration would be to study the teachers that

moved or changed schools in PACE and why they decided to move and change schools. The data in this study did not examine why teachers moved schools.

PACE's moving rate is higher than that of other TRP programs. Silva, McKie, & Gleason (2015) found that 77% of TRP teachers stayed in the same school they were teaching in as residents. Again, while this is notably higher than PACE's mobility rate. Most members in the TRP programs analyzed by Silva, McKie and Gleason (2015) chose to live in a specific city (Boston, Chicago). Whereas, PACE teachers were sent to different communities throughout the Western United States.

Catholic education retention. Interestingly, when examining the retention rate of PACE teachers in Catholic schools, 92.86% of teachers who were teaching in the first year after PACE graduation were teaching in a Catholic school. This percentage was 85.29% for year three and 85.71% for year five. Ingersoll (2001) found that 17.1% of Catholic schools had turnover after the first year of teaching. Clearly, the retention rates of PACE teachers in Catholic Schools is much higher than that rate.

Another interesting comparison to this study was between this study and Davis and Kennedy's (2009) examination of all University Consortium for Catholic Educators (UCCE) residency programs. Davis and Kennedy examined all UCCE schools and found that the retention rate was 93% for teachers in the first year after program completion. While that is higher than PACE's 88% found in this study, the overall percentage of teachers who continued to teach in Catholic schools in Davis and Kennedy's study was only 71%. This is much lower than PACE's Catholic school

retention rate of 92.86%. The PACE teachers Reflective Exit Papers speak to this issue. While coding those papers, it was clear that PACE teachers felt a calling not only to be teachers, but to be Catholic schoolteachers. One of the most positively coded responses throughout the essays focused on the vocation of Catholic school teaching and the calling that PACE graduates felt towards the service of teaching in a Catholic school. A final interesting note on this finding was that even though PACE prepares teachers to transition to public schools by helping them attain their teaching license (by completing such Oregon requirements as having to complete a work sample), many of the teachers decided to stay in Catholic education. This mission/calling to the teachers was clear. This could be related to a selection issue in that the selection of the PACE candidates was focused on participants that felt a calling to be Catholic educators. It also connects to the idea about the importance of mission in a school and apprenticeship and mentorship as discussed by the theoretical framework. PACE created a feeling of belonging for its members. Many teachers spoke about this feeling, and along with the intentional communities, the mentorship created by PACE helped the teachers to feel as though they were members of their community (both school community and the larger Catholic school teacher community).

A logistic regression was run to predict whether any characteristic (contact with other PACE teachers, degree earned, gender and race) had an impact on a teacher's decision to stay in Catholic education. This regression analysis indicated that graduates were 1.47 times more likely to teach in a Catholic school in the first year

after PACE graduation, 1.704 times more likely to teach in a Catholic school in the third year after PACE graduation, and 1.641 times more likely to teach in a Catholic school in the fifth year after PACE graduation as the amount of contact that the PACE graduate has with their fellow graduates increase.

This connects to the support that PACE teachers mentioned they received in their Reflective Exit Papers. The intentional communities created the intense family feelings for PACE graduates; a family-like feeling that supported them in their first years as teachers. Graduates often mentioned how the support helped them get through the challenges of teaching, which is something that seems to continue throughout their teaching careers and seems to impact their decision to stay in teaching.

Characteristics of teachers in the PACE program. When examining the demographics of the teachers who were still teaching, it was found that women made up a higher percentage of graduates that continued to teach over the five years than men, along with Whites making up a higher percentage of graduates staying in the program than non-Whites. In the first year after PACE graduation, 90.48% of females, in comparison to 81.48% of males, were still teaching. In year three, 88.71% of females were still teaching in comparison to 70.59% of males, and in year five 86.96% of females were still teaching in comparison to 58.33%. When examining Whites versus non-Whites, 88.47% of Whites were still teaching in the first year after PACE graduation while 69.23% of non-Whites were still teaching. In year three those percentages were 85.52% for Whites and 83.33% for non-Whites; and finally in year

five those percentages were 82.14% for Whites and 66.67% for non-Whites. It is important to note that the sample sizes of the males and the sample size for non-Whites were much less than the sample size of females and the sample size of Whites. This could have led to the lower percentages in these two demographics and helps to explain why the logistic regression found no statistical significance between the two demographics. While not a direct comparison, it is interesting to note that in this study White females were slightly more likely to stay in teaching as compared to Borman and Dowling's (2008) study which examined 34 quantitative studies and found that young, White married women were the most likely to leave the profession. This study on PACE found results more comparable to the BTLS study (Raue & Gray, 2015) that found female teachers were more likely than male to teach for five years after program completion.

