

2017

# A Mixed-Methods Study of Alternate-Route Teachers' Effect on Student Learning

Cassandra Faye Spearman  
*Walden University*

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# Walden University

College of Education

This is to certify that the doctoral study by

Cassandra Spearman

has been found to be complete and satisfactory in all respects,  
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Walden University  
2017

Abstract

A Mixed-Methods Study of Alternate-Route Teachers' Effect on Student Learning

by

Cassandra Faye Spearman

MA, University of Phoenix, 2007

MA, University of Phoenix, 2005

BS, Armstrong Atlantic State University, 2001

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

August 2017

## Abstract

Due to teacher shortages at the study site, teaching positions in the state that is the focus of this study are filled by alternate route (AR) teachers, who earned bachelor degrees in the fields that were not related to education and received teacher certification through alternative teacher education programs. Because there is limited information about the preparation and performance of AR teachers at the site of this study, the purpose of this sequential mixed methods project study was to explore AR teachers' preparation and their effect on student learning as measured by Northwest Evaluation Association's Measures of Academic Progress/Discovery Education Assessments. Guided by Mezirow's experiential learning theory and Dewey's educational philosophy, this project study investigated the relationship between the alternate route teachers' field experiences and years of experience, and teachers' effect on student learning. Data collection included a survey of 36 K-12 AR teachers selected through convenience sampling, document analysis of their student assessment scores, and 6 structured interviews with purposefully selected high performing AR teachers. Data were triangulated and cross-analyzed. Findings indicated that when AR teachers engage in field experiences prior to teaching, their students have higher levels of achievement as evidenced in their assessment scores. There was no correlation between AR teachers' years of teaching experience and their student assessment scores. Analysis of AR teachers' interview responses revealed a need for professional development, which was then created to address those needs. This study may contribute to social change by offering the targeted professional development of AR teachers and improving the design of AR preparation programs to better influence student learning.

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## Dedication

I am dedicating this doctoral study to my family. My family has provided unwavering support throughout this transforming process. In addition to working on this doctorate, I held two of the most challenging jobs in my career. I spent an extended amount of time at school and working on my project study. My family was my rock and never made me feel guilty. To my loving husband Tommy, I thank you for your patience with me and for supporting my dreams. I also want to thank my three kids Dominique, Jacqui, and Jacquel for your humorous encouragement. To my big sister, Jacqueline Berry, thank you for always being there for me. I love each and everyone one of you.

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I would like to thank the people in my life that made achieving this milestone possible. My goal as a child was to finish high school and go to college. I never thought about advanced degrees and I most certainly never thought about earning a doctoral degree. The old adage that says God puts people in your path for a reason and a season is certainly true for me.

First, I would like to thank Lord God my Savior. It is because of my many prayers, your grace, and your mercy that I have been able to achieve this task.

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## Section 1: The Problem

### **Introduction**

Every student is entitled to an effective teacher, a teacher possessing the knowledge and skills needed to ensure that students gain deep conceptual knowledge of the content. A number of researchers demonstrated that teacher effectiveness has a direct effect on student achievement (Chetty, Friedman, & Rockoff, 2014; Danielson, 2011). However, the steady increase in teacher turnover rates has caused concern for many. For several states, the problem is two-fold. They are experiencing high teacher turnover rates and are in need of increasing the number of highly effective teachers in their classrooms (Bastian & Henry, 2015). Teachers leaving the profession listed reasons such as negative school cultures, the lack of autonomy, lack of administrative support, and lack of mentorship (Heldfeldt, Capraro, Capraro, & Scott, 2015). These turnover rates are almost double in urban schools (Heldfeldt et al., 2015). The turnover rates and the increased number of teachers retiring have made an impact in the teaching force for [Redacted].

In 2012, the Office of Education Accountability (OEA) published Research Report No. 365 entitled Teacher Shortages: Trends and Continuing Questions (Alexander et al., 2012). In this report, the authors noted that the number of teacher shortages and emergency licenses have decreased significantly due to the eight alternative certification options offered by the Education Professional Standards Board (EPSB). Regulatory Statute 161.048 stated that teachers can begin teaching without having to meet all of the criteria for certification. Teachers may teach up to 3 years while working to meet full certification requirements. Each year, 8% of the teaching force in the state where the

study occurred does not return to teaching, 2% of those teachers retire, 1% becomes administrators, and 5% leave the state (Alexander et al., 2012). From 2001 to 2012, the number of teachers certified through (AR) programs increased from 136 teachers to 1,548 teachers. Of the new teachers hired during the 2013-2014 school year, 160 teachers taught on a provisional license through one of the ARs to certification, 153 taught on emergency licenses, and 135 taught on probationary licenses. This equates to 20% of the new teachers teaching without full certification. The school district that was the focus of this study has an annual teacher shortage rate of 6% (Alexander et al., 2012). With the number of teachers gaining certification through ARs, it is important for the district to have information on how the AR teachers in the district are influencing student learning.

Nationally, the percent of teachers certified through AR programs has increased over the years. New Jersey instituted the first AR program (Tamir, 2010). This strategy was considered successful in New Jersey, as the schools were able to increase and diversify their teacher applicant pool. Shortly after, Teach For America (TFA) was created; TFA produces the most AR teachers in the United States.

Many states joined the movement. There are approximately 59, 000 AR teachers teaching in classrooms around the United States (Feistritzer, 2011). Although researchers have noted that some AR teachers from specific programs have been successful (Henry et al., 2013; TFA, 2012), researchers have also demonstrated that AR teachers are not as effective as teachers who receive their certification through traditional route programs (Heilig, Cole, & Springel, 2011). The number of alternately certified teachers is steadily

increasing. Understanding their effectiveness and their continued needs is important to the education field.

AR teachers must be prepared to meet the challenges of teaching. If researchers (Chetty, Freidman, & Rockoff, 2014; Danielson, 2011) have demonstrated that the effectiveness of the teacher is the most influential factor in school improvement, the preparation programs must provide quality instruction and experiences to ensure that teacher candidates have the skillset needed to be deemed effective. There should be training and hands-on learning experiences that occur before and during teacher preparation. It is also the responsibility of the school districts that employ AR teachers to provide them with on-going professional development to support them while they are learning the profession.

### **Definition of the Problem**

In the spring of 2013, based on state and federal accountability system, this school district was labeled as needs improvement. Five of the 15 schools were labeled proficient, while other schools received improvement status with one labeled as a priority school. If this district does not show growth in student proficiency levels on the state assessments, they may receive state and federal sanctions, including being monitored by the state board of education. With 5% of the teachers in the district coming from AR programs, the district lacks information about the teachers' effect on student achievement and the types of continued supports that are needed for the development of these teachers.

Due to teacher shortages in major content areas, educational institutions have adapted to meet the needs of teacher candidates by offering alternative routes to teacher



certification. The concept of AR certification was intended to attract a bright and diverse population of teacher candidates and expedite their entry into the classroom. According to the National Center for Education Information (Feistritzer, 2011), one third of teachers employed since 2005 received their certification through an alternative route program. However, school districts throughout the United States continue to struggle to meet the academic needs of their students. Lawmakers, while noting problems within the school systems, often blame teachers for poor student achievement. The No Child Left Behind Act (NCLB, 2001) requires that school districts, that receive federal funding, hire highly qualified teachers. NCLB also requires that a certain percentage of students pass state assessments in reading and math; schools that do not meet the required percentage are penalized. The reauthorization of NCLB increased requirements for teachers and students to include college and career readiness standards, standardized assessments, implementation of Common Core State Standards, and an implementation of a teacher and principal evaluation system that includes student achievement data.

Multiple researchers have claimed that teacher effectiveness has a direct effect on student academic success. An effective teacher is the single most important factor in determining student success (Chetty et al., 2014; Danielson, 2011). With the teacher being the most important factor to student academic success, this district does not have enough evidence to determine if the local AR programs are placing effective teachers in their classrooms.

The Department of Education has policies and procedures to recruit and retain highly qualified teachers. Although the OEA (2012) stated that there is a decline in

highly qualified teachers in critical shortage areas, there are multiple areas that meet the federal guidelines for teacher shortage areas. The AR options have helped to decrease teacher shortages. According to the Revised Statute 161.048 (2010), the requirements to become a teacher in the studies state through an AR are as follows:

- Option 1: Exceptional Work- Candidate must have 10 years of exceptional work experience, bachelor's degree with a 2.5 grade point average (GPA), and a passing score on the academic content assessment designated by EPSB
- Option 2: Certification through a local district training program- Possess a bachelor's degree with a 2.5 GPA, complete the local district training program, pass a written test designated by EPSB, and have a job offer
- Option 3: Certification from a postsecondary institution- Possess a master's or doctoral degree and have 5 year's teaching experience at the collegial level in the academic content for which the candidate is seeking certification
- Option 4: Certification as an adjunct instructor-Must possess expertise in areas such as art, music, foreign language, drama, science, or other specialty area
- Option 5: Certification of a veteran of Armed Forces-Must have 6 years of continuous service prior to discharge, 10 years of service toward retirement, honorable discharge, bachelor's degree in area seeking

certification, GPA of 2.5, and passing score on the written exit assessment designated by EPSB.

- Option 6: University AR program-Must be an AR program approved by EPSB
- Option 7: Certification of a person in a field other than education- Can only be used in shortage areas. Must possess a bachelor's degree with a 3.0 GPA, a minimum score of 500 on the Graduate Record Examinations (GRE) verbal section, a 4 on the analytical writing, and pass the written assessment designated by EPSB
- Option 8: Certification of Teach for America- Must have job offer, possess a bachelor's degree, successfully complete the summer institute, and pass written test designated by EPSB.

Nationally, the number of teachers receiving AR teaching certificates has increased from 275 teachers in 1985 to 59,000 as of 2009 (Feistritzer, 2011). This same trend has occurred in the state over time. This school district is also experiencing an increase in teachers who are certified through AR programs.

The school district is comprised of 15 schools (10 elementary schools, three middle schools, two high schools). The district serves approximately 9,400 students. Sixty-five percent of the school district is low-income. The racial population of the school is as follows: 33% African American, 6% Hispanic American, and 56% European American students. There are approximately 2,900 teachers in the district and about 5% received their certification through an AR. With approximately 150 AR teachers in the

district, it would be beneficial to the district to have information about the influence of these teachers' instructional practices on student learning.

Although there have been a number of studies on the effectiveness of AR teachers, the studies do not build on one another, are inconclusive, and/or yield mixed results (Cochran-Smith & Villegas, 2015; Ludlow, 2011). This is largely due to the varying characteristics of teachers and the characteristics of the schools in which they teach (Feistritz & Harr, 2011). These studies also lack information on how teacher candidates in these studies learned to teach (Cochran-Smith & Villegas). In this study, I explored AR teachers in this school district and determined if there was a relationship between their preparation to become a teacher and their ability to increase student achievement scores as measured by NWEA MAP/Discovery Education.

## **Rationale**

### **Evidence of the Problem at the Local Level**

Because many of the AR teachers teach in critical shortage areas, which are mostly urban, it is vital for them to be effective in instructional delivery. Students in urban schools have additional challenges that interfere with learning; these schools struggle with school improvement (Chambers & Tate, 2013). However, it has been proven that urban students, who were taught by effective teachers, showed short-term and long-term academic gains (Konstantopoulos & Chung, 2011). This school district is comprised of diverse communities ranging from rural farms to urban inner-city neighborhoods. In 2013, all of the schools with urban populations were labeled as needs improvement.

### **Evidence of the Problem from the Professional Literature**

The prior research on the effectiveness of AR teachers is contradictory and inconclusive. According to Greenberg, McKee, and Walsh (2013), the type of teacher preparation program did not make a difference. However, the study that is referenced by these authors was conducted in Washington State where 95% of their teachers are from traditional teacher preparation programs. The review of teacher preparation programs conducted by Greenberg et al. did not include alternate certification programs. TFA (2012) stated that TFA teachers demonstrated their ability to be just as effective as veteran traditional route teachers. Henry et al. (2013) stated that although TFA candidates were more effective in some areas, the TFA teachers underperformed in many areas compared to traditional route teachers. Henry et al. attributed the positive results obtained from the TFA teachers to the recruitment and intense training of their candidates. While the AR teachers from these programs were able to provide pedagogically sound instruction in some areas, they struggled to meet the needs all students.

The purpose of this study was to explore alternatively certified teachers' preparation and their effect on student learning outcomes. School leaders and teacher preparation programs can use the findings of this study to guide them when creating program requirements for teacher certification and when designing professional development plans to support AR teachers.

## Definitions

*AR certification:* A nontraditional way to obtain teaching certification. Most programs require candidates to have a college degree from any discipline prior to entry into the program (National Center on Education Information, 2011).

*Common Core State Standards Initiative:* Clear, concise, and coherent standards that will be taught in most states across the United States. They were created by a bipartisan state-led effort by the Governors Association and the Council of Chief State School Officers, including education groups such as ACT, College Board (SAT), and colleges (Common Core Standards Initiative, 2014).

*Education and Professional Standards Board (EPSB):* The agency authorized by the [Redacted] Regulatory Statues to develop and monitor standards for certifying teachers and approving teacher preparation programs (EPSB, 2014).

*Effectiveness:* Effectiveness is defined by how teacher's instructional practices influence student achievement results (Danielson, 2011).

*Elementary and Secondary Education Act (ESEA) Reauthorization:* A law that addresses equity in education and allows federally funded education programs to be implemented by the states. It was reauthorized in 2002 as No Child Left Behind. In March of 2010, President Obama's administration released a blue print for reauthorizing ESEA (U.S. Department of Education, 2010).

*Field experiences:* A multifaceted experience where teacher candidates apply what they learned in their coursework (Caprano et al., 2010).

