

**An Examination of Practices in an Approved Private Special Education School:
A Focus on Induction Programming**

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University of Pittsburgh, 2020

Increases in identification of students with special needs have brought increases in the number of new special education teachers nationwide (Billingsley, 1993). The retention of these teachers is a challenge for administrators (Hargreaves & Fullan, 2000). Research reveals that 14% of new career teachers will leave the field of education within five years (Ingersoll & Strong, 2011). Teacher induction programs are one system addressing the crisis of retention. The purpose of this case study was to investigate participants' perceptions of effective practices and challenges encountered as part of induction program implementation at a specific approved private school. This case study also asked what recommendations the participants would make to improve the current program. Participants were five new and six mentor special education teachers, as well as the Induction Coordinator. They each participated in a survey and an interview. In this qualitative study, the researcher analyzed and coded the data as themes and patterns that were revealed from the participants' responses. Major themes that emerged included: mentor-mentee pairing, collaboration, access to information, communication from administration, the resource of time and acknowledgement of mentors. Participants provided both examples of effective practices, as well as challenges that existed within these themes. Participants further engaged in creating suggestions to improve elements of the program that they felt posed challenges for the new teachers and their mentors. The study concludes with recommendations to the induction committee for improvements to its current induction program.

Key words: **teacher attrition, teacher retention, mentoring, induction program**

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Dedication

I would like to dedicate this dissertation to my amazing family. My ever-supportive mother and father surrounded me with a love that has been a beacon of hope and light in both good times and bad. They have allowed me to build a firm foundation of perseverance and tenacity that taught me to fight for what I wanted and what I believed in. Their support has propelled me into the land of academia and instilled in me a life-long love of learning, curiosity, and determination; without which this journey could not have been possible. I am forever grateful for their unwavering patience, support, and constant warmth of love. Thank you for allowing me the time I needed to pursue this dream, even though it came at the cost of sacrificing our time together.

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only my dreams come true; it will also allow me to aid those I serve to fulfill their own dreams as well.

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I am excited to share the lessons I have learned from not only mentors and colleagues, but from the students I serve as well. It is time to take the lessons and prepare the next generation of teachers. The road of dissertation is complete, but the journey is only at its inception.

1.0 Introduction

Every year, thousands of graduates begin their professional career of teaching. Unfortunately, before teaching for five years, almost half of those teachers will transfer to new schools or completely leave the profession (Ingersoll, 2012). New teachers are more likely than their experienced counterparts to disengage and leave teaching (Billingsley, 1993) due to feelings of inadequacy and isolation (Heider, 2005). In the face of increasingly diverse school populations, school districts must maintain professional development standards for teacher quality while also recruiting and developing new teachers and further seek to retain their most proficient current teachers (Perry & Hayes, 2011).

Research has demonstrated that new special education teachers are leaving the profession of teaching for a number of various reasons, from lack of support and dissatisfaction with their teaching assignments to challenges related to policies (e.g., advanced and permanent teacher certifications) and procedures (e.g., working with paraprofessionals, private duty nurses and other professionals working in the classroom; Hagaman & Casey, 2018; Hughes, 2012; Ingersoll, 2001; Kent, Green, & Feldman, 2012; Long, 2010). When teachers leave either their school or the profession, they leave a gap that is usually filled by someone unfamiliar with the school and students, and the cycle perpetuating the inability to meet transformational goals continues (Hagaman & Casey, 2018). The retention of teachers is vital to breaking the cycle of inadequacy.

New special education teachers have specific needs and are faced with unique challenges; therefore, researching methods for retention of newly hired special education teachers has become a topic of significant discussion (e.g., Feiman-Nemser, 2003; Ingersoll & May, 2010; Ingersoll & Strong, 2011; Kent, Green, & Feldman, 2012). However, the solution may not lie in a salary

increase, as many speculate (Ingersoll, 2012). In fact, with teaching being America's largest profession, it is encouraging to realize that a solution to the teacher retention problem may not cost money (Hughes, 2012; Ingersoll, 2012; Zhang & Zeller, 2016). Specifically, some have speculated that the level of support a new teacher receives from a new teacher induction programs, also known as mentoring programs, can vastly impact the decision to leave their current placement, or even dissuade them from leaving the teaching profession altogether (Billingsley, 1993). A strong induction program can increase new teacher retention (Ingersoll, 2012; Ingersoll & Strong, 2012; Kent et al., 2012; Long, 2010). It may also improve student achievement due to increased collaborations amongst teachers and mentors within the school (Hagaman & Casey, 2018). Furthermore, effective induction programs may aid teachers to develop confidence, competence and comprehension of the craft; reduce of new teachers' feelings of isolation (Ingersoll, 2012); advance teachers' professional growth (e.g., Ingersoll & Strong, 2011), as well as help them discover their personal identity among their more experienced peers (Hargreaves & Fullan, 2000).

Many educational researchers have explored the problem of induction and mentoring programs for new teachers from the teachers' perspectives. Recurring themes of research encompassing induction and mentoring programs include effective mentoring, collaboration, access to resources, and administrative support (Andrews & Quinn, 2005; Billingsley, 2007; Carr & Evans, 2006; Guerra, Hernandez, Hector & Crosby, 2015; Jones, Young & Frank, 2013; Marshall, et. al., 2013; Pearson, 2008; Schlichte, Yssel, & Merbler, 2005; Smith & Ingersoll, 2004; White & Mason, 2006). Main findings of this literature include the need for effective mentors and mentor education, collaboration between mentor and new teacher, the need for access and training in use of resources and getting administrations to understand the role of the new teacher and how

it impacts the education of the students. Gaps in the literature include perspectives from the administration and recommendations for program improvement.

