Implications of Academic Pathway to Teaching in Utah: Does Alternative Certification Alleviate Teacher Shortages?

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Implications of Academic Pathway to Teaching in Utah:
Does Alternative Certification Alleviate
Teacher Shortages?

Laura M. Wilde

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Master of Arts

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ABSTRACT

Implications of Academic Pathway to Teaching in Utah:
Does Alternative Certification Alleviate
Teacher Shortages?

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Master of Arts

The Academic Pathway to Teaching (APT) licensure was introduced in 2016 to expand the supply of teachers in Utah. Since then, there has been no formal evaluation of the licensure or the teachers teaching with an APT license. The goals of this study were to explore the effects of the APT licensure on teacher turnover in Utah and to analyze how mentoring experience and teacher self-efficacy were related to the attrition of this population of teachers. This mixed-methods study used data from the Utah State Board of Education to calculate rates of teacher turnover of APT candidates (N=456) for each cohort and school year from 2016-17 to 2017-18. In addition, a survey was sent to current and previous APT candidates with questions on mentoring, self-efficacy, and opinions of the licensure. By their second year of teaching, 41% of the 2016-17 cohort had left teaching in Utah or moved schools. The 2017-18 cohort had a teacher turnover rate of 16%. Although analyses of variance of survey items found no relationship between self-efficacy and attrition, they did find that APT candidates who were still teaching had significantly more frequent and impactful mentoring experiences. Furthermore, data from the open-ended survey responses supported these findings and identified another variable related to the success of APT candidates: previous teaching experience. Although this study is limited by a small survey respondent group of APT candidates who had left teaching (N=13), the implications of this research can shape inform policy decisions regarding alternative certification in Utah.

Keywords: teacher turnover, teacher shortages, alternative certification
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Chapter 1

Introduction

The system of public education in the United States requires a large number of teachers in order to function. Data from 2017 suggest that 3.2 million full-time equivalent teachers would be employed in public elementary and secondary schools alone in the 2017-2018 school year, and with .5 million working in private schools (U.S. Department of Education, n.d.). However, recent research indicates that the nation is currently facing a critical teacher shortage (García & Weiss, 2019) and many schools have been left scrambling to fill the resulting vacancies.

Teacher shortages negatively impact many tenets of education (Carver-Thomas & Darling-Hammond, 2016). For example, when there are fewer teachers, increased pupil-teacher ratios lead to overcrowded classrooms, inadequate one-on-one attention, and classroom management issues. In addition, teacher shortages also increase the likelihood that teachers teach outside of their areas of certification or that unqualified teachers are hired. Furthermore, when schools are not fully staffed the individual teacher workload increases as the remaining teachers pick up the slack. This increased burden can lead to less effective teaching. These outgrowths of teacher shortages have negative impacts on student achievement, which is especially relevant, seeing as “teachers remain the strongest influence on student achievement (Carver-Thomas & Darling-Hammond, 2017). In other words, teacher shortages harm students and teachers alike.

Unfortunately, there is no singular cause of teacher shortages for policy makers to focus on. Instead, multiple variables have been identified and sorted into two groups (Sutcher, Darling-Hammond, & Carver-Thomas, 2016). The first includes factors that influence the demand for teachers. Increased student enrollments require schools to hire new teachers or deal with overflowing classrooms. In the case of falling pupil-teacher ratios due to school or district
requirements, new teachers must be hired to comply with new policies or laws. Certain disciplines have more difficulty attracting teachers namely, foreign language, mathematics, science, and special education. The second category includes forces that affect the supply of teachers. Decreased enrollment in teacher preparation programs has effectively shrunk the pool of candidates where schools traditionally go to find new teachers. Teacher attrition accounts for teachers who leave their school or the profession, voluntarily and involuntarily, and must consequently be replaced. Each cause listed here has its own set of causes.

Although multiple factors are involved, recent research has shown teacher attrition to be the largest cause of decreased teacher supply and teacher shortages (Castro, Quinn, Fuller, & Barnes, 2018). Nationally, 8% of teachers leave the profession every year (Carver-Thomas & Darling-Hammond, 2017) and half of all beginning teachers leave the profession within the first five years of teaching (Ingersoll, 2003). Research has also shown that there would be a sufficient number of new teachers to meet new demand if all new teachers stayed (Ingersoll, 2003). However, researchers also found that the attrition rate in U.S. schools in 2012 was equal to the demand rate for the following school year (Sutcher, Darling-Hammond, & Carver-Thomas, 2016), with the highest rates of attrition found in first-year teachers and teachers near retirement (Guarnina, Santibañez, & Daley, 2006). Attrition rates for teachers who leave the profession or their school before retirement age, known as pre-retirement attrition, are more than double those of retirement attrition (Sutcher et al., 2016). Furthermore, the largest group of pre-retirement teachers who leave are beginning teachers (Sutcher et al., 2016). Factors contributing to pre-retirement attrition include low salary levels, insufficient teacher pre-service preparation, lack of administrative support, and poor working conditions (Sutcher et al., 2016). Other studies have similarly found a relationship between beginning teacher attrition and teacher shortages.
(Guarino, Santibañez, & Daley, 2006). Taken together, these studies effectively show that attrition accounts for yearly demand for new teachers. Indeed, the interplay between factors paints a messy picture of the roots of teacher shortages.

Teacher attrition is in Utah is a serious issue. According to the Utah Education Policy Center (n.d.), 42% of all the teachers in Utah who began teaching during the 2011-12 school year had left the profession in Utah within five years. Another recent study found that new teachers in Utah (defined in this study as those with one to three years of experience) were more prone to attrition than were more experienced teachers (Ni, Nguyen, Rorrer, Franklin, & Nicolson, 2017). The overall rate of attrition for teachers was 5%, whereas the rate for new teachers was 11%. Another study corroborated the idea that beginning teachers in Utah tend to leave more often than teachers with more experience. Researchers used data from the Comprehensive Administration of Credentials for Teachers in Utah Schools (CACTUS) to follow a cohort of 2,699 beginning teachers in public schools over the course of eight school years from 2007-2008 until 2014-15 (Ni, Yan, Rorrer, & Nicolson, 2017a). It was found that 56% of the teachers in this cohort had left teaching after eight years. The analysis of year-by-year attrition showed that more teachers tended to leave early on, with the rate of attrition in the second, third and fourth years being 17%, 14%, and 11% respectively. The rate of attrition remained relatively constant during the remaining four years. It is clear that the attrition of beginning teachers in Utah is a major contributor to overall teacher shortages.

The costs of teacher attrition are high. First, when teachers leave an urban school, the estimated cost to the district is $20,000 (Carver-Thomas & Darling-Hammond, 2017). Second, inexperienced teachers hired in schools with high attrition rates have a negative effect on student achievement, which is distressing, given that teachers remain the strongest influence
on student achievement (Carver-Thomas & Darling-Hammond, 2017) and high-minority and high-poverty schools are disproportionately affected by teacher shortages (Carver-Thomas & Darling-Hammond, 2017).

Despite research underscoring the impact of attrition on teacher shortages and methods of alleviation, many states have simply focused on increasing the supply of teachers by expanding the pool through alternative routes to teacher certification. This type of licensure allows individuals who have not gone through a traditional teacher certification program to obtain a teaching license. One example of this is in the state of Utah, where in 2016 the Utah State Board of Education (USBE) enacted an alternative teacher certification program, known as the Academic Pathway to Teaching (APT), amid much controversy (Flores, 2016; Gatrell, 2018; Knox, 2016; Wood, 2017).

In the state of Utah until 2016, there were five routes to licensure, the Alternative Routes to Licensure (ARL), International License, Local Education Agency (LEA) Specific Competency-Based License, Out-of-State (OOS) License, and Utah University Recommendation. In 2016, a sixth option emerged, the “Academic Pathway to Teaching” (APT). Implemented by the Utah State Board of Education (USBE) despite overwhelming objection by those who spoke at a public hearing on the subject (Wood, 2016), the APT program allows LEAs to fill empty teaching positions with individuals who have professional experience, but not necessarily teaching experience or formal training. To become an APT candidate and receive a Level 1-APT license, it is necessary to have content area knowledge and a bachelor’s degree in any subject, pass a background check as well as a Praxis content test in the subject to be taught, provide a university transcript, complete the Educator Ethics Review, and pay a licensing fee (Utah State Board of Education, 2016a). Once accepted, APT candidates are mentored by a
mentor teacher\(^1\) for three years. Upon completion of this probationary period, teachers can move up to a higher level of licensure, the Standard Level 2 Utah Educator License.

Many teachers publicly denounced this new pathway to licensure. Cara Baldree, an elementary school teacher, characterized the APT as “absolutely demoralizing and insulting” because it disregards the importance of teacher preparation (Wood, 2016). Roger Donohoe, another Utah educator, described the program in catastrophic terms, “Instead of fixing a leak in the damn, it’s going to be plugging a hole with a stick of dynamite,” (Wood, 2019). Similarly, Representative Marie Poulson of the Utah State Legislature recommended that the state “plug up this sieve […] rather than fill the hole with people who aren’t ready to teach,” (Knox, 2016).

The public outcry caused by the APT casts doubt on the effectiveness of such a licensure on curbing teacher attrition in Utah. Although not all of the aspects of the relationship between beginning teacher attrition and teacher shortages are clear, several lines of research have been explored in conjunction with beginning teacher attrition, including teacher preparation, teachers’ sense of self-efficacy, and mentoring/induction programs. It is the purpose of this study to examine the relationship between these factors and APT licensure with the goal of helping advance education policy that addresses Utah’s teacher shortages. Research questions for the study are as follows:

1. What is the attrition rate for APT candidates?
   a. How does this rate compare with those of other certification pathways in Utah?

2. What are the future plans of APT candidates who are still pursuing licensure in relation to the teaching profession?

\(^1\) The official term is “teacher leader,” but “mentor teacher” is used in this study so that the discussion of the responses, which overwhelmingly used the term “mentor,” would not be dissociated from the responses themselves.
3. What factors contribute to APT candidates’ decision to stay in the teaching profession or leave it?
   
a. What is the relationship between the self-efficacy of APT candidates and attrition?
   
b. What is the relationship between APT candidates' participation in mentoring/induction programs and attrition?
   
c. What is the relationship between APT candidates’ previous teaching experience and attrition?
   
4. What are APT candidates’ attitudes toward the APT licensure?
   
a. How well prepared do APT candidates feel to teach?
   
b. What do they like about the licensure?
   
c. What aspects of the licensure would they change?

Chapter 2 of this thesis will review research on alternative routes to licensure, and the effects of self-efficacy and induction/mentoring programs on teacher attrition. Chapter 3 will describe the methodology used in this study. Chapter 4 will report the results of the study, and Chapter 5 will discuss conclusions and recommendations for further research.
Chapter 2

Review of Literature on Alternative Certification

This chapter begins with a review of research literature on the relationship between alternative routes to certification and teacher attrition. It then examines in more detail the research on two variables that have been shown to be related to teachers’ decisions to stay in the teaching profession: (1) their self-efficacy, and (2) their participation in mentoring/induction programs.

Alternative Certification and Teacher Attrition

In recent years as teacher shortages have become more apparent, various stakeholders have tried to make it easier to become a teacher by “reducing barriers to entry,” namely, traditional requirements for licensure such as student teaching and participation in a teacher preparation program (Darling-Hammond, 2005, p. 238). As a result, some have hypothesized that if traditional requirements were eliminated, or if multiple paths to licensure existed that more flexibly accommodated the life circumstances of a diverse array of candidates, teacher shortages might be reduced by increasing the flow of candidates into the classroom.

The intent of alternative certification is to provide another means to place teachers in classrooms without requiring them to complete a traditional four-year undergraduate education program. The length and scope of programs vary dramatically. Typically, alternatively-certified teachers complete shorter programs and are sometimes not trained before entering the classroom. This is problematic because teachers who are less prepared leave at higher rates than teachers with extensive preparation before entering the classroom (Sutcher, Carver-Thomas & Darling-Hammond, 2016; Darling-Hammond, 2002). Authors such as Darling-Hammond (2006) defend the importance of teacher preparation:
On one hand, many laypeople and a large share of policy makers hold the view that almost anyone can teach reasonably well—that entering teaching requires, at most, knowing something about a subject, and the rest of the fairly simple “tricks of the trade” can be picked up on the job. These notions—which derive both from a lack of understanding of what good teachers actually do behind the scenes and from tacit standards for teaching that are far too low—lead to pressures for backdoor routes into teaching that deny teachers access to much of the knowledge base for teaching and, often, to the supervised clinical practice that would provide them with models of what good teachers do and how they understand their work. (p. 301)

The debate continues as more and more states introduce alternative programs to fill teacherless classrooms. However, teachers who are alternatively certified are 25% more likely to leave the school they teach at (Carver-Thomas & Darling-Hammond, 2017) and are more likely to leave the profession (Redding & Smith, 2016). Although there is an observed relationship between alternative certification and attrition, it is important to look deeper into the characteristics of alternatively-certified teachers who leave the profession to better understand exactly what sets them apart from those who stay. The following two sections explore two characteristics: self-efficacy and mentoring/induction programs.