*Highly qualified teacher:* The teacher has a full state certification or passed a teacher licensing exam and hold a license to teach; Certification or licensure requirements have not been waived on an emergency, temporary, or provisional basis (NCLB, 2001).

*Teacher Intern Program:* Teachers who are new to the teaching profession must complete 1 year as an intern prior to gaining full certification. The program is monitored by EPSB. It is implemented by the local school district and EPSB approved universities (EPSB, 2014).

*Lexile level:* A measure of a student's reading ability based on the complexity of the words in the text. It is universal and is used to determine student ability in reading (Lexile Framework for Reading, 2014).

*Observations:* Teacher candidates who spend time watching veteran teachers teach a specific content lesson. The principal usually selects the veteran teachers used for these observations. The purpose of the observation is for the candidate to learn about teaching practices from a mentor teacher (Caprano, Caprano, & Helfeldt, 2010).

*Pedagogy:* Pedagogy is the set of skills or techniques comprised of the background knowledge of student development that teachers use to deliver instruction to students. It is the study of teaching and learning (Konig, Blomeke, Paine, Schmidt, & Hsieh, 2011).

*Praxis exam:* The praxis is an exam that teacher candidates must pass in order to obtain a teaching certificate (Education Professional Standards Board, 2014).

*Proficiency levels:* The student assessment program in the State of [Redacted] has cut scores that rank students into different proficiency levels. The four levels are novice,

apprentice, proficient, and distinguished. Novice means that the student is significantly below grade level, apprentice means that the students are slightly below grade level, proficient means that the student is performing at grade level, and distinguished means that the students is performing at a higher level than his/her peers. Schools are rated based on the percent of students they have proficient or distinguished (Department of Education, 2014).

*Race to the Top (RttT)*: A grant from the federal government available to states that agree to address four core areas of school improvement: make improvements in student achievement, close the achievement gap, increase the graduation rate, and make efforts to prepare students for college and career readiness (U.S. Department of Education, 2009).

*Student Teaching*: A semester long field experience that requires teacher candidates to work with a mentor teacher for a period of time prior to gaining teacher certification. The student teacher teaches lessons and is evaluated by a professor and their mentor teacher. The length of time and requirements vary with programs (National Council on Teacher Quality, 2011).

*Traditional route certification*: Candidates from traditional routes to obtain teacher certification (e.g., attended a college or university and majored in education) (Feistritz, 2011).

### **Significance**

Teacher quality and student achievement are two issues that are at the forefront of the debate on education. President Obama (2014) stated, “Today, more than ever, a world



class education is prerequisite to success” (p. 1). According to Daggett (2011), student achievement is increasing in schools; however, the rate of increase is not enough to compete with the advances that have been made in the world. The average high school student graduate has a Lexile range of 940-1220L. However, the Lexile level of a newspaper is 1330L. A standard health insurance form is 1360L. In order for students to be able to read, understand, and participate in a literate world, they must receive quality reading instruction from highly qualified teachers. Due to the difficulty in attracting high quality teachers and increasing areas of teacher shortages, AR programs were created to fill the void. However, the question is whether or not these programs are putting highly effective teachers in the classroom. The American Recovery and Reinvestment Act of 2009 allocated \$4.35 billion for RttT funding. This legislation rewarded funding to states that agreed to institute initiatives to increase the effectiveness of teachers and principals in order to increase student achievement (Mihaly, McCaffrey, Sass, & Lockwood, 2013).

Most research on alternatively certified teachers was conducted prior to the creation and adoption of the Common Core State Standards (CCSS), the increased accountability measures per the Re-Authorization of the Elementary and Secondary Education Act in 2010, and the mandatory teacher (ESEA Waiver requirement) and principal evaluation systems. These changes in education are significant and require teachers to have a deeper knowledge of their content and advanced teaching skills. This study will add to the literature on the effect that alternatively certified teachers have on student achievement with the CCSS and the increased accountability.

This school district is in its fifth year of implementation of the CCSS. Under the new accountability system, the district has maintained a needs improvement status. The local Chamber of Commerce has noted that the economy of the county depends on the performance of the school district. This study will provide the school district with data to determine how well AR teachers are meeting student needs and increasing student achievement. It will provide information that could drive professional development opportunities for AR teachers entering the school district. With highly effective teachers, the district will be able to move out of needs improvement status.

Developers of the AR to certification programs can use the findings of this study when determining the type and depth of the curriculum, type and length of field experiences, and criteria their candidates would need to demonstrate prior to gaining certification. States will be able to use this information when approving programs that lead to teacher certification. When the certification programs improve and as states are more informed on which programs produce quality teachers, the result would be placing highly effective teachers in classrooms. This would lead to higher rates of student achievement at all level. Additionally, it will lead to higher rates of students meeting the rigorous college and career readiness standards upon exiting high school.

### **Guiding/Research Questions**

The profile of teachers is constantly changing. Since the 1980s, there has been a significant increase in AR teachers when the concept was first introduced (Feistritzer, 2011). While student achievement and teacher quality remain at the forefront of the conversation on education, it is important to understand the relationship between teacher

preparation programs, teacher experience, and student achievement. The purpose of the *The Nation At Risk Report* and the state's School Ranking Report is to show the percentage of students who are proficient in their knowledge; however, they do not explain why the students are or are not proficient. In this study, I explored the teacher preparation aspect of education. The following research questions guided this study.

### **Quantitative Questions**

Research Question 1 (RQ1). What is the relationship between AR teachers' amount of field experience and the effect on student learning outcomes as measured by NWEA MAP/Discovery Ed assessments in this school district?

$H_{01}$ : There is no significant relationship between AR teachers' amount of field experience and the effect on student learning outcomes as measured by NWEA MAP/Discovery Ed assessments in this school district.

$H_{a1}$ : There is a significant relationship between AR teachers' amount of field experience and the effect on student learning outcomes as measured by NWEA MAP/Discovery Ed assessments in this school district.

Research Question 2 (RQ2). What is the relationship between AR teachers' years of experience and the effect on student learning outcomes as measured by NWEA MAP/Discovery Ed assessments in this school district?

$H_{02}$ : There is no significant relationship between AR teachers' years of experience and the effect on student learning outcomes as measured by NWEA MAP/Discovery Ed assessments in this school district.

$H_{a2}$ : There is a significant relationship between AR teachers' years of experience and the effect on student learning outcomes as measured by NWEA MAP/Discovery Ed assessments in this school district.

### **Qualitative Questions**

Research Question 3 (RQ3). How do AR teachers say that they developed into effective teachers in this school district?

Research Question 4 (RQ4). How do AR teachers say that prior experience and/or training helped to prepare them to teach in the classrooms of this school district?

### **Theoretical Framework**

The premise of AR certification is to provide a quick and fast pathway to teacher certification. Often times, this pathway removes several of the requirements traditional route teachers have to meet to gain certification. Most traditional route programs require teachers to engage in some form of field experience. The AR programs in the local area do not require any prior experience teaching in the classroom before candidates are hired to teach (OEA, 2012). It was important to find theory and/or conceptual frameworks that explained the role of experience in learning to guide this study.

This study was guided by the transformative learning theory of Mezirow (1998) and the philosophy of Dewey (1916). Mezirow believed that people learn best from meaningful experiences that cause them to engage in critical thinking. This critical thinking and reflection allowed adult learners to reframe information in order to solve the problem. Learning occurs in phases; the cycle starts with an experience that caused the person to self-reflect. After reflecting on the experience, people will analyze and make

connections from this experience to prior experiences, which would again lead to further reflection (Mezirow, 1998). Mezirow recommended that programmers of adult learning consider critical reflection when designing learning experiences. During field experiences, teacher candidates are able to practice teaching and reflect on the outcome, which helps them to solve the problem for future teaching. With the local AR programs not requiring field experiences, teachers from these programs rarely have time to go through this process when acquiring the knowledge needed to become an effective teacher.

The second theory that was relevant to this study is philosophy of Dewey (1916) and his concept of experience. According to the concept of learning in the course of continuing educative experiences, understanding is deepened by past and present experiences. Experiential learning is defined by cognitive experiences that are a part of the learning process (Kolb, Boyatzis, & Mainemelis, 2001). Dewey believed that learning was merely communication and what people gained from how they reflected on what was being communicated to them. Students are more successful when they were allowed to interact socially in school and when their talents and interests were taken into account (Monk, 2013). Dewey conceptualized learning as gaining knowledge through experiences rather than just having an awareness of a subject. When teacher candidates are allowed to participate in field experiences, they use their prior knowledge, content knowledge, and their continuous teaching practice helps them gain a deeper understanding of teaching. It is possible to theorize that placing teacher candidates into classrooms without having

field experience does not allow them the time they need to practice their teaching skills and deepen their understanding of the craft of teaching.

Both theories are similar in that they recognize that learners may not learn the same from the same experience largely because of the role that their prior experiences have on their learning. Both theories include the need for self-reflection in the course of learning. Those AR programs that are designed to provide a quick path to education and do not include fieldwork may give teachers limited opportunity to learn how to teach through experience .

Preservice field experience helps teacher candidates to make the connection between theory and practice. Giles and Eyler (1994) conducted a study on the basis of Dewey's theory of experience with preservice teachers. The teachers were provided with different types of experiences along with their coursework. Giles and Eyler found that the teachers who participated in those experiences felt that their experiences helped them to understand the coursework and have experiences to assist them in problem solving once they became fully certified teachers. Schmidt (2010) also conducted a study of preservice teachers based on Dewey's concept of experience. Schmidt found that experience played a major role in the teachers' preparedness and recommended "incorporating more and earlier field experiences in teacher education programs" (p. 11). These theories support providing preservice teachers with experiences in addition to the predetermined coursework in the teacher preparation programs for teachers to have opportunity to learn how to teach in practice.

## **Review of the Literature**

Teacher quality determines student achievement. With teacher attrition increasing critical shortage areas, many states have relied on ARs to teacher certification programs to fill teaching vacancies. I sought to explore the preparation of AR teachers and their effect on student learning outcomes, in this school district.

The literature review section includes background knowledge of the topic and addresses the research questions. Several educational databases were used to research this topic to include Thoreau, Sage, Eric, and Google Scholar. Key words included *teacher certification, teacher learning, preservice teachers, AR certification, teacher quality, field experiences, student achievement, teacher effectiveness, No Child Left Behind, highly qualified, and student teaching*. Most of the articles are within the last 5 years; however, some earlier articles were included because of relevance to the current issue. Those articles show the foundational research conducted on this topic.

### **Teacher Effectiveness**

Teacher quality is the key to student academic success. According to Rand Education (2012) and Carlisle, Kelcey, Berebitsky, and Phelps (2011), an effective teacher is the most important strategy that school administrators can use to improve student achievement. Rand Education also stated that a teacher's effectiveness should be based on student achievement data. Strong, Ward, and Grant (2011) found that students taught by teachers in the bottom quartile were expected to score at a lower percentile than students taught by a teacher at the top quartile. The quality of instruction was the identified variable that made the difference in test scores. Teacher characteristics such as

classroom management, building relationships, and instructional delivery also affect student achievement outcomes (Strong et al., 2011). Students taught by ineffective teachers are more likely to yield low achievement results, while students taught by effective teachers are more like to yield positive achievement results.

### **Teacher Preparation**

Teacher preparation is important to improving the quality of the schools in the United States. The RttT Initiative (USDOE, 2009) requires states to review their teacher preparation programs and evaluate them based on the quality of teacher candidates that graduate from their programs. Ronfeldt and Campbell (2016) conducted a study that asked program graduates to rate the programs that they graduated from in various areas. This study is significant because it is the first large scale attempt to evaluate teacher preparation programs through the use of data from the graduates. It is difficult to compare and measure program effectiveness across teacher preparation programs because coursework and program requirements vary by program. Goldhaber and Cowan (2014) found that there is more “variation of effectiveness within programs that there is across them (p. 459).”

### **AR Certification Programs**

AR certification was intended to make it quicker and easier for talented professionals to enter the field of teaching. Programs such as TFA (2012) and the New York Teaching Fellows (NYTF, 2014) claimed to only select the best and the brightest to enter their programs. Teacher candidates enrolled in the TFA cohorts engage in rigorous summer training institutes. These institutes include coursework in instructional planning,



classroom management, teacher leadership, diversity, and literacy development. The candidates also observe veteran teachers and practice teaching collaboratively (Maier, 2012). These programs require extensive screening of their applicants in addition to auditions prior to entry into the programs (Greenburg, McKee, & Walsh, 2013). New York Teaching Fellows (NYTF) engage their candidates in Math Immersion programs to deepen their understanding and to prepare them to teach in mathematics classrooms. They also attend summer training that includes teaching during summer school with veteran teachers. It includes planning lessons and practice teaching with coaching support (NYTF, 2014). Even though the length of preparation is shorter than traditional teacher education, teacher candidates in NYTF and TFA receive coursework and hands-on field experiences prior to teaching in the classroom.

The National Council on Teacher Quality (NCTQ, 2011) found that the current AR programs have changed from that original frame of thought as many programs are not being as selective in choosing their candidates. Although some AR programs claim to be selective in the candidates that are approved for their programs, there is evidence that this is not a consistent practice across all AR programs.

Local teachers can gain certification through traditional routes or through eight alternate pathways defined by EPSB. Although there are eight alternate pathways to gain teacher certification, the university route (Option 6) is the most common. The local university, from which most of the candidates in this school district gain certification, requires candidates to have a bachelor's degree with a minimum GPA of 2.75. Candidates are also required to pass the Praxis exam, gain employment with a school

district, and enroll in the university's masters of education program. The coursework begins within 90 days of teaching. A mentor and university support person is assigned to each candidate. The mentor and university support are required to observe the candidate for 15 hours and provide suggestions for improvement. At the end of 3-year program, the candidates gain certification. In the OEA report, it was noted that little research has been done in [Redacted] to determine the effectiveness of these teachers. While these AR teachers receive teaching certification that allows them to teach in a classroom, they may not have the pedagogical training needed to deliver effective instruction.