1.1 Statement of the Problem

The ABC School is an approved private school, located in Northwestern Pennsylvania, that works with students with disabilities that cannot be serviced by the student's neighborhood school district. The ABC School provides smaller class sizes, increased staff to student ratios and access to services such as speech therapy, occupational, physical, and behavioral therapies, as well as access to mental health psychologists through its mental health partial program. The induction program has been in existence at the ABC School since roughly 1985. It is a specified part of the school's larger professional development plan that is approved by the Pennsylvania Department of Education and will need to be reauthorized during the 2020 school year. The ABC School induction committee is dedicated to assessing the strengths and gaps observed within the induction program to best meet the challenge of revision and improvement to its teacher education program. To this end, the school has been obtaining feedback from both mentors and new career teachers to ascertain what areas of the induction program are both correlated to creating highly effective special education teachers, as well as what aspects of the program may need possible revision to best serve the pedagogies of the new career special education teacher and ultimately assist in the promotion of skills obtained by the individual student. Upon revision, the professional development plan would be subject to resubmittal to the Pennsylvania Department of Education for authorization and reimplementation for the 2020-2021 school years and beyond.

One issue that provided an impetus for this study was related to ongoing problem with teacher retention in the ABC School. In my observations as a fellow teacher at the school, it was believed that effective teachers were leaving the profession altogether and not just using the ABC School as necessary experience in their career path. Research into the rate of turnover needed to be calculated to determine the severity of the problem. (See Appendix A).

With R values, or the rate of turnover, at 47.36% and 90.00% for the periods of 2009 to 2014 and 2014 to 2019 respectively, the rates of turnover for the periods given should be large reason for administration at the ABC School to have concern regarding the rates of attrition. This increase in the turnover rate suggests further need for a strong induction program to potentially reduce these numbers. They may also suggest that some aspects of the induction program may not be working well enough to promote retention. Since effective induction programming has been proposed as a potential solution for remediation of teacher retention problem, this study focused on an examination of effective practices and challenges within ABC School's induction program. Therefore, the goals of this study align well with both the goals of the ABC School and the Pennsylvania Department of Education. Using a familiar population and sample, this study provided an authentic depiction of the perceptions and understandings of both early career and veteran special educators. As an early career teaching mentor in a dynamic approved private school in Northwest Pennsylvania, there was regular contact with the participating new and mentor teachers, which produced deep understandings of the positive aspects of effectiveness and challenges perceived regarding the induction program.

1.2 Purpose of the Study

The current study sought to understand the perceptions of teachers, mentors, and the coordinator regarding their experiences with induction in the ABC School. Specifically, it addressed the following research questions.

- 1) What are the stakeholders' perceptions of components that make this program effective?
- 2) What are the stakeholders' opinions regarding the challenges they face through the induction program?
- 3) What are the stakeholders' suggestions for improvement of the current iteration of the induction program?

1.3 Definition of Terms

Attrition

Attrition is loss of employees. In the current study, attrition reflects teachers leaving the school whether for a different position outside of the current placement, or leaving the field altogether (Billingsley, 1993).

Induction

Induction is a long-term process (usually a school year) that assists a new teacher to acclimate to the school in order to be ready for the classroom (Anhorn, 2008). Induction can also be known as a mentoring program.

Mentor Teacher

For the purposes of the current study, “mentor teacher” refers to a teacher who has achieved master teacher status and aids new teachers in acclimating to the school climate during an induction period (Ingersoll, 2001).

Mentoring

Often implemented as specified subsection of a support program for induction teachers, mentoring is a peer support relationship between a teacher and a mentor where teachers gain experience through mutual observations, collaboration, and reflection (Billingsley, 1993).

New Teacher

For the purposes of the current study, “new teacher” refers to a teacher who has zero to three years of experience (Ingersoll, 2001).

Teacher Retention

Teacher retention is continued employment in the workforce (Billingsley, 1993). For the current study, retention refers to continued employment in the ABC School (ABC School, 2019).

Teacher Attrition

Teacher attrition occurs when teachers leave the profession altogether. It includes retirement and any other reasons for leaving the profession (Ingersoll, 2001). For the current study, attrition refers to teachers that plan to leave the ABC School (ABC School, 2019).

Teacher Turnover

Teachers who transfer to different teaching jobs in other schools contribute to teacher turnover (Ingersoll, 2001).

2.0 Literature Review

2.1 Introduction

School districts, administrators, and policy makers are facing a multitude of problems with finding and retaining effective teachers (Kelley, 2004). In fact, the national shortage of special education teachers could be one of the most important aspects that special education faces today (Gersten et. al., 2001). Teacher shortages and national attrition rates for all special educators generally fall between 15.1 and 20.3% (Boe, Cook, & Sunderland, 2007; Keigher, 2010). Additionally, rates of attrition soar as high as 22% for early career special education teachers entering the field (Fore, Martin & Bender, 2002). Studies in this area (e.g., Billingsley, 1993; Boe, Cook, & Sunderland, 2007; Wilson & Lumadue, 2013) have found that special education teachers have some of the highest attrition rates for early career teachers. Some of the possible reasons for this high attrition rates include teacher burnout, low self-efficacy, and feelings of inadequacy and isolation of early career special education teachers (Perry & Hayes, 2011). Other plausible reasons for teacher attrition include but are not limited to: increases in class size populations, increases in paperwork, decreases to planning periods, lack of observation of other special education and lack of mentoring programs and professional development (Neil, et al., 2011) as well difficulty with classroom management, student discipline, staff management, creating strategies for organization and planning daily lessons and thematic units, the motivation of students, and the attempt at maintaining a healthy and productive personal life outside of the classroom (Troman & Woods, 2001).