**Self-Efficacy and Teacher Attrition**

Self-efficacy, the core of social cognitive theory, refers to the belief in one’s ability to complete a specific task and the subsequent effect this belief has on the decision to stop or continue a certain behavior based on self-perceived likelihood of success (Bandura, 1977). This theory rests on the idea that beliefs of ability or inability can be more powerful than the actual ability or inability to complete a task. Therefore, more success leads to increased expectations of
success, whereas recurring failure, especially in early stages, reinforces the belief that success is not possible. This factor is especially important when discussing the self-efficacy beliefs of beginning teachers and their relationship with attrition.

Much research has been carried out to understand teachers’ self-efficacy at different career stages. Klassen and Chiu (2010) studied the effects of gender, job stress, and years of experience on Canadian teachers’ self-efficacy and job satisfaction. Their data pointed to a non-linear relationship between years of experience and self-efficacy. Teachers’ beliefs of self-efficacy tended to rise as they gained more experience, but after a certain point (twenty-three years) it began to decline. Tschannen-Moran and Woolfolk Hoy’s (2007) study of the self-efficacy beliefs of novice and experienced teachers reinforces the first part of this idea. They found that the mean self-efficacy beliefs of novice teachers were, to some extent, lower than that of experienced teachers. It was suggested that this increase in self-efficacy for experienced teachers could be linked to greater knowledge of instructional strategies, and that attrition of novice teachers could be linked to low-self efficacy. Building on this foundation, Klassen and Chiu (2011) found that the self-efficacy of pre-service teachers was higher than that of practicing teachers in classroom management, but not in instructional strategies or student engagement. However, when Klassen and Chiu compared the results of their study with those of Tschannen-Moran and Woolfolk-Hoy (2007), they found that the self-efficacy of pre-service teachers from their study was consistently greater than that of the novice teachers studied by Tschannen-Moran and Woolfolk Hoy, suggesting that teachers’ self-efficacy decreases when teachers enter the profession. This finding corroborates Hoy’s (2000) findings across four measures of self-efficacy that perception of self-efficacy rose for pre-service teachers and fell when they began teaching.
The importance of these findings cannot be understated when juxtaposed with existing research on self-efficacy and teacher attrition. Wang, Hall, and Rahimi (2015) found that practicing Canadian teachers with higher self-efficacy for student engagement were less likely to have strong quitting intentions. Additionally, Klassen and Chiu (2011) found that the stress and self-efficacy of practicing teachers directly influenced occupational commitment, defined as behaviors within the organization and attitudes toward it in terms of individual identity (Mowday, Steers, & Porter, 1979), which in turn influenced quitting intentions, among other variables. On the other hand, it was overall teaching stress, stress related to the practicum assignment, and self-efficacy for classroom management that influenced occupational commitment of pre-service teachers, which, unlike the situation of practicing teachers, was the only influence on quitting intentions. Indeed, a meta-analysis of studies of teachers’ self-efficacy found that self-efficacy is positively related to the occupational commitment of both pre-service and practicing teachers (Chesnut & Burley, 2015). In summary, research suggests that occupational commitment is directly and indirectly related to quitting intentions (Hacket, Lapierre, & Hausdorf, 2001) and employee attrition (Mowday et al., 1979).

Despite a growing body of research on self-efficacy and attrition of practicing teachers, research is lacking on self-efficacy and attrition of a subset of the previous population: beginning teachers. The existing research, however, suggests a connection between beginning teacher attrition and self-efficacy. Høigaard, Giske, and Sundsli (2012) surveyed teacher education graduates from a Norwegian university with fewer than six years of teaching experience. They found that self-efficacy positively predicted job satisfaction and negatively predicted quitting intentions. Although these findings have important implications, the external validity of these results is limited due to cultural differences between countries and teaching cultures.
Mentoring/Induction Programs and Teacher Attrition

Another factor related to teacher attrition is the presence or absence of mentoring and induction programs for new teachers. Induction programs refer to the continuous support provided to beginning teachers, of which mentoring is a component (Wong, 2004). Mentoring consists of a mentor teacher who guides a novice teacher through the early years of the profession. This can take many forms and is by no means uniform across districts and states (Ingersoll & Strong, 2011). The following section will examine the effects of induction and mentoring programs on beginning teacher attrition and retention, while controlling for the type of teacher pre-service preparation using the following three categories: beginning teachers with pre-service preparation, unspecified pre-service preparation, and non-traditional pre-service preparation. Beneficial effects have been seen in each group, although the way each group experiences these programs does vary based on preparation type.

Quantitative research has shown that teachers with pre-service preparation benefit from mentoring and induction programs. For example, the Beginning Teacher Support and Assessment (BTSA) program, a professional development program instituted in California in the 1990’s, assigned experienced teachers to provide support to fully-credentialed, novice teachers in the form of counseling, assessment, and in-class assistance. This program reduced teacher attrition in elementary schools by 26% (Reed, Reuben, & Barbour, 2006). Researchers found that this professional development program was not only effective in reducing attrition but was more cost effective than raising teacher salaries. Cost effective programs such as BTSA not only decrease the cost of teacher retention, they reduce the cost of teacher attrition.

Similarly, Van Zandt Allen (2013) followed graduates of the five-year Master of Arts in Teaching (MAT) program at Trinity University who were in their first or second year of teaching
and who participated in the Summer Curriculum Writing Institute (SCWI) at the same university. The SCWI was created after alumni feedback indicated that teachers were experiencing feelings of deficiency when it came to teaching. The overall retention rate of MAT graduates was 78%, whereas research showed that 94% of SCWI participants were still teaching five years after finishing the program. Additionally, a questionnaire distributed to MAT graduates found that those who participated the SCWI program felt significantly more prepared than non-participants in three areas: performance assessment \((p<0.034)\), rubrics \((p<0.053)\), and curriculum design \((p<0.000)\). These results suggest that induction programs for novice teachers that increase a teacher’s belief in their ability to teach could be an effective means to retain teachers who had previously completed teacher preparation programs.

Similar results are seen in ex post facto studies of teacher preparation (Ingersoll & Smith, 2004; Kapadia, Coca, & Easton, 2007). Using data from the 1999-2000 and Schools and Staffing Survey (SASS) and the 2001 Teacher Follow-up Survey (TFS), Ingersoll and Smith (2004) found that having a mentor in the same field significantly reduced the likelihood of first-year teacher attrition from their school, in addition to other mentoring and induction factors. They also found that as the types of support these new teachers were provided increased, so did retention rates. This finding is echoed in Kapadia, Coca, and Easton’s (2007) analysis of district-wide induction programs. Although there was no difference between the intention to leave the profession of participants and non-participants, in the participant group, as the number of supports increased, the percentage of new teachers with quitting intentions decreased after controlling for teacher, class, and school-level contextual factors. Wong (2004) explains these findings as follows:
The issue is not mentoring; the issue is mentoring alone. Mentors are an important component, perhaps the most important component of an induction program, but they must be part of an induction process aligned to the district’s vision, mission, and structure. For a mentor to be effective, the mentor must be used in combination with the other components of the induction process. (p. 42)

Along these lines, it has been suggested that effective induction programs depend on the content, intensity, and duration of the program in question (Ingersoll, 2012). These findings highlight the importance of considering multiple induction and support factors when evaluating novice teachers’ experiences.

Research on induction and mentoring programs for teachers with non-traditional preparation and their effect on attrition is limited. Jorissen (2002), in a qualitative study of alternatively certified teachers, found that professional integration into the learning community was key to retaining teachers. One aspect that supported this integration was mentoring programs. This indirect influence suggests that mentoring can lead to beginning teacher retention.

Wong (2004) describes the success of a beginning teacher induction program, the Educational Career Alternative Program (ECAP), which aimed to help alternatively certified teachers to succeed in the classroom through comprehensive induction that included training and classroom support. Although it was deemed “a good induction model” (p. 43), data on the retention of these teachers were not provided. However, one can extrapolate that a model could be considered good because it positively influences teacher retention.

Research has also shown that beginning teachers experience induction programs differently based on differences in pre-service preparation. Roehrig and Luft (2006) qualitatively
assessed the experiences of sixteen first-year science teachers as they participated in an induction program. Participants were classified into four groups based on certification: (1) a traditional undergraduate elementary certification; (2) a traditional undergraduate secondary certification; (3) a combination M.Ed. and certification with a focus on science; and (4) a general alternative certification. The alternatively certified teachers had the least preservice preparation of the four groups. The researchers found that the various certification groups derived different degrees of benefit from the induction program. The traditional undergraduate elementary and alternative certification groups experienced the most significant change in their beliefs and practices as a result of the induction program, whereas the Master’s and traditional undergraduate secondary groups benefited less directly because many of the strategies discussed were already familiar to them from their science methods course(s). This study did not make a clear link between induction programs and attrition, but highlighted an important consideration: to what degree does pre-service preparation influence the success of induction programs and how does this in turn influence beginning teacher attrition?

Summary

In summary, research has shown that teachers who are alternatively certified are more likely to leave the school they teach at and are more likely to leave the profession entirely. Furthermore, research has found that attrition rates are influenced by teachers’ self-efficacy and by their participation in mentoring/induction programs. In general, teachers with higher self-efficacy are less likely to remain in the teaching profession, although research specifically examining the self-efficacy of beginning teachers is limited. Research has also generally shown that participation in mentoring/induction programs increases teacher retention, although the
benefits of such programs are moderated by other components of the induction process and by the type of pre-service preparation that teachers received.

The present study seeks to extend these lines of research by specifically examining a new alternative certification program in the state of Utah, the Academic Pathway to Teaching. Chapter 3 of this thesis explains the research questions and methodology for the study.
Chapter 3

Methodology

This chapter will detail the sources of information for the study, the participants, and the procedures used for analyzing the data.

Research Questions

Research questions for the study were as follows:

1. What is the attrition rate for APT candidates?
   a. How does this rate compare with those of other certification pathways in Utah?

2. What are the future plans of APT candidates who are still pursuing licensure in relation to the teaching profession?

3. What factors contribute to APT candidates’ decision to stay in the teaching profession or leave it?
   a. What is the relationship between the self-efficacy of APT candidates and attrition?
   b. What is the relationship between APT candidates' participation in mentoring/induction programs and attrition?
   c. What is the relationship between APT candidates’ previous teaching experience and attrition?

4. What are APT candidates’ attitudes toward the APT licensure?
   a. How well prepared do APT candidates feel to teach?
   b. What do they like about the licensure?
   c. What aspects of the licensure would they change?
Sources of Information

Two sources of information were used for this study: (1) data provided by the Utah State Board of Education listing teachers holding the APT license (which constitutes the population for this study), and (2) a survey sent to the teachers listed in this database (which constitutes the sample for the study).

Data from the Utah State Board of Education

In September 2017, I met with Kristin Campbell, a research analyst at the Utah State Board of Education offices in Salt Lake City, UT. I explained the research I wanted to conduct, and Ms. Campbell outlined the process to obtain data from the state that would help me answer my research questions.

I filed a data request with the Utah State Board of Education in October 2018 through their website, https://www.schools.utah.gov/data/request. I requested data on all Academic Pathway to Teaching candidates in charter, public, and private schools in Utah and, if possible, the following information regarding each candidate, organized by course code: (1) First and last name, (2) employment status, (3) current and previous school assignments, and (4) status in the program, i.e. first of second year.

Two weeks later, I received an Excel spreadsheet containing the following information for each individual who had up to that point held an APT license: (1) Name, (2) license issue date, (3) years of teaching experience (including under a different license if applicable), (4) district number, (5) LEA (also known as a school district, but is commonly used to refer to charter schools which have no specific school district), (6) school name, (7) all courses taught up to that point, (8) the core code of each course, and (9) if they had previously been licensed through ARL.
With this information, I created a spreadsheet that contained the names of all APT candidates and their email addresses. A link to the survey and a message explaining its purpose was then sent to teachers via email addresses obtained online and by phone with school administrators, and through several social media sites including Facebook, LinkedIn, and in one case, the mobile phone application, Instagram. If an email bounced back, I would double check it and either correct a misspelling or call the school office for clarification.