Because current AR programs in this area are not adhering to the original concept of ARs to teacher certification, students are not receiving a high quality education. Boyd, Grossman, Lankford, Loeb, and Wyckoff (2011) found that there were many differences among programs and graduates of some of them were more effective teachers than others. On January 9, 2014, the state was ranked 39<sup>th</sup> in education with an "C-" in student achievement in the *Education Week's Quality Counts Report* (2014). The state was also rated a C for the state's approved pathways to AR certification due to the fact that they are not selective in who can enroll in programs and the minimum requirements before gaining teacher certification (NCTQ, 2011). On average, 5% of the state teachers receive their certification through AR programs (OEA, 2012). With these programs no longer following with the original concept of AR to certification, the programs may no longer be effective in producing quality teachers.

### **Highly Qualified Teachers**

The Higher Education Opportunity Act (2008) and the reauthorization of The Elementary and Secondary Education Act (2002) require teachers to have the proper credentials to meet the needs of all of their students. Some argued that AR teachers who teach as an intern in order to gain certification do not meet the highly qualified requirement. In fact, there have been lawsuits and complaints from parents and community leaders that alternative route teachers are not prepared to teach and do not meet the highly qualified status of NCLB. In a landmark case, *Renee v. Duncan* (2010), parents and community leaders sued the U.S. Department of Education, arguing that allowing teachers who had not met the requirements to be fully certified to teach in California was detrimental to the education of their children and that the AR programs were not aligned with the mandate of NCLB. The case was appealed multiple times and finally it was decided that highly qualified teachers must meet full certification requirements. After this case was decided, congress issued a statement that a teacher enrolled in an alternate certification program meets the highly qualified status. Federal law defines highly qualified teachers as teachers who have met full certification requirements and law cases have determined that allowing teachers without full certification to teach is detrimental; however, ARs to teacher certification programs continue to allow teachers to gain teaching positions in schools without full certification.

### **Content Knowledge Versus Pedagogy**

AR programs seek teacher candidates who already have a bachelor's degree and are seeking teacher certification. The AR programs offer little in the realm of pedagogy.

Pedagogy is essential to teaching and learning (Konig, Blomeke, Paine, Schmidt, & Hsieh, 2011). Youngs and Qian (2013) argued that teachers who completed courses in pedagogy and had intensive student teaching were more effective in teaching math. Konig et al. (2011) found that the teachers who completed courses in numbers and theory and courses in general pedagogy had a significant instructional role in instruction during student teaching and were more adept in mathematical teaching knowledge. However, Preston (2016) recommended coursework in educational psychology in lieu of additional pedagogy courses to increase teacher effectiveness in the middle grades. The number of mathematics content classes alone was not enough to increase mathematical teaching knowledge.

Teachers who take content courses in mathematics and specific mathematical pedagogy courses are generally more effective in the classroom. Schmidt, Cogan, and Houang (2013) studied learning opportunities of preservice mathematics teachers in lower secondary and elementary and found significant differences at the secondary level in the learning opportunities provided in comparison to the nations who are leading the United States in mathematics achievement. Schmidt et al. found that the A+ nations offer more content course in mathematics and more mathematical pedagogy courses. Teachers with mathematical content and mathematical pedagogy are more effective.

Research on the effects of AR math teachers and their influence on student achievement in math show positive and negative results. Students taught by teachers in the math immersion AR program have lower assessment scores in math than students taught by teachers who are from the traditional college route. Boyd et al. (2012) found

that math immersion teachers had higher qualifications (SAT, licensure scores, content courses) than their peers; yet, their students still scored lower. The Troops to Teachers (TTT) AR to certification program also produces significant numbers of nontraditional teachers. Student math scores were significantly higher for students taught by TTT candidates (Owings, Kaplan, Khrabrova, & Chappell, 2015). The ARs to certification programs vary in structure; however, some programs are producing effective teachers in some areas.

AR teachers receive little instruction on teaching reading. Salinger et al. (2010) found that preservice teachers are not adequately prepared and require more training in reading. Salinger et al. included information about how much time several programs spent teaching the components of reading and found that the alternative route programs spent much less time teaching their teachers how to teach reading. AR teachers need more content courses on teaching reading that includes best practices in teaching the subject matter.

Teacher preparation should include content knowledge, pedagogy, and opportunities to practice prior to teaching. There is significant difference in the percent of traditional certification teachers who have teaching practice and who enroll in a teaching methods course versus alternate certification teacher, which has led to feelings of being less prepared to teach amongst alternate certification teachers (Redding & Smith, 2016). On average, the local [Redacted] programs do not require courses in pedagogy or require teacher candidates to demonstrate knowledge of content prior to gaining employment as a classroom teacher (OEA, 2012). The lack of instruction in pedagogy, necessary

coursework, and field experience adds additional challenges for AR teachers when planning for effective instructional delivery.

### **Field Experiences**

Teacher candidates need experiences that will allow them to bridge theory and practice prior to teaching in a classroom. Feistritzer (2011) surveyed alternative route teachers and found that they perceived that they were less confident in their knowledge of pedagogy. Casey, Dunlap, Brister, Davidson, and Starrett (2013) found that a large portion of the teachers in their study struggled with curriculum, bridging the gap between theory and practice, and time management. Field experience would assist teachers in gaining knowledge that they lack. Several of these skills are learned through collaboration. Preservice teachers should engage in collaboration before and during teaching (Weiss, Pellegrino, & Brigham, 2016). According to Boyd et al. (2011), teachers who spent more time working with children prior to becoming a teacher tended to be more effective. In 2012, Lowery, Roberts, and Roberts found that the more time teachers could spend working with students in a classroom prior to becoming a teacher the better prepared they were to deliver instruction. In a survey conducted by Evans and Leonard (2013), teachers noted that it was not in their best interest or the students' best interest to place them into classrooms without field experience. Teacher preparation programs, including AR programs, should require some form of field experience prior to teaching in the classroom.

AR programs that include course work and some form of field experience produce more effective teacher candidates. NYTF is credited as one of the most effective AR

programs (O'Connor, Malow, & Bisland, 2011). O'Connor et al. (2011) conducted a study of first-year teachers who received their certification through the Fellows program. Prior to teaching, the candidates had to pass the New York competency test, complete coursework, and student-teach during summer school. The conclusion was that the hands-on practice prepared teachers for teaching in the classroom. TFA candidates are required to complete educational coursework, field experiences, and job-embedded professional development prior to completing their program (TFA, 2015). These requirements are credited for the effectiveness of their teachers (Maier, 2012). Kaplan (2012) wrote that teachers from TFA AR program sought candidates from distinguished universities and their teachers have shown positive results in student achievement. Teachers in this school district have received their certification from primarily two AR programs offered in the local area. Neither program requires any form of student teaching prior to gaining certification to teach in a classroom.

The type and amount of field experiences offered to AR teacher candidate makes a difference in teachers' ability to influence student achievement. Teachers need to be taught how to collaborate with other teachers through authentic practice during preservice training (Weiss, Pellegrino, & Brigham, 2016). Time observing mentor teachers, conducting lessons, and working with children would help teacher candidates increase their knowledge and understanding of pedagogy, curriculum, and classroom management. Most studies on field experience were conducted with traditional route teachers. There is a gap in research in regards to AR teachers and field experiences (Cochran-Smith & Villegas, 2015).

Teachers should have content knowledge and knowledge on how to differentiate lessons to meet the needs of all students in their classroom. McCray (2012) found that teachers needed applied preparation in content and pedagogy, nonacademic characteristics, and supportive context in order to be successful in meeting the needs of all students. Preservice teachers need practice in multiple settings (urban and rural) and working with specialized groups of students prior to teaching in the classroom (Berman, Schultz, & Weber, 2012; Eckert & Petrone, 2013). The Urban Teacher Residency allows for teacher candidates to co-teach alongside a veteran teacher for 1 year before becoming a classroom teacher. This has increased their effectiveness and helped with the retention of their teachers (Marshall & Scott, 2015). Upon gaining teacher certification, teachers are expected to meet the diverse needs of all students. However, the lack of coursework and practice in differentiation limits teachers in meeting the needs of all of their students.

### **Effects of Alternative Certification on Students**

Casey et al. (2013) argued that AR teachers are not prepared to meet the needs of their students. The gaps in their knowledge of curriculum, resources, and differentiated instruction limit their ability to meet the individual needs of their students (Casey et al., 2013). Special education teachers in high poverty schools are more likely to have completed a nontraditional or alternative program, which should cause concern because underprepared teachers are not able to address the needs of their students (Mason-Williams, 2015). Konstantopoulos and Sun (2012) argued that the effects of low-performing teachers in the early grades influenced student performance through upper elementary. Low-performing students were affected the most. Most alternative route



teachers find jobs in large city, urban schools mainly populated by struggling minority students (Helig, Cole, & Springel, 2011). Inexperienced and underprepared teachers are faced with challenges when attempting to meet the needs of their struggling students.

Although there is evidence that teachers, who are certified prior to completing the requirements of full certification, are ineffective, there are bodies of research that support alternative route programs and the teachers' ability to increase student achievement. Ludlow (2011) cited several studies with positive correlations for AR programs especially, TFA. Lincove, Osborne, Mills, and Bellows (2015) demonstrated that independent nonprofit programs such as TFA produced effective teachers; however, they noted that these teachers do not exist in large volumes like the teachers from other teacher preparation programs.

### **Implications**

An implication of this study is the improvement of the preservice teachers' experiences provided by AR preparation programs. Program designers will have data to assist them in making decisions about and planning preservice activities that will increase the effectiveness of their teacher candidates. The second implication would be improved professional development opportunities provided by school districts for which the AR teachers are employed. Districts will have data that they can use to create support opportunities for their AR teachers.

### **Summary**

Ensuring that effective teachers are teaching in classrooms is the responsibility of school leadership. The purpose of this study was to explore alternatively certified

teachers' preparation and the effect on student learning outcomes. There have been many studies regarding teacher preparation; however, because there are so many variables in measuring teacher effectiveness, it has been difficult for the studies to build upon each other. It is difficult to lump all alternate teachers into the same category, and researchers have had difficulty accounting for individual school cultures. In this study, I used a mixed-method design to gain an in-depth understanding of this issue. Section 2 provides detailed information about the methods that were used to conduct this study.

## Section 2: The Methodology

### **Introduction**

In this explanatory mixed-methods research study, I used student assessment data, a survey, and individual interviews to measure alternate certificated teachers' effect on student learning outcomes. The data were used to identify the teachers who had a positive effect on student learning outcomes. The data were used to determine why the teachers were able to have a positive effect on student learning outcomes. Variables such as years of experience, types of field experiences, and length of field experiences were considered to determine if they were correlated to the student learning outcomes for each participant. Finally, the data were used to triangulate findings on both quantitative and qualitative sets of data.

Section 2 is a description of the research design, setting and sample, instrumentation and materials, data collection and analysis, assumptions, limitations, scope and delimitations, role of the researcher, and measures taken for the protection of participants' rights. The explanatory mixed methods research methodology was chosen to answer the research questions of this study.

### **Rationale for Mixed-Methods Design**

An explanatory mixed methods design was the best method for this study because I was able to use the qualitative data to offer an explanation of the quantitative data. According to Lodico, Spaulding, and Voegtle (2010),

Educational Researchers are increasingly recognizing the value of collecting both quantitative and qualitative data. One of the major advantages is that it combines

the strengths of both qualitative and quantitative research, providing an in-depth look at context, processes, and interactions and precise measurement of attitudes and outcomes. (p. 282)

While reviewing student achievement data, I was able to determine trends within the type and amount of field experience AR teachers had prior to teaching. I was also able to determine trends within the years of experience of AR teachers and their effect on student learning. However, the data are quantitative and did not provide an explanation as to how or why the students achieved the proficiency level that they earned. Knowing that Student A is proficient on MAP and that 65% of the students in Class 101 are proficient and distinguished does not explain why the data is what it is. Data alone does not explain whether or not students were already proficient and distinguished before being taught by the teacher. It does not explain the amount of time the teacher spends preparing and planning for instructional delivery and it does not indicate the amount of training the teacher has had in the content area. Qualitative data are needed to explain the findings from quantitative data. Boyd et al. (2012) and Salinger et al. (2010) studied AR teachers and listed limitations such as being not able to account for school climate and teacher personalities. A mixed-methods approach was used for this study. The qualitative data were used to explain the quantitative data.

In order to answer the research questions posed in this study, an explanatory mixed methods research methodology was used. Through a records review of student test data, I was able to determine if there is a correlation to field experience and years of experience. However, that data alone did not answer the question of why the class scored

in the manner in which it did. A mixed method study allowed me to identify specific reasons why students performed in the manner in which they performed. Teacher effectiveness is associated with student achievement scores. MAP/Discovery Education Assessment scores for teachers participating in this study were reviewed as the quantitative data. These data were used to show student proficiency levels and student growth compared to their peers. These data were also used to answer the research questions related to AR teachers' effect on student learning outcomes. The qualitative data were collected through individual interviews. The qualitative data allowed me to explore factors such as prior training, prior personal experiences, course work, school culture, instructional practices, and teacher development. Both quantitative and qualitative data were needed to fully understand the AR teachers' effect on student learning.

### **Study Setting**

Teachers within this school district were selected to participate in the study. This district is one of the largest districts in the state. It is located near a large military post and consists of neighbors ranging from rural farms, trailer parks, urban apartments, to suburban homes. The district serves approximately 9,300 students and employs approximately 600 teachers. Nearly 50 of the 600 teachers received their certification through an AR to teacher certification program. The superintendent gave consent for the research to be conducted.