With reports of job satisfaction for early career teacher experiences ranging from poor to highly satisfied (Lortie, 1975; Veenman, 1984), administrators must find ways to ameliorate the problem of teacher shortage in special education and improve early career experiences (Williams, Gillham, & Evans, 2016). School districts and administrators have attempted to decrease teacher attrition through policy mandates that enforce the necessity of “highly effective” teachers being placed in schools. Furthermore, schools have additional professional development standards placed upon them such as continuing education credits and professional development plans that are to be completed on a yearly basis.

Additionally, school districts, intermediate units, charter schools, and area vocational-technical schools in Pennsylvania have been required by the Pennsylvania Code (22 Pa. Code §49.16 and §49.83) (New Teacher Center, 2016) to have a state-approved teacher induction plan for first-year teachers since 1987 (Duke & Gates, 1990). According to the Pennsylvania Department of Education (PDE), the induction plan shall be prepared by an induction educator committee which includes teacher or educational specialist representatives, or both (McMurrer, 2007). As a result, newly employed professional personnel with prior school teaching experience may be required by the school entity to participate in an induction program (Duke & Gates, 1990). Quality induction programs for new teachers might not only be able to reduce teacher attrition and improve student achievement (McLaughlin, 1987); they might be able to save both schools and school districts necessary capital for other budgetary expenses, by eliminating the need for constant training of new first year special education teachers (Flanagan & Fowler, 2010).

Induction programs offer an opportunity for preparation and pedagogical knowledge of mentor teachers to directly impact the early career teachers and acclimate them to the challenges that are unique to the field of special education (Israel et al, 2013). Induction is also considered

the transition period for early career teachers, where they may encounter increasingly daunting and challenging situations that are not taught within the pre-service education curriculum (Wilson & Lumadue, 2013). However, school induction programs are often characterized by chaotic and complex frameworks and frequently fail to provide early career teachers the opportunity to collaborate with a mentor teacher within their area of expertise (Snowden & Boone, 2007). One possible way to achieve this goal of reduction in teacher attrition, is to strengthen mentor collaboration for the new career teachers entering the field (Nance & Calabrese, 2009). This practice can not only reduce the teacher attrition for schools, but it also has potential for increasing student achievement through the creation of highly effective teachers (McLaughlin, 1987). Induction programs for special education teachers generally include a minimum of a one-year apprenticeship with a mentor teacher (Billingsley, 2007). In 1998, the Council for Exceptional Children (CEC) identified five goals for an induction program for special educators, specifically, (1) to aid in the facilitation an application of knowledge and skills of the first-year teacher, (2) for the mentor to share advanced knowledge and skill, (3) for the mentor to aid in timely acculturation to the school environment and climate, (4) for the mentor teacher to aid in reducing stress and increase job satisfaction, and (5) guide the professional induction (Whitaker, 2000). Those guidelines must be considered when developing and implementing a successful induction program for new teachers.

Much of the current research examining induction programs is qualitative (Billingsley, 2004). Complicating interpretation of findings, many of the previous studies incorporated data from general education teachers, as opposed to solely focusing on effective practices for special education teachers (Boe et al., 1997). Although insights from general education provide useful information regarding effective induction programming, early career special education teachers

may have a unique perspective on the effective processes involved (Billingsley, 1993). Furthermore, these teachers may need mentoring supports from special education teachers who have been in the field and have worked with similar populations of students (Billingsley, 2003; Israel, et al., 2012). There has been no previous review of qualitative research of special education induction programs; therefore, a review of the literature focused solely on the qualitative research that specifically examines the effective practices for special education induction programs is warranted.

The purpose of this literature review is therefore to synthesize qualitative research on special education induction programs and challenges experienced by early career special education teachers during their induction programs. Specifically, it will examine (a) setting characteristics, (b) participant demographics, (c) components of induction programs that contribute to their effectiveness, (d) challenges experienced by participants in induction programs (both mentors and mentees), and (e) suggestions for improvement of induction programs, as perceived by participants.

2.2 Methods

2.2.1 Search Procedures

Online electronic databases *PsycINFO* and *ERIC* were searched to locate qualitative research on special education teacher induction programs. The author conducted the search in September of 2018. Search results were limited to include published, peer-reviewed articles in English language. Various combinations of the following key terms were used: *special education*,

induction, retention. Reports primarily containing tables with minimal narrative analysis were excluded. Moreover, research papers distinctly directed at personnel supply and demand, attrition rates, retention rates, job satisfaction, job stress, teacher burnout, and general education attrition were used only to provide a context for the findings in this paper.

2.2.2 Inclusion Criteria

To be included in this review, studies had to meet the following criteria: (a) present results of qualitative evaluations including mixed methods studies with supportive qualitative data shown; (b) provide an examination of induction programs that served to provide support to new career special education teachers within the first few years of teaching, (c) discuss perceived effectiveness of induction programs and effective practices within those programs; and (d) discuss challenges teachers are facing that potentially lead to decreases in teacher retention. Studies were excluded if they failed to meet the criteria for inclusion, were not peer reviewed, and were not written in English language.