Survey

Construction. The survey used a number of items from the Teacher Sense of Efficacy Scale (TSES) developed by Tschannen-Moran and Hoy (2001). This instrument measures three types of efficacy: efficacy for instructional strategies, efficacy for classroom management, and efficacy for student engagement. Its creators concluded that “positive correlations with other measures of personal teaching efficacy provide evidence for construct validity” (p. 801).

Additional items were included in the survey in order to assess the extent and quality of APT candidate induction and mentoring. This inclusion is supported by Woolfolk Hoy and Spero’s (2005) finding that novice teachers’ sense of efficacy changed during the first year of teaching due to the quantity of support received. Therefore, understanding the degree to which candidates were supported could provide moderator variables by which to analyze APT candidates. These additional items were taken from the National Teacher and Principal Survey (NTPS) 2015-2016 form, sections 5-5 through 5-9. The NTPS was previously known as the Schools and Staffing Survey (SASS) and is widely used in education research. Over the course of its creation, several items were removed from the survey to minimize the dropout rate. This included four items from the TSES portion, one from both Student
Engagement and Instructional Strategies categories, and two from Classroom Management (See Appendix A).

**Administration.** The survey was first sent by email to 540 teachers and to an addition 41 teachers via school website messaging system on February 5, 2019. If an email bounced, I followed the following procedure until I was able to establish contact: (1) double check spelling on school website, (2) call school to verify email address, (3) send message to their social media profile. A second email was sent on February 27, 2019 to encourage those who had not yet completed the survey to do so.

**Revision.** When we began to analyze the results of the survey, we noticed that the majority of the respondents were currently teaching in Utah under an APT license (subsequently referred to as “stayers”), and few respondents had left teaching in Utah (“leavers”). Without the latter, it would not be possible to fully answer the research questions.

A cursory analysis yielded two potential explanations: (1) the structure of the survey was biased toward individuals who were still teaching, and (2) it was easier to access the email addresses of current teachers through school websites than past teachers who had been removed and had their school email accounts deactivated.

To remedy the first problem, the survey was revised to include questions that catered to the experiences and circumstances of previous APT candidates or “leavers” (see Appendix B). The second issue was addressed by finding additional ways to search for email addresses. This included purchasing subscriptions to two “people search engine[s],” Spokeo and Intelus. Emails and messages were sent out on a rolling basis as new contact information was found.
Participants

Data from the Utah State Board of Education

The data from the USBE included teachers who began teaching under an APT license from 2016 to 2018. Although I knew how many teachers were teaching in the 2018-2019 school year, the data concerning those who had stopped teaching under an APT license during or after the end of the 2018-2019 school year had not yet been reported by all LEAs in the state. Given this, the data set described in this section will include teachers who began in the 2016-2017 and 2017-2018 school years and exclude those who began in 2018-2019. The total number of individuals with an APT license at some point in the specified time frame was 456.

Another important statistic that will be frequently referenced is the number of unique teaching positions. This refers to each time an APT candidate is the teacher of record in a classroom. This number includes each time a teacher stayed at a school, left one school to work at another, or left teaching in Utah in the 2016-2017 and 2017-2018 school years. As such, some teachers are represented multiple times. For example, a teacher who began teaching at School X in 2016-2017, but left at the end of the school year to teach at School Y for the 2017-2018 school year would have two entries: one as a “mover” and one as a “stayer.” Some teachers worked at multiple schools concurrently. All data presented from this point forward describes attrition using the number of unique teaching positions.

The APT candidates from the 2016-2017 and 2017-2018 school years are grouped by school type and teaching status in Table 1.
Table 1

*APT Candidates by School Type and Teaching Status Based on USBE Data*

<table>
<thead>
<tr>
<th>Teaching Status</th>
<th>Traditional Public School</th>
<th>Public Charter School</th>
<th>Private School</th>
<th>District/State Level</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stayer</td>
<td>175</td>
<td>180</td>
<td>6</td>
<td>5</td>
<td>366 (75.8%)</td>
</tr>
<tr>
<td>Leaver</td>
<td>27</td>
<td>38</td>
<td>5</td>
<td>1</td>
<td>71 (14.7%)</td>
</tr>
<tr>
<td>Intra-LEA Mover</td>
<td>18</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>21 (4.3%)</td>
</tr>
<tr>
<td>Inter-LEA Mover</td>
<td>8</td>
<td>16</td>
<td>1</td>
<td>0</td>
<td>25 (5.2%)</td>
</tr>
<tr>
<td>Leaver and Mover</td>
<td>53</td>
<td>56</td>
<td>6</td>
<td>2</td>
<td>117 (24.2%)</td>
</tr>
<tr>
<td>Total</td>
<td>228 (47.2%)</td>
<td>236 (48.9%)</td>
<td>12 (2.5%)</td>
<td>7 (1.4%)</td>
<td>483</td>
</tr>
</tbody>
</table>

Survey Data

Respondents were 221 individuals (165 from original and 56 from revised survey) who held or had held an APT license in the state of Utah since the program’s implementation in the 2016-2017 school year. Some tables in this thesis have different totals for the number of individuals. This reflects the number of respondents who answered that question, which is not uniform throughout the study. Of the respondents, 24.8% had previously pursued a license through Alternate Route to Licensure prior to pursuing the Academic Pathway to Teaching, and 65.2% had not. Respondents included teachers from traditional public schools (47.7%), public charter schools (48.6%), private schools (.9%), and other (2.8%), which included two Dual Language Immersion schools, a residential treatment center, an alternative high school, and adult education.

The number of survey respondents by school type is seen in Table 2 and the distribution of survey respondents by teaching status is shown in Table 3. The proportion of respondents at each type of school from the USBE data is very similar to the proportions gleaned by the survey data for each category, although as is evident from Table 3, the vast majority of survey respondents were stayers; only 13 leavers responded to the survey, a disproportionately low
number (6% of all respondents) in comparison to the total number of leavers in the USBE data (24.2% when adding the number of candidates who are no longer teaching to the number who have moved to other schools, as other studies on attrition have done).

Table 2

Respondents by School Type Based on Survey Data

<table>
<thead>
<tr>
<th>Survey Version</th>
<th>Traditional Public School</th>
<th>Public Charter School</th>
<th>Private School</th>
<th>Other</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey 1</td>
<td>72</td>
<td>86</td>
<td>1</td>
<td>5</td>
<td>164</td>
</tr>
<tr>
<td>Survey 2</td>
<td>30 (47.7%)</td>
<td>18</td>
<td>1 (.9%)</td>
<td>1</td>
<td>50</td>
</tr>
<tr>
<td>Totals</td>
<td>102 (47.7%)</td>
<td>104 (48.6%)</td>
<td>2 (0.9%)</td>
<td>6 (2.8%)</td>
<td>214</td>
</tr>
</tbody>
</table>

Table 3

Teaching Status of Survey Respondents

<table>
<thead>
<tr>
<th>Survey Version</th>
<th>Stayer</th>
<th>Leaver</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey 1</td>
<td>154</td>
<td>11</td>
<td>165</td>
</tr>
<tr>
<td>Survey 2</td>
<td>50</td>
<td>2</td>
<td>52</td>
</tr>
<tr>
<td>Totals</td>
<td>204 (94%)</td>
<td>13 (6%)</td>
<td>217</td>
</tr>
</tbody>
</table>
Chapter 4  
Results  

This chapter will discuss the findings of the study in relation to the four research questions. The chapter is organized according to these four questions and related sub-questions.  

**Question 1: What Is the Attrition Rate for APT Candidates?**  

The attrition rate of APT candidates was calculated by year and by cohort and is presented in cumulative and non-cumulative forms. Attrition in this study takes into account leavers and stayers, and is designed to measure the number of times a school needs to hire a teacher to fill a teaching position.  

The attrition rate of APT candidates by cohort was calculated by dividing the number of leavers and movers from the group of APT candidates who began teaching in the given school year by the total number of APT candidates who began teaching in that school year. To calculate the percentage of APT candidates from the 2016-2017 cohort who left during or after the 2017-2018 school year, the number of APT candidates who began in 2016-2017 but who left or moved in the 2017-2018 school year was divided by the total number of APT candidates who began in the 2016-2017 school year. The cumulative rate of attrition by cohort was calculated by adding the number of leavers and movers from the 2016-2017 and 2017-2018 school years and dividing it by the total number of APT candidates in the 2016-2017 cohort. It was not possible to calculate a cumulative rate of attrition for the 2017-2018 cohort, as only one year’s worth of data was available.
Table 4

*Cumulative Teacher Turnover by Year*

<table>
<thead>
<tr>
<th>Group (N=483)</th>
<th>2016-2017</th>
<th>2017-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stayer</td>
<td>116 (76%)</td>
<td>366 (76%)</td>
</tr>
<tr>
<td>Turnover (movers and leavers)</td>
<td>36 (24%)</td>
<td>117 (24%)</td>
</tr>
<tr>
<td>Mover</td>
<td>16 (11%)</td>
<td>47 (10%)</td>
</tr>
<tr>
<td>Mover between LEAs</td>
<td>10 (7%)</td>
<td>26 (5%)</td>
</tr>
<tr>
<td>Mover within LEA</td>
<td>6 (4%)</td>
<td>21 (4%)</td>
</tr>
<tr>
<td>Leaver</td>
<td>20 (13%)</td>
<td>70 (14%)</td>
</tr>
<tr>
<td>Cumulative Total</td>
<td>152</td>
<td>483</td>
</tr>
</tbody>
</table>

Table 5

*Cumulative Teacher Turnover of 2016-2017 Cohort*

<table>
<thead>
<tr>
<th>Group (N=152)</th>
<th>2016-2017</th>
<th>2017-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stayer</td>
<td>116 (77%)</td>
<td>89 (59%)</td>
</tr>
<tr>
<td>Turnover (movers and leavers)</td>
<td>36 (24%)</td>
<td>63 (41%)</td>
</tr>
<tr>
<td>Mover</td>
<td>16 (11%)</td>
<td>24 (16%)</td>
</tr>
<tr>
<td>Mover between LEAs</td>
<td>10 (7%)</td>
<td>13 (9%)</td>
</tr>
<tr>
<td>Mover within LEA</td>
<td>6 (4%)</td>
<td>11 (7%)</td>
</tr>
<tr>
<td>Leaver</td>
<td>20 (13%)</td>
<td>39 (26%)</td>
</tr>
</tbody>
</table>

Table 6

*Teacher Turnover of 2017-2018 Cohort*

<table>
<thead>
<tr>
<th>Group (N=331)</th>
<th>2017-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stayer</td>
<td>277 (84%)</td>
</tr>
<tr>
<td>Turnover (movers and leavers)</td>
<td>54 (16%)</td>
</tr>
<tr>
<td>Mover</td>
<td>23 (7%)</td>
</tr>
<tr>
<td>Mover between LEAs</td>
<td>13 (4%)</td>
</tr>
<tr>
<td>Mover within LEA</td>
<td>10 (3%)</td>
</tr>
<tr>
<td>Leaver</td>
<td>31 (9%)</td>
</tr>
</tbody>
</table>

To calculate the non-cumulative rate of attrition for the 2016-2017 school year, the total number of APT movers and leavers was divided by the total number of APT candidates that year. To calculate the rate of attrition for the 2017-2018 school year, the total number of APT
movers and leavers was divided by the total number of APT candidates that year, including APT candidates who began teaching in the 2017-2018 school year. The cumulative rate of attrition by year was calculated by combining the attrition rates from both years. There was no need to calculate a cumulative rate of attrition for the 2017-2018 school year.

Table 7

**Teacher Turnover by Year**

<table>
<thead>
<tr>
<th>Group (n=483)</th>
<th>2016-2017</th>
<th>2017-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stayer</td>
<td>116 (76%)</td>
<td>366 (82%)</td>
</tr>
<tr>
<td>Turnover (movers and leavers)</td>
<td>36 (24%)</td>
<td>81 (18%)</td>
</tr>
<tr>
<td>Mover</td>
<td>16 (11%)</td>
<td>31 (7%)</td>
</tr>
<tr>
<td>Mover between LEAs</td>
<td>10 (7%)</td>
<td>16 (4%)</td>
</tr>
<tr>
<td>Mover within LEA</td>
<td>6 (4%)</td>
<td>15 (3%)</td>
</tr>
<tr>
<td>Leaver</td>
<td>20 (13%)</td>
<td>50 (11%)</td>
</tr>
<tr>
<td></td>
<td>152</td>
<td>447</td>
</tr>
</tbody>
</table>

The cumulative yearly teacher turnover rate of the 2017 cohort was 24% and 41%. Of the 24%, 11% were movers and 13% were leavers, and of the 41%, 16% were movers and 26% were leavers. The teacher turnover rate of the 2018 was slightly less than the previous year. The 2018 cohort had a turnover rate of 16%; 7% were movers and 9% were leavers.