This district was selected to participate in this study due to five of the 15 schools being placed into school improvement status, which has caused the district to be labeled a

needs improvement school district. The schools that are labeled as needs improvement are most populated by teachers who have fewer than 3 years of teaching and AR certification. The superintendent or designee notified candidates that they would be contacted for possible participation in a research study. An e-mail was sent to candidates explaining the study and providing informed consent form. There were 36 teachers who opted to participate in the quantitative part of the study. Six teachers agreed to participate in the qualitative part of the study.

### **Study Sample**

The quantitative part of the study was used to answer the research question regarding type and amount of field experience and years of experience in relation to student learning outcomes. Convenience sampling was used because the participants were available and willing to participate (Lodico et al., 2010). Fifty of the AR teachers representing 14 of the 15 campuses were invited to participate in the quantitative part of the study. Thirty-six of the 50 teachers participated in the 10-question survey. The participants taught reading, math, or courses directly related to reading or math. The teachers' MAP data (Grades 3-8) and/or Discovery Education data (Grades 9-12) were gathered through a records review. There were only data available for 34 of the 36 participants.

For the qualitative part of the study, purposeful sampling was used. Participants were selected through purposeful sampling to better understand the issue (Creswell, 2012). Six teachers, whose data showed that their classes met the growth requirement and the delivery target, were interviewed individually. Individual interviews were chosen to

allow time to complete in-depth interviews and because some of the participants may not have shared personal information in a group setting.

### **Research Tools**

I created a 10-question survey and collected quantitative data from alternate certification teachers in the district. Data were also collected through a review of archival student assessment data (MAP Grades K-8 and Discovery Education Grades 9-12). The survey asked questions in regards to types of field experience, length of field experience, and coursework in content area. The MAP and Discovery Education are universal screeners that assess student learning over the course of a school year. MAP is norm-referenced and is administered across the district three times within the school year to students in Grades K-8. Discovery Education is criterion-referenced and is administered in all high schools in the district three times per year.

Using the quantitative data, six teachers, who were deemed effective, were selected to participate in the qualitative interviews. The purpose of the qualitative interviews was to gain an understanding of how the teachers developed over time and what factors affected their ability to be effective. The qualitative part of the study sought to answer research Questions 3 and 4. The interview protocol was arranged to gather information in five categories: content knowledge, prior experiences, field experiences, classroom management, and professional development. From the interviews, 11 themes developed and were condensed into four themes: dispositions, preservice experiences, professional development, and school leadership.

### **Data Collection**

Data were collected in two phases (sequential) throughout the study. Quantitative data collection included records review of MAP (Grades 3-8) and/or Discovery Education (Grades 9-12) assessment data and a survey. MAP and/or Discovery Education data, for each teacher participant in the areas of reading and math, was collected through a records review. The district assessment coordinator provided the data for each participant. The data for 2015-2016 was entered into SPSS for analysis. Teachers completed a survey about their field experiences and years of experience. The qualitative data were collected afterwards to gain an understanding of the quantitative data.

Qualitative data collection included one individual interview per participant. I created the interview protocols for the interviews. The interviews focused on how teachers described their development overtime, prior training, prior personal experiences, and other factors that may have influenced their teaching performance. In order to establish a relationship with participants, I engaged in a general non-project study related conversation at the beginning of the interviews. I reminded teachers that their names would not appear on any of the documentation and the information shared would be confidential. Consent forms were e-mailed to the interviewees with the invitation to participate in the interviews and signed at the beginning of each interview. The interviews were audio-recorded to be transcribed later. Numbers were used in place of teacher names.



### **Data Analysis**

The data for this explanatory mixed methods design was analyzed sequentially (Lodico et al., 2006). Student assessment data and teacher survey results served as quantitative data and were entered into SPSS. The Phi Coefficient Test was used to determine if there is a relationship between teacher effectiveness and field experience. It was also used to determine if there is a relationship between teacher effectiveness and years of experience. The analysis of the quantitative data assisted with the identification of participants for the qualitative interviews. The qualitative data were gathered through the individual interviews and analyzed using computer analysis software, NVivo. NVivo allowed me to organize, code, annotate, and identify trends in the data. Notes were also taken during the interviews. The field notes from the interviews were coded to look for patterns. The data gathered were triangulated through member checking of parts of the transcripts and correlating results from both the qualitative and quantitative data to determine if the data was consistent or inconsistent.

### **Limitations**

The fact that the teachers received their certification from different AR programs, with varying field experience requirements, limited the analysis of the effectiveness of the programs. Varying teacher personalities made it difficult to consider all characteristics that may influence student achievement. The schools differ significantly in how students are rostered into classes, how data are collected, and on which teachers' data are collected for, which limited the availability of data for participants in this study.

The qualitative data collection was designed to account for some of these variances; however, these factors still limit the generalization of the results.

### **Role of the Researcher**

I am employed by the district as an elementary principal. I received my initial teacher certification through a traditional route program. I received my administrative certification by completing two masters through University of Phoenix online. I have served as a substitute teacher, classroom teacher, lead teacher, assistant principal, and principal. The district has employed me for 3 years. I did not supervise the participants who were used for this study. However, I have conducted professional development in the district, which may have included some of the teachers included in this study. This factor added some familiarity, but did not interfere in the purpose of the study. I was able to gain approval from the superintendent to conduct the study, collect the data (archival assessment data and interviews), analyze the data, and setting a time to report the data.

### **Measures Taken for Protection of Participants' Rights**

A letter was submitted to the district requesting permission to conduct the study and engage in data collection. The letter described the purpose of the study, the data collection methods, and reporting strategies. Participants received informed consent and had the option not to participate in the study. I did not include any teachers that evaluated by her or that she has administrative authority over. Confidentiality was provided by recording participant data using numbers in place of names to protect privacy. Field notes and all other correspondence included numbers and not the real names for privacy reasons. Member checking was used with notes to ensure that what the participants

intended to communicate is what was communicated. The data have been stored in a password-protected computer. Interviews were conducted in private rooms, and administrators do not have access to information shared with the observer.

### **Findings**

In this study, I explored the preparation of alternate certification teachers and their effect on student learning outcomes as measured by NWEA MAP/Discovery Ed. She used an explanatory mixed-methods designed with data collected in a sequential manner.

The research questions were:

RQ1. What is the relationship between AR teachers' amount of field experience and the effect on student learning outcomes as measured by NWEA MAP/Discovery Ed assessments in this school district?

$H_{01}$ : There is no significant relationship between AR teachers' amount of field experience and the effect on student learning outcomes as measured by NWEA MAP/Discovery Ed assessments in this school district.

$H_{a1}$ : There is a significant relationship between AR teachers' amount of field experience and the effect on student learning outcomes as measured by NWEA MAP/Discovery Ed assessments in this school district.

RQ2. What is the relationship between AR teachers' years of experience and the effect on student learning outcome as measured by NWEA MAP/Discovery Ed assessments in this school district?

$H_{02}$ : There is no significant relationship between AR teachers' years of experience and the effect on student learning outcomes as measured by NWEA MAP/Discovery Ed assessments in this school district.

$H_{a2}$ : There is a significant relationship between AR teachers' years of experience and the effect on student learning outcomes as measured by NWEA MAP/Discovery Ed assessments in this school district.

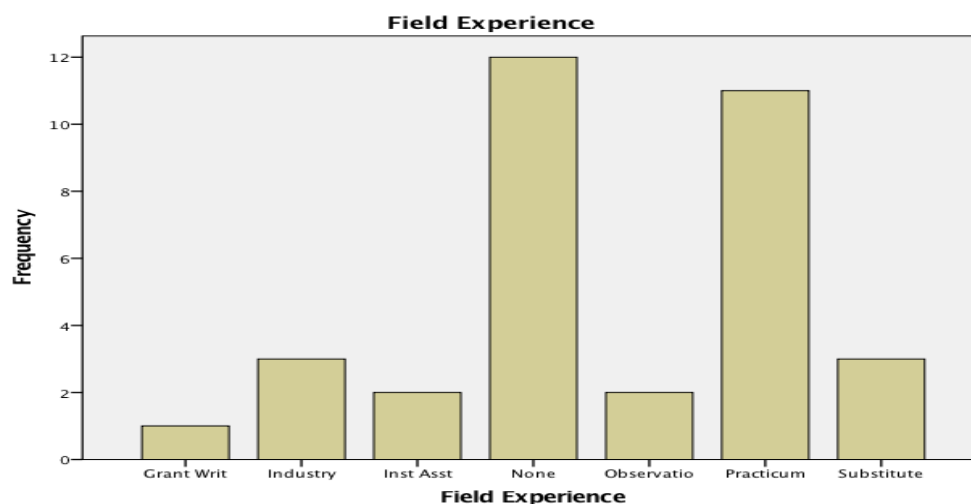
RQ3. How do AR teachers say that they developed into effective teachers in this school district?

RQ4. How do AR teachers say that prior experience and/or training helped to prepare them to teach in the classrooms of this school district?

To obtain the data for RQ1 and RQ2, I used data gathered from the participant surveys and a review of student assessment data. To obtain the data for RQ 3 and RQ4, I used individual interviews.

### **Research Question 1**

Field experience did influence the effectiveness of the teachers in this school district. Of the AR teachers who participated in this study, 58% had some form of field experience prior to gaining teaching certification. The length and type of field experience varies amongst the candidates. Figure 1 reflects the different types of field experiences that the participants in this study engaged in prior to becoming teachers.



*Figure 1.* Types of field experience AR teachers experienced prior to becoming teachers.

After determining which teachers met criteria for being deemed effective and which teachers participated in preservice field experiences, the Phi Coefficient Test was used. The test resulted in a correlation of .350,  $p = .042$ . With  $p < .05$ , there is a significant correlation (see Table 1). During the interviews, the participants noted that their field experiences helped to prepare them for teaching in the classroom. One participant stated, “As an instructional aide, I learned how to implement best practices, maintain positive/controlled classroom, and monitor student progress.” It should also be noted that amongst the teachers deemed ineffective, there were several who participated in field experiences prior to teaching. Therefore, it may be beneficial for future research to evaluate the quality of field experiences for AR teachers.

Table 1

*Summary of Pearson Correlation Test-Field Field Experience and Effectiveness*

		Field Experience	Effective
Field Experience	Pearson Correlation	1	.350
	Sig. (2-tailed)		.042
	N	34	34

Correlation is significant at the 0.05 level (2-tailed)

**Research Question 2**

Years of experience did not influence the effectiveness of the teachers in this school district. The participants' years of experience ranged from 1 year to 25 years. The Pearson correlation test was used and demonstrated that there was not a significant correlation between the years of experience and the percent of students who were proficient and met growth projections. The test resulted in a correlation of  $-.045$ ,  $p=.799$ . With  $p>.05$ , there is not a significant correlation (see Table 2). However, during the course of the interviews, participants who had multiple years in the teaching noted that they became more confident each year and believed that they were better teachers now compared to their first years of teaching. Participant 2 recalled how she relied on what on math teachers did in their classes to plan her lessons. She said, "Now, I look more as to how would teach it versus trying to do what other people do." The qualitative data is inconsistent with the findings of the quantitative data analysis. Table 2 reflects the correlation between field experience and effectiveness of the AR teachers in this study.

Table 2

*Summary of Pearson Correlation Test-years of Experience and Effective*

		Field Experience	Effective
Field Experience	Pearson Correlation	1	-.045
	Sig. (2-tailed)		.799
	N	34	34

Correlation is significant at the 0.05 level (2-tailed)

Using the quantitative data, six of the nine teachers who met the projected proficiency and growth were selected to participate in the qualitative interviews. The purpose of the qualitative interviews was to gain an understanding of how the teachers developed over time and what factors affected their ability to be effective. The qualitative part of the study sought to answer RQ 3 and RQ4. The interview protocol was arranged to gather information in five categories: content knowledge, prior experiences, field experiences, classroom management, and professional development. From the interviews, 11 themes developed and were condensed into seven themes: classroom management, content knowledge, prior experiences, field experiences, school culture, leadership, and professional development.

**Research Questions 3 and 4**

Strong classroom management was one of the categories that was relevant in developing these six teachers and making them effective. During the interview, all of the participants rated themselves between a 3 or a 4 in managing student behavior in the classroom. When asked how they learned to effectively manage student behavior, the participants stated that they came to the profession knowing how to build relationships with students. It is those relationships that make it easy to get students to want to work

for them and to meet their expectations. Several of the participants mentioned that classroom management was rated high on their evaluations from school leadership.

Although most participants rated themselves high in classroom management, two noted that this year has been more difficult than their prior years due to the major transitions that resulted from redistricting.

Alternate certification teachers in in this district enter the field with limited content knowledge. One teacher had a business degree, one was a biology major, one was early childhood. Most of the candidates began teaching prior to taking courses in their field. When asked about their content knowledge prior to teaching, participants stated that during their alternate certification training, they had to select a content area to focus on. Most chose a content area that they considered themselves as being good. One participant was good at math in high school; she chose math as her content path. Another participant had a passion to work with special education students; she chose to work towards a special education degree. Most of the participants gained content knowledge during their alternate certification training; however, it occurred simultaneously as they taught.

Prior personal experiences influenced the development of these teachers. There were a variety of prior experiences that helped to develop the participants into effective teachers. Several of the teachers noted having strong family backgrounds with hardworking parents. Some had large families and had to assist their parents in raising their siblings. Some worked in demanding jobs prior to becoming teachers. These experiences have taught them to have strong work ethic, to be resilient, to be nurturing, to



be problem-solvers, and to be resourceful. Each of these qualities are attributed to their success in teaching.

Alternate certification teachers in this district enter the field varying field experiences. Two of the six teachers did not have any prior field experience before teaching in the classroom. Two of the six teachers engaged in practicums and/or observations lasting approximately 1 to 2 weeks prior to teaching in a classroom. The other two gained field experience from being substitutes for 2 years prior to teaching. This experience allowed them to gain an understanding of how the institution of school works.

