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UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

COMPARING TEACHER INDUCTION PROGRAMS

A Dissertation Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
Doctor of Education

Catherine Teresa Linhardt

College of Education and Behavioral Sciences  
School of Teacher Education  
Educational Studies

December 2022

This Dissertation by: Catherine Teresa Linhardt

Entitled: *Comparing Teacher Induction Programs*

has been approved as meeting the requirement for the Degree of Doctor of Education in College of Education and Behavioral Sciences in the School of Teacher Education, Program of Educational Studies.

Accepted by the Doctoral Committee

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Dr. Jenni Harding, Ed.D., Research Advisor

---

Dr. Brian Rose, Ph.D., Committee Member

---

Dr. Amanda Rutter, Ed.D., Committee Member

---

Dr. Chia-Lin Tsai, Ph.D., Faculty Representative

Date of Dissertation Defense August 31, 2022

Accepted by the Graduate School

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Jeri-Anne Lyons, Ph.D.  
Dean of the Graduate School  
Associate Vice President for Research

## ABSTRACT

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The purpose of this research study was to provide a quantitative approach to the study of induction programs as a means to demonstrate their importance to lessening teacher attrition rates. The collection of quantitative data collected through an online Likert style survey was intended compare multiple induction programs and determine which induction program components are connected to increased job satisfaction and decreased teacher attrition. One school district agreed to participate in the online survey; 31 teachers completed it and were included in the results of the study. Due to unforeseen circumstances caused by COVID-19 and other uncontrollable factors, the study was not able to be completed in a manner that compared multiple schools or school districts. Instead, qualitative data were added through interview connecting numerical data with the emotions of being a novice teacher. Four novice teachers and one school principal were interviewed.

The results of this study impact three groups of educators: administrators, teachers, and policy makers determining that support is necessary for novice teachers and should come from the administrator. Policy makers should be aware that support for novice teachers is necessary to retention. Both mentors and a system of support are important components of induction programs. More research will determine the connection between job satisfaction and perception of support and how they relate to teacher attrition.

## TABLE OF CONTENTS

I.	INTRODUCTION .....	1
	The Problem.....	1
	Significance .....	2
	Rationale.....	2
	Research Questions .....	3
	Methodology .....	3
	Definition of Terms .....	4
	Researcher’s Assumptions .....	5
	Summary .....	6
II.	LITERATURE REVIEW .....	7
	Induction Programs for Novice Teachers and Job Satisfaction.....	7
	Prior Research .....	9
	Novice Teachers .....	9
	Novice Teacher Preparation Programs .....	10
	Need for System of Support .....	12
	Teacher Attrition .....	13
	Induction Programs .....	15
	Mentoring .....	17
	Observation, Evaluation, and Feedback .....	18
	Professional Development .....	19

Job Satisfaction .....	20
Direction of Study .....	21
Summary .....	22
<b>III. METHODOLOGY .....</b>	<b>24</b>
Research Design and Rationale .....	24
Procedures .....	24
Research Questions .....	25
Hypotheses .....	25
Population and Sample .....	25
Data Collection .....	26
Instruments .....	27
Data Analysis .....	28
Threats to Validity .....	29
Threats to Internal Validity .....	29
Limitations .....	30
Necessary Changes to Design of Study .....	30
Summary .....	31
<b>IV. RESULTS .....</b>	<b>32</b>
Quantitative Research .....	32
Descriptive Statistics.....	33
Qualitative Research .....	36
Interview Process .....	37
Analysis of Data .....	42

Combination of Data .....	53
Summary .....	54
<b>V. DISCUSSION AND CONCLUSION .....</b>	<b>55</b>
Meaning of Research .....	55
Implications for Practice .....	57
Recommendations for Administrators .....	57
Recommendations for Policy Makers .....	59
Recommendations for Teachers .....	61
Teacher Satisfaction and Teacher Attrition .....	62
Support for Novice Teachers and Attrition Rates .....	63
Recommendations for Future Research .....	64
Researcher stance .....	67
Limitations .....	67
Answers to Research Questions .....	68
Conclusion .....	69
 REFERENCES .....	 71
 APPENDICES	
A. ONLINE SURVEY QUESTIONS .....	76
B. INTERVIEW QUESTIONS FOR QUALITATIVE RESEARCH .....	84
C. RECRUITMENT LETTER FOR QUALITATIVE RESEARCH .....	87
D. INSTITUTIONAL REVIEW BOARD APPROVAL .....	89
E. HUMAN CONSENT FORM .....	92

LIST OF FIGURES

FIGURE

1. Components of an Induction Program ..... 16



LIST OF TABLES

TABLE

1. Table Survey Response Options .....	34
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## CHAPTER I

### INTRODUCTION

#### **The Problem**

In any given school, there are a variety of teachers. These teachers range in area of expertise, background, and teaching experience. Novice teachers are a group of teachers with one to three years of classroom experience. The amount of years a teacher has taught is a difference that separates them from experienced teachers in many ways. All teachers require support, but novice teachers are an especially sensitive group in any school. New teachers specifically tend to need more support than veteran teachers in the areas of classroom management and content and curriculum knowledge (Glazerman et al., 2010; Kwok, 2018; Kwok et al., 2021; Turley et al., 2006).

Because teaching is so difficult, specific support is needed to help new teachers navigate their new careers. Without these supports, teachers often feel alone and isolated, literally and figuratively. Teaching is a very individualized endeavor. Although surrounded by students daily, teachers rarely interact with other adults and have limited help. The lack of help or support often leads to feelings of isolation when a teacher struggles with a difficult situation without the support of a peer or administrator. Teacher attrition happens when a teacher does not receive the support to overcome the difficulties of the career (Brown & Wynn, 2007; Whalen et al., 2019). Attrition is a problem that is affecting schools all over the world which causes problems for schools and students.

Induction is a program specifically designed for novice teachers. Its purpose is to provide novice teachers with additional support systems throughout their first years in the teaching profession. Novice teacher induction programs are provided by and mandated through an individual school or school district. There is no federal mandate on teacher induction programs. Some states require them and some states do not. In the states that do mandate them, these programs are required for any new teacher entering the career. Many novice teachers are recent graduates of a university teacher preparation program beginning their first career. Those that are entering as second career teachers do not necessarily have the same preparation as university graduates.

### **Significance**

Currently, there is no federal mandate on the implementation of induction programs. The state of Colorado requires novice teachers to complete an induction program at their place of employment prior to obtaining a professional teaching license. More research is needed to determine if successful induction programs decrease teacher attrition because there are many determinants of high attrition rates.

This study is built off the idea that teaching is a difficult career and intends to connect job satisfaction with induction programs in an effort to learn about and decrease teacher attrition rates. It is known that many novice teachers face feelings of isolation (Ingersoll & Strong, 2011, p. 202). If induction programs have the intention of training and supporting novice teachers, then the gap between teacher preparation program and first year teaching might be lessened.

### **Rationale**

Novice teachers are leaving the profession at alarmingly high rates. In 2010, Glazerman et al. wrote that, “24 percent of beginning teachers leave the classroom by the end of their second

year and 46 percent leave by the end of their fifth year.” Raab (2018) states that, “almost 50% of beginning U.S. public school teachers who leave the profession within 5 years.” Induction programs are a potential strategy to lessen teacher attrition by providing novice teachers with the support they need to feel successful in their careers. The purpose of this study was to determine if different induction programs effect the job satisfaction of novice teachers during their first years in the teaching career. Through a comparison of different induction programs in Colorado steps can be taken towards what induction programs are effective leading to teacher retention. This research could lead to the potential standardization and national mandate of induction programs.

### **Research Questions**

These research questions were designed to build a connection between job satisfaction and teacher attrition through the comparison of different induction programs in Colorado. A quantitative approach was designed to answer these questions and provide educators with data on which to build and improve their induction programs.

- Q1     What percentage of novice teachers demonstrate feelings of job satisfaction while participating in induction programs?
- Q2     Do some novice teacher induction programs encourage perceived support, job satisfaction, and intention to stay better than other induction programs?
- Q3     What components of induction programs encourage perceived support, job satisfaction, and intention to stay?

### **Methodology**

This study was conducted using a survey to collect data. The survey was of the Likert style. Participants were gathered from multiple Colorado school districts. After learning each individual district’s protocols, I contacted districts and requested permission to survey their teachers. Districts were asked to share the survey with teachers who were currently participating

in their district induction program. For participation, districts were provided with results of the study. To compare specific districts, only a set number of school districts were initially approached and asked to participate.

Various statistical methods were planned to be used to analyze the data including descriptive statistics and ANOVA. Survey questions that addressed research questions were analyzed with descriptive statistics to determine the mean feelings of job satisfaction. If comparison data were available, an ANOVA test would have used to run statistics on the second research question to determine the differences between the induction programs participating in this research study. Finally, I would have run correlation tests to see if there is a relationship between levels of perceived support, job satisfaction, and a teacher's intention to remain in the career.

### **Definition of Terms**

These terms have been defined based on prior research in the areas of teacher induction and teacher professional development. They are the definitions used to guide the formation and implementation of this research study.

Induction- The initial experience, specifically in this study, of the teaching career. A program that offers explicit professional development experiences for novice teachers (Eberhard et al., 2000, p. 13)

Job satisfaction- attitudes and emotions an individual has about their job and job duties (Kasalak, & Dağyar, 2020)

Mentoring- one-on-one support of a novice or less experienced practitioner (mentee) by a more experienced practitioner (mentor), designed primarily to assist the development of the

mentee's expertise and to facilitate their induction into the culture of the profession  
(Hobson et al., 2009, p. 207)

Novice teacher- a teacher with one to three years of experience teaching in their own classroom

Professional development- Professional development is an important strategy for ensuring that  
educators are equipped to support deep and complex student learning in their classrooms  
(Darling-Hammond et al., 2017, p. 23)

Retention- to preserve or maintain the number of workers in an organization

Teacher attrition- The reduction of the numbers of teachers- for new teaching position or new  
career- in an school or school district due to resignation, retirement, or death (Eberhard et  
al., 2000, p. 13)

### **Researcher's Assumptions**

As the researcher, I sent the survey, collected data, and analyzed data. As an educator, it was difficult to separate myself from the research. Because this is a topic of great importance and I am passionate about the findings, I was invested in the results. Although I am no longer a classroom teacher, I still answer the question, "What do you do for a living?" with the response: I am a teacher. When I first became a teacher, I completed an induction program. At the time, it was a means to an end. I checked off the boxes like an assignment and turned my certificate in to the state at the end so I could apply for a professional teaching license. It did not mean anything to me other than meeting a state mandated requirement.

After working as a teacher for a couple more years, I met a new first year teacher. Having not yet started an induction program, he was in over his head and had no support. Without a supportive induction program, this teacher was lost. Sadly, he quit teaching before he was able to start the induction program at his school. Induction programs that provide meaningful support to

novice teachers may make a difference in retaining teachers in the first three years of their teaching careers.

### **Summary**

This research study intended to determine the most effective components of an induction program and make recommendations for the future through quantitative methods. After building connections between different components of an induction program and job satisfaction, the most effective components were recommended for use to deter teacher attrition.

## CHAPTER II

### LITERATURE REVIEW

#### **Induction Programs for Novice Teachers and Job Satisfaction**

To address the problem of increasing teacher attrition rates, especially among teachers during the first three years of their teaching career, the purpose of my research was to determine if induction programs for novice teachers increase job satisfaction and in turn increase retention of novice teachers in the career. It also meant to determine if induction programs from different schools or school districts have differing levels of success in creating feelings of job satisfaction amongst the newest teachers in the career. About one third of novice teachers leave the teaching career before they complete their first three years (Brown & Wynn, 2007; Glazerman et al., 2010; Whalen et al., 2019). By the time teachers reach their fifth year in their career, nearly fifty percent have chosen different professions (Brown & Wynn, 2007). Although induction programs have been a part of K - 12 education for many years, “the degree to which induction programs implement teacher education and/or impact new teacher professional learning remains unclear” (Hammerness & Matsko, 2013, p. 363). Further research is needed to show comparisons among popular components of induction programs and their levels of effectiveness.

The use and implementation of teacher induction programs has been changing over the past twenty to thirty years. This is because schools are facing the difficult and complicated task of hiring more new teachers each year than ever before because teacher attrition rates are so high (Brown & Wynn, 2007; Whalen et al., 2019). Out of all the reasons for teacher attrition, retirement accounts for only twelve percent of teacher attrition (Brown & Wynn, 2007; Cherian



& Daniel, 2008). Over thirty percent of new teachers leave the profession with less than three years of experience and by the time they hit the five-year mark of their careers, more than fifty percent of new teachers have left (Brown & Wynn, 2007). Teacher induction programs are now being seen as an opportunity to work with and help novice teachers in an effort to create strong teachers and reduce novice teacher attrition rates.

This problem of dissatisfied teachers and increasing teacher attrition rates can be addressed with the following research questions:

- Q1 What percentage of novice teachers demonstrate feelings of job satisfaction while participating in induction programs?
- Q2 Do some novice teacher induction programs encourage perceived support, job satisfaction, and intention to stay better than other induction programs?
- Q3 What components of induction programs encourage perceived support, job satisfaction, and intention to stay?

This research was needed because teacher attrition is a growing problem in schools across the state of Colorado as well as the nation and educational research seeks to solve major problems in education (Bastian & Marks, 2017). Prior research in the area of teacher induction has been inconsistent (Wasburn-Moses, 2017). It concerns policymakers and researchers that the number of teacher shortages is on the rise (Glazerman et al., 2010). It is yet to be determined which factors and components make for a successful induction programs (Bastian & Marks, 2017; Kwok et al., 2021) therefore, this research is needed because it connects teacher induction programs to job satisfaction and teacher attrition.