2.2.3 Coding Procedures

The coding of the articles was conducted to record the following characteristics: (a) context /setting of the research (e.g., urban, rural, or suburban setting, geographical location, public, private school, or residential setting), (b) participant descriptions (e.g., number, gender, age, race, number of years teaching), (c) effective practices within the induction programs reported by the participants and discussed by the researcher, and (d) teacher-reported challenges. The author was the only one to conduct the selection of the studies and the coding process.

The initial search yielded 25 articles. Four (16%) articles were removed as they did not report on educational induction programs, two (8%) articles were removed as they dealt with paraprofessional retention and not teacher retention. From that point 19 (76%) articles were printed and abstracts reviewed in addition for further compliance to inclusion criteria (described above). After review, eight (32%) did not report either what practices were deemed effective within the school or did not list research data. In final, eleven (44%) articles were retained for the review and further analysis (Andrews & Quinn, 2005; Billingsley, 2007; Carr & Evans, 2006; Guerra, Hernandez, Hector & Crosby, 2015; Jones, Young & Frank, 2013; Marshall, et. al., 2013; Pearson, 2008; Quinn & Andrews, 2004; Schlichte, Yssel, & Merbler, 2005; Smith & Ingersoll, 2004; and White & Mason, 2006). Results from the analyses of the eleven identified empirical studies are reported below (see also Table 1).

Table 1. Summary of Reviewed Studies

Study (Year)	Context and Setting	Participants	Design/ Data Source	Methods of Inquiry	Effective Practices	Challenges
Andrews and Quinn (2005)	A school district serving almost 60,000 students in both high-achieving, high socioeconomic and at-risk populations. The district encompasses 59 elementary schools, 1 special education school, eleven middle schools and 13 high schools.	182 1YT	Case Study	Questionnaire to all 1YT and 57 phone interviews completed	Support with policy/procedures and personal/emotional support. Mentoring programs.	Decreased support in instruction/ curriculum and resources and supplies. Opportunities to observe/ be observed with mentor teachers.
Billingsley (2007)	An urban school district serving almost 100,000 students. The district encompasses 150 schools, 5200 teachers (600 Special Education).	99 Leavers with a return rate representing 72% of full study M 5% F 95% MD 54% C 80% AA 20% 25% <4 years' experience.	Case Study	Questionnaire to 138 teachers that left the district over a three-year period.	Having a mentor in the same field. Time to collaborate with other teachers. External network of teacher system. Reduce paperwork and review procedures for behavior management. Create positive environment through administrative support.	Role overloads (class size, too much paperwork, lack of support staff). Inadequate support from administration. Inadequate facilities.

Carr & Evans (2006)	Louisiana Schools	70 1YT F 99% C 91% MD 77%	Case Study	Survey with five-point Likert scale.	Systematic, sustained support. Mentors play a pivotal role. Collaboration can maximize success.	Classroom management and accommodating individual differences.
Guerra, Hernandez, Hector & Crosby (2015)	Texas No other data listed	3 Special Education Teachers F 67% M 33% L 67% C 33% 100% aged 25-30	Case Study	Individual interviews yielding 42 transcripts.	Identifying and developing engagement styles.	Isolation or not heard.
Jones, Youngs, & Frank (2013)	8 Districts in Michigan & Indiana	185 Teachers 25% 1SET 83% F 17% M 90% C 7% AA	Mixed Methods	Survey	Mentoring Social Networks	Decreased teacher commitment.
Marshall, et al. (2013)	South Carolina 22 Schools	7,622 identified educators. 786 returned Educator Surveys and 1,662 Special Educator Surveys returned.	Mixed Methods	Survey and 25 interviews	Project ReSpecT mentoring model. Familiarity with resources and ability to write effective IEP's.	Too much paperwork, lack of planning time, responsible for too many types of students, number of students and lack of parental support.

Pearson (2008)	266 schools in Leeds, United Kingdom with populations ranging from 12 students to 2,200 students.	336 randomly selected respondents. Service length <1-26 years with a mean of 7 years.	Case Study	Survey, questionnaires, and interviews	Organized forms of collaborations and networking.	Caseload. Time allotted for mentoring.
Quinn & Andrews (2004)	A school district serving almost 60,000 students in both high-achieving, high socioeconomic and at-risk populations. The district encompasses 59 elementary schools, 1 special education school, eleven middle schools and 13 high schools.	182 1YT	Case Study	Questionnaire to all 1YT and 57 phone interviews completed	None listed	More & better orientation
Schlichte, Yssel, & Merbler (2005)	Midwestern State	5 first-year special educators. 80% F 20% M	Case Study	Interview	Administration addressing collaboration. Networking.	Problem students, classroom management, excessive paperwork, knowledge of special education law, and

						connecting with peers and administration. Need for mentoring.
Smith & Ingersoll (2004)	All beginning teachers in the US from 1999-2000 including 52,000 elementary and secondary teachers.	Random sample of 3,235. Mean data reported: Age 29.143 SPED. 0.091 M 0.264 Minority 0.187	Empirical Evaluation	Schools and Staffing Survey (SASS)	Participation in induction program. Mentor in SPED. Similar plan times. Collaboration. External network.	Adequate staffing. Ineffective support. Ineffective communication.
White & Mason (2006)	7 National Sites All regions and pop. of US.	147 ISET F 84% 1SET M 16% 1SET F 96% MEN M 4% MEN Age range 1SET 22-58 Mentor 24-63	Mixed Methods	Survey and focus group interviews.	Mentor program. Effective mentor pairing (same building, same subject, same grade). Supportive administration.	Paperwork (IEP's, referrals and evaluations). Access to materials. Acclimation to school climate. Behavior management. Collaborating with general education teachers.