The yearly teacher turnover rate was 24% (see previous paragraph for breakdown) and 18%, as seen in Table 4. Table 5 shows that the cumulative rate of teacher turnover stayed steady at 24% of all APT candidates from both 2016-17 and 2017-18 school years. The percentage of movers and leavers followed were not uniform: The percentage of movers (11% → 7%) and leavers (4% → 3%) went down in the yearly turnover analysis but in the cumulative analyses the movers (11% → 10%) fell by 1%, and the leavers (13% → 15%) rose by 2%.
Question 1a: How Does This Rate Compare with Those of Other Certification Pathways in Utah?

A recent study (Ni, Yan, Rorrer & Nicolson, 2017b) was conducted on teacher turnover in Utah that, like this study, used CACTUS data. The study calculated the rate of teacher turnover for all teachers in Utah over a one-year period in 2013-14 and 2014-15 (the study included 28,123 teachers; N=28,123). Turnover was defined as “any movement from a school, moving, or leaving.” It is important to note that the methodology for calculating teacher turnover rates was slightly different from the way I calculated teacher turnover. Ni, Yan, et al. (2017b) checked teaching status during the school year, rather than at the end, and the authors noted that teacher turnover during the school year would therefore not be included in their statistics. Furthermore, whereas my calculations accounted for teachers with multiple teaching positions and instances of turnover, Ni, Yan, et al. (2017b) restricted teachers to one school or subject, and the schools and subjects represented were determined by the rankings of FTE and then by earliest begin date. Lastly, schools with five or fewer teachers were excluded from their calculations.

Ni, Yan, et al. (2017b) found that the overall rate of teacher turnover between the 2013-14 and 2014-15 school years was 19%, with 12% leaving teaching and 7% moving to another school. The study also noted the turnover rates for charter schools (31%) and traditional public schools (18%). Leaving aside the small differences in methodology, the yearly turnover rates for APT candidates are higher in 2016-17 (Total=24%; leavers=13%; movers=11%) and comparable in 2017-18 (Total=18%, leavers=11%; stayers=7%) to the turnover rate of all teachers in Utah from 2013-14 to 2014-15.
Another study (Ni, Yan, Rorrer, & Nicolson, 2017a) calculated the yearly, cumulative attrition rates for the cohort of teachers who began teaching in Utah in 2008-09, until 2014-15 (See Figure X, which was originally published in Ni, Yan, et al., 2017a). Several methodological limitations also apply to these data: (1) Teachers who had previously taught in a private school or out of state were still considered beginning teachers, and (2) as in the previous example, teachers were only counted once, and judged along the same criteria. Be that as it may, the comparison between the two datasets yields striking results. In the present study, the cumulative teacher turnover rates of APT candidates of the 2016-17 cohort for the first two years of teaching (24% and 41%, respectively) are closer in size to the turnover rates in the second and fourth years of the 2008 cohort of all Utah teachers (28% and 42%, respectively). That is to say, it took the 2016-17 APT cohort half the time to lose around the same number of teachers as the 2008 cohort (see Figures X and Y for a graphic comparison of the two studies).

In summary, it appears that attrition rates for APT candidates, in comparison with those of candidates from other licensure paths, range from similar to nearly twice as high, depending on the year.

![Figure 1. Rates of cumulative teacher turnover of 2016-17 APT cohort.](image)
Question 2: What Are the Future Plans of APT Candidates Who Are Still Pursuing Licensure in Relation to the Teaching Profession?

Of the respondents to the original survey, 155 answered Question 24 (“How long do you plan to remain in teaching?”) and 154 answered Question 25 (“How long do you plan on staying at your current school?”). The revised survey had the same number of responses to both questions (47). The percentages were therefore calculated out of a total of 202 for Question 24 and 201 for Question 25, the results of which are seen in table 8 and 9.
Table 8

*Responses to the Question “How long do you plan to remain in teaching?”*

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>As long as I am able</td>
<td>92 (46%)</td>
</tr>
<tr>
<td>I am undecided at this time</td>
<td>44 (22%)</td>
</tr>
<tr>
<td>Until a more desirable job opportunity comes along</td>
<td>24 (12%)</td>
</tr>
<tr>
<td>Until a specific life event occurs (e.g., parenthood, marriage, retirement of spouse or partner)</td>
<td>20 (10%)</td>
</tr>
<tr>
<td>Until I am eligible for retirement benefits from this job</td>
<td>17 (8%)</td>
</tr>
<tr>
<td>I definitely plan to leave as soon as I can</td>
<td>2 (1%)</td>
</tr>
<tr>
<td>Until I am eligible for Social Security benefits</td>
<td>2 (1%)</td>
</tr>
</tbody>
</table>

Table 9

*Responses to the Question “How long do you plan on staying at your current school?”*

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>I plan to continue teaching here after I obtain my license</td>
<td>109 (54.5%)</td>
</tr>
<tr>
<td>I am undecided at this time</td>
<td>62 (31%)</td>
</tr>
<tr>
<td>I plan to stay until I obtain my teaching license</td>
<td>17 (8.5%)</td>
</tr>
<tr>
<td>I plan to stay only until the end of the academic year</td>
<td>12 (6%)</td>
</tr>
</tbody>
</table>

The responses to both questions had similar distributions. In Table 8, 46% of responses indicated commitment to the profession, 32% indicated some commitment (planning to leave), and 22% were unsure. Similarly, in Table 9, 54.4% showed commitment to their current school, 14.5 indicated some commitment (only planned to stay until a certain event), and 31% were undecided. It is interesting to note that the percentage of teachers who indicated some
commitment to the profession is twice as large as the percentage of teachers who showed commitment to their school.

**Question 3: What Factors Contribute to Academic Pathway to Teaching Candidates’ Decision to Stay in the Teaching Profession or Leave It?**

**Question 3a: What Is the Relationship Between the Self-Efficacy of APT Candidates and Attrition?**

Using SAS software, with the help of Dr. Dennis Eggett of the Department of Statistics, an analysis of variance was used to compare the mean self-ratings of stayers and leavers on each of the 20 self-efficacy items. In addition, composite scores were calculated for three overarching categories of self-efficacy: student engagement (comprising items 11, 12, 13, and 17 as shown in Table 10), teaching strategies (comprising items 1, 2, 5, 6, 7, 8, 9, 10), and classroom management (items 3, 4, 14, 15, and 16) by averaging the responses on these items, as well as an overall composite score for self-efficacy by averaging responses on all 20 items. Results are shown in Table 10.

Table 10

*ANOVA Comparing Mean Self-Efficacy Self-Ratings of Stayers and Leavers*

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Mean for Stayers</th>
<th>Mean for Leavers</th>
<th>F value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teach your subject matter</td>
<td>5.37</td>
<td>5.77</td>
<td>4.05</td>
<td>0.05</td>
</tr>
<tr>
<td>2. Teach to state core standards</td>
<td>4.91</td>
<td>4.62</td>
<td>1.08</td>
<td>0.30</td>
</tr>
<tr>
<td>3. Establish a classroom management system with each group of students</td>
<td>4.89</td>
<td>5.23</td>
<td>1.37</td>
<td>0.24</td>
</tr>
<tr>
<td>4. Establish routines to keep activities running smoothly</td>
<td>5.03</td>
<td>5.08</td>
<td>0.03</td>
<td>0.85</td>
</tr>
<tr>
<td>Task</td>
<td>Mean</td>
<td>SD</td>
<td>CI Lower</td>
<td>CI Upper</td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td>------</td>
<td>-----</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>5. Craft good questions for your students</td>
<td>4.79</td>
<td>5.15</td>
<td>1.73</td>
<td>0.19</td>
</tr>
<tr>
<td>6. Provide an alternative explanation or example when students are confused</td>
<td>5.03</td>
<td>5.39</td>
<td>1.78</td>
<td>0.19</td>
</tr>
<tr>
<td>7. Respond to difficult questions from your students</td>
<td>5.10</td>
<td>5.39</td>
<td>1.26</td>
<td>0.26</td>
</tr>
<tr>
<td>8. Gauge student comprehension of what you have taught</td>
<td>4.64</td>
<td>4.77</td>
<td>0.22</td>
<td>0.64</td>
</tr>
<tr>
<td>9. Use a variety of assessment strategies</td>
<td>4.47</td>
<td>5.23</td>
<td>6.50</td>
<td>0.01*</td>
</tr>
<tr>
<td>10. Adjust your lessons to the proper level for individual students</td>
<td>4.49</td>
<td>4.69</td>
<td>0.43</td>
<td>0.52</td>
</tr>
<tr>
<td>11. Get students to believe they can do well in school work</td>
<td>5.0</td>
<td>5.15</td>
<td>0.31</td>
<td>0.58</td>
</tr>
<tr>
<td>12. Motivate students who show low interest in school work</td>
<td>4.35</td>
<td>4.31</td>
<td>0.02</td>
<td>0.90</td>
</tr>
<tr>
<td>13. Improve the understanding of a student who is failing</td>
<td>4.38</td>
<td>4.62</td>
<td>0.65</td>
<td>0.42</td>
</tr>
<tr>
<td>14. Make your expectations clear about student behavior</td>
<td>5.02</td>
<td>5.08</td>
<td>0.04</td>
<td>0.84</td>
</tr>
<tr>
<td>15. Control disruptive behaviors in the classroom</td>
<td>4.68</td>
<td>4.69</td>
<td>0.00</td>
<td>0.97</td>
</tr>
<tr>
<td>16. Prevent a few problem students from ruining an entire lesson</td>
<td>4.59</td>
<td>4.77</td>
<td>0.31</td>
<td>0.58</td>
</tr>
<tr>
<td>17. Assist families in helping their children do well in school</td>
<td>4.47</td>
<td>4.54</td>
<td>0.05</td>
<td>0.83</td>
</tr>
<tr>
<td>18. Teach students who are limited-English proficient (LEP) or English-language learners (ELLs)</td>
<td>3.57</td>
<td>3.39</td>
<td>0.30</td>
<td>0.58</td>
</tr>
<tr>
<td>19. Teach students with special needs</td>
<td>3.81</td>
<td>3.92</td>
<td>0.12</td>
<td>0.73</td>
</tr>
<tr>
<td>20. Provide appropriate challenges for very capable students</td>
<td>4.74</td>
<td>4.92</td>
<td>0.36</td>
<td>0.55</td>
</tr>
</tbody>
</table>

**Composite self-efficacy variables**

<table>
<thead>
<tr>
<th>Student engagement</th>
<th>Mean</th>
<th>SD</th>
<th>CI Lower</th>
<th>CI Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.55</td>
<td>4.66</td>
<td>0.93</td>
<td>0.35</td>
</tr>
</tbody>
</table>
As is evident in Table 10, almost no significant differences were found in the self-efficacy ratings of stayers and leavers, with the exception of Item 9 (“Use a variety of assessment strategies”), in which the mean of leavers (5.23) was actually higher than that of stayers (4.47). Given that the leavers group was comprised of only 13 participants, however, this difference probably has little or no practical significance.

One striking finding from participants’ self-efficacy ratings was that they tended to be quite high: on a scale of 1 to 6, with 6 representing “very confident,” most of the items had means of 4.3 or greater for both groups. The only exceptions were Item 18 (“Teach students who are limited-English proficient or English-language learners”) and Item 19 (“Teach students with special needs”), on which the means for both groups fell between 3.3 and 3.9. The comparatively lower means on these two items is perhaps not surprising, given that many APT candidates have probably received little or no training to work with ELL or special-needs students. What is surprising is that the self-efficacy ratings of respondents who had been teaching with an APT license for only one or two years were so high on all the other items. Possible explanations for this finding will be discussed in Chapter 5.

**Question 3b: What Is the Relationship Between APT Candidates’ Participation in Mentoring/Induction Programs and Attrition?**

In contrast to the non-significant results for self-efficacy, a comparison between leavers and stayers in relation to the mentoring they received yielded highly significant results. Three dependent variables were used to measure mentoring, comprising responses to the questions (1)
How frequently did you work with your assigned teacher leader or mentor teacher during your first year of teaching?; (2) Overall, to what extent did your assigned teacher leader or mentor teacher improve your teaching in your first year of teaching?; and (3) Overall, to what extent did your assigned teacher leader or mentor teacher improve your confidence in your ability to teach?