In fact, when comparing the following characteristics (contact with other PACE teachers, degree earned, gender, and race) a multi-level logistic regression found no statistically significant difference in the percentages of teachers versus non-teachers. While there was no statistical significance, graduates who earned a MEd as opposed to graduates who earned a MAT had higher percentages of teachers versus non-teachers (91.67% versus 85.48% in year one; 93.33% versus 79.17% in year three; and 90.48% versus 75% in year five). When examining the retention rate of teachers who had contact with fellow PACE teachers, 93.75% of graduates who made daily contact with fellow PACE teachers were still teaching one year after graduation, 90.48% of graduates who made daily contact with fellow PACE teachers were still

teaching three years after graduation, and 88.24% of graduates who made daily contact with PACE teachers five years after PACE graduation were still teaching. One interesting finding is the number of graduates that were still in daily contact with their fellow PACE teachers. Seventeen of the 58 graduates were still in daily communication with other PACE teachers five years after graduation, 21 out of 79 graduates were still in daily communication with other PACE teachers three years after graduation, and 32 graduates out of 111 graduates were still in contact with other PACE teachers one year after PACE graduation.

Three-Pillar support program in PACE. The final research question analyzed in this study examined the three-pillar support program utilized by PACE to support residents in their program. This research question was analyzed quantitatively in the final two questions of the Qualtrics survey and qualitatively with the Reflective Exit Papers.

Quantitative analysis of Three-Pillar support program. The last two questions on the Qualtrics survey asked the participants to determine the impact of the three-pillar support program of PACE. The first question asked the graduates to rank, in order of importance, the impact that each support pillar had on their time in PACE. Professional Service was ranked the highest with 49.55% selecting that as having the biggest impact on their time in PACE, while Academic Preparation had the fewest mot impactful ranks with only 18.92% of graduates selecting Academic Preparation as the most important pillar. The Community Living pillar had a bi-modal distribution with 31.53% selecting it as the most important pillar and 42.34% selecting Community

Living as the least important pillar. The final question on the survey asked the candidates about the impact of each pillar on a graduate's decision to stay in teaching. A multi-level logistic regression was run and found that the higher percent impact scores a candidate selected for Academic Preparation, the more likely they were to stay in teaching (1.034 times for year three and 1.044 times more like for year five). The regression analysis also found that as graduates selected higher percent impact scores for Professional Service, they were 1.025 times more likely to stay in teaching. This shows that as teachers reflected on their time in PACE, they realized that the support they had in forms of Academic Preparation and Professional Service had an impact on their decision to stay in teaching. This result might appear surprising at first glance, because it might appear that PACE teachers do not value the community living aspect of the three-pillar support program. However, in reality this result actually is more of a testament to the power of the Academic Support and Professional Service pillars and how powerful those two pillars were in shaping PACE graduates' experiences as teachers. When focusing on preparing the graduates to be educators, it is clear that the Academic Support and Professional Service pillars provided by PACE had a more significant impact on the graduates' decision to stay in teaching, especially three or five years after graduation. This is consistent with the findings and themes identified in the PACE Reflective Exit Paper.

Qualitative analysis of PACE's Three-Pillar support program. The final section of this study will report the analysis of the PACE Reflective Exit Papers that

graduates wrote when they finished PACE. These Reflective Exit Papers were coded using descriptive coding, evaluation coding, and magnitude coding.

It was clear from the essays that PACE graduates reported many positive feelings about the PACE program. Overall, most of the comments and feedback provided by the graduates were positive, and the negative comments often were prefaced with a comment from the graduate claiming that they provided the negative comments in order to improve the program. Most of the comments throughout the Reflective Exit Papers focused on the Community Living Pillar. As mentioned in Chapter 4, graduates found that living in these intentional communities was difficult but rewarding. This pillar had the most themes and sub-themes identified throughout the study and also the most mixed responses in terms of positive and negative responses. It also had quite a few recommendations from the graduates.