Typically, induction programs are established by individual schools or school districts (Goldrick, 2016). Because of the lack of consistency, the different programs have different results. I aimed to study the different components of existing novice teacher induction programs in order to compare the success of an induction program by increasing job satisfaction and

helping to retain teachers. By determining which components of induction programs are most successful at retaining teachers beyond their first years, an induction program that can be used with the purpose of retaining and supporting novice teachers could be built and used nationwide.

### **Prior Research**

New teachers are a vulnerable group. They are traditionally young and recent college graduates. Many novice teachers are in their first career or job ever. Although all teachers should be supported throughout the school year, novice teachers require different support than veteran teachers. They need to know that they are a part of the professional teaching community (Whalen et al., 2019). Without providing that support, schools and school districts risk losing their novice teachers year after year to chronic teacher attrition. The better the support provided, the more likely a novice teacher is to continue on in the career. One means of support is a novice teacher induction program. Induction programs are growing in need and therefore require more research on proper methods and alignment with teaching standards.

This literature review contains a summary of the prior research in the area of teacher induction programs as well as factors that contribute to the success or failure of novice teachers. Looking into the differences between types of novice teachers, types of induction programs, and various levels of job satisfaction contribute to an understanding of teacher attrition rates in Colorado.

### **Novice Teachers**

A new or novice teacher is a teacher within the first three years of his or her teaching career. Today, there are more new teachers than ever and the number of new teachers is increasing even more each passing year. In the early 1990s, most teachers had around 15 years of classroom experience. Now, most teachers currently employed in schools have only one year of

teaching experience (Bastian & Marks, 2017). Teachers with little experience make up the majority of the teaching force in today's schools around the world (Bastian & Marks, 2017; Glazerman et al., 2010). That means that most of the teachers currently employed have three or less years of classroom teaching experience.

Most teachers enter the career having completed some form of teacher preparation program as required by the state in which they work. In addition to passing an approved preparation program, states also require future teachers to pass an exam. Since the 1960s, exams like PRAXIS in Colorado, have been required for teacher licensure (Boyd et al., 2007).

### **Novice Teacher Preparation Programs**

The routes to enter the teaching career vary by state. The most popular path to becoming a teacher is an undergraduate degree from a four or five-year university. The future teacher spends time completing coursework on curriculum content, teaching skills, and pedagogy (Boyd et al., 2007). In this type of preparation program, the final step to a degree in teaching is an internship or student teaching experience under the full-time support and guidance of a host teacher. The required length of this internship also varies by state but is typically part of a school semester. Some universities place student teachers or interns in full year placements so they can experience a wide range of teaching and learning.

Alternative programs are available to those who wish to become teachers and already hold at least a bachelor's degree in an area other than education. These alternative routes often have fewer requirements and almost always coincide with an individual's first year of teaching and seek to address the growing teacher shortage (Chamberlin-Kim et al., 2019). This means the teacher is completing their coursework and teaching in a classroom for the first time while at the same time as they are teaching in the classroom to students. These types of programs have

become necessary to encourage people from other career paths to become teachers to lessen stress of the teacher shortage (Boyd et al., 2007; Chamberlin-Kim et al., 2019).

Although these teachers have successfully completed these programs, it is not until they have their own classrooms, “in their initial year of teaching, that they come face to face with the complexity of what it means to teach and to be responsible for the students in their classes” (Kane & Francis, 2013, p. 367). The amount of responsibility and expectations can be daunting. Preparation programs meet standards and requirements for preparing future teachers, but there are some teaching skills that cannot be taught in a university setting. Sometimes experience is the best teacher.

In rare situations, states allow teachers to be hired with emergency credentials. These emergency situations bring teachers into classrooms without formal training and no teaching experience. The need for emergency certification has sprung out of the teacher shortage in some content areas, specifically math and science. These teachers especially require support during their first years of the teaching career (Boyd et al., 2007). The state of Colorado allows teachers to obtain emergency certifications one year at a time while the novice teacher participates in the school or school district’s induction program and professional learning. A licensure program must still be completed to obtain non-emergency credentials (Colorado Educator Licensing Act of 1991, 1991).

Regardless of the type of preparation program, all preparation programs must meet strict standards set by their states and prospective teachers must meet these standards in order to successfully complete a program. “The responsibility for scaffolding new teacher growth does not fall to university teacher educators alone; it is shared with mentor teachers, school administrators, and intern supervisors” (Broemmel et al., 2009, p. 68). Preparation of potential

and novice teachers is a multi-year team event through the successful completion of a preparation program and then reinforced through induction programs.

### **Need for System of Support**

Even after completion of a preparation program, many novice teachers struggle in the first years of their career (Kane & Francis, 2013; Whalen et al., 2019). The first years of a teacher's career shape his or her performance, satisfaction, and future intentions (Hammerness & Matsko, 2013). The first years of teaching are "intense and formative time in learning to teach, influencing not only whether people remain in teaching, but what type of teacher they become" (Kane & Francis, 2013, p. 363). Unfortunately, new teachers enter the career with little to no experience yet are expected to perform at the same level as teachers with multiple years of experience (Kane & Francis, 2013). Additionally, many first-year teachers are assigned or are forced to accept the most difficult teaching positions (Goldrick, 2016). Some of these difficult teaching positions include: classrooms in urban or low-income schools, students with difficult behaviors, or schools with multiple English Language Learners. When not properly supported during the first years, teachers become discouraged and dissatisfied (Glazerman et al., 2010).

Because many novice teachers are employed in the most difficult teaching positions, they often face feelings of frustration. Teachers are expected to perform at the same level as experienced teachers with years of experience. This frustration can stem from grading, managing classroom discipline, lack of time, and the general stress of the position. Most new teachers are facing these tasks alone with little to no interaction with other adults, peers, or administrators. (Ingersoll & Strong, 2011). Providing support to these novice teachers can alleviate some of that stress by reducing feelings of inadequacy and isolation (Goldrick, 2016). Induction programs seek to relieve the stress of a novice teacher through quality support.

In recent years, many educational professionals have realized that it is unrealistic to expect performances from new teachers equal to those of returning teachers (Bastian & Marks, 2017; Kwok et al., 2021). These educational professionals have turned to induction programs to reduce attrition and increase positive feelings of success (Cherian & Daniel, 2008). New teacher success increases with strong mentoring and feedback from an induction program (Kingsley & Romine, 2014). An induction program can help a novice teacher begin the process of completing the five tasks necessary for a first-year teacher, learning about students, curriculum, instruction, community, and developing a professional identity (Kane & Francis, 2013).

Novice teachers need help. That help needs to be specifically designed to meet the unique needs of a novice teacher. Through an induction program, schools and school districts can provide novice teachers support that encourage them to grow into experienced teachers. Experienced teachers who feel supported are more likely to remain teaching (Cherian & Daniel, 2008; Glazerman et al., 2010; Wasburn-Moses, 2017).

### **Teacher Attrition**

Recently coming to light by educators and researchers, it is now understood that novice teachers face unreachable expectations and difficulties in their first years. These unrealistic expectations and difficulties lead many teachers to leave the career early (Cherian & Daniel, 2008). Teacher attrition is a growing problem in schools and school districts around the world. Out of all the teachers who leave the career each year, only 12% are teachers who have reached retirement age. Within the first three years of their career 33% of teachers have left. That number increases to 50% for teachers who have five years of teaching experience (Brown & Wynn, 2007).

The school environment plays a strong role in staff morale and decreasing attrition rates (Brown & Wynn, 2007). All teachers, new teachers included desire to feel a part of the decision-making process of a school. Administrators who include their staff in decisions and creating a welcoming environment are more successful in building a positive working environment for all teachers and staff and have lower levels of teacher attrition in their schools (Brown & Wynn, 2007). Another contributing factor to teacher attrition is school location and diversity. Schools with lower socioeconomic status (SES) and ethnic diversity have higher attrition rates because new teachers are often hired on for the more difficult teaching assignments and then resign or move on (Toropova et al., 2021).

The negative effects of teacher attrition cost schools and students each year. Constant teacher attrition forces schools and districts to repeat the expensive hiring process of advertising, interviewing, conducting background checks, and planning orientation (Glazerman et al., 2010; Kraft & Blazar, 2017). Induction programs can alleviate these costs because the cost to guide a novice teacher through an induction program can be less than the cost of hiring new teachers. These high attrition rates are connected to the number of teacher shortages that schools and districts face each year (Carver-Thomas & Darling-Hammond, 2019; Ingersoll & Smith, 2004, p. 202).

One unfortunate cost of consistent teacher attrition is student achievement. Students suffer from lack of experienced teachers in the classroom. Experienced teachers are more likely to have higher levels of student achievement (Wasburn-Moses, 2017). Constant turnover of teachers means that more students are being taught by novice teachers. The only way for a novice teacher to gain experience is by staying in the career. Brown and Wynn (2007) state that schools with higher rates of retention are schools that demonstrate increased levels of support for

the novice teacher, often through mentoring and an induction program. Now more than ever, it is important for schools and school districts to keep the teachers they have on staff from school year to school year with the support of a research-based induction program (Larabee, 2009; Wasburn-Moses, 2017).

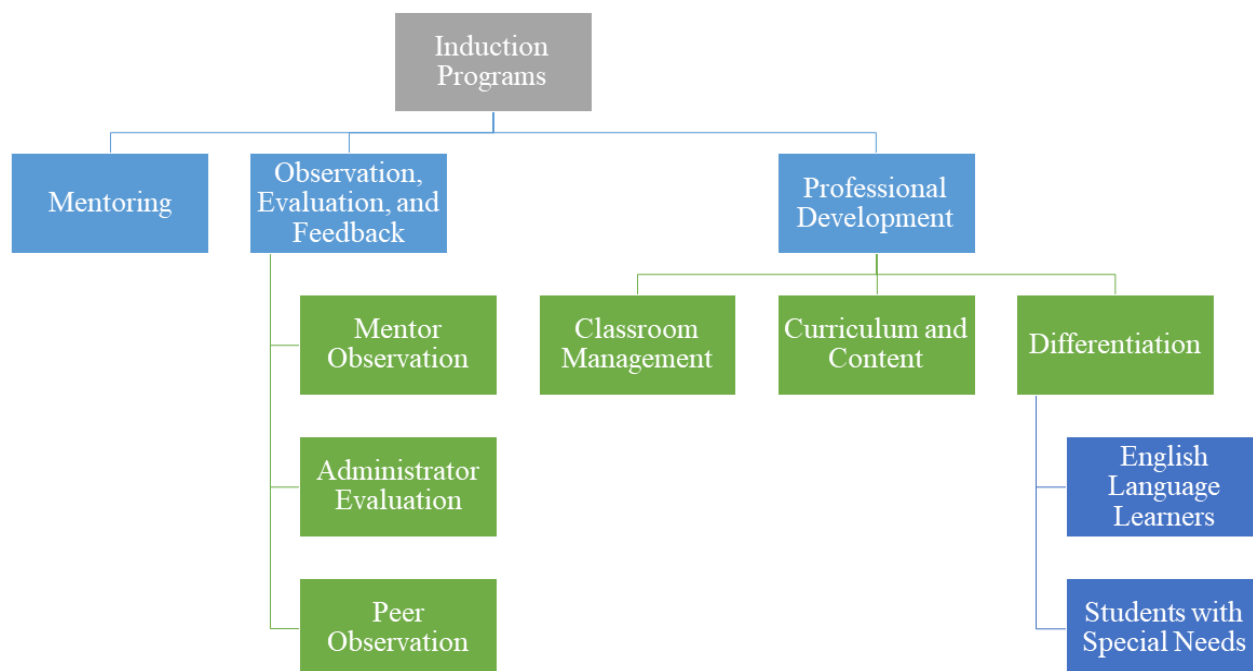
### **Induction Programs**

The federal government became interested in using induction programs as a means of increasing teacher quality with the introduction of educational reformations such as No Child Left Behind (Glazerman et al., 2010). It is believed that increased levels of teacher quality lead to increased levels of student success. Induction programs could include mentoring, professional development in difficult areas, multiple observations and constructive feedback. With little research to back up the success of induction programs, many schools and school districts at first struggled to justify the expensive programs (Glazerman et al., 2010, p. 1). Induction programs are currently left to each state to regulate and enforce.

In the state of Colorado, an induction program is mandatory for a novice teacher to transition from an initial teaching license to a professional teaching license. The Colorado Educator Licensing Act of 1991 (1991) states that induction programs in the state of Colorado must include opportunities for novice teachers to work with a mentor teacher and enhance their teaching skills through a variety of professional development. Mandated areas of professional development are quality instructional practices, improved educational experiences, and ways to adapt curriculum and instruction to accommodate populations of diverse students.

Teacher induction programs vary from school to school, but most of them have similar main components. Through induction programs, teachers become “active participants in their



**Figure 1***Components of an Induction Program*

own training” by learning through practical classroom applications (Schaffer et al., 1992, p. 182).

An induction program is different from a teacher preparation program, induction programs go beyond teacher preparation to involve the teacher with on the job training and support for their first year (Ingersoll & Smith, 2004).

The main components (Figure 1) of any induction program shown to be successful by research are mentoring, professional development in classroom management and instructional practices, orientation, and reflection (Turley et al., 2006). Evidence suggests these practices can benefit teaching practices and significantly reduce attrition rates (Bastian & Marks, 2017). Induction programs also give novice teachers an opportunity to learn about and understand their struggles. When a trusting relationship with the mentor teacher is formed, novice teachers are comfortable asking for help (Broemmel et al., 2009).