Response options to the first question, regarding the frequency of mentoring, were “At least once a week” (which we coded as a 0); “Once or twice a month” (coded as 1); “A few times a year” (coded as 2); and “Never” (coded as 3). Response options to the second and third questions, regarding mentor teachers’ impact on candidates’ teaching skills and confidence, were “Not at all” (coded as 0); “To a small extent” (coded as 1); “To a moderate extent” (coded as 2); and “To a great extent” (coded as 3). Analyses of variance were conducted to compare the means of the two groups on these three items. Results are shown in Table 11.

As is evident from Table 11, leavers recorded significantly lower responses than stayers on all three items. The differences between the groups regarding the first two questions, the frequency of mentoring and the impact of the mentor on teaching skills, are depicted in box plots in Figures 3 and 4, respectively.
Figure 3. Responses to the question “How frequently did you work with your assigned teacher leader or mentor teacher during your first year of teaching?”

Figure 4. Responses to the question “Overall, to what extent did your assigned teacher leader or mentor teacher improve your teaching in your first year of teaching?”
The impact of mentoring was similarly reflected in responses to the questions “How well prepared do you feel to teach?”, and “What do you like about the APT licensure?” Mentoring was mentioned eleven times in the responses of the former, and ten times in the responses of the latter. The comments made by stayers that speak to the importance for mentoring are of interest:

*I have learned far more from spending time with my mentor than I have in any of the classes I have taken. It allows me time to work through specific problems and questions and has vastly improved my teaching.*

Another stayer appeared to credit the frequency of the mentoring help received, which is in line with the findings of this study:

*The system that my director has set up for us to teach in is rather unique. We teach in a hub with other teachers, so my “mentor” teacher is in the hub with me every day. I feel that she has taught me the most about classroom management and differentiating my lessons.*

Mentors and other support staff such as principals and colleagues were described as “very understanding” and “very helpful.” One respondent went as far as to say that the APT licensure “definitely would not work . . . without significant engagement from administrators and mentor teachers.” It is possible that these respondents had the time and opportunity to ask questions of them mentor that were germane to their practice, which in turn impacted their skills and confidence in teaching ability.

In contrast to the above comments, some responses from leavers pointed to a lack of adequate mentoring:

*I was just thrown into the classroom and expected to be perfect. I was teaching at [removed] and they have a very specific curriculum and style of teaching, which I was*
working very hard to master. There were very few mentoring opportunities for me because they were short handed. I thought I was doing great, had a happy, well managed classroom, and they basically fired me after fall break. So I loved teaching but try to get hired as a teacher once you’ve been fired. That’s a hard one to explain.

In response to the question “How well prepared do you feel to teach?”, two respondents gave similar responses:

> My degree in psychology and work with youth in youth homes prepared me immensely! I don’t feel like my training at school has been very helpful at all. I’ve had to use the skills I have from my experience to figure things out on my own.  
> All of my preparedness was due to my own life experience, and not due to any part of the licensure.

Admittedly, neither comment explicitly singles out deficiencies in mentoring, but both answers state that they had to draw from previous experiences to feel prepared. Perhaps more enlightening were two comments made in response to the question “What aspects of the APT licensure would you change?” Respondents recommended:

> Create a weekly or monthly APT cohort web conference or local meet up with a suggested reading, and discussion topic to guide open honest discussions with mentor teachers or an education professor about classroom problems.  
> Perhaps an in-class mentor?

Both suggestions imply deficient support in the form of mentoring. The first could be an indication of a lack of emotional support indicated by their desire for “open honest discussions with mentor teachers.” The second could indicate a lack of mentor support in the realm of classroom management. This point is underlined in the responses to the question “How well
prepared do you feel to teach?” in which “classroom management” was the most frequently mentioned area where teachers felt either inadequately prepared, and in some cases, distressingly so.

**Question 3c: What is the Relationship Between Previous Teaching Experience and Attrition?**

This question was not one of the original research questions for the study, but was rather added after survey responses began to arrive. It soon became apparent that in answer to the open-ended question “How well prepared do you feel to teach?”, many respondents mentioned feeling well prepared to teach as a result of previous teaching experience they had had in various settings—for example, as ARL candidates, substitute teachers, volunteer aides, or at private schools. Accordingly, this research question was added in order to examine the relationship between previous teaching experience and attrition. In an effort to answer the question, two sources of information were used: (1) data from the Utah State Board of Education, and (2) open-ended responses to the survey question “How well prepared do you feel to teach?”

**USBE data.** The data set from the Utah State Board of Education contained information on APT candidates’ years of previous experience teaching in Utah schools, including traditional public schools, public charter schools, and private schools, or working in a district or state office. Although these data do not account for other types of teaching experience such as informal teaching experience or previous teaching experience out of state or in another country, they do provide one measure of a certain type of teaching experience.

In order to determine whether a significant relationship existed between attrition and years of teaching experience as represented in the USBE data, a logistic regression procedure was used, with the assistance of Dr. Philip White of the BYU Department of Statistics. Logistic
regression is a generalized linear model for binary outcomes, assumed to be either 0 or 1. In this case the dependent variable was candidates’ current teaching status: candidates who were still teaching at the school where they were hired (“stayers”) were coded as 1, and those who were not (“leavers”) were coded as 0. In all, the USBE data set included 366 teachers who were classified as stayers and 117 classified as leavers.

First, a null model with only an intercept but no predictor variables was fit. Next, a model was fit that included years of previous teaching experience as an independent or predictor variable. The second model was not significantly better than the null model at predicting attrition; however, when a third model was fitted using an additional “dummy” variable accounting for some level of previous experience (i.e., more than zero years), the third model was significantly better than the null model ($R^2 = 0.0155$, $\chi^2 = 6.198$, df = 2, $p = 0.045$). An effect was found in which, on average, candidates with more experience were actually more likely to leave, and this effect accumulated over time. The dummy variable, however, added a degree of nuance. The dummy variable (greater than no experience) carried a positive effect, meaning that candidates with more experience were more likely to stay. Combining these two pieces of information, candidates were more likely to stay in the first two years and became less likely after two years. Overall, however, the low $R^2$ value of 0.0155 suggests that even this model was not particularly explanatory of the data.
Table 11

Logistic Regression on USBE Data

|                          | Estimate | Std. Error | z value | Probability (>|z|) |
|--------------------------|----------|------------|---------|-------------------|
| (Intercept)              | 1.8052   | 0.1774     | 10.176  | <2e-16**          |
| More than zero years     | 0.5806   | 0.3788     | 1.533   | 0.1254            |
| Years of experience      | -0.2964  | 0.1162     | -2.550  | 0.0108*           |

*p < .05  ** p < .001

In summary, the number of years of teaching experience was not a particularly strong predictor of attrition. Again, this may be due in part to the fact that the USBE data represented only a very limited range of types of previous teaching experience.

Open-ended responses. Although no strong statistical relationship was found between previous teaching experience and attrition, respondents’ answers to open-ended questions repeatedly mentioned their previous experience as a major factor that influenced their success in the APT. In summary, the number of years of teaching experience was not a particularly strong predictor of attrition. Again, this may be due in part to the fact that the USBE data represented only a very limited range of types of previous teaching experience.

Unspecified previous teaching experience. Teachers with unspecified previous teaching experience included respondents who made a point of referencing past teaching experiences, but did not elaborate on the situation, duration, or their role as a teacher:

*MY situation is different than others. I have had a variety of teaching opportunities BEFORE getting into teaching. I am well prepared to teach my subject.*

This category also included teachers who taught in some capacity outside of the classroom:
I felt somewhat prepared from other life experiences, i.e., coaching and working with youth outside of school.

The last subsection of this category included teachers who had either worked toward a teaching degree or obtained one, but did not teach.

*I am a unique APT situation, as I graduated with an English Teaching degree and a Physics Teaching minor. As such, I took numerous classes on education as a college student. Essentially, I completed all of the requirements for a regular teaching license except for the year of student teaching.*

Another respondent who studied education but who was not able to teach right away detailed how holding an APT license helped her get back into teaching:

*I feel very well prepared to teach. My situation is quite different than the norm. I received my associate’s degree in preschool education and then moved away from college for my husband’s job. I decided I wanted to complete my bachelor’s degree in education but couldn’t do it through the normal avenue of college. I had three children and a full-time job. So, I joined the APT program and passed all the tests needed to through the ABCTE program and now I am finishing up my first year teaching and it has been great. Two more years and I will be official!!*

All three subsets of the unspecified section benefited in some way from prior experience whether it be from time spent informally instructing pupils or being trained themselves in the field of education. Interestingly, several respondents, including two in this section, described their situation as “unique” or “different” from other situations.

*Previous classroom experience without the full responsibility.* Teachers in this category filled a range of classroom positions from paraeducators and classroom aides to long-term
substitutes. One respondent spoke very highly of his experience as a long-term substitute for a teacher on maternity leave, “If I hadn’t of had the opportunity […], I would have been completely overwhelmed being a new APT teacher.” Another teacher felt very prepared to teach because she had spent four years as a paraeducator and a substitute teacher.

It is important to note that not every teacher with prior teaching experience felt confident in a teaching position with full responsibility in the classroom:

I’m moderately prepared. I have previous teaching experience (adjuncting at university level) so that made classroom management easy, but teaching so many new subjects, having so little time to prep, and have no support from administration makes me feel stymied and unprepared.

Previous experience in a classroom setting as the teacher of record. A number of respondents had been hired to teach at schools where they had previously worked in other capacities, including as a teacher of record in a classroom. One teacher credited her previous teaching experience at a school and extensive knowledge of its culture and unique teaching methods for her successful transition to teaching with an APT license:

I feel very prepared to teach. I started out as an instructional aide at my school teaching small groups and helping out a homeroom teacher for a year. I then was offered a position to take over a homeroom class in third grade for maternity leave and was then asked to continue teaching the next year. I taught my first year under an LOA (letter of authorization) and then entered the APT Program. Because of my experience, and the format in which my school expects teachers to teach (direct instruction, choral responses, high behavior management) I feel extremely prepared to teach on a daily basis.
Other types of previous teaching mentioned teaching out of state and in another country, teaching with an ARL license, and teaching at the university level. The length of previous teaching assignments ranged from one semester to sixteen years. These large variations in teaching experience raises questions about the influence of previous experience on APT candidates. The implications of previous teaching experience will be further discussed in Chapter 5.

**Question 4: What are APT Candidates’ Attitudes Toward the APT Licensure?**

Qualitative data from open-ended survey questions were continuously analyzed using conventional content analysis techniques for qualitative data (e.g., Strauss & Corbin, 1990) in order to identify patterns of responses.

**Question 4a: How Well Prepared Do You Feel to Teach?**

The responses to Q1 were sorted into five themes: (1) Felt confident in preparation, (2) Felt more prepared now, is getting better, (3) Felt prepared in certain areas but not in others, (4) Felt partially prepared but did not specify, and (5) Did not feel prepared. The frequency of each theme is found in Table 12.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felt confident in preparation</td>
<td>117</td>
</tr>
<tr>
<td>Felt more prepared than in the past, is getting better</td>
<td>45</td>
</tr>
<tr>
<td>Felt prepared in certain areas but not in others</td>
<td>39</td>
</tr>
<tr>
<td>Felt partially prepared but did not specify</td>
<td>18</td>
</tr>
<tr>
<td>Did not feel prepared</td>
<td>7</td>
</tr>
</tbody>
</table>
**Felt confident in preparation.** The first theme identified was also the most common, with 117 mentions. Teachers in this category often provided justification for their perceived level of preparedness. One teacher credited school supports, saying they were prepared to teach because of, “weekly PD’s and observations,” and another said they were “lucky to be at a school that is very supportive of their new teachers.” As highlighted in a previous section, mentor support was cited eight times as the reason behind feelings of confidence in preparation. Several teachers also cited their determination to succeed. One said, “Because of my own desires and drive I feel pretty confident in my preparedness.”

Another participant had strong feelings about the origins of her confidence:

> I feel extremely prepared to teach because I have a degree in the subject I am teaching. I did not go to college to learn how to teach, I went to college to master my subject. I believe in mastering the subject will make you a master teacher.

**Felt more prepared than in the past, is getting better.** The teachers sorted into this group were often optimistic about their teaching careers and growing skills.

> I felt really unprepared in the early weeks but quickly through the support of my team and mentors realized I was more prepared than I realized. Now I feel prepared and confident as a teacher and need minimal support.