School culture also influences the ability for teachers to be effective. When the participants were asked what they liked the most about teaching and the least about teaching, their answers to both questions linked to the culture of their schools. All participants said what they liked most about teaching was helping children reach their goals or be successful. However, the answers were a little different for what they disliked the most. For example, Participant 1 stated that with the redistricting, the culture of the school had changed and the students were more unmotivated to learn than the students they previously serviced. This factor has her considering changing from middle school to elementary. Participant 2 stated that she disliked the negativity displayed by staff members regarding students, administration, and each other. Participant 3 stated that some teachers help one another while others are not willing to share and collaborate for the betterment of the school.

Effective leadership breeds effective teachers. Participants in this study considered their leadership as a major part of their growth over time. Three of the participants work in three different buildings; but, they have each worked for the same principal. They each stated that this principal's leadership pushed them beyond their limits and forced them to step out of their comfort zones. His leadership forced them to become learners thus delivering better quality instruction. This leader provided moral support and cheered them on as they worked to increase student achievement.

Three of the participants mentioned curriculum coaches as significant resources that they could go to for support. Finally, four of the participants stated that if they had leaders like they have now, they probably would have been more effective during their earlier years of teaching. Leadership can influence teacher development.

Professional development influences teachers' effectiveness over time. The participants in this study identified multiple professional development opportunities that assisted in their growth over time. Collaboration with other teachers in their content area was a common theme throughout the interviews. Three of the candidates had mentors who collaborated with them on lesson planning, standards, and pedagogy. The others had friendly teachers within their buildings that they could enlist help from in planning lessons. Some attended trainings within their content areas. All of the participants have earned a degree in education (bachelor's and/or masters) since becoming a teacher.

### **Conclusion**

In order to answer the guiding questions for this study and to gain a deeper insight of the issue, a mixed methods research design was used to collect data for this study. The

results of this mixed methods study concluded that most (only nine out of 34 met projected proficiency and growth) AR teachers in this school district did not meet the proficiency and growth targets determined by the state's accountability model. Field experience did influence the effectiveness of the alternate certification teachers in this district. Years of experience did not influence the effectiveness of the alternate certification teachers in the school district. Alternate certification teachers, who were deemed effective in this study, entered the profession with several dispositions, which influenced their ability to be effective. Quality leadership and professional development shaped the development of these teachers into effective teachers.

Participants were protected throughout the study. I did not include teachers who are evaluated by her, numbers were used in place of their real names, teachers had the option to opt out of the study, and interviews were held in a private room without school administrators. Participants selected the location of the interview to ensure that they were comfortable. Any identifying information was blacked out on documents. Administrators do not have access nor have they been notified of any information gathered during this study. The validity of data gathered was checked through triangulation and member checking. Descriptive statistics was used to display data for analysis purposes. Section 3 provides information about the project study created in response to the data analysis, literature review, limitations, and implications. Section 4 includes implications for social change and a conclusion of the study.

### Section 3: The Project

#### **Introduction**

The project created for this study is a professional development program aimed at AR teachers gaining employment within this district through one of the eight alternate certification options. One of the study's findings was a positive relationship between AR teachers with prior field experience and student achievement. Additionally, quantitative demonstrated that while some of the AR teachers had a positive effect on student achievement, most of the teachers participating in this study did not meet the criteria for proficiency and growth.

During the qualitative interviews, the teachers described their development over time and noted that they had to learn how to read curriculum, plan units, create and use assessments, and learn classroom management strategies from their peers. At times, it was their mentors, but mostly just from observing others. Several mentioned that they merely mimicked their colleagues until they figured it out. The candidates stated that training in these areas were limited or not offered. They believed that this lack of knowledge made their first few years of teaching difficult. They stated that if they had specific training addressing these topics at the beginning of their career, they would have been more effective sooner. After exporting their interviews into *NVivo*, themes were identified. The topics addressed in this program were themes that emerged through the analysis of their interviews. The professional development program addresses the findings and is purposely designed using current literature on professional development in order to increase the teachers' knowledge and effectiveness.

### **Description and Goals**

The findings of this study identified strengths and weaknesses of AR teachers entering classrooms in this district. Based on the quantitative and qualitative data, I will propose a professional development program that will address those strengths and weaknesses. The goal of this professional development program is to increase the AR teachers' knowledge of curriculum mapping using learning maps, increase their knowledge of planning and using authentic assessments to monitor student learning, and to increase AR teachers' knowledge of managing a highly engaging classroom. Additionally, this program will ensure that the district has data to determine the effectiveness of the AR teachers.

The professional development program consists of 3 full days of training prior to the start of the school year, a summer school practicum, coaching by the Instruction and Behavior Coach (IBC), mentoring by an effective teacher, two after-school follow-up trainings, and monitoring of the teacher's performance through data collection. Several of the components of this program are pre-existing in the district. The training and the summer school practicum are in addition to the district's induction of new teachers. This program will address the professional development needs of the AR teachers and it will address the lack of information on the effectiveness of these teachers within the district.

At the onset of hiring, each AR teacher will be assigned a mentor teacher and to an IBC. The mentor teacher will be an effective educator with a minimum of 3 years of teaching experience. The mentor teacher will teach the same or related content area and be housed in the same school as the AR teacher. The building principal will assign

mentors to the AR teachers and complete the request for the IBC. The amount of time and the type of mentoring activities will be documented for data analysis purposes.

The district currently offers three days of new teacher training during the summer to all new teachers to the district. The AR teachers' training will occur during these days; however, because their training is tailored to their needs, it will be conducted at a separate location, with different topics, and conducted by instructional staff. separate. Each day of training will encompass topics that address the findings for this study. Day 1 will focus on curriculum mapping through the use of learning maps. The participants will engage in instruction on research-based curriculum mapping strategies lead by a presenter. They will have the opportunities to engage in discussions with experienced teachers, watch demonstration videos, and work in small groups to begin curriculum maps for their first unit of the school year. At the end of the day, the teachers will have the opportunity to reflect on their learning and complete a session evaluation survey. The survey will be used to assist the trainers in future planning.

Day 2 will review the learning on curriculum mapping and provide instruction on creating and using authentic assessment to monitor student learning. Participants will have opportunities to review samples of assessments, engage in dialogue about the assessments, watch demonstration videos, and practice creating assessments in relation to the curriculum maps that were created on Day 1 of training. At the end of the day, the participants will have samples to reference, resources to help guide them during planning, and an outline of assessments for their first unit of instruction. They will engage in reflection of their learning and complete a session evaluation.

Day 3 will focus on managing a highly engaged classroom tying in the strategies from the two previous days of training. They will learn how to plan for student engagement and strategies that can help to eliminate some of the pitfalls of classroom management. They will have the opportunity to engage in discussion with experienced teachers, watch videos of highly engaged classrooms, and engage in reflection about their learning. At the end of the session, they will complete a session evaluation. The content and structure of the two follow up meetings will be determined by the data collected in the session evaluations completed by the participants.

In addition to the training days, the participants will participate in a summer school practicum. This feature was added to the professional development program because of the positive correlation between field experience and student achievement. During the summer school practicum, the candidates will observe effective teachers and engage in reflection about what they observed. With the assistance of their mentors and the summer school teachers, the teachers will have the opportunity to plan and deliver instruction to a summer school class. This gives the teacher candidates the opportunity to have some field experience prior to teaching in the classroom.

Finally, monitoring of the AR teachers' influence on student achievement addresses the problem of a lack of information regarding their effectiveness. The district already requires monitoring of instruction through classroom observations by building leadership. Building leadership will observe the AR teachers' classrooms to gather data about instructional practices. The district also administers universal screeners to all schools within the district. Building leadership would gather and analyze the AR

teachers' universal screening data to determine if they are positively influencing student achievement. Data analysis will be reported out to district leadership each semester.

Adjustments to supports will be made based on the data.

### **Rationale**

This project was chosen to address this study because qualitative data (survey and interviews) showed that there is a deficit in the training that is provided for AR teachers prior to gaining a job as a teacher. This project addresses several of the deficits identified during the interviews with AR teachers. The AR teachers identified training needs that would have made their transition into the classroom better. This project genre would have the most influence on the AR teachers and the students that they teach. This project will provide AR teachers with a good start at being effective teachers, thus improving student achievement and improving schools and the district. It will also allow the district administration to maintain current data on the effectiveness of their AR teachers.

### **Review of the Literature**

The literature review was conducted to gain an understanding of the current research surrounding the findings and themes from data analysis. The research was conducted using primarily Sage, ERIC, and Google Scholar databases. Key words for the search included *mentoring, novice teachers, teacher development, teacher preparation, professional development, classroom management, theories of teaching, adult learning, feedback, evaluating teachers, and behavior management.*



## **Theoretical Framework**

Teachers of teachers should embrace the personal and professional experiences that they bring to the profession and use them to plan for their learning. “Teachers and school leaders, as adult learners in general, bring their personal and professional experiences, their knowledge and their own way of seeing themselves to bear in the learning process to a high degree,” (Huber, 2011, p. 839). This project is guided by Knowles’s (1970) theory of andragogy, which is defined as the art and science of adult learning. This theory indicates that adults learn best from connecting their prior experiences to new learning. Learning should be designed in a manner that allows for the adult to be an active participant of the teaching and learning process. Activities should include discussions, practice, reflection, and working collaboratively with peers (Knowles, Holton III, & Swanson, 2005). To ensure teachers are able to transition the information learned from this professional development plan into their classrooms, this project will implement several of the structures of the theory of andragogy.

## **Professional Development**

Professional development is instrumental in teacher development. High quality professional development should increase teachers’ performance, thus increasing the retention rate of highly qualified teachers. Traditionally, teachers will attend a workshop or a session at a conference to learn about a strategy; however, the one-shot workshops and trainings are not enough to influence teacher development that transfers into classroom practice (Schleicher, 2011). Instead, professional development should be multifaceted including workshops, mentoring, coaching, observations, collaboration, and

evaluation. The trainings and activities should be aligned to the standards in which teachers are going to be held accountable (Darling-Hammond, 2012). It should also be focused on what effective teaching looks like (Burkman, 2012). Professional development should be linked to weaknesses that the teachers have identified for themselves and goals that they set for their growth. If professional development is done well, teachers will improve their practice (Sun, Penuel, Frank, Gallagher, & Youngs, 2013).

### **Instructional Planning**

As part of the professional development plan, teachers should be taught how to plan for quality instruction. Effective lesson planning is key to ensuring that students learn (Danielson, 2011). As identified in this study, some preparation programs teach preservice teachers how to plan for instruction, while others do not. Regardless of whether they were trained on lesson plan development or not, Ruys, Van Keer, and Aelterman (2012) found that preservice teachers continue to require additional training in order to implement the latest research on instructional planning. The CCSS are rigorous standards that hinge on the teachers' abilities to understand them, teach them, and assess them to improve student achievement (DeMonte, 2013). In addition to training on the standards, preservice teachers should engage in collaborative lesson planning discussions with their colleagues to deepen their knowledge and understanding of the standards and the process for delivering instruction (Bauml, 2014). These collaborative discussions have shown to have a positive effect on teacher development. According to Hunter and Back (2011), professional development involving lesson planning should also include the

study of lessons that were developed as a collegial group, taught and observed by that group, then discussed afterwards by that group. Professional development programs should include training in instructional planning that includes training on the standards, instructional delivery, lesson study, and reflection.

### **Mentorship**

Veteran teachers should be assigned to new teachers as mentors. These mentors formally and informally serve in many capacities for their mentees, which affects their growth and influences their longevity in the profession (Ghosh, 2012). However, Mullen (2012) recommended a formal mentoring program to maximize the benefits received from quality mentoring. Mentors should engage their mentees in discussions about practice, model for them, provide advice, and advocate for them. Ideally, the relationship is reciprocal, allowing both parties to grow in the profession. High quality mentoring programs help both the mentor and mentee improve their professional practice, learn about curriculum, instruction, and assessment practices, and improve student achievement (Mathur, Gehrke, & Kim, 2012).

### **Classroom Management**

In addition to professional development on instructional delivery, teachers should receive training on how to plan for the management of those instructional activities to optimize learning. Classroom management is determined by student misbehavior versus how the teacher planned management of instructional activities (Wolff, Bogert, Jarodzka, & Boshuizen, 2015). Instead, teacher should view planning for the management of instructional activities to maximize learning as a way to minimize student misbehavior

(Eisenman, Edwards, & Cushman, 2015). However, many teachers lack the necessary training to know how to leverage management strategies to ensure quality learning environments (Freeman, Simonsen, Briere, & MacSuga-Gage, 2014).

O'Connor, Dearing, and Collins (2011) recommend that teachers are educated on their role in their students' social and emotional development. Teachers must be taught the importance of positive and respectful relationships among teachers and students and how these relationships influence classroom management (O'Connor et al., 2011).

According to Mathur, Estes, and Johns (2012), teachers attend training on student discipline and management; however, the learning rarely transitions into classroom practices. They recommended having teachers reflect on how they are going to use the information in their classrooms, sharing what they learned with others, and celebrating their implementation of what they learned. Professional development programs should include classroom management training for teachers that require them to reflect on their own practice, brainstorm ways to use it in their classrooms, and include celebrations of implementation.

### **Role of Feedback in Teacher Development**

Feedback is critical to teacher development. The effect size of feedback on the learner is .73 (Hattie, 2012), which means that the chances of improving the quality of the learners' work are almost twice greater with effective feedback. Traditionally, teachers only received feedback about their teaching as a part of their annual evaluations. A study on feedback conducted by Voerman, Meijer, Korthagen, and Simons (2015) found that frequent positive feedback provided by peers, coaches, and administrators increased

teacher performance in the classroom. Coaching has also shown positive results because it provides individualized job-embedded practice that is focused and hinged on timely feedback (Kraft & Blazar, 2016). This involves the coach observing the teacher in the classroom and providing feedback to the teacher on the lesson that was observed. The teachers would then use the feedback to make improvements in their teaching. These interactions are highly positive and nonevaluative.