One of the most obvious recommendations identified in the Reflective Exit Papers involved the spiritual growth of the graduates. Unlike the Alliance for Catholic Educators (ACE) and other UCCE programs, PACE had folded the spiritual growth pillar into the community living pillar. While this could be seen as a natural fit, it seems clear that the spiritual aspect of the intentional communities was very unique and depended on the individuals present in the specific community. Some communities mentioned that it felt like a forced aspect of their household to live together, while others mentioned that it was not something they focused on at all. In order for PACE to have an impact on the spiritual growth of its candidates, one suggestion is that, similar to the University Supervisors provided by PACE for the

Academic Support of their graduates, perhaps connecting the intentional communities to local churches or increasing the presence of spiritual leaders could help support the spiritual growth of the graduates. It is important to note that strengthening the spiritual aspect of the PACE program was seen by the participants as natural and expected, since they were living in an intentional Catholic community as a requirement of being in PACE. This also makes sense, since there is no designated "spiritual leader" in a PACE community. Unlike the teaching or academic experiences, the candidates had to work together to grow spiritually. Many of the graduates mentioned how they grew individually in their faith because of the struggle they faced in trying to negotiate the spiritual growth of their intentional communities.

One of the most positive outcomes of the Community Living pillar was the emotional support provided by living in intentional communities. Many graduates felt as though they had a support system where they could talk and spend time discussing the different challenges they felt as educators throughout their days. This could help increase their social identity in their community as described by Tajfel (1982). Tajfel (1982) defined social identity as "the part of the individuals' self concept which derives from their knowledge of their membership of a social group" (p. 24). This definition of social identify can apply to teachers. Teachers need to feel socially connected to their jobs; they need to feel like they belong in an organization. The intentional communities created and fostered by PACE allowed these teachers to feel like they had a community where they could struggle and grow with other like-minded individuals. By having a built-in support system in their intentional communities, they

were able to navigate the new experiences of teaching better and not feel as "lost at sea without any map or anything, without an astronomer" (Kauffman, Johnson, Kardos, Lui, & Peske, 2000, p. 281).

An interesting connection can be made between the candidates' responses to community and Weitzel's (2009) study that focused on communities in a Catholic residency program. Similar to Weitzel, this study was able to identify PACE graduates talking about community in different ways. In a sense, similar to Weitzel (2009), the communities felt by the graduates could be separated into four different communities. The first community graduates had was in their homes with their intentional communities, both spiritually and as an emotional support system. A second community graduates experienced while a member of PACE was with the school in which they taught. They were in relationships with their students, with their mentor, and with the larger school community. A third community that graduates were a part of while a member of PACE was the communities in which they live. At times, graduates would mention the area they lived in (Utah, Alaska, etc.) and the impact that had on their experience in PACE. Finally, the last community graduates experienced while a member of PACE was the larger University of Portland Community. Whether this was through the three summers where they took summer school classes at UP, or through the school assigned mentors, or even through the support of the PACE leadership, graduates were able to use this community to support them as they learned to become educators.

This built-in community was also evident when examining the Professional Service pillar designed by PACE. Having a mentor for PACE teachers greatly impacted their first two-years when they were resident teachers. While the comments were mixed on some of the school-assigned mentors, the graduates agreed with Rowley (1999) that the best mentors were committed, accepting of them as new teachers, skilled at providing support, and able to handle the different skills necessary to lead new colleagues. Graduates, who felt like their mentor was their friend that could provide them with both a place to vent and tools they could use in their classrooms, were overwhelmingly pleased and encouraged by their mentor relationships. One complaint reported by the graduates is that some felt their mentor did not want to help them or did not have the time. This became more clear in the later cohorts and might be connected to the fact that more mentors were needed for the increasing number of PACE candidates in the program. PACE can consider not only providing resources to their participants, but also setting up and providing strong resources for the mentors. The most positive comments made by graduates reflected Ingersoll and Smith's (2004) findings that the best mentors were experienced teachers that could guide and support the new teachers.

The research is clear that good, strong induction programs have an impact on new teachers. Raue and Gray (2015) found that 80% of teachers who participated in an induction program in their first year of teaching taught for all five years, while only 69% of teachers who did not have an induction program were still teaching in five years. That is similar to the 81% of PACE teachers who were still teaching five years

after graduation. By having both a school-assigned mentor and an outside University Supervisor, PACE graduates were supported as they delved into the teaching experience. Also, PACE graduates were placed in schools where administrators were supportive of PACE. Ingersoll and Strong (2011) found that many teachers quit teaching because they did not feel supported by their administrators. In the PACE reflective essays, PACE graduates not only felt supported by their mentors, their intentional communities, and the U.P. Supervisors, but also by they felt supported by their school community. Feeling like a member in the school community has an impact on a teacher's decision to stay in the profession (Olsen & Anderson, 2007). Since PACE teachers were able to feel like a member of their school communities, and not just outsiders, they were able to move quickly to the inner trajectory of participation (Wenger, 1998).