Several teachers compared their first year of teaching to the current year. Many of them lacked support early on. One teacher felt like she was “really left to figure out so much of it on [her] own.”

**Felt prepared in certain areas, not in others.** Twenty of the teachers in this category cited classroom management as an area in which they lacked adequate knowledge. One teacher said their skills “required some time to develop” and another described their first year of
teaching as being “filled with learning how to handle things for which I was previously unprepared,” indicating that some teachers were able to fill the gaps in their knowledge. Yet, some respondents report to still “feel unprepared sometimes” to effectively manage their classroom.

The second area in which teachers did not feel prepared was teaching to a specific grade level or a specific teaching skill (e.g. classroom management, assessment, etc.), despite being proficient in the subject matter. Respondents often began their responses in the same way, with a statement of their capabilities, for example, “I feel completely prepared to teach my subject matter,” “I am very knowledgeable of the content,” and “I feel very prepared to teach my subject.” The second half of the response addressed which levels and or aspects of teaching they struggled with. One teacher did not feel prepared to teach “this age level (high school) as well as a generation that is so apathetic/obsessed with phones” and another reported that they were “still learning how to teach at the 6th grade level” but that it required “many, many hours outside of the typical school day.”

In terms of more method-based concerns, one respondent did not consider themselves prepared with regard to “the methods, assessments, strategies, or activities that suit the grade levels I’m teaching” and another teacher felt uncomfortable “writing lesson plans and incorporating which standard of which strand my instruction was covering.” These statements call into question the validity of the answers to this question. It is possible that other respondents also stated that they felt very prepared, but perhaps they only feel prepared in the subject matter side, and not in the more technical or grade-specific aspects.

**Felt partially prepared.** Teachers in the “partially prepared” category described themselves as “fairly,” “moderately,” and “adequately,” prepared. These descriptions often
came with qualifying statements, such as “I could definitely use more preparation;” “I have so much more to learn;” “I did not realize the extent of all a teacher does behind the scenes in preparation for full-time teaching;” and lastly, “When I got to the school, I did expect there to be curriculum of some kind or a scope and sequence for me to use. There was not. And that was a bit surprising.”

Several teachers listed the reasons why they did not feel as prepared as they wished to be namely, and many explanations contradicted the explanations of other teachers in this category. These explanations included: APT classes and school administration support (lack of support vs. the influence of the available supports). One influence spoken of negatively by all who mentioned it was the lack of prep time.

**Did not feel prepared.** This category included teachers who felt unprepared to teach and did add any type of qualifying statement. Many of these teachers expressed that they felt much dissatisfaction with the realities of teaching:

*I do not feel very prepared at all. I did not appreciate going in the extent to which classroom management, procedures, expectations, and behavior management are part of the job. My knowledge of the subject matter has been only one tiny element of the job that often feels irrelevant.*

Another teacher outlined the link between feeling unprepared and dwindling supports available or offered:

*Before becoming an APT teacher, I had been working as a paraprofessional in my school district for many years. Yet when becoming a teacher, I had felt unprepared to shoulder all the many many responsibilities a regular classroom teacher had at an elementary school. For the first two years our instructional coach, who was the designated mentor,*
either had not given enough support, or we didn’t even have one. Our principal was a
great support but when she retired our new principal has not shown a lot less support
and our new IC has been sporadic in her efforts to support. Overall, in the last 3 years I
have faced increasing levels of expectations, work load, and class sizes, with a
decreasing level of support and appreciation. I thought that by the third year I would feel
somewhat more competent and comfortable but with changes in administrators and some
of the curricula taught in my school district this hope has not materialized. I feel faced
with demands but insufficient support to meet them all. I don’t know if it is the school
district I am at or it’s like this everywhere but my job satisfaction is not very high at all.

The influence of supports such as mentoring on the feelings of preparation of APT candidates is
evident.

**Question 4b: What Do You Like About the APT Licensure?**

The aspects of the APT licensure that teachers liked were broken down into six
categories, the frequencies of each are listed below in Table 13.

**Table 13**

<table>
<thead>
<tr>
<th>Aspects of the APT License that Teachers Like</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy, no hoops to jump through</td>
<td>75</td>
</tr>
<tr>
<td>Did not have the desire or was not able to go back to school</td>
<td>59</td>
</tr>
<tr>
<td>Previously non-existent opportunity for motivated individuals</td>
<td>42</td>
</tr>
<tr>
<td>Values experience, knowledge, and expertise</td>
<td>41</td>
</tr>
<tr>
<td>Able to work, learn, and teach concurrently</td>
<td>32</td>
</tr>
<tr>
<td>School and district support</td>
<td>28</td>
</tr>
<tr>
<td>Better than ARL, unable to do ARL</td>
<td>17</td>
</tr>
</tbody>
</table>
Easy, no hoops to jump through, teach right away. One metaphor was repeated six times: teachers did not want to “jump through hoops” or were glad that there were fewer “hoops to jump through.” If explained by the respondent, “hoops” generally referred to the “extensive process that made the job not worthwhile,” or the requirements of traditional teacher licensing that are often discouraging to potential candidates. Many teachers said they “very quickly” or “immediately” began teaching, and that it was “easy” and “fast” to become licensed. One respondent was excited to start teaching right away, “I love that I could take the Praxis, demonstrate knowledge, and then get going.”

Did not have the desire or was not able to go back to school. Respondents had two main reasons for not going back to school: first, they could not afford to go back to school because the cost was “prohibitively high” and they were not able to pay, as in the case of this teacher:

> Coming to teaching from a full-time job, there is no way I would have been able to do it the traditional way. I could not have taken the time or have been financially able to take the classes and then go unpaid during student teaching

Second, the costs of entering the profession were “expensive and time-consuming” and they did not want to pay, like in the case of a teacher who liked that they could “get a job [they] wanted very quickly, especially without having to pay for a Master’s degree.” Several teachers considered going back to school to be unnecessary. One said, “I can teach without going back to school for 4 years to get a teaching degree since I have been tutoring kids in math for many years and I can teach it.” Another liked being able to focus on their subject matter, rather than take education courses,
I think it helps me be a better teacher. I am not locked into an “education major” mindset. I feel more open to different perspectives and options in teaching. I specifically chose not to pursue an education major because I did not want to wear those blinders.

Others described going back to school as “unnecessary burden” and something “I don’t really need [to do] in order to teach effectively.” Consequently, respondents felt that the APT licensure was a practical solution to both problems. Because they taught and worked in the same environment without having to attend traditional classes, being able to teach was a financial reality. They could “[gain] valuable experience as well as […] a paycheck.”

Previously non-existent opportunity for motivated individuals. For many teachers, the APT licensure opened up doors in their lives that they believed to be forever closed. Some realized they wanted to teach near the end of or just after their undergraduate experience ended (I didn’t realize I wanted to become a teacher until the final semester of my undergrad”) and others who had this realization later in life (“I liked that even though I realized later in life I wanted to teach it was not too late”). When the APT licensure became available in 2016, it allowed them to make their dream a reality. One respondent who had always wanted to teach after being a mom said the APT “was a great time for [her] to live the dream.” Several respondents, including the latter, mentioned their children entering school as a catalyst to for them to begin teaching:

It was perfect for me. I have always loved teaching, and after having children realized what an important job it is to have. I believe in public education and always knew I had the drive to be a part of it. After working at my kids’ schools as a volunteer and part-time, I felt like I just needed to go all out. At 38, I started working online at to earn a teaching degree. It was going to be very expensive and time-consuming. I was so happy when the law changed so I can work as a teacher and learn on the job. The Professional
Development I attend means so much more when I can put it into practice right away. I am very anxious to get my license next year.

Several teachers also gave cautionary statements about the licensure in relation to its usefulness to people in unique situations. One described it as “a good option for only a very specific type of person,” someone who is “very motivated, love teaching, are willing to study hard, and accept feedback,” but they “could see how less motivated individuals would not be able to make it through this.” A second teacher echoed this sentiment saying that the license was available for “those who are motivated,” and a third added, “the success of a teacher with an APT license, much the same as a traditional teacher, is dependent on a teacher’s willingness to keep learning.”

**Values experience, knowledge, and expertise.** The main theme of this category was that the APT license brings in “competent education people” with industry experience, who are “qualified and passionate in their subject area.” Several respondents spoke to their abilities to “bring real-world context into the classroom,” and the benefits to students:

> I think that my non-education degree has served me very well in classroom. Because of my engineering background, whenever students ask questions like, “when am I ever going to use this?” I can tell them exactly the kind of real world applications the math is necessary for. This has made for many rich classroom experiences where I get students engaged and excited about the content. I majored in Biological Engineering and I loved it—but I wanted a career where I had more impact on society. Because APT licensure exists I was able to make that happen.

**Able to work, learn, and teach concurrently.** A total of 32 respondents detailed the seamless manner in which the licensure fit into their lives. That is to say, there was no separation
between the “learning” and subsequent “doing” aspects of traditional teacher preparation. They could learn on the job and take what they learned in professional development and education classes and apply it to their teaching in real time. One teacher appreciated,

[… the freedom to learn on the job. I have heard from many teachers who obtained a teaching degree that the on-the-job learning was far more beneficial than the programs they attended.

Another enjoyed “[learning] on the job. I improve every day because I learn something every day.” Yet another teacher said the professional development they received “means so much more” because they could put teaching theory into practice and reinforce their pedagogical skills.

I feel like I have been in positions throughout my life that have helped me know the expectations of teaching. I taught Preschool, have volunteered at the school teaching art and music. I had a part time position at the school for 3 years as a Reading Intervention Aide and the school STEM teacher. Those positions were enjoyable, but a lot of work for such little pay. I started going back to school, taking online courses to become a teacher when the law changed. Being a mom of 4 kids, I decided to do the APT path to gaining my license. It felt like it was created for a person just in my position. I do not think I could have pulled it off at any school.

**School and district support.** Respondents in this category praised the support they received at their schools and in their districts. Of the 28 respondents, eight specifically praised the efforts their district had made, such as classes that “made the process quite smooth,” “great monthly instruction,” that “enhance[d] the skills [they] already have with ones [they] don’t.” One respondent felt “looked after and cared for” due to the APT licensure being monitored at
the district level, and another felt that the professional development organized at the district level had provided "more of a network of support."

The comments on school level support tended to focus on the usefulness of teacher preparation at the school level. One teacher liked that co-designing a music curriculum with their colleagues "allowed [them] to learn to teach in the ways [their] charter school needed."

Another respondent praised the intensive new and first-year teacher training, "the APT licensure let me be trained in the whole school system instead of a bunch of different theories or systems that wouldn’t work in my school’s structure." In some cases, teachers are being trained to be exactly what the school needs, which gives them confidence in their work, whereas in a traditional teacher program, one would be exposed to multiple methods and teaching cultures. This discrepancy raises questions about the usefulness of an APT license to a teacher wanting to transfer to a different school with a different way of doing things. Indeed, two teachers mentioned this possibility, saying, "I feel like moving to another school would make me feel very unprepared," and "I do not think I could have pulled it off at any school."

Better than Alternative Route to Licensure (ARL), unable to do ARL. For some, ARL was not feasible, and for others, the APT license was seen as the better of the two options. The program was considered by one teacher to be more effective" and “more accommodating as far as scheduling and much more cost effective” by another, whereas ARL was deemed “discouraging” and “complicated” because of the amount of necessary schooling by four respondents.

Question 4c: What Would You Change About the APT Licensure?

Results from the open-ended research question, “What aspects of the APT licensure would you change?” were sorted into seven categories which are listed in Table 14 along with
their respective frequencies. An eighth category catalogued the following responses: (1) none, and (2) unsure, and will not be included in the findings. This section will offer a summary of each category as well as examples from survey responses.