Peer observations and feedback have become part of the evaluation process in many states. This strategy increases teacher effectiveness (Kraft & Gilmour, 2016). School leadership should also provide specific and targeted feedback to teachers to help them to develop their practice (Hannan, Russell, Takahashi, & Park, 2015). “An environment in which teachers have opportunities to practice and receive feedback within a supportive, trusting social network of peers or knowledgeable others is critical for creating lasting change,” (Malu, 2015, p.24). Quality performance-based feedback improves teacher development overtime.

## **Implementation**

### **Potential Resources and Existing Supports**

Potential resources needed for this project to be successful would include funding, support, and facilities to host trainings. Funding would be needed to pay stipends for teachers to attend professional learning during noncontract times and to purchase snacks for trainings. Some of the resources would be of no cost to the district such as facilities to host trainings, human capital to teach sessions, and support from school leadership to provide monitoring and feedback to teachers.

Existing supports include Redacted mentors and IBCs. Redacted mentor teachers meet the qualifications of this project to be mentors. They are assigned to teachers during their 1<sup>st</sup> year of teaching and are paid a stipend by the state department of education. The IBCs are trained in the most current research on quality instruction and classroom management structures. Their sole purpose is to train and coach teachers. They have the time and the resources needed to support the teachers. The only drawback is that these coaches are not located within the schools. They are housed at the district level and come out to schools as requested by principals.

### **Potential Barriers**

In a time of major budget cuts, funding to pay the stipends to teachers might be a barrier. The coaches are an expense to the district. These positions are on the chopping block for the district each year. Buy-in from the district, teachers, and principals will also be a challenge as the district already a variety of many initiatives underway. Time to provide training in conjunction with these district initiatives will also be a barrier.

### **Proposal for Implementation and Timetable**

This project will be implemented in three phases: planning, training, and mentoring and support. The first phase will be the planning phase. This phase will occur in the spring semester (March-May). During this phase, it will be necessary to secure funding, trainers, facilities, and train administrators. Teachers who meet the criteria to participate in this program will also be identified. The second phase will occur during late spring and early summer. The second phase will include the 3 days of professional training, assignment of mentors, and summer school practicum. The final phase will

occur throughout the school year. This phase includes the mentoring visits, coaching visits, after-school trainings, and evaluations from administrators. This phase would also include teacher surveys to monitor the effectiveness of the program on their development.

### **Roles and Responsibilities of Student and Others**

District leadership would have to work together to ensure the program was well developed and effective. The researcher will create the outline for the project, gain approval from the central office, secure trainers, secure facilities, secure mentors, arrange for stipends to be paid, train administrators, evaluate the effectiveness of the program, and communicate results.

The IBCs would be needed to assist in the creation and delivery of the training sessions. They would also be responsible for meeting with the teachers to provide coaching. They would also observe their teaching and provide quality feedback for teachers to make improvements.

Building principals and personnel would need to assist in identifying teachers who meet criteria for the program and enroll them. They would also assist with identifying qualified mentors and observe and provide feedback to the teachers in the program. Finally, building principals would need to allot time for AR teachers to meet with coaches and attend training dates throughout the school year. The role of central office is to approve the professional development plan, allocate funds to support the plan, allow IBCs the time needed to work with the teachers, and provide support with buy-in.

## **Project Evaluation**

Project evaluation will occur throughout the implementation of the professional development program. First, teachers will complete a survey at the end of each training day to determine if the learning objectives were met. After reviewing the surveys, the trainers and I will determine a course of action. The coaches, mentors, and the mentees will then be required to keep a log of activities and reflections of those activities. These documents will be collected to ensure that these components of the plan were implemented with fidelity. The teachers' assessment data will be collected to determine if students are making expected academic growth. If the assessment data shows that students are making expected academic growth, this serves as evidence that the program is effective. If not, I will determine a necessary course of action. Finally, if the program is effective, teacher scores from the observations should be at the accomplished or exemplary rating. If not, I will work with the mentors, coaches, administration, and teachers to determine the cause and make the necessary adjustments to the program. If the program is deemed effective, next steps would include working with central office to continue the program for current cohort of teachers and starting a new cohort the following year.

## **Implications Including Social Change**

### **Local Community**

This project directly impacts this school district and its local community in several ways. This project has the potential of reaching over 3,000 students during the course of one school year. If these students experience positive academic growth, it could



significantly improve the performance of individual schools and the district as a whole. If schools are performing well, more industry will come, which will create jobs and possibly improve the poverty issue within the district. Students will learn more and have a greater chance of being college and career ready upon graduation. Teachers will experience better performance, which might increase job satisfaction. Administrators will benefit because they should experience higher scores on state accountability measures.

### **Far-Reaching**

My work has limitations due to the small sample size, however, if it is effective in a needs improvement district, then it may be able to be replicated in other districts with similar or better results. There are also implications for further research based on the findings of this study. The hope is that this study will serve as a resource for other districts and future research.

### **Conclusion**

This section provided a clear outline of a project created to address the problem and the findings of this study. A literature review including the theoretical framework that justifies this project was also provided. The implementation timeline, barriers, resources, and an evaluation plan were all explained in this section. Section 4 will address reflections on the project, the study, and its effect on social change.

## Section 4: Reflections and Conclusions

### **Introduction**

The purpose of this study was to examine alternatively certified teachers' education and experience and to explore their ability to increase student achievement. In this study, I analyzed teacher surveys, interviews, and student achievement data to gain an understanding of the training and teaching performance of AR teachers within the district. As a result of the data analysis, I created a professional development plan to address the needs of AR teachers within the district. This plan was outlined in Section 3.

Section 4 is an evaluation of the study and the project created to address the problem of addressed in the study. This section also includes my self-reflection as a scholar, practitioner, and project developer. Finally, this section offers an overview of the social implications and recommendations for future research.

### **Project Strengths and Limitations**

Two major strengths were identified for this project. The first strength is that the district will now be able to track teachers who are alternately certified and have data to know if they are providing effective instruction to students. Prior to this study, there was not a database or method to identify teachers who gained certification through one of the eight options, unless they were currently in an AR program. Teachers who had completed their AR programs gained full certification and were no longer tracked. This created a gap in knowledge for the district.

The second strength of the program is professional development for AR teachers that meet the AdvancED Standards for Quality. These standards are used to determine

school accreditation. Because the district has a high school with priority status, it is monitored by [Redacted] Department of Education using the AdvancED standards. This program meets standard 3.7 under Teaching and Assessing Learning, which stated that “Mentoring, coaching, and induction programs support instructional improvement consistent with the school’s values and beliefs about teaching and learn,” (AdvancEd, 2011, p. 4). This project will serve as additional evidence for our district’s scholastic review audit.

The project’s limitations are funding and buy-in. In order for the summer work to occur, the district would have to offer stipends to the teacher participants, mentors, trainers, and additional staff needed to ensure a quality program. The district would also need to allocate funds for the training resources. At a time of major budget cuts, funding is limited. The lack of funding may limit implementation or cause it not to be possible at all. The remedy for this would be to apply for grants that would provide the funding or some of the resources needed to lessen the burden on the district.

The second limitation is the lack of buy-in by the district. It was a lengthy and difficult process to get schools and participants to assist during data collection. It is not clear if administrators understand or value the importance of the data collected during this study. If buy-in does not exist, the program may not be implemented with fidelity, which would invalidate the results. The remedy for this would be to provide training for district administration on AR programs, the needs of the AR teachers, and student achievement of students taught by these teachers. Gaining buy-in might also influence the district to commit funding for the project.

### **Recommendations for Alternative Approaches**

An alternate approach to addressing the problem and findings would include offering professional development sessions that AR teachers can attend as a part of the district's 24 hours of professional development contract requirement. Teachers cannot receive a stipend for these hours. This option would only include 2 days of training, coaching visits by the district coaches (as long as funding for their positions was available), and monitoring by the school administrators. This plan would not provide the field experience or the mentor teachers. This plan would still meet the AdvancED standard; however, it would not be aligned to the latest research on the effects of field experience and mentoring.

### **Scholarship, Project Development and Evaluation, and Leadership and Change Scholarship**

During the course of this study, I was able to deepen my knowledge of alternate certification, teacher preparation, teacher attrition, and theories/conceptual frameworks that shaped the institution of education. At the onset of this doctoral program, my knowledge of alternate certification was very limited. As a graduate of a traditional education program, my belief has always been that teaching was too complex for someone to learn how to do it while doing it. I felt as though education was the only profession that you can go to school and study something unrelated to education, yet still are able to gain teacher certification. During my research, I learned of AR programs that are producing highly effective teachers. Some of these programs are also used to address disparities in education such as the lack of minorities and men in high need schools. I still

believe that AR programs overall are in need of revamping, my beliefs have slightly changed.

While I experienced several challenges throughout this study, I learned how to conduct a mixed-methods research study that includes all of the critical elements. I learned how to conduct surveys, interviews, transcribe interviews, and triangulate data to ensure validity of the data collected. I have a deeper understanding of educational statistics and how to determine if there is a correlation between two variables.

### **Project Development**

As a school principal for 8 years, I have a great deal of knowledge about project development. I have created and implemented multiple professional development plans for various purposes. I have spoken at public forums to influence local and state policy armed with evidence from school and district performance. However, this study forced me to evaluate whether or not I had adequately addressed the problem and the findings of the study using strategies supported by recent research in the field. I have done research on strategies prior to starting a project; however, it was never as in-depth as the literature review that was required as a part of the rationale for the creation of this project.

My weakness was project evaluation. I have always measured success of a project by informal feedback from participants and student assessment scores. I now have a better understanding about how to go about evaluating the success of a project. I now understand that the type of data collection is determined by the type of goals that were set for the project (qualitative and/or quantitative). I have a deeper knowledge of how to

collect the data in phases (quantitative and qualitative) and how to use multiple data points to triangulate findings.

### **Leadership and Change**

As an instructional leader in my school and district, it is my duty to stay current on recent research involving education. It is also my duty to evaluate systems that are in place to ensure that the systems are as effective as possible in meeting the needs of teachers and students. After evaluating the effectiveness of the work, it is necessary to use the knowledge and findings to influence change in my school, district, and possibly on a larger scale. Since starting this doctoral study, I have placed more focus on whether or not the actions of teachers and administration are grounded in theoretical/conceptual frameworks. I have also learned to influence change through an explanation of the research that has been done and recommendations from that research.

### **Reflection on Importance of Work**

This project has great importance to the field of education in the realm of teacher preparation. Whenever there is a discussion about improving schools, there is always a discussion about the quality of teachers teaching in those schools. With the large influx of teachers gaining certification through an AR, it is imperative to know who they are and whether they are prepared to assist them with transitioning into classrooms. Some AR programs produce high quality teachers; however, researchers have proven that the results are uneven across programs. My state has noted the lack of research on the effectiveness of the AR teachers teaching in the state. Furthermore, research has been

very limited since the installation of the CCSS, which has presented challenges for veteran teachers throughout the district.

In this study, I measured AR teacher preparedness and performance in teaching the CCSS in this school district. It can serve as a start of the research on this group of teachers within the state. It can influence state policy on what is required of AR teacher candidates prior to entry into the classroom. It can influence higher education's development of AR programs and districts' plans for professional development of AR teachers. Ultimately, it can increase the effectiveness of AR teachers entering classrooms, thus increasing student achievement in schools, districts, states, and nationally.

### **Implications, Applications, and Directions for Future Research**

Implications for this study are that field experience and specific training will increase the performance of AR teachers. The effect of field experience in the role of teacher preparation has been a topic of discussion. Departments of education at higher institutions and school districts can use the findings of this study to restructure their AR programs to ensure that the teachers are adequately prepared to teach in classrooms. Highly qualified has traditionally be regarded as having taken the appropriate coursework and passed the appropriate assessments to teach in a classroom. This study implies that coursework and content knowledge is not enough. Professional development coupled with hands-on field experience produces more effective teachers.

One of the limitations of this study was that the teachers in the study gained certification through various options and programs. It would be beneficial for future researchers to study each option and program more in-depth with a larger sample of

teachers. In this study, field experience ranged from observations, practicums, instructional assistants, substitute teaching, to years of working in the field of the content taught. The exploration of the quality of these experiences was limited to how the teachers rated them in how they believed the experiences prepared them for teaching in the classroom. I recommend future researchers to study the quality of the field experiences provided to AR teachers in more depth.

### **Conclusion**

The purpose of this study was to explore the preparation of AR teachers in this school district. The goal of the study was to gather information about their experiences, training, and development over time as it related to their effect on student learning outcomes. The analysis of data showed that additional supports were needed to increase the effectiveness of these teachers; and therefore, a professional development plan was created. The plan was designed to include recommendations from the latest research on the topic.

Implementation and evaluation of the plan was outlined in Chapter 3. The goal of the project is to increase the effectiveness of the alternate certification teachers in order to retain them in the district. If that goal is met, this plan could increase the performance of individual schools, the district, and the state. There has been very little research on alternate certification teachers within the state, especially since the implementation of the rigorous CCSS. This study can contribute to further research within the district, state, and nationally.



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## Appendix A: Alternate Route Teachers Professional Development Project

### **Purpose**

The problem in this study was that this school district lacked data on the experiences and effectiveness of the AR teachers. In order to address this problem and the findings from the study, a teacher professional development program was created. The purpose of this project is to address the professional learning needs of the AR teachers and increase the effectiveness of the AR teachers within the district.

### **Program Components**

The professional development program consists of three full days of face-to-face training, a summer school practicum, coaching by the IBCs, mentoring by an effective teacher, two after-school follow-up trainings, and monitoring of the AR teacher's performance through observations and review of their student achievement data. These components are aligned with current district practices and research (Sun et al., 2013; Ghosh, 2012; and Schleicher, 2011) on effective professional development for teachers. This program is designed to provide initial training, follow-up training, and support throughout the school year.