Finally, the pillar of Academic Support had the most positively coded responses in the Reflective Exit Papers. The University of Portland's summer classes were well respected by the graduates and allowed the graduates to feel a high level of confidence in their teaching experience. UP provided PACE graduates with a comprehensive pedagogy training program which had an impact on them in the classroom by providing them with both the teaching methods and strategies they needed and then the pedagogy needed to use these methods and strategies in their classes. This is consistent with the literature that states that only 9.8% of teachers who had comprehensive pedagogy training left after one year (Ingersoll, Merrill, & May, 2012). Teachers in the PACE program were able to balance the practitioner knowledge

of their mentors and school communities with the knowledge provided by the University of Portland's faculty and staff. This is consistent with Darling-Hammond's (2010) study on connections between universities and the school in which their teachers are teaching. Since PACE teachers are teaching in schools chosen by the University and schools that have a partnership with the University of Portland, the relationship helps the participants feel supported on all levels.

By having the capstone project for PACE teachers, they were able to feel like leaders in their schools. Having this direct connection to the University and the best educational practices helped them feel like leaders, and helped them to feel like they were actually valuable to their colleagues. This feeling of importance was vital for many PACE teachers, and it helped them grow in confidence as new teachers.

The three-pillar support program helps PACE teachers feel supported in many different communities and through many different ways. They are supported by the intentional communities they are living in with other PACE candidates, by the strong Professional Service provided by PACE, and the impressive and impactful Academic Preparation from the University of Portland. This is consistent with the theoretical framework discussed in Chapter 2. PACE graduates were able to reify their experience as teachers and the mission of education through many different communities and through their academic support, and they were able to participate in strong communities that help them to transition on the trajectory of participation and to have a "social experience of living in the world" (Wenger, 1998, p. 55).

Significance

The results of this investigation could be helpful to school districts by providing some guidance in how to keep the cost down on impactful induction programs. It was evident that partnering can be a valuable strategy for districts. In the instances described in this study, Catholic schools were able to get teachers that are dedicated to the profession of teaching Catholic education and are supported by a strong residency model. This way, the schools do not have to shoulder the cost of creating these induction programs for their new teachers. Ingersoll (2012) found little research investigating the cost benefits of implementing induction programs. If schools and districts are able to partner with universities with proven track records of training and supporting new teachers, the concerns around the cost for the schools can be negated.

This study was the first analysis of the PACE program. PACE has been in existence since 1998, and enrollment in PACE is increasing each year. It was necessary that a study was conducted on the impact of PACE and whether PACE was succeeding in sending well-trained teachers into the profession. The University of Portland is now able to examine the retention rates of participants in their PACE program and identify how the support they are providing to PACE is helping to further the mission of Catholic education. This study provides UP with clear data about the retention effects of the program, along with themes and subthemes on the impact of the three-pillar support program used to help train their new teachers. This study can

potentially help other Universities that want to start residency a program similar to PACE to see the benefits of having a residency-model teacher-training program.

Limitations

One of the main limitations of this study was the lack of diversity in the participants of the PACE program. Of the 141 participants of PACE, 104 (73.76%) were females and 37 (26.24%) were males. While ethnicity was not formally collected previous to this study, this study found that of the 111 respondents to the Qualtrics survey, 104 (93.69%) identified themselves as White and 13 (11.71%) identified themselves as something other than White. The sums of these percentages add up to higher than 100% because graduates had the option to select more than one race. This lack of diversity in the program caused small sample sizes in the population, especially when examining graduates three years and five years after graduation, leading towards the lack of statistically significant results on the logistic regression.

The sample size of the 111 respondents also was a limitation of this study. Since this study examined graduates three years and five years after PACE graduation, the sample sizes became much smaller as respondents who had not yet been out of PACE for three or five years were unable to respond to questions specific to graduates who had been out of PACE for three or five years. PACE has had drastic growth in the last three years of the program. While the sample size for respondents in the first year after graduation from PACE was 111, the sample size dropped down to 79 for respondents that were out of PACE for 3 years and 58 for respondents that were out of PACE for 5 years.