Table 14

*Responses to the Question “What would you change about the APT licensure?”*

<table>
<thead>
<tr>
<th>Theme</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>More teacher preparation, training, and support</td>
<td>54</td>
</tr>
<tr>
<td>Clarity and assistance with licensing process.</td>
<td>39</td>
</tr>
<tr>
<td>Specific aspects of licensure policy</td>
<td>26</td>
</tr>
<tr>
<td>Influence of stigma and lack of prestige on hiring practices</td>
<td>25</td>
</tr>
<tr>
<td>Changes to Praxis test/procedures</td>
<td>7</td>
</tr>
<tr>
<td>Number of endorsements allowed</td>
<td>8</td>
</tr>
<tr>
<td>Fewer demands on time</td>
<td>6</td>
</tr>
</tbody>
</table>

**More teacher preparation, training, and support.** The first commonly mentioned type of pre-service teacher preparation was student teaching. There was variety among the forms suggested, but the common theme was that teachers would benefit most from having classroom experience before being the teacher of record. One respondent summarized the difficulties he observed for APT candidates who had not student taught,

*I’ve seen other APT teachers really struggle because they did not have the student teaching experience. It was difficult for them to set up a classroom, plan lessons, and create a strong classroom management system.*
The second commonly mentioned type of pre-service teacher preparation was courses for APT candidates on basic teaching methods and classroom management. The idea was that the teachers would benefit more from being introduced to this knowledge as early as possible. One respondent described her experience having teacher training six weeks into the school year:

*It would have been extremely helpful to have classroom management training early in the year. I attended a class on that topic 6 weeks in — and at my table there were five of us and we all wished we’d had the information during the meetings that start off the school year. The class was taught by a teacher coach and a couple of very tenured teachers. They told us to have a ‘reset’ that next day to implement the things we were taught, but it would have been so much more helpful to start the school year out with that info.*

On-the-job training was also frequently mentioned in terms of quality and quantity. Several respondents wanted to have ongoing grade- and subject-specific training during the school year. Others spoke to the amount of training they received while teaching, and one teacher in particular shared a distressing anecdote:

*On the job training was scarce for me. I would have loved to have more support when I first started. No one told me what to teach. No one provided me with any materials. My school didn’t have a language arts department before I showed up (it’s a new school). I was just expected to go print off the core standards and then write a yearlong curriculum for 9-12th grade all on my own without any oversight or assistance.*

In situations like these, on the job training is crucial.

The last category mentioned was the support offered to teachers. Several respondents advocated for a “support group” exclusive to APT candidates. One teacher felt isolated by her status and wanted to establish a community of practice for APT candidates:
I would like to have a support group for all APT people within the district. I do not know a single person that is on my path in the [LEA removed]. I am basically treated like a new teacher out of college, and that assumes a lot. I have had to learn quickly how to manage technology and keeping up to speed with online courses, etc.

Unbeknownst to the respondent, she was teaching in a district with one of the highest numbers of APT teachers.

Lastly, respondents wanted to have a different mentor experience. Two respondents specifically stated that they did not know how to find a mentor. Others expressed interest in being mentored by someone who had also been licensed through APT.

I wish our district had a different mentoring program for only APT teachers. It’s hard to understand how difficult it is to be in our shoes, so having the support of people who understand would be so helpful.

Clarity and assistance with the licensing process. Respondents wanted clearer guidelines of what was expected of them and other stakeholders in their licensing process (mentor, LEA, etc.). Existing guidelines were described as “really confusing,” “unclear,” “constantly changing,” and, “a pain to identify.” Respondents elaborated, saying “I wish I had an expert to sit me down and explain everything about the process at the very start;” “I’d love a clear plan/timeline for what is required;” and “I don’t understand the whole process well enough to answer this.” In addition to unclear requirements, many respondents were unsure how to find necessary information. The most common requested change was communication with the state. Because of communication difficulties, many respondents tried to find information from their LEAs, but little information was known due to the newness of the program. On the other
hand, several respondents singled out their districts for the aide and support they gave helping keep APT candidates informed of their progress and next steps.

**Specific aspects of licensure policy.** Many respondents wanted to change the requirement that teachers wait three years to upgrade their license. Some suggested reducing the three years of provisional status policy to two years, and others suggested allowing teachers to finish earlier if the requirements had been met. Desired changes to required classes included the idea that teachers could get a “life experience credit.” One teacher explained, “I believe credit should be given for life/work experience and not just because I took a college class. Life experience is so much more valuable.” Another teacher argued the opposite, that the difficulty of required courses should be reduced: “If I haven’t had a class on assessment as an undergraduate then why would I understand more if placed directly into a Masters class on it?” If anything, the advocacy of two opposite spectrum ideas shows the diversity of needs of respondents, and potentially APT teachers.

**Influence of stigma and lack of prestige on hiring practices.** Respondents’ main desire was to change the stigma around the APT license that prevents them from being hired. One teacher had a demoralizing experience when a parent “questioned my ability as a teacher because of the license I hold.” Another felt the need to reiterate her humanity: “Just because I didn’t take teaching classes in college doesn’t mean that I am any less of a teacher, or person for that matter.” Clearly, the effect of this perceived stigma takes an emotional toll on teachers with an APT license.

Respondents indicated a second way in which this stigma was affecting them. Several reported that they had been turned away from jobs once their license type became known. Citing the futility of teacher preparation programs, one teacher reported that her superintendent told her,
“soon after graduation, professional teachers abandon much of what they learn in college because this profession is in chaos: you can never predict what will happen.” Accordingly, the most common proposed change was to require all districts to accept APT licenses. One teacher who had struggled to find employment with an APT license believed that traditional and alternatively licensed teachers should be given equal consideration in the hiring process:

I was “hired” by a district school for three open teaching jobs. When they submitted my name to the district for all three jobs, the district denied my name every time because I ONLY had an APT license. This is unacceptable. The APT licensure program is a state-approved program, which means that districts should accept it. They should trust the principal or director of the school to make the decision based on applicant’s experience and levels of education to decide whether or not this candidate is a good choice for the school. Mentoring programs are in place, the experience is there. The district told me, “We can’t trust those with an APT license because of their lack of experience.” How is this relevant? How can you trust a first-year teacher with a brand-new level one license? The administrator chooses them based on recommendations, experience, mentoring, observations — just as an APT licensure candidate should be chosen. There should be no discrepancies between the two candidates. The APT licensure program should be accepted by ALL districts, especially with the teacher shortages. The decision to hire should be in the hands of capable administrators and teacher teams of the school.

Other respondents felt that hiring practices and stigma should change because some APT candidates in some cases are better than their traditionally licensed peers. One respondent stated, “My expertise may be superior in some instances,” in reference to their traditionally licensed colleagues. Another felt “more qualified than many of the teachers around me.” Another
asserted that, “In reality, some APT teachers are MUCH better than ‘traditional teachers.’” In some APT candidates, it would seem that stigmas are developing to counter the stigmas perceived against themselves.

**Changes to Praxis tests and procedures.** The main finding of this theme is that the Praxis test was not an effective means to measure whether a teacher is ready to teach. Two respondents did not consider it necessary at all and wanted to create a waiver for APT candidates with graduate degrees or abolish it entirely. Another respondent advocated for increasing the difficulty of the test and one took issue with their cost, but not the content. Lastly, two respondents requested study aids for the Praxis tests.

**Number of endorsements allowed.** Respondents expressed frustration at the one endorsement limit on teachers with an APT license. Several had passed multiple Praxis exams only to learn they could not teach those subjects. If teachers wish to obtain another endorsement, they must first surrender their current endorsement. One teacher outlined how the one endorsement policy negatively affects the hiring prospects of APT license holders: “*It can be difficult to find a teaching position that is exactly covered by the APT license and not requiring flexibility to teach content in other areas.*”

**Fewer demands on time.** This category of respondents focused on changing the number of requirements for the APT licensure. Two solutions were proposed: (1) allow teachers to test out of classes in which they demonstrate proficiency, and (2) reduce the number of obligations and the amount of busy work (examples given include meetings and portfolio creation, both required to level up a license) for APT candidates so they can build up skills they do not already have.
Each of the seven categories provided tremendous insights into the experiences of APT candidates. The implications of these responses will be discussed in Chapter 5.
Chapter 5

Discussion and Implications

As indicated in the title of this thesis, the main goal of this study was to examine attrition among APT candidates in Utah. If the APT licensure is intended to address teacher shortages, it is not a particularly effective one. To alleviate teacher attrition, the goal is to get skilled teachers into the classroom and keep them there. The fact that two-fifths of APT candidates leave within their first two years raises questions about the cost-effectiveness of the APT license, particularly in regard to the heavy investments required in mentoring. Moreover, the APT licensure could even push teacher shortages to new heights. This section will detail specific issues uncovered by this research and provide recommendations for alleviating their consequence. Lastly, pedagogical implications will be discussed.

When formal teacher preparation is not required to teach, the message being communicated is clear: teacher preparation is unnecessary. It is possible that having the APT license as an option could discourage students in higher education from pursuing a degree in education in favor of a subject matter-exclusive degree. Indeed, one respondent in this study stated she they had purposefully not studied education because it was not an APT licensing requirement, and several other respondents claimed such pedagogical education was unnecessary. There were even an anecdote of a school administrator sharing this belief in his district. It is alarming that even a small subset of current teachers consider teacher preparation and education a detriment to success in the profession. The literature on this point is unambiguous; teachers who are more prepared tend to stay in teaching. The existence of the APT license reinforces the mentality that pre-service preparation is unnecessary or a waste of time.
If this mentality continues to take hold and fewer and fewer university students obtain degrees in education, the teacher shortage could be worsened in two ways. Students who plan on teaching with subject matter-only preparation are more likely to contribute to attrition due to their lack of preparation (Darling-Hammond, 2002). This very phenomenon was documented by this study. In addition, mentoring resources will become strained as more teachers lacking pedagogical preparation enter the classroom. The burdens placed on mentor teachers could end up pushing them to leave their school or the profession, particularly if they do not receive sufficient release time for mentoring or if their financial compensation is not commensurate with their presumed status as “teacher leaders.” The loss of these mentor teachers would be devastating to the collective knowledge and expertise of the teaching profession. It would also be detrimental to APT.

The most significant finding of this study was the relationship between mentoring and attrition. The more frequently APT candidates met with their mentor teachers, the more likely they were to be stayers. Moreover, stayers reported significantly higher impacts of mentor teachers on teaching skills and on confidence. The qualitative data provided additional insight into the relationship between teacher retention and mentoring. In the open-ended responses, it was clear that mentoring was considered an essential element for teacher success. These findings fall in line with previous research on the positive effect mentoring has on teacher retention (Ingersoll & Smith, 2004; Ingersoll & Strong, 2011).

This study found that the APT licensure did not work uniformly for all participants. For example, many survey respondents detailed the influence of previous teaching experience on their teaching, whereas others felt wholly or partially unprepared. There were teachers who felt they should be treated like any other teacher at the school, regardless of certification pathway,
but some did not appreciate being treated the same as teachers who had been formally trained. Instead of lifting all candidates to higher levels of teaching expertise, the APT license appears to magnify pre-existing individual differences in the teaching ability and aptitude of APT candidates. It is possible that because there was no selection process of teaching candidates, such as exists in traditional teacher preparation programs, that the skill set of APT candidates had such a large spectrum. Moreover, there was also no safety net to catch unqualified candidates. Unlike traditional student teaching programs, where a mentor teacher is in the same classroom with the candidate to immediately address problems, and a university supervisor also provides regular support (and can even remove candidates who are seriously struggling), APT candidates are essentially on their own in the classroom. Although they presumably have a mentor in the same building, their only immediate recourse when problems arise is to rely on their own skills—and since APT candidates are the teachers of record, those who find themselves seriously struggling cannot easily be removed or replaced.

In other words, a one-size-fits-all approach will result in many being left behind which will only exacerbate teacher attrition and shortages. Therefore, it is imperative that mentor teachers be able to differentiate their mentoring strategies for APT candidates of varying abilities.

This necessity raises several questions. How will mentor teachers be trained to work with a variety of skill levels? Teacher education varies dramatically from K-12 education; not everyone trained to be a teacher has been trained to be a mentor as well. Unfortunately, there is no Academic Pathway to Mentoring available to them. Moreover, how can mentor teacher compensation in terms of time and money be ensured? Per Rule R277-513-5, LEA Teacher Leader Compensation and Accommodations (Utah State Board of Education, 2016b), mentor
teachers should be given a monetary incentive to compensate them for the time spent fulfilling
the duty as a mentor teacher, and a lighter class load so they have the time for this assignment.
No rates of monetary compensation or workload reduction are suggested, and no mechanism is
provided for enforcing these recommendations. The suggested duties of mentor teachers,
however, include “training, supervising, and mentoring student teachers and new teachers”;
“serving as an instructional coach to develop effective instruction”; “leading specific school
improvement initiatives”; and “facilitating and coordinating professional learning activities,”
among other suggested tasks. In other words, mentor teachers are being tasked with teacher
education, but no additional funding has been provided by the state to cover the increased costs
of operation directly related to mentoring APT candidates. Simply decreeing that mentor
teachers “should” be given release time and compensation will not make it so. If the APT
licensure is to continue and mentor teachers are to shoulder the enormous responsibility of
teacher education, mentor teachers need significant release time and monetary compensation
funded by the state.