### **Goal and Learning Outcomes**

The goal of this project is to create a program that provides the district with data on its AR teachers, address their professional learning needs, and increase their effectiveness in regard to student achievement. The learning outcomes of this program are (a) to increase teacher knowledge of curriculum mapping through the use of learning maps; (b) to increase teacher knowledge of authentic assessment to monitor student

achievement and make instructional adjustments; and (c) to increase teacher knowledge of managing a highly engaging classroom.

### **Audience**

The audience for this project is AR teachers within the district. All new hires will be required to attend the training as a part of their new teacher training. They will be enrolled into the program by their building principals. Principals will enroll their teachers by emailing a list to the coordinator. Existing AR teachers can be enrolled into the training by their building principals; however, they are not required to attend.

### **Role and Responsibilities**

The district will sponsor the training and the researcher will serve as the coordinator for the program.

### **3-Day Professional Learning**

In collaboration with the Instruction and Behavior Coaches, the researcher will deliver 3 full days of face-to-face training for all new AR teachers to the district. The training will occur during the new teacher training dates. However, the AR teachers' training will be separate as it is designed to be targeted based on the findings of the study. The attached PPT will be used by the presenter to conduct the 3 days of training. The training will provide learning through lecture, discussion, practice, and reflection. Lunch will not be provided. Snacks and drinks will be available. Stipends will not be offered as these days are a part of the contractual days for teachers.

### **Mentors**

The mentor process is an existing process within the district. The mentors are assigned by building leadership. In order to qualify to be a mentor, teachers must be deemed effective with a minimum of 3 years of teaching experience. Parties will be notified using the enclosed mentor assignment form. Mentors are paid by the state based on the mentoring activities and hours that are spent with the teacher. This project will continue to follow the process that is already in place.

### **Summer School Practicum**

AR teachers will be assigned to observe, teach, and engage in reflection with a cooperating teacher during summer school. The summer school practicum assignments will be made by building leadership. An effort to place teachers in the grade level and content they will be teaching shall be made. If this project is accepted by the district, the AR teachers will receive a stipend for the time they spend in the practicum.

### **Classroom Observations**

AR teachers enrolled in this program will be observed by building leadership using current district observation tools throughout the school year. The observer will meet with the teacher to provide feedback. The data will be collected by the researcher and shared at the district administrator's meetings throughout the school year. Data will be used to determine the effectiveness and next steps of the program.

### **Follow-Up**

Based on feedback from teachers and observation data, two follow-up trainings will occur during the school year. The topics of these trainings will be decided by the coordinator and IBCs after analyzing data. All teachers enrolled in the program will attend the follow-up sessions. The sessions will occur after-school and be 1.5 hours in length. Water and snacks will be provided.

### **Program Evaluation**

The program will be evaluated through data collection and analysis. Teacher surveys at the end of each professional learning session will be used as part of the evaluation. Data collection from observations and review of student universal screener data will also be used to measure the effectiveness of the program. All data will be collected by the coordinator and shared with the district leadership at the district administrator's meetings.

### **Costs**

The program includes resources that are currently available to the district such as the mentors, IBCs, facilities, observation tools, and the data tracking system. However, there are additional costs. Additional funds would be needed to pay the stipends for the summer school practicums and snacks. On non-contractual days, teachers are paid by the hour. The hourly rate for teachers is \$23.93. These additional costs would depend on the number of AR teachers hired into the district. On average, the district hires 10-15 AR teachers each year. This cost could range from \$4,000-\$6,000 a year. Snacks would range between \$200-\$500. If the funding is not available, the coordinator will work with



community partners to provide snacks. Alternative options will be discussed amongst the committee if funding is not available for stipends.

### Timeline for Implementation of Project

Below is the timeline proposed timeline for implementation of the project.

	MAR-APR	MAY-JUNE	JUNE-JULY	AUG-SEPT	OCT-NOV	DEC-JAN	FEB-MAR	APR-MAY
<b>Planning of PD Program</b>	X							
<b>3 Day Training</b>		X						
<b>Summer School Practicum</b>		X	X					
<b>Assignment of Mentors</b>			X					
<b>Classroom Observations and Data Collection</b>				X	X	X	X	X
<b>AR Teacher Surveys (Program Evaluation)</b>	X		X			X		X
<b>After-School Follow-Up Sessions</b>				X		X	X	

This is the form that will be used to notify the AR teacher of their summer school practicum assignment. It will be completed by building leadership and given to the teacher prior to the start of the practicum. A copy of the form will be given to the program coordinator, summer school director, and cooperating teacher.

### **Summer School Practicum Assignment Form**

Date: \_\_\_\_\_

Dear \_\_\_\_\_,

Congratulations on becoming a teacher in this district! It is our pleasure to welcome you to the teaching profession. In an effort to ensure your success, we have planned a field experience, which would allow you to observe highly effective teachers deliver engaging instruction. This experience will also provide you with the opportunity to practice the instructional strategies that you learned in the three days of professional development.

You have been assigned to work with \_\_\_\_\_ (cooperating teacher) at \_\_\_\_\_ (Summer School Location). The content area is \_\_\_\_\_ and the grade level is \_\_\_\_\_. Your field experience begins on \_\_\_\_\_ and concludes on \_\_\_\_\_. Please report to the location daily by \_\_\_\_\_ A.M.

If you have any questions or concerns, please contact XXX @ XXXXXXXX.

Sincerely,  
XXXX  
Principal

This form will be completed by building leadership to notify the AR teacher of their mentor assignment. A copy of the form will be provided to the program coordinator, mentee, and mentor.

### **Mentor Assignment Form**

Date:

Dear \_\_\_\_\_,

You have been assigned a mentor for the 20XX-20XX School Year. Your mentor is

\_\_\_\_\_. Please join us at a mentor/mentee meeting on

\_\_\_\_\_ at \_\_\_\_\_. In this meeting, we will

discuss the process and procedures for mentoring for this school year. Again,

congratulations on becoming a teacher in ABC School District.

Respectfully,

XXXXX

This is a form that is currently used in the district to request support from an IBC. As a part of this program, it is to be completed by building leadership. After the form has been submitted, a copy of the form is to be provided to the program coordinator.

<b>XXXXX Public Schools</b> <b>Process for Requesting Coaching Support</b>
---

1. School staff determines coaching support is needed. See email for areas not supported in this manner.
2. School staff completes the Coaching Support Request form and submits to the coaching mailbox. Complete the form fully as incomplete forms will be returned. The email address for coaching requests is: XXXXX
3. Coaching staff review the requests and compare against the strengths of available staff.
4. Assignment of coach(es) is made. While schools may request specific coaches, those assignments cannot be guaranteed.
5. Coach contacts the principal or other administrative staff to determine the scope and need through a face-to-face meeting.
6. Coaching support is planned and scheduled.
7. Coach and teacher develop partnership agreement. Teachers are made aware that coaches will share a general overview of their work together with the principal.
8. Coaching support is provided with a built in reflection component. Teachers will be asked to reflect on their new learning and the next steps in that process.
9. Administrative staff is provided with a general overview of the work that does not violate the partnership agreement.
10. Following the coaching visit, two additional follow ups are scheduled within three weeks to provide ongoing support in a gradual release model.
11. Coaches provide final report of overview of work to the principal/ administrative staff.

<b>Name Of Person Submitting Request:</b>			
<b>Email Address:</b>			
<b>School Name:</b>			
<b>Name of Staff Member(s) for whom you are requesting support:</b>			
<b>Last Name</b>	<b>First Name</b>	<b>Email Address</b>	

<b>Coach Requested (requests are not guaranteed)</b>	
--	--

<b>Support Information</b>			
<b>Core Area:</b>		<b>Grade Level:</b>	
<b>Date of Support Requested:</b>			
<b>Describe the specific support you are requesting:</b>			
<b>What is Your Expected Outcome?</b>			
<b>Requested Support Aligns to KFFT Indicators:</b>			
<b>Other Information:</b>			

*Email correspondence from Chief Instructional Officer giving permission to use the PD evaluation form. Identifying information has been removed.*

Mrs. Spearman,

You have permission to use **any** and **all** district documents and forms as part of your PD program. I am eagerly anticipating reading your finished product.

**XXXXXXXXXX**

**Chief Instructional Officer**

XXXXXX County Public Schools

XXXXXXXXXX

**Our Vision:** “Transform the educational environment to meet the ongoing demands of 21<sup>st</sup> Century learning so that all students are engaged in a high quality, equitable education and are prepared for community and global responsibilities.”

**Our Mission:** “Create an educational culture of continuous growth through shared partnerships and responsibilities.”

**From:** Spearman, Cassandra **Sent:** Sunday, September 11, 2016 12:12 PM **To:** XXXXXXXX  
**Subject:** Seeking Approval for Doctorate

Ms. XXXX,

A part of my doctoral study includes developing a project that addresses the results of the data analysis. Based on the results of my study, my committee and I decided on a professional development program directed at alternate route teachers (any teacher entering through one of the 8 options that BOE allows). As a part of my PD program, I would like to include the following forms: Coaching Request Form and Teacher PD Evaluation Form. If I have your permission to include these forms in my project, please respond to this email stating that I have permission from XXX to use the forms. I thank you in advance for your support.

Cassandra Spearman

# PLANNING EFFECTIVE INSTRUCTION

## PURPOSE

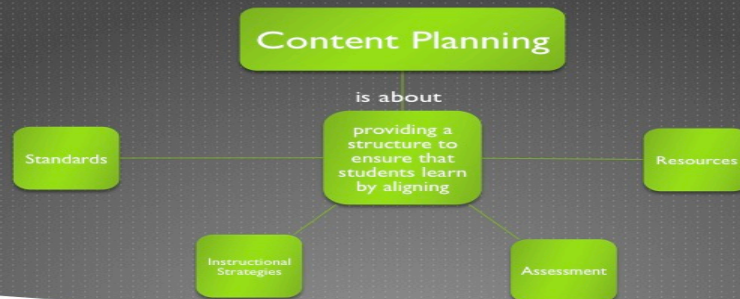
The purpose of this project is to provide professional development opportunities to meet the needs of alternate route teachers to increase their effectiveness and increase student achievement within the district.

## DAY 1 AGENDA

- ▶ 8:00-8:15 Introductions
- ▶ 8:15-8:30 Agenda and Norms
- ▶ 8:30-9:30 Content Planning
- ▶ 9:30-9:45 Break
- ▶ 9:45-11:00 Content Planning
- ▶ 11:00-12:15 Lunch on your own
- ▶ 12:15-2:15 Creating Content Maps for Unit
- ▶ 2:15-2:30 Journal Reflections
- ▶ 2:30-3:00 PD Evaluation



## LEARNING MAP



## GUIDING QUESTIONS

- ▶ Why should we pre-plan content?
- ▶ How should we plan content?
- ▶ How do I assessment the content?
- ▶ How do I align resources to the content?

## WHY SHOULD WE PRE-PLAN CONTENT?

<https://youtu.be/FGFS9qiqhJU>

## WHY SHOULD WE PRE-PLAN CONTENT?

- ▶ Instruction should be intentional and include the most important information on the topic (Knight, 2013).
- ▶ Strategic planning increases the teacher's effectiveness and raises student achievement (Marzano, Pickering, and Pollock, 2001).
- ▶ Content mapping has an effect size of .60 which increases student learning more than 1 academic school year (Hattie, 2012).

## HOW DO I PLAN CONTENT?

Steps to content planning:

1. Review district pacing guides and when standards are taught
2. Review standards for each unit and study what they require students to be able to know and do (pre-requisites needed, hidden skills, skill mastery)
3. Map out (Learning Map) the path to teaching the standards
4. Create guiding questions for unit
5. Decide on best instructional strategies (ensuring congruency with standard)
6. Create the assessments for the unit (ensuring congruency with standard)
7. Decide on best resources to use for the unit

## EXAMPLES

- ▶ In your folders, there are some examples of learning maps and unit plans. Spend a few minutes reviewing them.
- ▶ Work with your partner to discuss the content planning checklists and the items in your folders.
- ▶ Share out discussions.

## LET'S GIVE IT A TRY

- ▶ Look at your pacing guide to determine which standards need to be taught
- ▶ Determine what students need to be able to do to meet the standards in the unit
- ▶ Break them down into parts
- ▶ Begin your learning map by titling it with the topic of the unit (i.e. Fractions, chemical/physical changes, poetry, etc.)
- ▶ Paraphrase what the overall topic is about (i.e. Poetry is about....)
- ▶ Create your stems through, by,....
- ▶ Add the parts
- ▶ List the details that you want students to know
- ▶ Determine timeframe needed

## JOURNAL REFLECTIONS

Take a few moments to reflect on learning for the day. How can you use the information learning today in your classroom?

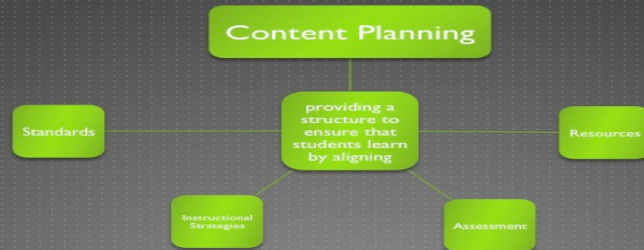
**3-2-1**

- 3: Things you learned today
- 2: Things that you already knew
- 1: Thing you still have a question about

## DAY 2 AGENDA

- ▶ 8:00-8:15 Revisiting Content Mapping
- ▶ 8:15-8:30 Agenda and Norms
- ▶ 8:30-9:30 What is Authentic Assessment?
- ▶ 9:30-9:45 Break
- ▶ 9:45-11:00 Designing Assessments/Success Criteria
- ▶ 11:00-12:15 Lunch on your own
- ▶ 12:15-2:15 Creating Assessments
- ▶ 2:15-2:30 Journal Reflection
- ▶ 2:30-3:00 Reflections/ PD Evaluation

## LEARNING MAP



## GUIDING QUESTIONS

- ▶ Why should we pre-plan content?
- ▶ How should we plan content?
- ▶ How do I assessment the content?
- ▶ How do I align resources to the content?