Notes. ISET: 1st Year Special Education Teacher; SPED: Special Education Teacher; MD: Master's Degree; 1YT: First Year Teacher; F: Female; M: Male; C: Caucasian; AA: African American; L: Latino.

2.3 Results

2.3.1 Context and Setting

All studies, but one that was conducted in Leeds, United Kingdom (Pearson, 2008; 9.09%) were conducted within the continental United States. Studies ranged in the level of description of geographical setting provided, from general descriptions (e.g., reference to “southern states”, see Marshall, et al., 2013) to specific settings. One study (9.09%) was conducted in the Northern States of Indiana and Michigan (Jones, Youngs, & Frank, 2013) and one study (9.09%) was conducted in an undisclosed setting in a Midwest State (Schlichte, Yssel, & Merbler, 2005). Five studies (45.45%) do not list the individual states name; however, two of the studies do state various locations throughout the United States (Smith & Ingersoll, 2004; White & Mason, 2006).

One of the eleven studies (9.09%) described the setting as “urban” (Billingsley, 2007). The other ten studies (90.90) did not give the setting information. In terms of type of educational setting, none of the studies reviewed described whether they were conducted at public, private, residential, or approved private facilities. Only one study (9.09%) provided information on the eight school districts reporting an average of 51% percentage of students receiving free/reduced lunches, with a range of 36-55%, a common correlation indicator of low socio-economic communities (Jones, Youngs, & Frank, 2013). It should be mentioned that two studies (18.18%) had a combination settings, determined by nature of the study (e.g., a nation-wide survey) and information on the specific setting type could not be obtained.

2.3.2 Participants

Across all the studies, approximately 11,853 individuals participated. One article (9.09%) included mentors in addition to the first-year special education teachers (i.e., White & Mason, 2006). In eight studies (72.72%) the sample consisted of both new career special education and general education teachers (e.g., Carr & Evans, 2006; Guerra, Hernandez, Hector & Crosby, 2015; Schlichte, Yssel, & Merbler, 2005). None of the studies included administrators. Five of the eleven articles (45.45%) described age or experience of teacher, including both mentor and novice teacher (i.e., Billingsley, 2007; Guerra, Hernandez, Hector & Crosby, 2015; Pearson, 2008; Smith & Ingersoll, 2004; and White & Mason, 2006). Three of the eleven studies (33.33%) reported the age of the teaching population, with ranges from the youngest of 22 years of age to the oldest being 58 years of age (i.e., Carr & Evans, 2006; Smith & Ingersoll, 2004; White & Mason, 2006). Two of the eleven (18.18%) studies looked at the overall experience range of the teacher with reported ranges with less than one-year experience to twenty-six years' experience with a mean value of seven years (Billingsley, 2007; Pearson, 2008). Three of the eleven studies (27.27%) gave no identifying information of the sample (Andrews & Quinn, 2005; Marshall, et. al., 2013; Quinn & Andrews, 2004). In terms of reported educational attainment, two of the eleven studies (18.18%) reported educational attainment. On average from reported data in the two studies, 65.5 % of teachers reported having their master's degree (Billingsley, 2007; Carr & Evans, 2006). No background information to teacher specialty (e.g. Autistic Life Skills, Emotional Behavior Support, and Teacher of Visual Impairment) was identified for any participant.

Seven articles (63.63%) described gender of the participants, which included both new teachers and mentor teachers, although no specified breakdown of participant role was described (Billingsley, 2007; Carr & Evans, 2006; Guerra, Hernandez, Hector & Crosby, 2015; Jones, Young & Frank, 2013;

Schlichte, Yssel, & Merbler, 2005; Smith & Ingersoll, 2004; and White & Mason, 2006). In 100% of articles stating gender, female teachers were the predominate gender of those teachers participating. Five articles (45.45%) described race, such as Caucasian, African American, Latino, or simply list the minority percentage (Billingsley, 2007; Carr & Evans, 2006; Guerra, Hernandez, Hector & Crosby, 2015; Jones, Young & Frank, 2013; and Smith & Ingersoll, 2004). In all but one study (9.09%) from Texas, where Latino teachers comprised 67% of the population, Caucasian teachers were the predominate ethnicity of teachers participating in the research.

2.3.3 Method of Inquiry

Five of the eleven studies (45.45%) used more than one research method to extrapolate and report teacher opinions and attitudes regarding the potential to leave or stay (Andrews & Quinn, 2005; Marshall et. al., 2013; Pearson, 2008; Quinn & Andrews, 2004; and White & Mason, 2006). Four of those utilized a survey questionnaire to gather data from participants for reporting (Andrews & Quinn, 2005; Billingsley, 2007; Pearson, 2008; Quinn & Andrews, 2004). One (i.e., Marshall et al., 2013) used interview methods in addition to surveys. Six studies used one sole method to uncover data (i.e., Billingsley, 2007; Carr & Evans, 2006; Guerra, Hernandez, Hector, & Crosby, 2015; Jones, Youngs, & Frank, 2011; Schlichte, Yssel, & Merbler, 2005; & Smith & Ingersoll, 2004). Of those, 4 used survey and 2 used interview.