## **Mentoring**

Mentoring is one of the most common practices in an induction program in the United States and internationally (Larabee, 2009). A mentor is a strong, experienced, veteran teacher who is paired up with the novice teacher to provide support and assist during the induction process. In the state of Colorado, mentor teachers must hold a professional teaching license. This professional license indicates that the teacher is working at veteran status. Mentor teachers have “demonstrated outstanding teaching and school leadership and who can provide exemplary modeling” (Colorado Educator Licensing Act of 1991, 1991, p. 3). Some mentors are assigned evaluative tasks, while others are just an immediate point of contact for the new teacher (Turley et al., 2006). Mentors have been shown, through research, to lessen attrition rates among teachers in the early years of their career (Smith & Ingersoll, 2004).

Mentoring helps reduce a novice teacher’s feelings of isolation. For many novice teachers, their first-year teaching is the first time they are alone in the classroom, that is the nature of teaching (Ingersoll & Strong, 2011). Throughout student teaching or internship opportunities, there is always constant supervision by the cooperating teacher. Facing the responsibility of a classroom alone for the first time can be daunting and intimidating. The mentor is intended to be a direct contact for the novice teacher and a constant reminder that they are not alone (Larabee, 2009; Whalen et al., 2019).

Successful mentoring includes regularly scheduled meetings between mentors and novice teachers. In these meetings, the mentor and novice teacher should discuss routines, struggles, and observation feedback. Schools and school districts can support this portion of an induction program by providing substitutes for the two teachers so the meeting can take place during the

day, rather than after the work day is over (Larabee, 2009). These regular points of contact encourage the relationship between the novice teacher and mentor.

### **Observation, Evaluation, and Feedback**

Opportunities for observation and feedback is a necessary component of induction programs. These evaluations can be completed by the school administrators or the mentor. The experienced teacher or mentor completes observations and during a post observation meeting, offers feedback to the novice teacher (Glazerman et al., 2010; Kingsley & Romine, 2014). The observer watches the lesson with a specific goal in mind to provide targeted feedback, making it meaningful for the novice teacher (Kraft & Blazar, 2017). Research shows that with a regular cycle of observation and feedback, the novice teacher can build strong instructional practices through the support of his or her mentor. Many novice teachers believe that the insights they gain from the practice of observation and feedback are the most relevant to their classroom management growth (Kwok, 2018).

In addition to working with their mentor, novice teachers need the opportunity to observe other veteran teachers at work (Glazerman et al., 2010). During these peer observations, veteran teachers can demonstrate successful practices in a live classroom setting. Watching veteran experts teach allows the novice teacher opportunities for reflection to compare to their own classroom practices. Novice teachers should enter observation opportunities with specific goals for growth in mind. Some induction programs allow novice teachers to observe experts during the school day by providing substitute teachers. Induction programs that allow observation understand the power of learning from others with experience.

## **Professional Development**

Professional development is a part of the induction process. Novice teachers participating in an induction program are provided with professional development opportunities specifically designed for novice teachers (Gibbons & Cobb, 2017; Whalen et al., 2019). These professional developments can take place throughout the school year in many different forms. Successful professional development opportunities are intensive and intentional. Focusing on areas that are relevant to the teachers makes professional development meaningful (Gibbons & Cobb, 2017). When learning in professional development relates directly to their classrooms, teachers are more likely to use it in their own classrooms (Kraft & Blazar, 2017). Most new teachers require explicit professional development in the areas of classroom management, curriculum, and differentiation (Kingsley & Romine, 2014; Turley et al., 2006; Whalen et al., 2019).

### ***Classroom Management Professional Development***

Supporting teachers with classroom management skills is a necessary piece of professional development because many novice teachers are facing classrooms independently for the first time (Glazerman et al., 2010). Classroom management is consistently ranked as one of the top struggles for novice teachers (Kwok, 2018). Through direct professional development opportunities or observation and feedback, novice teachers gain experience and improve their classroom management skills (Turley et al., 2006).

### ***Curriculum and Content Professional Development***

Teachers come from a variety of backgrounds and preparation programs to work in one specific school or school district. They do not necessarily have the same experiences of curriculum materials and content. Schools use different curriculum resources and books that require specific teacher training. It is important that teachers, especially novice teachers, are

offered proper professional development in the area of curriculum and instruction to meet the standards of their specific school or school district (Schaffer et al., 1992; Turley et al., 2006). Professional development on curriculum and content should be intensive and directly related to the teacher's assignment to be a meaningful part of the induction process (Gibbons & Cobb, 2017).

### ***Differentiation Professional Development***

Meeting the needs of diverse learners is another difficult area for many novice teachers (Whalen et al., 2019). Teachers need support when working with diverse populations such as English Language Learners or students with special needs. The ability to manipulate a single lesson plan to reach a variety of different learners is a skill that takes time and experience to develop. Through specific and intensive professional development, mentors and administrators can provide novice teachers with tools for successfully reaching their diverse students (Whalen et al., 2019). Additionally, mentors can support novice teachers in planning for differentiated instruction by providing examples or observation opportunities.

### **Job Satisfaction**

Job satisfaction is the direct relationship between a work environment and an individual's attitude towards work (Ho & Au, 2006; Kasalak & Dağyar, 2020). Many factors contribute to positive or negative on the job experiences. The job satisfaction of teachers is dependent upon each individual school. Working conditions and school composition are factors that a school can control. Teacher characteristics are based on the individual. Working conditions that a school or school district can control are workload, availability of necessary resources, and coworker collaboration (Toropova et al., 2021). Student factors contribute to teacher job satisfaction. Teachers take student achievement personally and feel better about themselves and their jobs

when students are successful (Wang et al., 2020). Opportunities for professional development and support from leadership also make a difference when individuals rate their job satisfaction (Toropova et al., 2021).

Many surveys have been conducted over time to measure levels of job satisfaction. Surveys are conducted and then measured with descriptive statistics and correlations (Kasalak, & Dağyar, 2020). Researchers are especially interested in the levels of job satisfaction of teachers so they are common. Many studies have been conducted to rate and understand the job satisfaction of teachers. Research has made a connection between lessened teacher attrition and job satisfaction (Ingersoll & Strong, 2011; Toropova et al., 2021). When teachers are happy with their jobs and teaching assignments, they do not quit. Job satisfaction and working conditions play an important role in an individual's decision to remain in the teaching profession but more research is needed to focus on the job satisfaction of teachers and make connections to novice teacher attrition rates.

Induction programs seek to improve job satisfaction rates by providing meaningful professional development opportunities and providing support to improve working conditions. "Teachers are expected to love their professions, to have a positive attitude towards their jobs, to be satisfied with what their professions bring to them, and to have high self-efficacy beliefs that they can do their jobs" (Kasalak, & Dağyar, 2020, p. 18) yet there is no standard system for helping teachers feel support and confidence in what they do. The intention of induction programs is to bridge the gap between expectation and reality.

### **Direction of Study**

Mostly qualitative studies have been conducted to demonstrate successful induction programs and have shown that there are mixed results concerning the benefits of novice teacher

induction programs (Hammerness & Matsko, 2013). Qualitative studies focus on how teachers feel about and react to induction programs; they focus on the experiences of teachers. In a mixed methods study, Kwok (2018) concluded that teachers with similar experiences had varying levels of successful growth throughout their induction year. Research finds that even though induction programs are in place, novice teachers are still struggling and still leaving the career at alarming rates in their early years (Brown & Wynn, 2007; Kane & Francis, 2013).

Mentoring as a common component of many induction programs, has been increasing in use over recent years, and is shown to help novice teachers build confidence through relationships (Goldrick, 2016). In many studies, novice teachers report that their relationship with their mentor teacher was the most useful component of their induction program (Larabee, 2009; Whalen et al., 2019). That relationship allows novice teachers a safe contact to seek help or ask questions they might otherwise keep to themselves (Broemmel et al., 2009). Kwok (2018) found that consistent mentorship offers positive opportunities for novice teachers specific to their content.

This study was conducted using quantitative methods. Many prior studies exist on the topic of teacher induction, but are mostly done with qualitative methods. A quantitative study is needed to fill gaps in this area of research. The addition of quantitative data to this area of study can be an important part of decision making at a state or local level.

### **Summary**

Teachers in the first years of their teaching careers need guidance and support more than and different from their experienced peers. Induction programs intend to provide support for novice teachers. Additional professional development, mentoring, and opportunities for evaluation and feedback are traditional components of induction programs. It is up to the

discretion of individual schools or school districts to provide induction programs for their novice teachers. Some states require induction and some do not. Without statewide or national standards for induction, there is little consistency.

This quantitative research study took steps towards the standardization of induction programs by comparing different existing induction programs. Comparisons provided a deeper understanding of what makes different programs successful. Through building connections between the components of induction offered and teacher job satisfaction, research can make recommendations for successful induction implementation and the potential standardization of induction.



## CHAPTER III

### METHODOLOGY

#### **Research Design and Rationale**

This research study intended to build connections between novice teacher induction programs and job satisfaction to better understand the growing teacher attrition rates within novice teachers. The following research questions guided this research study through quantitative methods. If induction programs have the intention of training and supporting novice teachers, then the gap between teacher preparation program and first year teaching might be lessened. Comparing different induction programs began the processes for making recommendations that encourage the requirement of induction programs nationally and for potential standardization of induction programs.

#### **Procedures**

At the start of the spring semester, I began building connections with the selected school districts in Colorado. Each district had their own policies for requesting to conduct research within the district and those were followed. Districts were offered an analysis of their induction program for participation.

After permission to conduct research was granted, I emailed the electronic survey to qualified participants, teachers currently participating in an induction program. Participants were given four weeks to complete the survey with a reminder to complete the survey at the two-week mark if necessary. Following the completion of surveys, I held the raffle for a gift card for participants who opted in.

Once all data were collected, I planned to analyze the data using ANOVA tests, descriptive statistics, and regression analysis. Had it been available, data would have been compared to determine which components of an induction program encouraged teacher retention and which programs had the highest rates of teacher retention. Finally, individual an analysis of each district was completed and shared with the school district.

### **Research Questions**

- Q1    What percentage of novice teachers demonstrate feelings of job satisfaction while participating in induction programs?
- Q2    Do some novice teacher induction programs encourage perceived support, job satisfaction, and intention to stay better than other induction programs?
- Q3    What components of induction programs encourage perceived support, job satisfaction, and intention to stay?

### **Hypotheses**

- H1    Teachers who participate in induction programs feel higher than average levels of job satisfaction while participating in the program.
- H2    Perceived support, job satisfaction, and intention to stay is positively related to the type of program. Some programs will have higher levels of perceived support, job satisfaction, and intention to stay than others.
- H3    Induction programs with a mentoring component have higher levels of perceived support, job satisfaction, and intention to stay.

### **Population and Sample**

The participants were licensed teachers who were in the process of completing a novice teacher induction program. Type of license, initial or alternative, is not a determining factor for participation in this study. It was up to the discretion of building or district administration when the teacher completes the program. As long as a teacher is currently participating in an induction program, they were invited to participate in my study.

Participants were collected from school districts in Colorado. There was a mix of suburban and urban districts invited to participate. I began by contacting six school districts to request permission to conduct research. When permission was not granted, I reached out to additional districts totaling 32 school districts. To establish a relationship with the school districts, I followed their individual protocols and requested permission to conduct research with them. The goal was to have at least three participating districts with a total of 100 participants completing the survey.

For participation, I offered each district an individual analysis of their induction programs compared with job satisfaction. Using this method ensured that I have direct control of the number of district induction programs included in my study because that number was based on how many districts respond to my request for research. When approved, I sent my survey to the district to distribute to their teachers. Participation of teachers was encouraged with the option to enter a gift card raffle at the end of the survey.

### **Data Collection**

After receiving permission from the school districts, I sent the survey to potential participants. Participants in this study were asked to complete the survey one time and were entered into a gift card raffle upon completion if they chose to submit contact information. Teachers were able to exempt themselves from the raffle if they choose.

After two weeks, when reminders to take the survey were required, I took note of the average completion time of completed surveys and sent email reminders at that same time of day to encourage an increased response rate. Participants who did not respond after two additional weeks were not included.

## **Instruments**

This study comparing induction programs was conducted by a quantitative research study using cross sectional survey design. “Cross sectional design compares two or more educational groups in terms of attitudes, beliefs, opinions, or practices” (Creswell, 2012, p. 378). The data collection was conducted through a Likert Style survey (see APPENDIX A) and was web based. Some survey questions from the Induction Activities Teacher Questionnaire from Mathematica Policy research and the US Department of Education (see APPENDIX A) were adapted to fit the needs of this research study. This survey included 61 questions about professional development, mentoring, and classroom observations. Changes and additions were made to the Induction Activities Teacher Questionnaire from Mathematica Policy Survey to specifically address the research questions of the study and to focus the attention of the participants on their participation in and perception of the induction program. Some questions from the original survey were not included. Seven of the survey questions were written by myself to fully address the research questions. The online survey was split into nine sections: Informed consent, demographics, satisfaction, induction support, feedback and evaluation, mentoring, professional development, future plans, and optional survey entry.

The Induction Activities Teacher Questionnaire from Mathematica Policy was first published on January 11, 2006 for Mathematica Policy Research (Glazerman et al., 2006). Its purpose was to study the components of novice teacher induction programs and their impact on the design of future programs. To ensure reliability, the participants and participating schools were randomly assigned (p. 16). Because the survey was conducted in multiple parts, plans were made in case teachers left or stopped participating mid study.