APT candidates clearly saw the APT license as having strengths that traditional teacher
education programs lack, including context-specific experience and training, and an emphasis on
practical applications (as opposed to an over-emphasis on theory in teacher ed programs).
Clearly, teacher education programs are (perhaps rightly) seen as having too many requirements
(for which, ironically, the state bears a share of the responsibility) and being too theoretical.
Moreover, the most common aspect of the APT licensure that teachers liked was its lack of
“hoops to jump through,” or licensure requirements deemed unnecessary.

What is needed in all paths to licensure is a balance between theory and practice, between
content knowledge and pedagogical skills, between the specific skills necessary to teach in a
given school setting and the general skills needed for teaching in any setting. This implies that traditional teacher education programs may benefit from incorporating the increased flexibility of alternative paths such as the APT, whereas the trainings offered to holders of the APT license may need a stronger focus on foundational knowledge of teaching theory and skills, child development, and meeting the needs of all students. In other words, neither extreme is serving prospective teachers well.

Ironically, the aggregate of what respondents would change about the APT licensure is the pith of the APT licensure itself. The APT licensure allows qualified individuals to quickly enter the profession by removing requirements, one of which is participation in a teacher education program. Even so, the most common response to the question “What would you change about the APT licensure?” was more teacher preparation, training, and support. This included student teaching and courses in classroom management and principles of teaching. Many respondents called for APT-specific support—for instance, a support group made up of fellow APT candidates and mentor teachers who had also been licensed through APT. It is possible that respondents felt more comfortable discussing their teaching experiences and questions with fellow APT candidates without the stigma of licensure hanging over their heads. Because much of the stigma mentioned by respondents was attributed to negative opinions about APT candidate qualifications, increasing preparation, training, and support of APT candidates could lessen the stigma surrounding their qualifications and legitimacy as educators. But, to challenge the stigma in such a way would be to essentially overhaul the licensure as it is.

**Limitations and Recommendations for Future Research**

The biggest limitation of this research was the small sample size (N=13) of leavers who responded to the survey. The second critical limitation is that the study had no actual measure of
teacher effectiveness. It is problematic to use self-ratings because they can be skewed positively or negatively based on the individual. The subjective measures of preparation and skills do not automatically correspond with actual teaching skills, which suggests the need for additional studies that assess teacher effectiveness.

In light of these findings, the following five recommendations may help to address the current limitations of the APT licensure and possibly of more traditional routes to licensure as well.

1. **Address discrepancies among candidates' pre-existing levels of knowledge, experience, and skills.** Employ a screening process that holistically measures APT candidates’ pre-existing levels of knowledge, experience, and skills, and provide resources and support based on where each candidate falls on the spectrum. Candidates with more experience would receive less, or perhaps, different support, whereas candidates who are more or less new to teaching in general would receive more comprehensive support.

2. **Objectively measure candidates’ teaching skills and their relation to factors that affect attrition.** Employ a more objective means to measure candidate teaching skills perhaps through evaluations made by mentor teachers or principals.

3. **Examine the relationship between demographic context and the APT licensure.** Identify where APT candidates are most often found in the following variables: LEA, subjects taught, and grade levels taught. Doing so could provide data on the effect the APT license has on equity in Utah schools, as well as identify other trends regarding subjects and grade levels experiencing teacher shortages.
4. **Examine the mentor teachers’ experiences in the APT.** Survey and possibly interview mentor teachers to see their side of the APT process. The survey could include items that measure how these teachers felt about this assignment, whether they were given adequate time to carry it out, and whether they received fair compensation for their time. It would be equally important to know how mentors are being trained so the sources of effective mentoring could be better understood and replicated.

5. **Examine the relationship effect of the APT license on student achievement.** Use standardized testing data, as well as possibly other measures, to study the relationship between APT candidates and student achievement.

**Conclusion**

Given the urgency of addressing the teacher shortage in Utah and other states, it is important that the effectiveness of new approaches to licensure be empirically evaluated. Equally important is the discussion that follows among all stakeholders in education to construct policy to the benefit of students and teachers alike. It is hoped that this study may contribute in a small way to those efforts and pave the way for others to follow.
References


Utah Education Policy Center. (n.d.). At first glance: Teachers in Utah. Salt Lake City, UT.


Appendix A

Academic Pathway to Teaching Licensure Survey

Start of Block: Demographic Information

Q35 In which school district do you teach?

▼ No specific public school district ... Weber

Q38 At what type of school do you teach?

- Traditional public school
- Public charter school
- Private school
- Other ________________________________________________

Q36 Which degree(s) do you hold?

- Bachelor's degree (BA)
- Master's degree (MA)
- Doctoral degree (PhD)

Q39 In what subject is your bachelor's degree (BA)?

Q40 In what subject is your master's degree (MA)?
Q41 In what subject is your doctoral degree (PhD)?
___________________________________________________________________

Q42 What subjects have you taught since you have held an APT license?
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

Q37 Which levels do you teach/have you taught? Please list them below.
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

Q44 How many different classes (different course preps) do you currently teach?

0  10

Slide the bar to indicate how many classes.

Q43 What is the total number of classes that you currently teach?

0  10

Slide the bar to indicate how many classes.
Q2 Please rate your current confidence in your ability to do each of the following in your present teaching position.

<table>
<thead>
<tr>
<th></th>
<th>1 - Not at all confident</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6 - Very confident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teach your subject matter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teach to state core standards</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Establish a classroom management system with each group of students</td>
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<td></td>
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</tr>
<tr>
<td>Establish routines to keep activities running smoothly</td>
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<td></td>
</tr>
<tr>
<td>Craft good questions for your students</td>
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</tr>
<tr>
<td>Provide an alternative explanation or example when students are confused</td>
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</tr>
<tr>
<td>Respond to difficult questions from your students</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gauge student comprehension of what you have taught</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Use a variety of assessment strategies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Adjust your lessons to the proper level for individual students.

Get students to believe they can do well in school work.

Motivate students who show low interest in school work.

Improve the understanding of a student who is failing.

Make your expectations clear about student behavior.

Control disruptive behaviors in the classroom.

Prevent a few problem students from ruining an entire lesson.

Assist families in helping their children do well in school.

Teach students who are limited-English proficient.
(LEP) or English-language learners (ELLs)
Teach students with special needs
Provide appropriate challenges for very capable students

End of Block: Self-efficacy

Start of Block: Mentoring and Induction

Q32 Please respond to the following questions in relation to your FIRST year of teaching. *(If you are in your first year of teaching, please answer for THIS school year).*

Q3 Were you previously pursuing a teaching license through the Alternative Route to Licensure (ARL) prior to becoming an Academic Pathway to Teaching (APT) candidate?

○ Yes
○ No

Q5 There are different types of induction programs available to APT candidates. Induction programs often include training before the beginning of the school year and support during the school year. Some may be held at the district level and some at the school level. The following question is about induction programs at the district level.
Q4 In your first year of teaching, did you participate in a formal districtwide program for beginning teachers aimed to enhance teachers’ effectiveness by providing systematic support (sometimes called a teacher induction program)?

- Yes
- No

Q30 Was your beginning teacher induction program exclusively for APT candidates?

- Yes
- No
- I don't know

Q6 The following question is about induction programs at the school level.

Q9 In your first year of teaching, did you participate in a formal schoolwide program for beginning teachers aimed to enhance teachers’ effectiveness by providing systematic support (sometimes called a teacher induction program)?

- Yes
- No

Q31 Was your beginning teacher induction program exclusively for APT candidates?

- Yes
- No
- I don't know
Q10 Did your school provide you with a mentoring plan?

- Yes
- No
- I don't know

Q11 In your first year of teaching, were you assigned a teacher leader or mentor teacher by your school or district?

- Yes
- No

Q12 How frequently did you work with your assigned teacher leader or mentor teacher during your first year of teaching?

- At least once a week
- Once or twice a month
- A few times a year
- Never

Q13 Had your assigned teacher leader or mentor teacher ever instructed students in the same subject area(s) as yours?

- Yes
- No
- I don't know
Q14 Had your assigned teacher leader or mentor teacher ever been a mentor before?

- Yes
- No
- I don't know

Q15 Which of the following types of support did your assigned teacher leader or mentor provide during your first year of teaching? Select all that apply.

- Helped with paperwork or record keeping
- Demonstrated lessons
- Helped you prepare lessons that address learning standards
- Helped you develop student assessment tools
- Emotional/moral support
- Helped with classroom management
- Other ________________________________

Q16 Overall, to what extent did your assigned teacher leader or mentor teacher improve your teaching in your first year of teaching?

- Not at all
- To a small extent
- To a moderate extent
- To a great extent
Q17 Overall, to what extent did your assigned teacher leader or mentor teacher improve your confidence in your ability to teach?

- Not at all
- To a small extent
- To a moderate extent
- To a great extent

Q45 Did anyone complete a formal evaluation of the mentoring that you received?

- Yes
- No

Q19 Who completed an evaluation of your mentoring? Select all that apply.

- I was asked to fill out an evaluation myself
- My teacher leader or mentor filled out an evaluation
- My principal filled out an evaluation
- Other: ________________________________
Q20 In addition to any support you received from your mentor teacher, which of the following kinds of support did you receive during your first year of teaching? Select all that apply.

- Reduced teaching schedule or number of preparations
- Common planning time with teachers in your subject
- Seminars or classes for beginning teachers
- Inservice meetings for beginning teachers
- Extra classroom assistance (e.g. teacher aids)
- Regular supportive communication with your principal, other administrators, or department chair
- Formal observations and feedback from principal
- Informal feedback, help, or emotional support from my principal
- Release time to participate in supportive activities for new or beginning teachers
- Other ____________________________

End of Block: Mentoring and Induction

Start of Block: Teaching Experiences

Q21 Please respond to the following questions regarding your experience as a teacher:
Q22 To what extent do you agree or disagree with the following statements?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The stress and disappointments involved in teaching at this school aren’t really worth it</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The teachers at this school like being here; I would describe us as a satisfied group</td>
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<td></td>
</tr>
<tr>
<td>I like the way things are run at this school</td>
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</tr>
<tr>
<td>If I could get a higher paying job I’d leave teaching as soon as possible</td>
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</tr>
<tr>
<td>I think about transferring to another school</td>
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<td></td>
</tr>
<tr>
<td>I don’t seem to have as much enthusiasm now as I did when I began teaching</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>I think about staying home from school because I don’t want to go</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

End of Block: Teaching Experiences

Start of Block: Future Plans
Q23 Please respond to the following question about your intentions to remain in teaching:

Q24 How long do you plan to remain in teaching? Choose one.

- As long as I am able
- Until I am eligible for retirement benefits from this job
- Until I am eligible for retirement benefits from a previous job
- Until I am eligible for Social Security benefits
- Until a specific life event occurs (e.g., parenthood, marriage, retirement of spouse or partner)
- Until a more desirable job opportunity comes along
- I definitely plan to leave as soon as I can
- I am undecided at this time

End of Block: Future Plans

Start of Block: Open-ended Questions

Q26 Please respond to the following three open-ended questions. Please be as thorough as possible.
Q27 How well prepared do you feel to teach?

________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

Q28 What do you like about the APT licensure?
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

Q29 What aspects of the APT licensure would you change?
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

End of Block: Open-ended Questions

Start of Block: Interview opt-in

Q34 Would you be willing to participate in a 20-30 minute Skype interview to help the researcher get a better understanding of your experiences as a teacher?

☐ Yes
☐ No

Q39 What is your name?
Q40 What is your primary email address?

Page Break

Q43 Thank you for completing this survey! Someone will be in contact with you shortly to set up a time to chat. If you would like to be informed of the results of the survey, email lwilde11@gmail.com

Page Break

Q46 Thank you for completing this survey! If you would like to be informed of the results of the survey, email lwilde11@gmail.com.

End of Block: Interview opt-in
Appendix B

Questions Added to Survey 2

Q48 In what year did you begin the Academic Path to Teaching?

- 2016
- 2017
- 2018
- 2019

Q49 Are you currently teaching in a K-12 school setting?

- Yes
- No

Q50 Including the current school year, how many years have you taught or did you teach in a K-12 school with an APT license (excluding any years you may have taught previously with an ARL license)?

- I have not taught under an APT license.
- 1 year
- 2 years
- 3 years
- 4 years

Q51 What were your reasons for not having taught after obtaining an APT license? Please give as much information as you are comfortable giving.

________________________________________________________________________

End of Block: Open-ended item (NEVER)
Q73 Do you plan to teach in a K-12 classroom setting in the future?

- Yes, definitely
- Probably
- Possibly
- Probably not
- Definitely not