2.3.4 Effective Practices

Participants in seven (63.63%) studies perceived induction programs as effective practice to reduce the attrition rate in both new career and veteran teachers (Andrews & Quinn, 2005; Billingsley,

2007; Carr & Evans, 2006; Jones, Young & Frank, 2013; Marshall, et. al., 2013; Smith & Ingersoll, 2004; and White & Mason, 2006). The remaining four studies (37.37%), did not state induction practices were noneffective and did not make recommendation in order to improve programming (Guerra, Hernandez, Hector & Crosby, 2015; Pearson, 2008; Quinn & Andrews, 2004; Schlichte, Yssel, & Merbler, 2005).

In terms of specific practices that contribute to the effectiveness of mentoring programs, five studies (45.45%) reported the use of collaboration, including team teaching and co-teaching, as an effective practice utilized by administrations as part of mentoring programs for their schools (Billingsley, 2007; Carr & Evans, 2006; Pearson, 2008; Schlichte, Yssel, & Merbler, 2005; Smith & Ingersoll, 2004). Additionally, five studies (45.45%) discussed the effective practice of external networks, such as contacts or mentors that are located outside of the new teachers physical building that the new teachers may contact should they have questions, as a means to address ineffective programs (Billingsley, 2007; Jones, Young & Frank, 2013; Pearson, 2008; Schlichte, Yssel, & Merbler, 2005; and Smith & Ingersoll, 2004). In four studies (36.36%) teachers discussed the importance of administrative support in mentoring programs, ranging from emotional and personal support to support with systems and policies, as the best way to address and reduce teacher attrition in the schools (Andrews & Quinn, 2005; Billingsley, 2007; Carr & Evans, 2006; White & Mason, 2006). In the study by Guerra, Hernandez, Hector & Crosby (2015) the authors explained that the identification and development of engagement styles for teachers , such as moving from passive focus and venting focus systems of engagement to creating a goal-orientated focus for engagement styles, is the most effective practice to beat the climbing attrition rates for teachers. Only one study (9.09%) did not explicitly state the effective practices as reported by their participants, but generally referred to induction programs as a means to address teacher attrition (Quinn & Andrews, 2004).

2.3.5 Challenges

The challenges reported through all studies varied widely, from assistance needed with special education paperwork, inclusion into the general education program and access to mentors within the same building; however, a few commonalities were apparent in several of the studies. In four of the eleven studies (36.36%; Billingsley, 2007; Marshall, et. al., 2013; Schlichte, Yssel, & Merbler, 2005; White & Mason, 2006) the number one listed challenge for new career special education teachers was learning to complete paperwork associated with their role as teacher, with items such as Individual Education Plans (IEP) writing, behavior modification plans and data collection being noted most frequently reported (36.36%). This was often taught by the mentor teacher throughout the process of the induction program. Another largely reported challenge for new career special education teachers was caseload or class size, including both number of students and type of students, which can be addressed with support from mentor teachers with strategies and personal experiences during the induction program through individual meetings, observations and coaching sessions (Billingsley, 2007; Marshall, et. al., 2013; Pearson, 2008). Another common theme throughout the studies suggested that a lack of resources was perceived as a major challenge that teachers face in the school that leads to increases in teacher attrition. In fact, eight studies (72.72%) list lack of resources as a top challenge; ranging from inadequate staffing, inadequate access to curriculum and materials, inadequate time for planning and observing and collaborating with peers and mentors, as well as inadequate orientation to policies and procedures and acclimation to demanding and difficult school climates (Andrews & Quinn, 2005; Billingsley, 2007; Marshall, et. al., 2013; Pearson, 2008; Quinn & Andrews, 2004; Schlichte, Yssel, & Merbler, 2005; Smith & Ingersoll, 2004; and White & Mason, 2006). Three studies (27.27%) list behavior and classroom management as a top contributor to increases in teacher attrition according to the results (Carr & Evans, 2006; Schlichte, Yssel, & Merbler, 2005; and White & Mason, 2006).

Finally, feelings of insufficient support from parents (Marshall, et. al., 2013), feelings of isolation (Guerra, Hernandez, Hector & Crosby, 2015) and feelings of decreases in teacher commitment (Jones, Youngs, & Frank, 2013) each were discussed in one study each (9.09%).

In three of the studies (27.27%) findings revealed the need in the partnership between special education mentor and new career special education teacher, as opposed to general education mentors with special education new career teachers (Marshall, et al., 2013; Jones, Youngs, & Frank, 2013; and White & Mason, 2006).

2.4 Discussion

2.4.1 Discussion

The variables that this literature review of qualitative research examined were: (a) setting/context characteristics, (b) participant demographics, (c) components of induction programs that contribute to their effectiveness, (d) challenges experienced by participants in induction programs (both mentors and mentees), and (e) suggestions for improvement of induction programs, as perceived by participants. Although previous literature reviews and meta-analyses (e.g., Bay & Parker-Katz, 2009; Billingsley, 2004; Fore, Martin, & Bender, 2002) have been conducted to examine effective means to reduce teacher attrition in both general and special education, this review represents the first systematic review of qualitative research examining components and outcomes of effective induction and mentoring programs for new career teachers, as well as challenges associated with their implementation.