To gather demographic data, the survey started with a series of multiple-choice questions to address research question one (see APPENDIX A). This ensured the participants fit the needs of the study and collected data about the components included in the induction program. It also sorted the participants by district for comparison. It was emailed to potential participants. This study demonstrated a quantitative methodology with a Likert style survey that is a strong method for showing comparisons.

Creswell (2012) writes of the importance of clarity in survey questions. I sought permission to use surveys from prior research studies. Using a historical survey increased validity because they have already demonstrated proper clarity and calibration. Had the study been completed as intended, I would have also run Cronbach's Alpha to establish consistency and reliability.

### **Data Analysis**

The data from the Likert style survey was to be analyzed using multiple statistical methods based on the research question. Descriptive statistics were used to analyze research question one. I planned to look at the job satisfaction survey and calculate the frequency (percentage) of participants reporting satisfied and highly satisfied.

An analysis of variance (ANOVA) test would have been used to analyze research question two if comparison data were available to compare reported mean of the subscales job satisfaction, perceived levels of support, and intention to return (Agresti & Finlay, 2009). ANOVA tests measure the F distribution to note differences in populations (p. 369) or in this study, difference in induction program. A statistical assumption was that the sample is random. The independent variable was the district induction program and the dependent variable was perceived levels of support and intention to return. Regression statistics would have tested the

relationship between perception of satisfaction with the induction program and teacher intention to stay in the career to address research question three. Regression analysis would have determined the relationship between the multiple variables. It was assumed that there would be a linear relationship and the residuals are independent. Homoscedasticity and normality are also assumed. If the data appeared violated, running a Brown-Forsythe (B-F) Test would have tested the assumption of equal variances in ANOVA.

### **Threats to Validity**

My research made connections between the teacher's status in the career and the components of their induction program. There could have been three possible outcomes from the teachers' participation in the various induction programs. They could have remained in teaching happily, remained in teaching reluctantly, or quit the profession entirely to pursue different career opportunities. Threats to validity included external validity, internal validity, statistical conclusion validity, and construct validity. These threats to validity could have interfered with the data collection process (Creswell, 2012, p. 303). This study had the potential threat to internal validity.

### **Threats to Internal Validity**

The location of the study was one threat to the internal validity of this study. Colorado is a state that requires induction for their novice teachers and in doing so, has a system for vetting and approving induction programs. There could be few differences to compare since all programs included in the study have been approved by the state through the same state approved, rubric based grading system. Another threat to internal validity was the selection of participants. Teachers were asked to participate in this study based on their current participation in their school's induction program. Teachers currently participating in the program only had partial

experience with the program and therefore were not answering the questions with a completed experience. Additionally, their opinion of the program and their decision to remain in teaching could change over the school year and this study only looked at a moment in time.

### **Limitations**

This study had some limitations. First, this survey was given at one set time during the school year. Teachers generally begin thinking about employment for the next school year at the end of the current school year. If the survey was conducted at any other time of the year, then the teacher might not have had a good idea of their intent to return or leave.

Another limitation is that the entire study was conducted in the state of Colorado where induction programs are required and maintained by the state. All induction programs must be approved by the state with the same rubric and judging criteria and therefore, might have many similar components.

### **Necessary Changes to Design of Study**

I intended to address my research questions using quantitative research because there is very little quantitative research relating to induction programs. Due to many unforeseen circumstances, the quantitative research did not go according to plan and changes were made in the area of data collection.

This study was originally designed to be a quantitative look into teacher induction programs across Colorado using a Likert style survey to collect data from novice teachers about their experiences in an induction program. Because of uncontrollable circumstances, I received Institutional Review Boards (IRB) approval in the middle of March. March is the time of year that most school districts are on spring break so when I requested permission to conduct research in multiple Colorado school districts, there was a delay in receipt of those requests. Once

requests were received and reviewed by district administration, it was state testing season in Colorado. Testing season is a stressful and difficult time for districts and teachers. Teaching is a difficult profession made even more difficult in the aftermath of the COVID-19 pandemic. School district administrators are protective of the teachers working for them. For these reasons, I was unable to procure enough participants to complete a comparison study.

The inability to collect enough participating school districts to complete a comparison study caused me to find a shift in methods. The shifts I made included conducting interviews with four novice teachers who each participated in an induction program in the state of Colorado during the most recent school year. Interview questions were written to encourage teachers to reflect about their program and make connections with their induction program and their intention to remain in the teaching profession. I also analyzed the results of the quantitative study from the one district who agreed to participate. In total, 31 teachers from this district participated by taking the online survey. Combining the quantitative descriptive analytics with the qualitative thoughts of the teachers interviewed provided enough data to draw conclusions about the state of induction in Colorado.

### **Summary**

The original design of this quantitative study planned to use ANOVA, descriptive statistics, and regression statistics to compare multiple induction programs in the state of Colorado. The combination of qualitative and quantitative data added an unexpected layer of emotion and description to the study. Although the original methodology met uncontrollable roadblocks and was altered, valuable information about induction programs in the state of Colorado was gathered during this study.



## CHAPTER IV

### RESULTS

Teachers new to the teaching career are often referred to as novice teachers. Novice teachers tend to need more support than experienced teachers. The state of Colorado has recognized this and has implemented mandatory induction programs for teachers to obtain a professional teaching license. The purpose of this research was to compare different novice teacher induction programs to determine if some were more successful than others at retaining novice teachers in the first years of their career because rising teacher attrition rates is a problem with many consequences including suffering student achievement and high costs to school districts (Brown & Wynn, 2007; Whalen et al., 2019).

#### **Quantitative Research**

Based on its original design, qualitative data were collected from one school district in Colorado. Once Institutional Review Board (IRB) permission was granted, 32 school districts in Colorado were contacted and asked to participate in this study. Some districts were not contacted due to information on their websites that openly addressed outside associations conducting research studies. Of the 32 districts contacted, one district and one small charter school agreed to participate. The participating charter school did not have enough participants for their data to be included. The participating district had 31 novice teachers submit responses to the online survey. The responses to this survey were analyzed using descriptive statistics. All 31 teachers were novice teachers currently participating in the induction program provided by the district. The teachers were spread out across all grade levels. 32.26% of the participants taught kindergarten -

2nd grades, 9.68% of the participants taught 3rd - 5th grades, 25.81% of participants taught 6th - 8th grades, and 29.03% of participants taught high school grades 9 - 12 at the time of completing the survey.

The survey was divided into eight sections and data were analyzed by the same sections. The sections include: consent, descriptive statistics, satisfaction, induction support, feedback and evaluation, mentoring, professional development, contact. Data from the section's descriptive statistics, satisfaction, induction support, feedback and evaluation, mentoring, and professional development were analyzed for this study. Comparison data were not available since only one district participated, therefore, descriptive statistics were used.

### **Descriptive Statistics**

The Likert style survey asked teachers to reflect and judge their novice teacher experiences in five areas: general job satisfaction, support throughout the induction process, quality of feedback and evaluation, program mentor, and options for professional development throughout the year. Because only one district participated in the online survey, there was no data available to make comparative assumptions that answer the research questions. A summary of descriptive statistics is provided. Table one shows response options and how data were analyzed based on the section of question being asked.

### ***Satisfaction***

In the area of job satisfaction, the teachers who completed the survey were generally satisfied with their teaching experiences. Their overall satisfaction rating averaged 3.3818 with a standard deviation of 0.7559. Considering all questions in the category of satisfaction, teachers responded with somewhat satisfied 32.62% and very satisfied 48.99%. Combined ratings of somewhat satisfied and very satisfied occurred 81.45%. Meaning, teachers fell between

somewhat satisfied and very satisfied and the overall ratings ranged within one point of the average. When asked specifically about their induction program and level of satisfaction, teachers were also on average satisfied with the program with a rating of 3.6897 and a standard deviation of 0.5414. The three lowest rated areas were workload (2.76), student discipline and behavior (2.93), and opportunities for professional development (3.1).

**Table 1**

*Survey Response Options*

<b>Response Options</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Satisfaction</b>	Very dissatisfied	Dissatisfied	Somewhat satisfied	Very satisfied
<b>Induction Support</b>	Not supported at all	Somewhat supported	Well supported	Very Well supported
<b>Feedback and Evaluation</b>	Never	Once	2-3 times	4 or more times
<b>Mentoring Professional Development</b>	Strongly Disagree	Disagree	Agree	Strongly Agree

*Induction Support*

There are various types of support that can be provided to teachers throughout an induction program. Some areas that support can be provided in are classroom management, working with groups of exceptional learners, and using curriculum. Teachers reported on the support they were provided throughout the induction program with an average of 2.7696. The standard deviation is 0.7729. The participants reported the lowest levels of support in the areas of teaching students with special needs (2.6154) and implementing the school-based curriculum with fidelity (2.64).

### ***Feedback and Evaluation***

Various types of feedback and evaluation are a necessary component of any induction program. This can happen with novice teachers being observed or when novice teachers are provided the opportunity to observe veteran teachers. In this portion of the survey, participating teachers reported the number of visits they had experienced by their mentor or school administrator. This section also asked the participants to report the amount of times they were provided with feedback or given the opportunity to observe other exemplary teachers.

With limited amounts of teaching experience, novice teachers benefit from receiving constructive feedback from their mentor or supervisor. The average reporting on experiencing multiple mentor observations in the last three months of the school year is 3.28 meaning that the participants were observed by a mentor 2 -3 times in the designated time frame. The average number of visits by the school principal is much lower at a 2.48 average rating; principals were in classrooms an average of only 1 time in the designated time frame. Very few teachers report being given feedback on lesson plans (1.88) or being given the opportunity to observe other teachers (1.42).

### ***Mentoring***

Working with an assigned mentor teacher is a required component of induction programs in Colorado. The Colorado Educator Licensing Act of 1991 (1991) defines a mentor teacher as: any teacher who is designated by a school district or districts providing an approved induction program for initial teacher license-holders, who has demonstrated outstanding teaching and school leadership and who can provide exemplary modeling and counseling to initial teacher license-holders participating in an approved induction program (p. 9).

The average rating when asked if the mentor played a strong role in the induction program was 3.56 and with a standard deviation of 0.5066, there was not much variance in the responses.

Participants also report feeling strong levels of support (3.68) from their mentor throughout the induction program.

### ***Professional Development***

All teachers participate in professional development throughout the school year regardless of their levels of experience. Novice teachers require different types of professional development to support their unique needs. Induction programs include professional development to meet these needs. With an average of 2.936, novice teachers report that their induction program did not strongly meet their professional development needs. The scoring areas of professional development were preparing students for standardized testing (2.5), lesson planning (2.74), content area knowledge (2.77), and assigning grades/ keeping records (2.78).

### ***Future Plans***

Of all participants, 82% decided to remain in their current position at the end of the school year; indicating an 18% attrition rate of teachers who sought teaching positions or careers different than the year they just completed. None of the participants reported that their decision was impacted by COVID-19. With an average reporting of 3.3913, teachers indicate high levels of satisfaction with their induction program but that does not mean the induction program impacts the desire to remain in their current position.

### **Qualitative Research**

Interviews were used to add qualitative research to this study when there were no participants for the survey to collect quantitative data.

## **Interview Process**

### ***Interview Questions***

The interview questions were developed with the original research questions in mind with the intention of adding qualitative data in the form of interview questions to this study. The interview questions were written with the research questions in mind. When writing the interview questions, I looked at my research questions and thought about what types of answers potential participants would need to give to answer the research questions. I then built questions based on the type of answers necessary.

### ***Setting/Participants***

Interviews were conducted with four novice teachers and one principal from the state of Colorado. I contacted the participants via email and requested they participate in an interview about their induction program. Participants were assured that participation would be confidential. They were also assured that, if names were to be used, pseudonyms would be applied to protect the identity of the participating novice teachers.

The researcher questioned the novice teachers and school principals about various components of the induction program and their experiences with the program. Participant interviews took place via Zoom and were one-on-one interviews. Each teacher was interviewed one time, lasting an average of 34 minutes per participant. The shortest interview was 21 minutes and the longest interview was 58 minutes long. The novice teachers are asked open-ended questions with the goal of gaining insight on how induction programs affect the teacher's career. In their interviews, the principals were also asked open ended questions in a one-on-one setting. The perspective from the principal provided detailed information about the components of an induction program as well as insights into the retention of novice teachers. All participants are

adults, over the age of 18. The researcher has personal connections to multiple novice teachers in Colorado and therefore, the participants were chosen through connections by the researcher. Snowball sampling, which is a type of non-probability sampling technique that is used by researchers in order to help identify potential participants, was also used to expand the participant field. One participant was contacted through the recommendation of another participant. The names and brief description of the participants who agreed to be interviewed are listed below. All names and personal identifiable information have been changed to ensure privacy and confidentiality.

The four teacher participants and one principal participant worked at three different schools at the time of the study. All three programs include a mentor program. Brianna teaches at a charter school that uses a one-year induction program. Any teacher who is new to the school completes the program regardless of novice or veteran status. This program includes monthly article reviews. The principal participant also works at a charter school. This school has a two-year mentor program and also includes peer observations for novice teachers. Nolan, Gabriella, and Harper teach at a kindergarten – eighth grade charter school, different from Brianna, that implements a two-year induction program. The first year of the induction program includes opportunities for the novice teacher to observe veteran teachers in the building. It also includes lesson planning, classroom management, and differentiation support. The second year requires the novice teacher to be observed by their veteran teacher mentor and then meet to discuss feedback.