Another limitation is connected to the response rate for the Qualtrics survey. Even though the 80.43% survey rate was higher than other studies (Baurch, 1999), it is still important to note that 20% of the graduates did not respond to this survey. While the entire population of PACE (73.76% female; 26.24% male) was similar to the respondents in the survey (75.68% female; 24.32% male), it is still possible that some of the non-respondents had different experiences in PACE than the respondents.

One final limitation is connected to researcher bias. The researcher graduated from The University of Portland, both as an undergraduate student and a graduate student. While the researcher was not a graduate of PACE, he did take classes from many of the professors described in the PACE Reflective Exit Papers, and was familiar with some graduates of PACE. The Reflective Exit Papers were anonymous to help prevent bias in the responses as the researcher coded the responses. Also, in order to prevent as much bias as possible, another EdD candidate read and coded a selection of the Reflective Exit Papers to increase the interobserver reliability and cross-checking with the quantitative results occurred to ensure validity.

Future Research

One recommendation for future research is an examination of the admission criteria for PACE program. With the positive impact of PACE on Catholic Education, and the growth of the PACE program in the last few yeas, examining who PACE is admitting and the type of teaching candidate PACE admits is necessary. This also could help PACE to increase the racial/ethnicity and gender diversity of the program. This study examined the PACE graduates after completing the PACE program.

Exploring who the candidates are prior to admission will help to build a fuller picture of the PACE program.

Another interesting finding that could be explored in greater depth is the movers in the PACE program. PACE had high rates of movers in the first year after PACE graduation (54.08%), the third year after PACE graduation (52.94%) and the fifth year after PACE graduation (38.78%). Exploring why there is such a high movement rate (especially three years after graduation) is necessary, because teacher migration impacts the school from which teachers are leaving. In fact, Ingersoll (2003) believed that movers and leavers have the same impact on the school from which they depart both organizationally and on a management level.

While reading and coding the different Reflective Exit Papers, it was clear (especially in the Community Living Pillar) that graduates had different experiences based on their specific intentional communities. This study only looked at five of the last six graduating cohorts. And, when examining these cohorts it only looked at the anonymous Reflective Exit Papers, thus preventing knowledge of which community the paper was from, unless explicitly stated by the graduate. As PACE continues to grow and expand in communities, examining the differences in the intentional communities (both schools in which the participants teach in and the larger social community) is necessary.

Finally, as discussed in Chapter 2, there has been a lack of studies on religious-based residency models. Davis and Kennedy (2009) examined the attrition rate of 439 UCCE graduates across all of its schools. However, as noted by Davis and Kennedy

(2009) there is "much variation within the way programs operate and serve" (p. 253). A more comparative analysis between PACE and other UCCE schools, as opposed to the entire UCCE program, could help to identify the strengths of each program and areas where each program can improve.

Conclusion

This mixed-method research study examined the retention rates and patterns of retention amongst PACE graduates. The study was based in the theoretical framework of the situational learning theory, and the importance of belonging in a community. A review of the literature around teacher retention and teacher support was completed to connect this study to the current literature. The study was able to examine the retention rates of 111 (80.43%) of the PACE graduates. It found that 88.29% of graduates were teaching one year after graduation, 84.81% of graduates were still teaching three years after graduation, and 81.34% were still teaching five years after PACE graduation; along with descriptive statistics around the teachers that decided to stay in the profession. This study also examined the impact the three-pillar support program (Community Living, Academic Learning and Professional Service) had on 47.10% of all PACE graduates by reading and coding the PACE Reflective Exit Papers. Finally, this study looked at all the results found, compared that to the key literature, and discussed the significance, implications, and made suggestions for areas of further research.

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Appendix A

Qualtrics PACE Alumni Survey

Teacher Demographics

Thank you for participating in this survey on the PACE program. The survey is going to ask you about your teaching experience after PACE and about the impact the Three-Pillar Support system had on you while you were in PACE. You will be asked about your employment the year after PACE graduation, three years after your PACE graduation and again five years after your PACE graduation. For the purpose of this study, please **do not** count your PACE teaching years in your total teaching time. Those years will automatically be calculated in your response. Please note this survey requests your name in order to update an existing database on PACE graduates.

Please enter your first and last name.