In reviewing context and setting, it was found that regardless of geographical location, type of area (rural, urban) and socio-economic status of the school and district surveyed, induction programs with mentoring components had a positive impact on the new career teacher. With mentoring being a capstone of the early career teaching experience, professional development for both the new career teacher and the mentor are necessary to further address and reduce the intention rate of the special education teacher and improve the field of special education. The analysis of demographic information revealed that the race for most of the participants ($M = 73.5\%$) were Caucasian although it could be concluded that some studies did not adequately report participant demographics. With 84% of the current teaching force identifying as White/Caucasian (National Center for Educational Statistics, 2003), there is a belief that, as these teachers engage in their ideal and belief systems, they propagate and substantiate white privilege within the classroom and potentially negatively impact and affect the black students (Parsons, 2005). An analysis from the National Center for Education Statistics (2012) data revealed that students of color resulted in more than 45% of the Pre-Kindergarten–12 population, whereas teachers of color made up only 17.5% of the educator workforce. Overall, therefore, the data obtained in this analysis of literature are consistent with the nation-wide statistics. The lack of participant diversity is concerning and suggests needing to examine the perspective of a more diverse population of teacher to better obtain both the most effective practices and largest challenges to the successful implementation to the induction program (Parsons, 2005).

Reviewing methods of data collection, it was surprising that six of the eleven studies used a single method of data collection to determine and calculate perceived effectiveness of programs. Using multiple methods to study a phenomenon is one proposed means to produce results that are more robust, more compelling, and more substantially rigorous than single method studies (Creswell, 2009). The world of educational research is becoming increasingly interdisciplinary and complex; therefore, many

researchers will need to augment one method with another to provide superior research (Johnson & Onwuegbuzie, 2004).

Ten of the eleven reviewed empirical studies met the criteria of specifically targeting effective practices, while all eleven of the studies additionally listed challenges most associated with increases in teacher attrition. The findings of this literature review suggested that while much of the research shows advantages of mentoring from special education teachers for first-year special education teachers needing mentoring, there are critical gaps in the belief of what administrators see as problematic opportunities or challenges identified to reduce teacher attrition and the perceived realities of teachers working in the field. First, consistent with the findings of Billingsley, (2007); Carr & Evans, (2006); Pearson, (2008); Schlichte, Yssel, & Merbler, (2005); and Smith & Ingersoll, (2004), this review indicated that one key practice administrators can implement within the school to potentially reduce teacher attrition for both new career special education teachers and their general education colleagues is increases in the number of opportunities available to new teachers to engage in collaboration with peers and mentor teachers. In collaborations, new career teachers feel less isolated (Guerra, Hernandez, Hector & Crosby, 2015) and collaboration could promote more effective communication (Smith & Ingersoll, 2004), while connecting peers (Schlichte, Yssel, & Merbler, 2005) and increasing teacher commitment to reduce the increases in teacher attrition (Jones, Youngs, & Frank, 2013).

Another key perceived outcome observed from the literature is the mentoring and induction processes, such as effective pairing protocols, mentor/mentee observations, and communication between new teachers and administrations (Andrews & Quinn, 2005; Billingsley, 2007; Carr & Evans, 2006; Jones, Young & Frank, 2013; Marshall, et. al., 2013; Smith & Ingersoll, 2004; White & Mason, 2006). One of the key goals of mentoring and induction programs is specifically to retain qualified special education teachers and develop new career teachers into effective practitioners (Andrews &

Quinn, 2005). The role administrators play in both induction and mentoring for new career teachers is both complicated and challenging, but if the systems are properly implemented, new career teachers develop appreciation of more positive school climates and instrumental collaborations amongst professionals (Correa & Wagner, 2011). If administrators focused on successful mentoring and induction programs, teachers would potentially understand curriculum and behavior plans better as well as also be able to more effectively manage increased paperwork loads while further developing a better school climate for all teachers (Andrews & Quinn, 2005; Billingsley, 2007; Carr & Evans, 2006; Marshall, et. al., 2013; Quinn & Andrews, 2004; Schlichte, Yssel, & Merbler, 2005; and White & Mason, 2006).

Alternatively, in addressing some of the challenges in induction programming, administrators have the potential to further reduce the rate of attrition. In matters such as increased administrative support, administrators have a great deal of influence in changing the culture and providing a positive experience for both new career and veteran teachers (Smith & Ingersoll, 2004). However, reviewing many of the challenges reported in the studies, administrators should make changes to their schools to address these challenges, but based on available resources, such items such as classroom size, inadequate facilities and access to supplies and curriculum might be unobtainable (Andrews & Quinn, 2005; Billingsley, 2007; Marshall, et. al., 2013; Pearson, 2008; Quinn & Andrews, 2004; Schlichte, Yssel, & Merbler, 2005; Smith & Ingersoll, 2004; and White & Mason, 2006).

2.4.2 Limitations

The results of this literature review should be interpreted with consideration of the following limitations. First, the reviewer located only eleven studies that met the inclusion criteria. Although not a limitation, but rather a finding, the fact that so little data exists in the realm of effective practices in

special education in comparison to effective practices for general education is of great concern. Within the review itself, more than half (63.63%) of all articles reviewed had a general education teacher population reporting in addition to special education teachers. Furthermore, the reviewer only utilized two well-established databases to conduct the initial search. Descendent searches were utilized but did not add any studies to the sample. Similarly, results were limited to include only peer-reviewed journals and did not include other literature such as dissertation studies or those that did not undergo the peer-review process. The low number of studies meeting the criteria, as well as the range of effective practices and contributing challenges, limits generalizability of findings. When examining initially developing inquiry, future authors may consider whether to include additional databases as well as other sources such as dissertation studies. Future studies should use an interdisciplinary approach to using quality indicators to examine the evidence of practices recommended for use across educational contexts serving all mentors and first year teachers. Finally, inter-rater reliability was not assessed for selection and coding of the studies; therefore, additional research conducted with the same studies could potentially yield varied reliability of selection and coding of the given studies. Finally, perceived “effective characteristics” and some conclusions were based on qualitative literature; therefore, the actual numeric correlation is unclear, and conclusions should be interpreted through this lens.