The principal at this school is Marissa. She has over 10 years of experience in school administration but this is her first year as principal at this charter school. She was hired after the former principal resigned and moved to a new state. That same year, the dean of students and

school executive director also resigned. Marissa had one-month direct work with the former principal. The board of directors decided to not replace the dean of students or school executive director meaning and Marissa took on those responsibilities as well. During their interviews, Marissa is often mentioned by the novice teacher participants. It is obvious they respect her, but they did not work directly with her often.

**Nolan.** Nolan is a third-year teacher. He teaches physical education to students grades kindergarten - eighth grade. He completed his bachelor's degree in a non-education area of kinesiology and turned to teaching after graduating and taking on multiple part time roles as a substitute teacher, restaurant worker, and personal fitness trainer. During his first-year teaching, he completed a certificate program at an accredited Colorado university to procure a Colorado Initial Teaching license. Nolan just completed the second year of his induction program and plans to transition to a professional teaching license with the completion of this induction program.

Nolan was asked to participate because of his connection with the researcher and his status as a novice teacher participating in an induction program. He was open to discussing components of the induction program. As an eloquent speaker, his answers were well thought out even with no prior knowledge of the questions.

Entering the career of education as a second career teacher, he has been very happy with his decision to become a PE teacher. He enjoys teaching students of all grade levels but specifically loves working with older students who are developmentally ready to understand skill and reasoning.

He is not returning to his current teaching position and began searching a new teaching position in the fall. His reasoning for changing jobs is to teach high school instead of



Kindergarten through eighth grade at the school where he is already employed as the head coach of the track and field team.

**Harper.** Harper is a second-year teacher. She teaches technology to students grades kindergarten - eighth grade. She completed a traditional teacher preparation program in a state other than Colorado. Harper also recently completed the second year of her induction program and has an initial teaching license from the state of Colorado. She plans to transition to a professional teaching license with the completion of the induction program.

Harper has an effervescent personality and was very open and honest about her experience within her school's induction program. She answers questions with great emotion yet is level headed and thoughtful. Her excitement for participating in this study was obvious when she suggested the researcher speak with a novice teacher not originally on the list of participants. She is content with her teaching position but due to feelings of instability within the charter school's structure and management, she began looking for a different job in the spring. She interviewed for and turned down two different offers. She loves teaching all grade levels, kindergarten through eighth grade, and is being very selective of the openings she applies for. Many factors have gone into her decision to stay in her current position including, salary, work load, commute, and relationships with coworkers.

**Gabriella.** Gabriella is a first-year teacher. She teaches music to students grades kindergarten through eighth grade. She completed a traditional teacher preparation program in a state other than Colorado and graduated from that university with the honor of highest-ranking graduate. Gabriella is in the first year of her induction program and has an initial teaching license from the state of Colorado.

As an educator, her philosophy and teaching focus leans heavily on social interactions between students. She has recently completed training in the Kodály Method and strongly believes that music should be taught in a collaborative setting.

This was Gabriella's first year living in Colorado and her first job. She was thankful to have found a position with coworkers she could relate to and rely on. The teachers on her special team became people she often spent time with on the weekend. She plans to return to her current position because the salary and commute are within her area of comfort. She is also looking forward to completing year two of the induction program at this school.

**Brianna.** Brianna is a second-year teacher. She teaches first grade. She is a Colorado Native who completed a traditional preparation program in the state of Colorado. Brianna started her induction program at one school but chose to change schools after her first-year teaching. The change in job required her to start a new induction program at her new place of employment. This new induction program is one year long; Brianna has recently finished that year. Brianna has an initial teaching license from the state of Colorado.

As a former competitive dancer and current high school dance coach, Brianna brings joy and rhythm into her first-grade classroom. Brianna brings excitement to a conversation and describes her classroom as joyful and active yet focused.

Her plans for the future include teaching first grade again at her current school. She is excited to dive even deeper into the curriculum materials now that she has experience with them while continuing to co-plan with her first-grade teammates.

**Carol.** Carol is an K-8 principal at a charter school in Northern Colorado. She had 4 years of experience as principal and 6 years' experience teaching multiple grade levels. She is responsible for the induction program at her school as well as the hiring and supervising of all

teachers. The majority of her career in education has been in the state of Colorado but she also taught in Iowa and South Dakota.

Carol feels strongly that the retention of novice teachers is vital to the success of the school's programming and worries that the constant focus of hiring and training new teachers takes away from student success. She believes that ensuring novice teachers have positive experiences is one step to increasing retention rates.

### **Analysis of Data**

Interview transcripts were analyzed using both emotional coding and in vivo coding. Saldaña (2015) states that emotional coding can be implemented in all types of qualitative research because it delves into the participant's actions and experiences. This type of coding is especially useful in deciphering social relationships and decision making. Emotional coding was chosen to analyze the interview data of this study because teaching is an emotional process as is the decision to remain in the career of teaching or to lose it. Connecting themes to emotions gives a real life meaning to the work and lives of novice teachers.

In vivo coding practices were also used to analyze the qualitative data in this study. Although it was not originally set out to be an ethnographic study, the interview questions really opened to conversations with teachers about their experiences. In vivo coding practices "prioritize and honor the participant's voice" (Saldaña, 2015, p. 106). Combined with emotional coding, in vivo coding paints a descriptive picture of the teachers' thoughts and feelings towards their induction programs.

The analysis and coding process was repeated multiple times to develop strong emotions and themes. First, transcripts were read and highlighted for key points and ideas. The highlights

were coded using emotional coding. Commonalities were found amongst the different participant answers and themes were developed based on those commonalities.

### *Qualitative Trustworthiness*

To maintain credibility, the participants were each be sent a summary of the findings after the study is complete. This study includes interview questions (see APPENDIX B) that are open ended allowing for the participants to elaborate and explain whenever they feel necessary. The participants were also chosen because of their experiences in completing a teacher induction program during their first and second years of teaching. This study is transferable because the procedure could be easily reproduced. Any researcher with access to novice teachers can conduct a similar study using the interview questions written by this research team. The participants were sent a recruitment email (APPENDIX C) before the interviews were conducted that indicates that there are no potential risks for their participation.

Nine participants were asked to participate in the interview portion of this study; seven were novice teachers and two were experienced school administrators. Three teachers and one administrator, four potential participants, declined participation in this study. After transcripts are prepared, they are sent to the individual participant for member checking. All of the participants gave approval for their interview transcripts and none provided additional comments. Upon approval, the interview transcripts were analyzed and presented using thick rich description to accurately relay the thoughts, feelings, and intentions of the participants. The career of teaching can often be generalized but is a very unique experience that is often different for every individual. Hearing the voices of novice teachers connects their career with their needs and emotions.

### *Themes from Qualitative Data*

In shifting the methodology of this study qualitative data were collected during one on one interviews. Through in vivo and emotional coding three themes were determined: theme 1: novice teachers require support from multiple sources, theme 2: novice teachers are unique and have unique needs, and theme 3: novice teachers appreciate being treated with respect and viewed as professionals. The themes were then analyzed with teacher emotion in mind. Human connection and emotion play large roles in the daily lives of teachers.

**Theme 1: Novice Teachers Require Support from Multiple Sources.** An established system of support is necessary to a successful induction program. Participants expressed multiple feelings about the various levels of support they felt throughout the school year. Joy, confusion, and empathy were reoccurring emotions when systems of support were discussed with the novice teachers.

**Joy.** The participating novice teachers report that finding support in their school or school district was the most beneficial component of their induction programs. Through the guidance of their mentors, teachers gained confidence and strength in their teaching practices. Nolan said that, “just talking with somebody that was very forward thinking and very passionate about the teaching profession was really helpful.” Harper stresses the importance of having a strong team to turn to. “A lot of us don't have a lot of experience but we have a lot of experience together,” she said. Working through an induction program creates a different type of team for the participants. The induction program created opportunities for the novice teachers to meet together regularly which helped establish them as a community of learners. The community of teachers completing an induction program at an individual school site provides teachers with

support and reassurance. Harper said, “it's helpful to know in a way that everyone kind of has the same struggles to where you don't feel isolated.”

***Empathetic.*** From mentors to teammates to principal, there are multiple experienced teachers in any given school building that a teacher could go to for assistance. Novice teachers report knowing that their school principal would be a good source of support, but oftentimes, did not want to bother that person. Gabriella reports, “I tried not to go to Michelle as much as possible just because there was so much stuff going on. I think that a lot of times she was pretty overwhelmed.” At the same school, Nolan felt the same, “I did not seek her out often because the weight of the world was on her shoulders. But whenever she did come and observe, the feedback she gave was very helpful.”

***Confused.*** Different participants in an induction program can have largely different experiences from one another, even when participating in the exact same induction program. The mentor plays a large role in the success or failure of the implementation and therefore, if ineffective, creates a confusing situation for the inductee (Whalen et al., 2019). During her interview, Gabriella noted that her mentor started the year with a book study that she later learned was not a required component of the program. She felt that the first half of her year was wasted although the book was helpful because she had induction requirements that she did not learn about until later in the school year. Mentors can be a vital form of support, but without proper training or understanding of the program themselves, can be detrimental to the process. Although vital, proper mentors are often difficult to find. A school principal involved in the induction program, Carol said:

Our mentor/inductee pairing is as thoughtful as possible taking into consideration grade level and content taught. Unfortunately, as I said before, most of our teachers are novice

teachers which does not leave many options for mentor teachers. In some schools, mentors receive a stipend or some form of extra pay because mentoring involves a lot of extra work with meetings after hours, during lunch or on planning periods. We do not have the ability to pay stipends, so the mentors are voluntary and therefore limited. Sometimes, novice teachers are paired up with the only teacher who is willing to volunteer.

The limited number of available mentors and potential lack of training can cause the confusion that many novice teachers face. Carol also said, “because we do not pay our mentors a stipend, we cannot bring them in for additional time outside of their contract to train them specifically in mentoring.”

Another difficulty that novice teachers reported was having a mentor from a different grade level or department than their own. This mentor teacher is an expert teacher, but does not understand the grade level or content of the inductee. The novice teachers reported that conflicts with their assigned mentor led them to seek support from other sources. Nolan said, “[he was] pushing us towards what he thought would be best teaching practices.” If the mentor’s ideas did not align with the inductee’s needs, they reported going to their grade level or same content teammates for support and guidance. Speaking of her mentor, Gabriella said, “[my mentor] didn't follow the induction program at all. We basically just read *Teach Like a Champion* every time that we met and then discussed it so instead I would ask somebody on the specialists’ team usually, Harper.”

Methods for providing teachers multiple levels of support is vital and ever changing. For a novice teacher, knowing that there is a system for support is reassuring and will help them feel successful.

**Theme 2: Novice Teachers Are Unique and Have Unique Needs.** Not every teacher has the same questions or the same needs. Teachers teach different grade levels and different content areas. Some teachers are strong in planning and need support with classroom management while others need more information about the curriculum resources that are available for them to use with their students.

*Nervous.* Feeling apprehensive about a new situation is a typical human emotion. Although most teachers who completed traditional preparation programs in a four-year university completed a student teaching experience, nothing compares to the first time they are alone with students in their own classrooms. Whether it be from lack of training or moving to a new state, many novice teachers report feeling nervous about their first teaching experiences.

Gabriella reflects:

I student taught during the fall of 2020, so when everything got shut down because of COVID was my entire first half of student teaching. [That was when] I was at my middle school placement. It was remote and I was doing band and teaching band remotely is like not really teaching band, you know, so I didn't feel like I really got a good experience from that pedagogically, or learning classroom management because you know, on Zoom, you can just mute someone.

Feeling nervous also stems from the desire to be good at one's job. Teaching is a high stakes career and many teachers are worried about living up to the expectations of the students and community members. "I want to make sure that I am doing a good job. Being a charter school, parents choose to send their students to my school. We hear a lot about the importance of enrollment so I just want to do my part," reflected Gabriella.



Mentors should be a good source to relieve the stresses of nervous feelings. Harper was happy with her mentor match up, “[my mentor] is probably one of the strongest teachers in the whole school. I loved going to her for help because even though we taught different subjects, she had great ideas.” Most novice teachers report that their mentor was the person who they would go to alleviate their stress, but one teacher in this study did report that their mentor was not friendly and was afraid to go to him in fear that he would brush off her problem as insignificant. Harper said, “I was scared to talk about anything at all.”

The desire to make a strong impact on one’s students can cause the nerves of a novice teacher to work overtime. Past experiences like university preparation programs and student teaching intern experiences can only prepare a teacher so far like Gabriella mentioned. When a teacher is the only adult in a classroom for the first time, knowing there is a support system in the background is often the only way to ease the nerves. Mentors and administrators are the support system for novice teachers. Experience can alleviate those nerves but they may never go away completely.

***Frustrated.*** During the interview process, some teachers expressed different levels of frustration surrounding the various components of the induction program. Untrained mentors, teachers and mentors teaching different content areas, and unhelpful professional development sessions can increase frustration levels for novice teachers.

At Gabriella's school, her untrained mentor did not have a strong understanding of the induction program. As mentioned earlier, she reported that they meet weekly to complete a book study that ultimately did not align with the program. The meetings cut into her planning and grading time and were not as beneficial as they could have been. She said, “[I] don't know that [the induction] had this sort of return retention impact that I think it's supposed to have. I think

had I had the resources that I was supposed to have at the beginning of the year, it probably would have been more helpful”

Teachers who teach in specialty areas like music and physical education are alone in their content areas. In this study, Nolan, Harper, and Gabriella all teach in specials areas. Many of their needs are unique to themselves with no teammate who teaches the same curriculum or uses the same material. Nolan talked about how he needed more specific guidance on exactly what to teach, but aside from looking up the state PE standards, no one was able to give him specific guidance because the school does not have an officially adopted curriculum for physical education.