Please identify your ethnicity. Check **all** that apply

- [ ] White
- [ ] Hispanic or Latino
- [ ] Black or African-American
- [ ] Asian
- [ ] Native Hawaiian or other Pacific Islander
- [ ] American Indian or Alaska Native
- [ ] Mixed

Please identify your gender

- ( ) Male
- ( ) Female

Please select the degree you earned at UP with PACE

- ( ) M.Ed
- ( ) MAT
- ( ) M.A.
- ( ) Did not finish

What grade level did you teach while a member of PACE? (select all that apply)

- [ ] Elementary (P-5)
- [ ] Middle (6-8)
- [ ] High School (9-12)

Please select the year you graduated from PACE

Please identify if you have pursued/earned any other graduate degree since PACE completion

- ○ I have not earned another graduate degree
- ○ I am currently enrolled in the graduate program (please specify)
- ○ I have earned another graduate degree (please specify)

How often (on average) do you currently make contact with fellow PACErs who are not your family members?

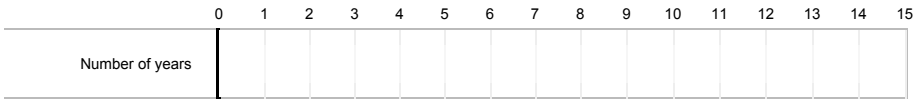
- ○ Daily
- ○ Weekly
- ○ Monthly
- ○ Quarterly
- ○ Yearly
- ○ Never

Employment

The following questions will ask you about your teaching experience. When completing the number of years teaching please:

- Do not include your time while you were in the PACE program
- Do not include substitute teaching (unless as a long-term sub in a single position for more than 1/2 the school year)
- Include this current year in your calculation
- Include as a full year any school year you spent teaching at least 1/2 time

How many years have you been a teacher?



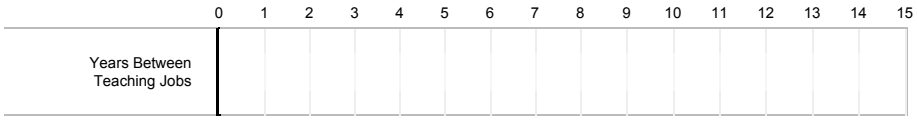
As a teacher, did you leave teaching for at least one year?

- ○ Yes
- ○ No

Did you return to teaching?

- ○ Yes
- ○ No

How many years were you out of the classroom?



In the year **immediately following** graduation from PACE, what best describes your employment?

- ◯ Teacher (P-12)
- ◯ Higher Education
- ◯ Administration
- ◯ Other (please specify)

The following questions refer to the first year after PACE graduation

Please identify if your school was a Catholic school or not

- ◯ Catholic
- ◯ Non-Catholic

Was your school the same as your PACE placement?

- ◯ Yes
- ◯ No

Please identify the grade level you taught at your school (select all that apply)

- ☐ Elementary (P-5)
- ☐ Middle School (6-8)
- ☐ High School (9-12)

Please select one of the following choices about your employment **three years** after program completion (For example, if you graduated in 2001, then select choice based on 2003-2004 school year)

- ◯ Teacher (P-12)
- ◯ Higher Education
- ◯ Administration
- ◯ Other (please specify)
- ◯ Have not been out of PACE for three years

The following questions refer to your third year teaching after PACE completion

Please identify if your school was a Catholic school or not

- ◯ Catholic
- ◯ Non-Catholic

Please identify the grade level you taught in this school (select all that apply)

- ☐ Elementary (P-5)
- ☐ Middle School (6-8)
- ☐ High School (9-12)

Was the school you taught in the same school or a different school than the school you taught in following PACE graduation?

- ◯ Same
- ◯ Different

Please select one of the following choices about your employment **five years** after program completion (For example, if you graduated in 2001, then select choice based on 2005-2006 school year)

- ◯ Teacher (P-12)
- ◯ Higher Education
- ◯ Administration
- ◯ Other (please specify)
- ◯ Have not been out of PACE for five years

The following questions refer to your fifth year teaching after PACE completion

Please identify if your school was a Catholic school or not

- ◯ Catholic
- ◯ Non-Catholic

Please identify the grade level you taught at your school (select all that apply)

- ☐ Elementary (P-5)
- ☐ Middle School (6-8)
- ☐ High School (9-12)

Teacher Demographics

Thank you for participating in this survey on the PACE program. The survey is going to ask you about your teaching experience after PACE and about the impact the Three-Pillar Support system had on you while you were in PACE. You will be asked about your employment the year after PACE graduation, three years after your PACE graduation and again five years after your PACE graduation. For the purpose of this study, please **do not** count your PACE teaching years in your total teaching time. Those years will automatically be calculated in your response. Please note this survey requests your name in order to update an existing database on PACE graduates.