## REVISITING CONTENT MAPPING

- ▶ Reflections on content mapping
- ▶ Share your work from yesterday
- ▶ Feedback on content maps

## WHAT IS AUTHENTIC ASSESSMENT?

- ▶ Formative vs Summative Assessment
- ▶ Gathering information about student learning throughout the lesson
- ▶ Gathering student learning at the end of the unit
- ▶ Monitoring and adjusting instruction
- ▶ Planning for intervention

## STRATEGIES FOR ASSESSING STUDENT LEARNING

### Formative Assessment

- ▶ Exit ticket
- ▶ White boards
- ▶ Kahoot it
- ▶ Classroom discussion and questioning
- ▶ Reviewing student work samples
- ▶ Student conferences
- ▶ Quizzes

### Summative Assessment

- ▶ Tests
- ▶ Projects
- ▶ Culminating Activities

## WHEN IS IT APPROPRIATE TO ASSESS LEARNING?

### Jigsaw- Chapter 3 of High Impact Instruction by Jim Knight

In your table groups, you are going to each read a section of the chapter. Take notes on your chapter and be ready to share it with the group. Use the chart paper to note the most important information from everyone's chapter.

## WHEN IS IT APPROPRIATE TO ASSESS LEARNING?

### Jigsaw- Chapter 3 of High Impact Instruction by Jim Knight

In your table groups, you are going to each read a section of the chapter. Take notes on your chapter and be ready to share it with the group. Use the chart paper to note the most important information from everyone's chapter.

## DESIGNING ASSESSMENTS WITH SUCCESS CRITERIA

- ▶ Butterfly Activity
- ▶ Butterfly Video
  - ▶ <https://youtu.be/hqh1MRVZjms>
- ▶ Defining success criteria
  - ▶ Rubrics
  - ▶ Checklists
  - ▶ Exemplars
  - ▶ Specific feedback

## EXAMPLES OF ASSESSMENT

- ▶ There are some examples of formative and summative assessments in your folders.
- ▶ Take a few minutes to review them.
- ▶ Discuss the assessments with your partner.
- ▶ Share out

## CREATING ASSESSMENTS

- ▶ Take a look at your content map. Brainstorm some ideas of how you can use formative and summative assessment to assess your content.
- ▶ Share out

## JOURNAL REFLECTION

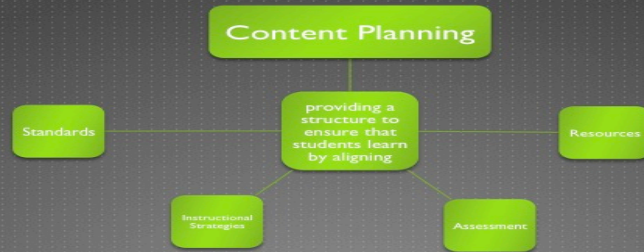
In your journals, please answer this question.

How will I know if my students are learning?  
What will I do with the information that I gather?

## DAY 3 AGENDA

- ▶ 8:00-8:15 Revisiting Assessment of Content
- ▶ 8:15-8:30 Agenda and Norms
- ▶ 8:30-9:30 Classroom Management vs. Discipline
- ▶ 9:30-9:45 Break
- ▶ 9:45-11:00 Classroom Management through Engaging Lessons
- ▶ 11:00-12:15 Lunch on your own
- ▶ 12:15-2:15 Strategies for Student Engagement
- ▶ 2:15-2:30 Journal Reflections
- ▶ 2:30-3:00 PD Evaluation

## LEARNING MAP



## GUIDING QUESTIONS

- ▶ Why should we pre-plan content?
- ▶ How should we plan content?
- ▶ How do I assessment the content?
- ▶ How do I align resources to the content?

## CLASSROOM MANAGEMENT VS. DISCIPLINE

### Classroom Management

- ▶ Rituals
- ▶ Routines
- ▶ Classroom rules

### Discipline

- ▶ Consequences for not following classroom rules



## HOW TO ENGAGE STUDENTS?

[https://youtu.be/y0H5XsZl\\_gzA](https://youtu.be/y0H5XsZl_gzA)

## CLASSROOM MANAGEMENT THROUGH ENGAGING LESSONS

- ▶ Plan for student engagement in learning tasks
- ▶ Differentiate learning to meet needs of students
- ▶ Ensure lessons meet the developmental needs of all students
- ▶ Ensure pacing allows for enough time to process learning, but minimizes idle time
- ▶ Design lessons that allow for all students to be involved
- ▶ Relate learning to their lives and the real world

## STRATEGIES FOR AN ENGAGING CLASSROOM

- ▶ Clicker systems
- ▶ White boards
- ▶ Guided note-taking
- ▶ Random selector tools
- ▶ Classroom discussions
- ▶ Group work
- ▶ Kinesthetic learning
- ▶ Problem-based learning
- ▶ Incorporate technology

## JOURNAL REFLECTIONS

Answer this question in your journals:

What will you do to ensure that your  
classroom is highly engaging?

### Professional Development Evaluation

1. How clearly was the information presented at this event?

- Extremely clear
- Very clear
- Moderately clear
- Slightly clear
- Not at all clear

2. The content in this training increased my knowledge of this topic.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

3. Rate your level of understanding of the topic.

- I can teach this topic.
- I can implement this strategy independently.
- I understand; however, I need assistance to implement.
- I need additional training.

4. How relevant was the workshop to your professional development?

- Extremely relevant
- Very relevant
- Somewhat relevant
- Not so relevant
- Not at all relevant

5. What was the most beneficial part of this workshop for you?

6. What workshop topics would be beneficial to you in the future?

7. What can we do to improve future workshops for optimum learning?

## Appendix B: Semistructured Interview Protocol

*This interview protocol is for the individual interviews to be conducted during this study.*

**Title:** A Mixed-methods Study of Alternate-route Teachers' Effect on Student Learning

### **Research Questions:**

Research Question 1 (RQ1). What is the relationship between AR teachers' amount of field experience and the effect on student learning outcomes as measured by NWEA MAP/Discovery Ed assessments in this school district?

$H_{01}$ : There is no significant relationship between AR teachers' amount of field experience and the effect on student learning outcomes as measured by NWEA MAP/Discovery Ed assessments in this school district.

$H_{a1}$ : There is a significant relationship between AR teachers' amount of field experience and the effect on student learning outcomes as measured by NWEA MAP/Discovery Ed assessments in this school district.

Research Question 2 (RQ2). What is the relationship between AR teachers' years of experience and the effect on student learning outcomes as measured by NWEA MAP/Discovery Ed assessments in this school district?

$H_{02}$ : There is no significant relationship between AR teachers' years of experience and the effect on student learning outcomes as measured by NWEA MAP/Discovery Ed assessments in this school district.

$H_{a2}$ : There is a significant relationship between AR teachers' years of experience and the effect on student learning outcomes as measured by NWEA MAP/Discovery Ed assessments in this school district.

**Qualitative Questions**

Research Question 3 (RQ3). How do AR teachers say that they developed into effective teachers in this school district?

Research Question 4 (RQ4). How do AR teachers say that prior experience and/or training helped to prepare them to teach in the classrooms of this school district?

**Protocol:**

1. Tell me a little bit about yourself, your education, and your background.
2. After reviewing your MAP assessment data, what factors would you say influenced the outcome?
3. What types of field experiences did you have prior to becoming a teacher?
4. How did those experiences prepare you for the teaching in a classroom?
  - Add more questions about experiences to include interpersonal experience
5. On a scale of 1-4, how would you rate your ability to manage the classroom?  
Build positive relationships with students?
6. What strengths and weaknesses have you identified for yourself as a teacher?
  - How did you learn to do that? How did you develop that skill? Tell me about you some things that you are doing better than you did as a beginning teacher?
7. What types of support have you received to help you to address your weaknesses?
8. What do you enjoy the most and the least about teaching?

## Appendix C: Survey Questions

**Title:** A Mixed-methods Study of Alternate-route Teachers' Effect on Student Learning

**Research Questions:**

Research Question 1 (RQ1). What is the relationship between AR teachers' amount of field experience and the effect on student learning outcomes as measured by NWEA MAP/Discovery Ed assessments in this school district?

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**Qualitative Questions**

Research Question 3 (RQ3). How do AR teachers say that they developed into effective teachers in this school district?

Research Question 4 (RQ4). How do AR teachers say that prior experience and/or training helped to prepare them to teach in the classrooms of this school district?

**Survey Questions**

1. What is your current position?
2. What content do you teach?
3. What grade level do you teach?
4. At the end of this school year, how many years of teaching experience will you have?
5. How many of those years are in your current teaching content?
6. Prior to gaining teacher certification, what type of field experience did you have?
7. What was the length of your field experience?
8. How would you rate your field experience in preparing you to teach?
9. How many courses did you take in your preparation program to teach this content?
10. How would you rate those courses in preparing you to teach?



## Appendix D: Letter of Cooperation from School District

Dear Mrs. Spearman,

Based on my review of your research proposal, I give permission for you to conduct the study entitled, A Mixed-methods Study of Alternate-route Teachers' Effect on Student Learning, XXXX Public Schools. As a part of this study, I will forward the researcher's contact information and a summary of the research to teachers in the district who received their certification through alternative routes to teacher certification (RS 161.048). I understand those teachers who contact the researcher will be asked to participate in a survey and two interviews. Individuals' participation will be voluntary and at their own discretion. The district agrees to provide the researcher with MAP assessment data for the 2014-2015 school year for the participating teachers. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Walden University IRB.

Sincerely,

XXXXXX  
Chief Administrative Officer

## Appendix E: IRB Approval

## QUANTITATIVE CONSENT FORM

You are invited to take part in a research study of alternate route teachers and their impact on student achievement. The researcher is inviting teachers with alternative certification who teach reading and/or math in Grades 3-12, to be in the study. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Cassandra Spearman who is a doctoral student at Walden University. You may already know Mrs. Spearman as the principal of Martin Luther King, Jr. Elementary School; however, she is functioning in the role of a doctoral student for the purpose of this study.

**Background Information:**

The purpose of this study is to examine alternatively certified teachers' education and experience and to explore their ability to increase student achievement.

**Procedures:**

If you agree to be in this study, you will be asked to:

- Complete a 10 question survey, which should take approximately 10-15 minutes.

**Voluntary Nature of the Study:**

This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one within the district will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later. You may stop at any time.

**Risks and Benefits of Being in the Study:**

Being in this study would not pose risk to your safety or wellbeing.

It would benefit participants to participate in this study because results will be used to plan professional development opportunities for alternate route teachers. I am a mandatory reporter. If any information regarding abuse, criminal activity, and/or the potential to harm yourself or others, I am required to report to the appropriate authorities.

**Payment:**

Participants, who complete the survey, will receive a \$10 Walmart Gift Card as a thank you gift.

**Privacy:**

Any information you provide will be kept confidential. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. Data will be kept secure by password protecting the survey results and ensuring that only the researcher has access.

**Contacts and Questions:**

You may ask any questions you have now. Or if you have questions later, you may contact the researcher via email @ [cassandra.spearman@waldenu.edu](mailto:cassandra.spearman@waldenu.edu) and/or phone at 706-580-3603. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 612-312-1210. Walden University's approval number for this study is 12-08-15-0298427 and it expires on December 7, 2016.

The researcher will give you a copy of this form to keep.

**Statement of Consent:**

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By signing below, I understand that I am agreeing to the terms described above.

Printed Name of Participant

Date of consent

Participant's Signature

Researcher's Signature

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## QUALITATIVE CONSENT FORM

You are invited to take part in a research study of alternate route teachers and their impact on student achievement. The researcher is inviting teachers with alternative certification who teach reading and/or math in Grades 3-12. to be in the study. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Cassandra Spearman who is a doctoral student at Walden University. You may already know Mrs. Spearman as the principal of Martin Luther King, Jr. Elementary School; however, she is functioning in the role of a doctoral student for the purpose of this study.

### **Background Information:**

The purpose of this study is to examine alternatively certified teachers' education and experience and to explore their ability to increase student achievement.

### **Procedures:**

If you agree to be in this study, you will be asked to:

- Participate in an individual interview (approximately 1 hour)
- Participate in a focus group interview (approximately 2 hours)

### **Voluntary Nature of the Study:**

This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one within the district will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later. You may stop at any time.

### **Risks and Benefits of Being in the Study:**

Being in this study would not pose risk to your safety or wellbeing. I am a mandatory reporter. If any information regarding abuse, criminal activity, and/or the potential to harm yourself or others, I am required to report to the appropriate authorities.

It would benefit participants to participate in this study because results will be used to plan professional development opportunities for alternate route teachers. .

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### **Privacy:**

Any information you provide will be kept confidential. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. Data will be kept secure by password protecting the database where data will be housed, having participants sign confidentiality agreements, and using pseudonyms in place of teacher names on documents.

### **Contacts and Questions:**

You may ask any questions you have now. Or if you have questions later, you may contact the researcher via email @ [cassandra.spearman@waldenu.edu](mailto:cassandra.spearman@waldenu.edu) and/or phone at 706-580-3603. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 612-312-1210. Walden University's approval number for this study is 12-08-15-0298427 and it expires on December 7, 2016.

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**Statement of Consent:**

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By signing below, I understand that I am agreeing to the terms described above.

Printed Name of Participant

Date of consent

Participant's Signature

Researcher's Signature

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