Professional development is a vital component of induction. The teachers interviewed for this study participated in two different induction programs. Both induction programs ask teachers to read and reflect on professional educational articles on a monthly basis. One program allowed the teachers to choose their own articles. A building principal, Carol, says that:

article choice and reflection can be very telling. If they are choosing meaningful articles or asking for suggestions, I know they are serious about their professional growth. When I sense random article choice, I assume the teacher is struggling or frustrated with some aspect of the job or the program. Also, when I see something I know they just wrote about reflected in their practice, I know that the induction program is having a positive effect.

In another program, teachers reported excitement to find articles within their own content area, “I felt empowered to choose my own learning. In college, we were told what to read, but when I got to choose my own article, I was able to reflect on where I felt that I needed support and find something that was able to help me,” mentioned Harper. In the other program, Brianna was

frustrated that she had to read articles she had recently read in her college preparation program. She felt that the article reflections were designed for the more experienced teachers completing the induction program as a form of orientation instead of a novice induction program. “This [article] is literally what I just learned in college and just spent four years doing. I know things shifts, but just for me personally, I was like, I know what this is already,” she mentioned.

An induction program should be designed to support the novice teacher through the difficulties faced throughout the year. Open communication between teachers and mentors provides an opportunity to better learn how induction programs can be improved.

***Overwhelmed.*** Although teaching, especially early in the career, can be overwhelming and intimidating, teachers noted that the induction program alleviated some of those feelings.

Brianna said:

Because I feel like as a first-year teacher, you're just learning everything. You're learning the curriculum, you're learning, the community, the students, the staff members, so it made it feel like a place where it was like safe to ask those questions and really, like, take the time to learn about it.

The participants recognized that their preparation programs did not and could not fully prepare them for everything they faced in the real world of teaching. Haley reflected on her out of state program saying, “I learned how to lesson plan and connect standards to student learning, but I had no idea how to manage a classroom with actual students. That was a big learning curve for me.” While preparation programs taught proper lesson planning and classroom management theory, hands-on experiences were limited to classroom simulation. The induction programs offered a safe environment to continue professional learning. An induction program cannot

replace a preparation program, but can help the novice teacher build connections from their learning to actual practice.

Novice teachers have a range of emotions from excitement to frustration to nervousness and many others throughout the year. Unique emotions create unique needs; helping novice teachers learn to balance and support those needs and emotions is one purpose of implementing induction programs.

**Theme 3: Novice Teacher Appreciate Respect and Professionalism.** Teaching is a professional career and novice teachers are adults. Therefore, novice teachers recognize and appreciate when they are treated with respect and trusted to make decisions for their students. Support can be provided in a way that teachers still learn to make classroom decisions on their own.

*Gratitude.* The teachers participating in this study came from different schools and therefore different induction programs. Only one of the induction programs required peer observations as part of the induction program. The teachers described peer observations as an opportunity to observe a veteran teacher in action and were thankful for the various opportunities. Peer observations allow a teacher to learn from an expert without taking time away from that expert teacher. Harper said, “I can just go sit in the back of their room, and it's not inhibiting what they're doing or putting more on their plate and I'm gaining a lot from that.” At this school, the novice teachers were able to pick peer observations based on individualized needs. Nolan mentioned that, “I had really no concept of what teaching really meant when I started teaching and being able to observe other teachers do their thing was enormously helpful to me.” It appeared to be a favorite component of the induction program because it not only

allowed teachers to learn from each other, it also encouraged novice teachers to build relationships with veteran teachers.

*Appreciated.* Feelings of appreciation can come in multiple forms. The novice teachers in this study noted feelings of appreciation from students and administrators. Gabriella's favorite moment of the school year was when a kindergarten student told her, "when I grow up. I'm going to be a music teacher just like you." Brianna expected her building administrators to be constantly checking up on her to make sure she was doing her job but did not feel overly observed. She said, "[it was] nice to feel trusted that you're doing your job, to not have to be super micromanaged." Those feelings of appreciation go a long way to increase a teacher's self-confidence.

*Pride.* The novice teacher participants in this study noted increased levels of confidence in their abilities as teachers. Nolan said, "I feel more confident about at least knowing that I'm getting better as a teacher, and more confident about what I would need to do to continue to get better." He also notes that learning to read and understand data from classroom assessments really increased his ability to lesson plan appropriately for his students.

Self confidence in their teaching is also something that principal Carol, looks for in her novice teachers. "Each teacher has unique needs and it is my job as an administrator to learn and understand what those needs are and then use that knowledge to nurture and grow a teacher's confidence." Noticing when a teacher becomes more confident in their teaching is also a sign that the teacher is feeling satisfied with their job and workload "which typically leads to retention of that teacher," says Carol.

Treating novice teachers as professionals allows them to learn from their mistakes and gain self-confidence when their choices are successful. An induction program also increases a

novice teacher's self-confidence by providing the teacher with new tools and strategies to use within in the classroom. The themes determined from the qualitative portion of this study demonstrate that novice teachers need support for their unique needs and that teachers are satisfied when they are treated as professionals.

### **Combination of Data**

- Q1 What percentage of novice teachers demonstrate feelings of job satisfaction while participating in induction programs?
- Q2 Do some novice teacher induction programs encourage perceived support, job satisfaction, and intention to stay better than other induction programs?
- Q3 What components of induction programs encourage perceived support, job satisfaction, and intention to stay?

Although changes were made to the design and data collection of this research study, the research questions were still answered sufficiently. The intention of research question one was to survey teachers across multiple districts to determine job satisfaction across the state. The quantitative data gathered from the one participating school district demonstrated that a high level of novice teachers were satisfied with their teaching positions and the school where they worked. This is determined based on the calculation that over 80% of the survey questions about job satisfaction were answered with somewhat satisfied or very satisfied. When asked about their experiences within their teaching careers, the interviewed participants responded with positive emotions, joyfully thankful for the support and connections with other teachers they were able to build.

Comparative data is necessary to answer research question two. Only one school district participated in the quantitative study and therefore, there is no data available to answer this question with quantitative data. The teachers who participated in the qualitative portion of this study did come from two different schools but the limited number of participants does not lend to

strong data collection. Brianna did note frustration with the article review portion of her induction program while Harper was satisfied with her article review professional development meaning that different approaches to the same professional development do have differing effects on novice teachers.

Most induction programs have similar main components: professional development, observation with feedback, and a mentorship program. The third research question focuses on the different components of an induction program to determine if different components affect satisfaction and attrition. This question was partially answered through the qualitative data collected through interviews; participants reporting that while they enjoyed their induction program, it did not directly factor into their decision to stay in or leave their current teaching position.

### **Summary**

Teacher induction programs have grown exponentially since the 1990s. They began as a system of orientation to a full support system for novice teachers. Although the improvements to induction programs have been well received and mostly successful, there is still a need for consistency. Induction programs have the potential to create a community within and among schools for the betterment of student growth and achievement which is the end goal for all educational professionals.

## CHAPTER V

### DISCUSSION AND CONCLUSION

#### **Meaning of Research**

Teacher attrition is a problem that many schools and school districts face. It is an especially noticeable struggle within the group of novice teachers. With a specific focus on novice teachers, this study was designed to determine if different induction programs across the state of Colorado have differing levels of success at retaining novice teachers. Because there is limited existing research in the area from a quantitative viewpoint, the results from this study would have filled that gap.

The research questions in this research study were designed to be answered with quantitative data:

- Q1 What percentage of novice teachers demonstrate feelings of job satisfaction while participating in induction programs?
- Q2 Do some novice teacher induction programs encourage perceived support, job satisfaction, and intention to stay better than other induction programs?
- Q3 What components of induction programs encourage perceived support, job satisfaction, and intention to stay?

Due to the unforeseen circumstances of timing and lack of district participation, changes were made to the methodology of this study and qualitative data were collected through interviews with novice teachers and a school principal. A fourth research question, how do induction programs impact the teaching career in the novice years? was answered through the addition of qualitative research methods. The qualitative and quantitative data were woven together through



coding and descriptive statistics with the descriptive statistics informing numbers and the qualitative codes told an emotional story.

The teacher participants were novice teachers each with only one or two years of teaching experience. They are all teachers in Colorado and were all participating in their school's induction program at the time of the study. One school district in Colorado participated in the survey portion of this study providing quantitative data about their district's induction program for novice teachers. Qualitative data were collected via one-on-one interview. The qualitative and quantitative data collected was combined to answer the research questions. The data were interpreted in a way that could best answer the questions with the qualitative data that was collected.

The importance of induction programs was demonstrated in this research study. The interviewed teachers noted improved confidence levels and satisfaction with their induction program. When schools and school districts can prioritize the professional development and support of novice teachers, those teachers are generally satisfied with their induction program and teaching position (Glazerman et al., 2010). More research is needed to determine the connection between job satisfaction and attrition. From this study, two out of four interview participants either accepted a new teaching position or were actively seeking new employment, the reasons they gave for their transition were unrelated to satisfaction with the school or position.

The high levels of satisfaction reported from both sets of data indicate that induction programs have a positive impact on novice teachers. Unfortunately, satisfaction with one's teaching career does not seem to be directly related to retention because this study demonstrated that its participants had high levels of satisfaction and still were seeking teaching positions

elsewhere. From the quantitative participants, 18% of novice teachers either left their teaching position for a different one or found a new career entirely. Through qualitative and quantitative methods, the questions that require further research is: do induction programs directly increase teacher retention rates and how do the induction programs directly increase teacher retention rates?

### **Implications for Practice**

Teachers, school or district administrators, and policy makers can learn different methods of practice from this study. It is important that all three groups of people learn about induction programs because all three groups have different yet equally important roles throughout the duration of an induction program. Teachers are the active participants, administrators are the experts on site, policy makers determine the necessity and legal backing of the school system and induction program.

### **Recommendations for Administrators**

Building administrators are the first point of contact a new teacher has when hired for a new teaching position. It is the responsibility of the administrator to build a relationship of trust with the novice teacher. This relationship helps the administrator pair the novice teacher with an appropriate mentor teacher. As learned from this study, the role of the mentor is vital to the success of an induction program. Harper had a mentor who she deemed the best teacher in the school while Gabriella had a teacher who did not follow the program and ignored questions from she asked. Harper was enthusiastic about sharing her learning during the program and Gabriella shared that she was focused on completing the requirement. Both of these novice teachers were completing the same induction program, demonstrating that the mentor teacher plays an

important role in how the novice teacher interacts with and benefits from the school or district's induction program.

It is also important the novice teacher knows and understands the process of the induction program from the start of the year. The building administrator should take on the responsibility of introducing the process of the induction program or designating a veteran teacher to introduce the new teachers to the steps in the school's induction program. The novice teachers must be provided instructions so they have an adequate amount of time to complete the process with fidelity. In this study, Gabriella's mentor did not initially follow the induction program with fidelity causing her confusion and frustration when she finally learned the requirements.

During the interview process of this study, Gabriella and Nolan both noted that they knew they could go to their building principal for support but hardly did because they thought she was too overwhelmed. In the online survey, participants noted that their building administrator or principal visited their classrooms for walkthroughs or formal evaluations only one time in three months. Since walk-throughs and evaluations are a part of the induction process, the building principal should make a point to be more present in the classrooms of novice teachers. Knowing that going to one's boss when a novice teacher is struggling, the principal or building administrator should also work on relationship building so novice teachers feel comfortable asking for support. Even when overwhelmed with daily work, it is the role of the principal to make a novice teacher feel important and novice teachers must understand that the support and growth of all teachers is the principal's responsibility.

One of the site principals in this study, Marissa, was not a direct participant, but her role as principal at the charter school where Nolan, Harper, and Gabriella worked was instrumental in the induction program. All three novice teacher participants mentioned that they thought Marissa

would have a good resource but did not feel comfortable going to her for help because she always had a lot of work to do. In this case, Marissa took on the three different administrator roles when there was administrative turn over in her school, but it is not uncommon for school-based administrators to take on additional responsibilities each year. As principals' responsibilities increase, district and state level administrators should make sure that principals have necessary supports. This will help keep a school principal's focus on the school, students, and teachers of all experience levels.

Neither school that participated in this study on induction program offered their mentors training prior to becoming mentors. Even if specific mentor training is not available because of cost or available time, at minimum, mentor teachers should be given enough background information about the steps and requirements in an induction program to be able to guide the novice teacher through. Building administrators should ensure that they themselves or a designee establish these expectations with the mentor. District and schools that implement induction programs should work towards creating a component of training for mentors prior to working with novice teachers. If funds are available, this training should take place prior to the pairing of induction participant with the assigned mentor.

### **Recommendations for Policy Makers**

State and local policy makers should know that induction programs are effective in providing a system of support for novice teachers and encourage high levels of satisfaction for those teachers. During both methods of this study, teachers report high levels of satisfaction when asked about the support they received in the induction program. Harper, Nolan, and Gabriella's induction program included the component of peer observation allowing teachers to visit and learn from master teachers in their schools. Brianna's induction program did not have a

peer observation component. In states like Colorado, where induction programs are already mandated, this research can provide information about what components of induction work and which areas of a program do not leading policy makers to require or not require certain components over others. Since this study and other research shows that the mentorship component plays an important role, policy makers might learn that more funding needs to be (Kingsley & Romine, 2014; Turley et al., 2006) provided to support the growth of mentor programs and the training of mentors.