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- [ ] Mixed

Please identify your gender

- ( ) Male
- ( ) Female

Please select the degree you earned at UP with PACE

- ( ) M.Ed
- ( ) MAT
- ( ) M.A.
- ( ) Did not finish

What grade level did you teach while a member of PACE? (select all that apply)

- [ ] Elementary (P-5)
- [ ] Middle (6-8)
- [ ] High School (9-12)

Please select the year you graduated from PACE

- Professional Service: A commitment to making a difference in the lives of children and bringing faith-based idealism into the classroom.
  - Key Components:
    - Regularly scheduled formal observations by the University of Portland supervisor
    - Mentoring by an on-site teacher
    - Ongoing supervision and support from the school
    - Subsidized housing on site
    - Health coverage arranged by the program and a "simple living" stipend

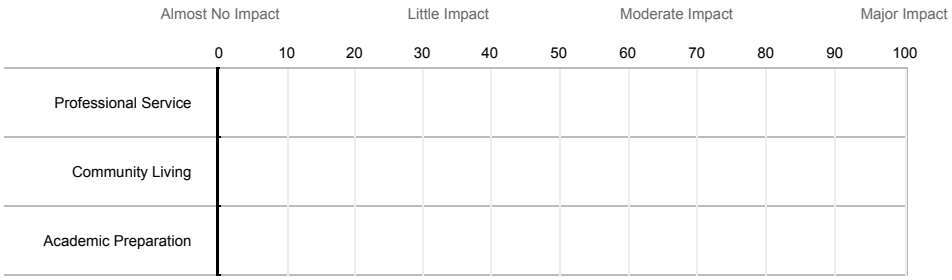
- Community Living: Living in intentional community groups of three to six members.
  - Key Components:
    - Mutual support from fellow PACE teachers
    - Communal dinners
    - Planned recreation activities
    - Weekly community meetings
    - Shared household responsibilities
    - Regular site meetings with PACE Team Members
    - Weekly community prayer & Sunday Mass
    - PACE formation programs & Cycle of retreats

- Academic Preparation: Time attending classes at the University of Portland's Graduate School of Education and earning M.A.T or M.Ed.

Please rank in order of importance, with 1 being most important.
Which aspect of the PACE Three-Pillar support system did you find most impactful during your time in PACE?

	1	2	3
Community Living	○	○	○
Professional Service	○	○	○
Academic Preparation	○	○	○

What impact did each Pillar have on your decision to stay in teaching?



Thank you for participating in this survey. Please review your answers and click the arrow at the bottom when you are done.

Please contact support@surveyz.com if you have any questions regarding this survey.

Appendix B

First E-Mail for PACE Survey

Dear PACE Alums -

I hope this email finds you enjoying autumn, wherever you are, and holding fond memories of your time on the Bluff. I'm emailing today with an introduction, and a very important request. **David Exley** is a Catholic school teacher and current doctoral student in the University of Portland's relatively new Ed.D. Program in Learning and Leading. As a dedicated K-8 educator and a big believer in the PACE program, David has elected to conduct his doctoral research and structure his dissertation around impacts of the PACE Program. Regrettably, *PACE has never had the time or the people-power available to conduct in-depth research into our own programming, but we have that opportunity now through David's passionate work*. As part of that work, David is asking all PACE alums to complete a **5-Minute Survey** with questions about your time in PACE and your trajectory after graduation. As you might recall from your research days, David needs a sizable response from PACE alums for the work to have statistical significance, so EVERY response matters. Please read David's introduction below, and consider clicking this link to complete the survey today!

COMPLETE THE SURVEY NOW

With gratitude,
Dave

Appendix C

Follow-up E-Mail for PACE Survey

Greetings PACE Alum,

A few weeks ago, Dave sent out the message you see below with an invitation to help **David Exley,** a Catholic school teacher and current doctoral student in the University of Portland's Ed.D. Program in Learning and Leading. We haven't heard back from you and want to reach out again to ask for you to complete a brief **5-minute survey**. Your input is so helpful—thank you in advance!

COMPLETE THE SURVEY NOW

Thank you,