The length of an induction program can also impact the effects on the novice teacher participants. The qualitative portion of this study came across two different induction programs. Brianna's induction program was one year long while Harper, Gabriella, and Nolan's program was a two-year program. The addition of the second year allowed the components to be spaced out in a way that did not deter from the professional growth of the novice teachers but did not become overwhelming. Brianna's induction program was one-year long; not long enough to make an impact on her professional growth. Induction programs are left to be designed by each individual school or school district. State policy does not mandate length but might consider setting a standard for multi-year induction if more research demonstrates success with lengthier programs.

Induction programs should not be synonymous with orientation. At Brianna's school, any teacher new to the school had to complete the school's induction program regardless of years of teaching experience. As learned in this research study, the combination of the induction program with the school's orientation caused frustration for Brianna. Induction should be specifically designed with a novice teacher in mind since their needs can be so different from those of a veteran teacher.

In states like Colorado, where induction programs are a requirement, research into induction programs should provide opportunities for the monitoring and growth of programs. It is clear that individuals do not have the same experiences when participating in an induction program and also that different programs provide different results. The mentorship of novice teachers by a veteran teacher should remain a requirement. More school and district induction programs can benefit from adding a peer observation component to their induction programs. In states that do not require induction programs, induction program research can provide powerful examples of why this type of professional development is important for the growth, satisfaction, and retention of novice teachers.

### **Recommendations for Teachers**

For an induction program to be successful, the novice teacher participant must understand the purpose of the program. In states like Colorado where induction programs are a requirement, a teacher who completed a Colorado based preparation program would know they are expected to complete an induction program. For a teacher like Gabriella, who completed her participation program in a different state, induction programs were a new idea; she had never heard of them before. Having no expectations, she was unprepared and overwhelmed by the additional requirements. Teachers should do some research to learn about the requirements in the state where they plan to seek employment so they know what to expect and are not surprised by the requirements that might differ from state to state.

Novice teachers should be open to professional development opportunities. With the amount of work that teachers are required to do daily, it can be easy to develop the habit of foregoing professional development. Intentional work on one's self growth is important during all stages of the teaching career; especially during the novice years. All teachers who were

interviewed for this study completed traditional four-year university preparation programs. Teachers in this study noted that they did not learn everything they needed in their university preparation program therefore exemplifying the importance of continued professional development in an induction program.

### **Teacher Satisfaction and Teacher Attrition**

Induction programs should continue to be a requirement in Colorado. This study demonstrates that induction programs have a positive impact on feelings of job satisfaction in novice teachers with an average rating of agree to strongly agree in the quantitative portion. Even though there were high levels of satisfaction with both groups of participants, attrition rates were still high indicating that either job satisfaction or induction programs are not related to teacher attrition within the first years.

Previous research shows there is a relationship between satisfaction and attrition; high levels of satisfaction decrease attrition rates, but this study does not demonstrate that correlation. In the survey, there were 16 questions related to job satisfaction. Overall, teachers rate high satisfaction with an overall satisfaction score 3.38, between satisfied and highly satisfied. The two lowest areas of satisfaction were managing student behavior and overall workload with scores of 2.93 and 2.76, respectively. Toropova et al. (2021) notes that novice teachers are typically assigned or resigned to accept difficult teaching assignments in areas of low socioeconomic-status or schools with known behavior difficulties. This idea explains why there is a low rating for job satisfaction when considering managing student behavior and overall workload.

Still in the range of satisfaction, although low, with an average of 3.07 is the satisfaction of providing input into school policies and practices. Novice teachers want to be treated like

professionals and appreciate when their professional opinion is asked. Being asked to partake in decision making for the school increases feelings of satisfaction (Brown & Wynn, 2007). During her interview, Harper also discussed the idea of working with the school leaders being good for her resume and future as a teacher. Novice teachers lack physical classroom experience, but still bring creativity and new ideas to a school or school district.

Since many novice teachers accept positions that are not ideal for their personal situation, many find themselves in a location that is not favorable (Goldrick, 2016). Prior research shows that location is a leading contributing factor to high levels of teacher attrition (Toropova et al., 2021). Both Harper and Nolan cite commute as a reason to look for a new teaching job in their interviews. Location and commute are not factors that schools and school districts can control when it comes to the hiring and retention of teachers.

### **Support for Novice Teachers and Attrition Rates**

Support for novice teachers is the underlying purpose of induction programs. Through specific professional development, work with a mentor, observations, and evaluation and feedback, novice teachers are provided varying levels of support to encourage their growth and development within the profession. It is surprising then that the novice teacher participants in both portions of this study mention lack of direct support. The interview participants had differing experiences ranging from minimal principal support to absent mentor support. Only one participant felt they had a strong mentor teacher but Harper still mentioned a disconnect from teaching different grade levels and content areas.

In the online survey, the data shows the average rating for induction program support was 2.77 meaning these participants only felt somewhat supported in a variety of areas during their induction experience. Specifically in the areas of supporting diverse learners such as English



language learners and students with special needs, novice teachers experienced minimal support from mentors and administrators. Because the average rating of support is relatively low and the average rating of satisfaction is high, it can be determined that support and satisfaction are not directly related; that feeling supported does not directly affect satisfaction rates. Furthermore, while experiencing satisfactory work conditions does not deter teacher attrition, feeling low levels of support might encourage teachers to look for other teaching positions or other careers entirely. Further research is needed to determine the connection between job satisfaction, feelings of support, and teacher attrition rates.

### **Recommendations for Future Research**

To improve on or to gain a different angle of information this study should be repeated. It can be completed as a quantitative study in its original design. Once the quantitative study is completed in its original design, it could also be beneficial to approach this study using a population sample from multiple states. It also can be repeated as an official mixed methods study. There are two potential approaches to design this study as a mixed methods study. A study that specifically targets novice teachers and seeks to connect induction programs with reasons why teachers leave could also be beneficial research.

This study was not completed with its original design in mind. It is recommended that this study be completed again with at least three participating school districts. Learning from the difficulties, it is suggested that school districts are approached with requests for participation at a different time of year. The districts in this study were approached in the middle of March which lines up with spring break and then testing season in Colorado. Those delays bleed into the end of the school year causing many districts to refuse participation. If districts are approached in January for participation, approval might be granted allowing the survey to be sent to teachers

before their spring breaks. This also tends to be the time of year that teachers begin thinking about the upcoming school year, making decisions about staying in their current position or decide to look for new options.

Completing this study using the originally designed quantitative methods but comparing participating districts from different states would provide insights into the requirement of induction programs. Currently, induction programs are not required in all states. The information gained from comparing states where induction is required to states where induction is optional could drive policy makers to make decisions about the requirement of induction programs across the country.

Because this study demonstrated that even though satisfied with their careers or teaching positions there is still a high rate of attrition, further research should connect satisfaction with induction and reason for leaving. In this example, Nolan chose to leave his current position for a teaching job closer to his house. A high level of satisfaction could not compete with a shortened commute. Research that asks why teachers leave current teaching positions for new ones can guide administrators and policy makers with methods for adjusting induction programs and in school support systems if necessary.

It was discovered that the role of the mentor is an important component of the induction program and therefore should have had a stronger presence in the online survey. More questions specifically asking about the mentor component in the induction program should be added to the online survey. To delve more deeply into the relationship between the mentor and novice teacher, questions about the novice teacher's relationship with the mentor should have been addressed as well.

The interview participants in this study demonstrate that teaching is an emotional career. The qualitative portions of this study encouraged district leaders and policy makers to see teachers as people and professionals. Future research should be conducted to include more teacher participants in the interview portions. There are two different approaches to collecting participants that would provide interesting yet different data on this topic. The first method for collecting participants would be similar to this design with purposeful sampling and snowball sampling. Gathering more than five participants from different induction programs would provide insights about the importance of induction. A different method for collecting participants would be to approach teachers who completed the online survey to see if they would be willing to participate in an additional step of the study by completing a live interview. This method would create a direct connection between the quantitative survey data and the emotional qualitative data because it will be using the same teachers. Researchers could connect survey answers with qualitative answers for a true mixed methods study.

The impact of induction programs, job satisfaction, and attrition rates on student achievement is not addressed in this study but the purpose of education at any level is the students. Some prior research has made connections between student achievement and attrition rates without looking into the reasoning behind attrition (Wasburn-Moses, 2017; Whalen et al., 2019). Therefore, future research should connect job satisfaction with attrition rates and then compare student achievement rates. A mixed methods study could accomplish this by interviewing teachers about their perception of satisfaction, intent for future years in the career or at the same school and then looking at quantitative data on student achievement.

### **Researcher Stance**

Since this study started as quantitative but is now mixed methods, it is important that researcher stance is included. The growth and development of novice teachers has always been an important component of my philosophy of education especially as I transitioned into different roles as an educator. I have held positions as a novice teacher, a grade level lead, a school principal, and district central administrator. I contributed to the statistics of high teacher turnover in the first years of a teaching career.

As a former novice teacher myself, I remember the struggles of having little to no support. I experienced an absent mentor and a difficult administrator. I have also experienced supportive administrators and hands on mentors. With multiple years of experience in the classroom and as a school principal, I have had the opportunity to work with multiple novice teachers since my experience as one. Helping other novice teachers through the struggles I faced early in my career has let me to value the work of induction programs.

I have personally worked aside many first-year teachers who left their school or the career after feeling lost or unsupported during their first years in the teaching profession. I personally feel that providing induction programs for novice teachers is important for more than the professional development reasons. Induction programs provide personal development and a mentor relationship that novice teachers need to avoid feelings of isolation because sometimes being the only adult in a room with 25 students can feel like being stranded alone on an island.

### **Limitations**

In both methods of data collection, limitations existed. This study was designed to be a quantitative study with the intention of comparing multiple sets of quantitative data. Therefore, the research questions were designed to be answered with quantitative data. With the necessary

changes, the research questions which asked about quantified data, were answered with qualitative data. The data collected does not directly answer the quantitative components of the questions.

The participants in the qualitative portion of this study were gathered through personal connections. The interviewer was the former supervisor of the participants. Because the teachers interviewed had a working relationship with the researcher conversation flowed in a comfortable manner. This could be viewed as a limitation if the participants felt any reservations about having conversations about their experiences with a former supervisor.

### **Answers to Research Questions**

The research questions asked in this study were not all answered as predicted. The research questions asked in this study were not all answered as predicted.

- Q1 What percentage of novice teachers demonstrate feelings of job satisfaction while participating in induction programs?
- Q2 Do some novice teacher induction programs encourage perceived support, job satisfaction, and intention to stay better than other induction programs?
- Q3 What components of induction programs encourage perceived support, job satisfaction, and intention to stay?

Looking at research question one, the hypothesis was that teachers who participate in induction programs feel higher than average levels of job satisfaction while participating in the program. The high average of satisfaction from the quantitative data in this study confirms this hypothesis. Based on research question two, it was predicted that some programs will have higher levels of perceived support, job satisfaction, and intention to stay than others was not directly addressed because quantitative data comparing multiple induction programs was not available but it was determined that some components of an induction program, such as the mentorship component, are vital to perceived levels of satisfaction in novice teachers. The third

research question was more directly answered with a correct hypothesis that induction programs with a mentoring component have higher levels of perceived support, job satisfaction, and intention to stay. The teachers in this study did demonstrate high levels of job satisfaction but induction programs could improve on their ability to increase feelings of support and intention to stay in the teaching career.

### **Conclusion**

This research study confirmed that teaching is a difficult career and that teacher attrition rates are high (Bastian & Marks, 2017; Toropova et al., 2021; Whalen et al., 2019). The results do not clearly indicate that induction programs increase levels of satisfaction as a means for lessening the crisis of teacher attrition. The teacher participants in this study expressed feelings of satisfaction with their teaching position even while their perception of the support they received was low. The findings in this study demonstrate that further research is needed to determine the cause of teacher attrition and ways to decrease the rising rates at which teachers leave their schools and the career.

Additionally, as fewer people are choosing teaching as a career path. Many districts across the country are facing teacher shortages. The retention and training of existing teachers, especially novice teachers, is one solution to rising attrition rates and teacher shortages. Policy makers, administrators, and teachers can learn a lot from this research about induction programs and their connection to teacher retention, satisfaction, and perceived levels of support.

This study is a starting point for further research that is needed to ensure that novice teachers are receiving proper support and professional development. Because teacher attrition is connected to student achievement, policy makers should devote resources to decreasing teacher attrition rates. If induction programs can be determined as a means to increase teachers'

perception of support and increase job satisfaction, then they should be implemented in more school and district settings. Continued growth and learning will support policy makers when making decisions about the requirement of and methods for conducting induction programs across the country, not just in Colorado.

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APPENDIX A  
ONLINE SURVEY QUESTIONS

1. In what school district do you currently teach?
  - a. School District A
  - b. School District B
  - c. School District C
2. Are you currently participating in your school/school district induction program?
  - a. Yes
  - b. No
3. Who provides your induction program?
  - a. The school district I work for
  - b. The school I work for
4. What grade level do you teach?
  - a. K-2
  - b. 3-5
  - c. 6-8
  - d. 9-12
5. What type of preparation program did you complete?
  - a. 4-year undergraduate degree in education
  - b. Alternative teacher licensure program
  - c. No preparation program
  - d. Other

**At this point, how satisfied are you with EACH of the following aspects of teaching at THIS SCHOOL?**

6. Support from administration for beginning teachers
  - a. Very dissatisfied
  - b. Somewhat dissatisfied
  - c. Somewhat satisfied
  - d. Very satisfied
7. Availability of resources and materials/equipment for your classroom
  - a. Very dissatisfied
  - b. Somewhat dissatisfied
  - c. Somewhat satisfied
  - d. Very satisfied
8. Your input into school policies and practices
  - a. Very dissatisfied
  - b. Somewhat dissatisfied
  - c. Somewhat satisfied
  - d. Very satisfied
9. Autonomy or control over your own classroom
  - a. Very dissatisfied
  - b. Somewhat dissatisfied
  - c. Somewhat satisfied
  - d. Very satisfied

10. Student motivation to learn
  - a. Very dissatisfied
  - b. Somewhat dissatisfied
  - c. Somewhat satisfied
  - d. Very satisfied
11. Student discipline and behavior
  - a. Very dissatisfied
  - b. Somewhat dissatisfied
  - c. Somewhat satisfied
  - d. Very satisfied
12. Opportunities for professional development
  - a. Very dissatisfied
  - b. Somewhat dissatisfied
  - c. Somewhat satisfied
  - d. Very satisfied
13. The principal's leadership and vision
  - a. Very dissatisfied
  - b. Somewhat dissatisfied
  - c. Somewhat satisfied
  - d. Very satisfied
14. Professional caliber of colleagues
  - a. Very dissatisfied
  - b. Somewhat dissatisfied
  - c. Somewhat satisfied
  - d. Very satisfied
15. Supportive atmosphere among faculty/collaboration with colleagues
  - a. Very dissatisfied
  - b. Somewhat dissatisfied
  - c. Somewhat satisfied
  - d. Very satisfied
16. Your grade assignment
  - a. Very dissatisfied
  - b. Somewhat dissatisfied
  - c. Somewhat satisfied
  - d. Very satisfied
17. The students assigned to you
  - a. Very dissatisfied
  - b. Somewhat dissatisfied
  - c. Somewhat satisfied
  - d. Very satisfied
18. The induction program
  - a. Very dissatisfied
  - b. Somewhat dissatisfied
  - c. Somewhat satisfied
  - d. Very satisfied

19. Professional prestige
  - a. Very dissatisfied
  - b. Somewhat dissatisfied
  - c. Somewhat satisfied
  - d. Very satisfied
20. Intellectual challenge
  - a. Very dissatisfied
  - b. Somewhat dissatisfied
  - c. Somewhat satisfied
  - d. Very satisfied
21. Workload
  - a. Very dissatisfied
  - b. Somewhat dissatisfied
  - c. Somewhat satisfied
  - d. Very satisfied
22. As a result of my induction program, I plan to return to the same school and teaching position for the next school year?
  - a. Strongly Disagree
  - b. Disagree
  - c. Agree
  - d. Strongly Agree
23. My decision to not return to my position is related to COVID-19?
  - a. Strongly Disagree
  - b. Disagree
  - c. Agree
  - d. Strongly Agree
24. I have felt strong levels of support throughout my teaching experience
  - a. Strongly Disagree
  - b. Disagree
  - c. Agree
  - d. Strongly Agree
25. I have felt strong levels of support throughout my induction experience
  - a. Strongly Disagree
  - b. Disagree
  - c. Agree
  - d. Strongly Agree
26. I feel satisfied with my induction program and continuing in the career of teaching.
  - a. Strongly Disagree
  - b. Disagree
  - c. Agree
  - d. Strongly Agree
27. This induction program increased my desire to remain in the teaching career.
  - a. Strongly Disagree
  - b. Disagree
  - c. Agree
  - d. Strongly Agree



**How did your induction program support you to:**

28. Handle a range of classroom management or discipline situations?
  - a. Not supported at all
  - b. Somewhat supported
  - c. Well supported
  - d. Very Well supported
29. Use a variety of instructional methods?
  - a. Not supported at all
  - b. Somewhat supported
  - c. Well supported
  - d. Very Well supported
30. Teach your subject matter?
  - a. Not supported at all
  - b. Somewhat supported
  - c. Well supported
  - d. Very Well supported
31. Assess students?
  - a. Not supported at all
  - b. Somewhat supported
  - c. Well supported
  - d. Very Well supported
32. Differentiate instruction in the classroom?
  - a. Not supported at all
  - b. Somewhat supported
  - c. Well supported
  - d. Very Well supported
33. Use data from student assessments to guide instruction?
  - a. Not supported at all
  - b. Somewhat supported
  - c. Well supported
  - d. Very Well supported
34. Implement school-based curriculum with fidelity?
  - a. Not supported at all
  - b. Somewhat supported
  - c. Well supported
  - d. Very Well supported
35. Teach to state academic standards?
  - a. Not supported at all
  - b. Somewhat supported
  - c. Well supported
  - d. Very Well supported
36. Meet the needs of students who are English-language learners?
  - a. Not supported at all
  - b. Somewhat supported
  - c. Well supported
  - d. Very Well supported

37. Teach students with special needs?
- Not supported at all
  - Somewhat supported
  - Well supported
  - Very Well supported
38. My mentor played an important role in my induction process.
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree
39. I gained feelings of confidence while completing the induction program.
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree
40. I felt strong levels of support from my mentor during the induction program.
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree
41. During the most recent full week of teaching, how much scheduled time did your mentor spend Observing your teaching?
- No Time Less
  - Than 30 Minutes
  - 30 Minutes to 1 Hour
  - 1 to 2 Hours
  - More Than 2 Hours

**During the past 3 months, how often were you**

42. Observed teaching your class by your mentor?
- Never
  - Once
  - 2-3 times
  - 4 or more times
43. Observed teaching your class by your principal?
- Never
  - Once
  - 2-3 times
  - 4 or more times
44. Given feedback on your teaching (not as part of a formal evaluation process)?
- Never
  - Once
  - 2-3 times
  - 4 or more times

45. Given feedback on your teaching as part of a formal evaluation process?
- Never
  - Once
  - 2-3 times
  - 4 or more times
46. Given feedback on your lesson plans?
- Never
  - Once
  - 2-3 times
  - 4 or more times
47. Given the opportunity to observe other teachers?
- Never
  - Once
  - 2-3 times
  - 4 or more times
48. The feedback I received from formal observations was meaningful to my teaching.
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree
49. The feedback I received from informal observations was meaningful to my teaching.
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree
50. I learned new skills through observation of other teachers.
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree
  - NA

**I was provided meaningful professional development in the following areas:**

51. Instructional techniques/ strategies
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree
52. Understanding the composition of students in your class
- Strongly Disagree
  - Disagree
  - Agree
  - Strongly Agree

53. Content area knowledge (language arts, mathematics, science)
  - a. Strongly Disagree
  - b. Disagree
  - c. Agree
  - d. Strongly Agree
54. Lesson planning
  - a. Strongly Disagree
  - b. Disagree
  - c. Agree
  - d. Strongly Agree
55. Analyzing student work/ assessment
  - a. Strongly Disagree
  - b. Disagree
  - c. Agree
  - d. Strongly Agree
56. Student motivation/ engagement
  - a. Strongly Disagree
  - b. Disagree
  - c. Agree
  - d. Strongly Agree
57. Differentiated instruction
  - a. Strongly Disagree
  - b. Disagree
  - c. Agree
  - d. Strongly Agree
58. Classroom management techniques
  - a. Strongly Disagree
  - b. Disagree
  - c. Agree
  - d. Strongly Agree
59. Assigning grades/record keeping
  - a. Strongly Disagree
  - b. Disagree
  - c. Agree
  - d. Strongly Agree
60. Preparing students for standardized testing
  - a. Strongly Disagree
  - b. Disagree
  - c. Agree
  - d. Strongly Agree
61. The professional development provided to me throughout the induction program supported and improved my teaching abilities
  - a. Strongly Disagree
  - b. Disagree
  - c. Agree
  - d. Strongly Agree

APPENDIX B

INTERVIEW QUESTIONS FOR QUALITATIVE RESEARCH

**Teacher Interview Questions**

- Why did you want to become a teacher?
- What was the most difficult part of being a new teacher? What was the most rewarding?
- Please describe your induction program.
- Thinking back to the beginning of your induction program, what did you expect an induction program to include? Did your program meet your expectations?
- Who did you go to when you needed support this school year?
- Does your induction program encourage you to remain in the teaching field? How?
- How is your induction program beneficial to you as a teacher?
- Thinking about functions of the job rather than student interactions, what parts of your teaching career have made you happy so far?
- As a new teacher, what support do you wish you had? What supports were offered to you that was not useful?
- How could your induction program be improved?

**Administrator Interview Questions**

- How can you tell that novice teachers are satisfied with their position and work load?
- Why is it important to your induction program that teachers feel high levels of satisfaction?
- Does your school's induction program include work with a mentor? How are the mentor/inductee relationships chosen?
- How do you know that your teachers feel supported throughout their induction program?
- What does teacher attrition do to your school culture?

- Can you describe how teachers respond to different components of your school/district induction program?
- Overall, how effective do you think your professional development program is?

APPENDIX C

RECRUITMENT LETTER FOR QUALITATIVE RESEARCH



Participant,

My name is Catherine Linhardt. I am a doctoral candidate at the University of Northern Colorado in Greeley, CO.

For my dissertation, I am conducting research on teacher induction programs in the state of Colorado. I am contacting you because you are a recent participant in your school or district induction program for novice teachers.

Would you be willing and able to participate in a brief interview to discuss your experiences in the induction program? The interview will be conducted via Zoom and there are no foreseeable risks in participating in this study.

Please let me know if you require any further information. If you are interested and able to participate, we will schedule a time to meet that works best for you and I will send you the Zoom credentials.

I look forward to your response as soon as it is convenient.

Thank you for your time,

Catherine Linhardt

[linh5631@bears.unco.edu](mailto:linh5631@bears.unco.edu)

APPENDIX D  
INSTITUTIONAL REVIEW BOARD APPROVAL



UNIVERSITY OF  
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**Institutional Review Board**

Date: 03/09/2022

Principal Investigator: Catherine Linhardt

Committee Action: **IRB EXEMPT DETERMINATION – New Protocol**  
Action Date: 03/09/2022

Protocol Number: [2111032975](#)  
Protocol Title: Comparing Teacher Induction Programs

Expiration Date:

The University of Northern Colorado Institutional Review Board has reviewed your protocol and determined your project to be exempt under 45 CFR 46.104(d)(702) for research involving Category 2 (2018): EDUCATIONAL TESTS, SURVEYS, INTERVIEWS, OR OBSERVATIONS OF PUBLIC BEHAVIOR. Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met: (i) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects; (ii) Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or (iii) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by 45 CFR 46.111(a)(7).

You may begin conducting your research as outlined in your protocol. Your study does not require further review from the IRB, unless changes need to be made to your approved protocol.

**As the Principal Investigator (PI), you are still responsible for contacting the UNC IRB office if and when:**



UNIVERSITY OF  
NORTHERN COLORADO

**Institutional Review Board**

- You wish to deviate from the described protocol and would like to formally submit a modification request. Prior IRB approval must be obtained before any changes can be implemented (except to eliminate an immediate hazard to research participants).
- You make changes to the research personnel working on this study (add or drop research staff on this protocol).
- At the end of the study or before you leave The University of Northern Colorado and are no longer a student or employee, to request your protocol be closed. \*You cannot continue to reference UNC on any documents (including the informed consent form) or conduct the study under the auspices of UNC if you are no longer a student/employee of this university.
- You have received or have been made aware of any complaints, problems, or adverse events that are related or possibly related to participation in the research.

If you have any questions, please contact the Research Compliance Manager, Nicole Morse, at 970-351-1910 or via e-mail at [nicole.morse@unco.edu](mailto:nicole.morse@unco.edu). Additional information concerning the requirements for the protection of human subjects may be found at the Office of Human Research Protection website - <http://hhs.gov/ohrp/> and <https://www.unco.edu/research/research-integrity-and-compliance/institutional-review-board/>.

Sincerely,  
Nicole Morse

A handwritten signature in black ink that reads "Nicole Morse".

Research Compliance Manager

University of Northern Colorado: FWA00000784

APPENDIX E  
HUMAN CONSENT FORM



CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH  
UNIVERSITY OF NORTHERN COLORADO

Project Title: Comparing Teacher Induction Programs  
Researcher: Catherine Linhardt, Doctoral Candidate  
Phone Number: (303) 596-6483 e-mail: [linh5631@bears.unco.edu](mailto:linh5631@bears.unco.edu)

Advisor: Dr. Jenni Harding, [jenni.harding@unco.edu](mailto:jenni.harding@unco.edu)

I am researching induction programs for novice teachers. As a participant in this research, you will be asked to take an online survey. The survey will ask you questions about your experiences throughout the induction program. You will be asked about your mentor and school or district's professional development. The survey will take approximately 15-20 minutes.

You will not be required to provide your name or contact information. Your responses will be anonymous. Only the researcher will examine responses. If you choose to participate, you may enter an optional gift card raffle. If you choose to enter the gift card raffle, you will enter your email address at the end of the survey. Contact information will be stored separate from the survey data and all participants will be anonymous during the reporting of the study.

Risks to you are minimal. The only cost to participate is time spent taking the survey.

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Please take your time to read and thoroughly review this document and decide whether you would like to participate in this research study. If you decide to participate, your completion of the research procedures indicates your consent. Please keep or print this form for your records. If you have any concerns about your selection or treatment as a research participant, please contact Nicole Morse, Office of Research & Sponsored Programs, University of Northern Colorado, Greeley, CO; 970-351-1910 or [nicole.morse@unco.edu](mailto:nicole.morse@unco.edu).