2.4.3 Implications for Practice

The findings of this review have implications for special education teachers, administrators, and policymakers. First, special educators must continue to mentor new career teachers through increased collaboration in order to best educate the new teacher in policies and procedures not generally known by their general education peers. Secondly, administrators must acknowledge the differences in general and special education mentoring needs and allow for these two systems to work in conjunction with

each other, while maintaining their individual properties, such as behavior and population specifics. Administrators must also promote effective practices as reported by the literature and address teacher reported challenges to attempt reductions of new career teacher attrition, even when matters of resource availabilities are out of their control. Finally, policymakers need to work to mandate professional development for the mentor teacher to better serve the needs of the novice teacher, while providing opportunities for aid in time and financial compensation on behalf of the role of mentor teacher. This could be relegated and have some correlation to the research data from participants stating mentor and teacher formal networks and how the field of education utilizes growth of mentoring a novice teacher to improve their own teaching experience (Jaspers et. al., 2014).

2.4.4 Suggestions for Future Research

This is the first literature synthesis of qualitative literature to focus on addressing not only effective practices, but teacher reported challenges and research related to professional development for mentors and intervention studies for induction programs. The relatively small number of studies, producing results of this systematic literature review suggest that there is a considerable lack of research focused on induction programming specifically for teachers in the field of special education. This is not surprising as special education is a highly specialized realm of education that is a unique counterculture of education and therefore might not have as much research available in exclusivity. On the other hand, it is surprising given the data presented for retention for special education teachers in particular. This shows that there is a need for further research into the phenomenon of both effective practices in special education and the potential for effective inclusive special education practices in the realm of the general education arena, since the research sites only general education curriculum is the Pre-K Counts program.

Future research should focus on the realm of special education effective practices. Other aspects for future research could include using additional methodologies to best ascertain both quantitative data while further expanding qualitative data in teacher perceptions of effective practices and challenges experienced by both new and experienced teachers. Further, diversifying the demographics of the sample, context and participants could yield very different results. For example, data extrapolated from approved private schools, or with higher proportions of minority populations could show vastly different effective practices and challenges for the new teacher. Additionally, research into more quantitative studies to find numeric correlations between professional development, mentoring, the resource of time and attrition could greatly increase the administrations perspective into the need to address the severity of current teacher retention practices.

In summary, this study is necessary to address the gaps in the previous literature by examining the induction program practices within special education rather than the general education settings. Further, it addresses gaps in the literature by providing an examination of practices within the approved private school using a reverse inclusion model. Finally, the need in diversifying the methodology of the investigation will be addressed by using a combination of survey and interview methods.

3.0 Methods

3.1 Research Questions

The purpose of this study was to examine perspectives of stakeholders (including induction program coordinator, new career special education teachers, and mentor special education teachers) who support new career teachers with induction programming at one approved private day school located in Northwestern Pennsylvania, to be identified as ABC School. This study attempted to determine stakeholders' beliefs related to practices within an existing induction program. Additionally, this study examined gaps in execution of the existing program, as well as challenges that new career teachers face that may contribute to an increase in the rate of attrition within the identified approved private school. The specific research questions that this study addressed were the following:

- 1) What are the stakeholders' perceptions of the components that make this induction program effective?
- 2) What are the stakeholders' opinions regarding the challenges they face through the induction program?
- 3) What are the stakeholders' suggestions for improvement of the current iteration of the induction program?

Participants included (a) the induction program coordinator, (b) new career teachers, and (c) mentor teachers in the ABC School.

Due to my role as a teacher at the chosen research school site and this study's researcher, it is essential that I (the researcher) addressed my own bias as it related to the study. I had been a past participant of the current iteration of the induction program and had served as mentor to two new career

teachers. It was essential that consideration and reflection on my own experiences related to the induction programming were addressed in order to examine the existing bias that may have been present. This assisted me in moving away from a focus on anticipated challenges to a positive and precise lens that investigated effective practices associated with the induction program.

3.2 Study Context

3.2.1 School Setting

The study setting, ABC School, was an approved private day school located in the North West region of the Commonwealth of Pennsylvania. The school was one branch of a larger provider of disability services for the North West sector of Pennsylvania. The school was founded in 1952 and was designated as an Approved Private School by the Commonwealth of Pennsylvania in 1963. The school found residence at its current location in 1970. The school contained 21 classrooms with each classroom designed to provide special education services to a maximum of ten students per room with exception of the Early Intervention and Pre-K Counts rooms, which held a capacity of fifteen students each. 100% of the students received free or reduced-priced lunch. A vast majority of students received special education services that included physical, intellectual, emotional and behavioral goals and programming.

3.2.2 Student Information

The school fundamentally operated on the premise of reverse inclusion, wherein typically developing students were placed with peers that all have intellectual, physical or emotional/behavioral disabilities (ABC School, 2014). Students with disabilities were educated with peers with similar disabilities and neuro-typical peers were included in various activities throughout the year to support adaptation and integration into the community. There were 243 students that attended the school; 196 students received special education services, while 47 students were part of the general education curriculum. Of the 243 students, the percentage of race was as follows: White (70.36%); Black or African American (20.15%); American Indian or Alaskan Native (4.52%); Native Hawaiian or Other Pacific Islander (2.46%); Asian (1.64%); Unknown (0.41%); and Declined to Answer (0.41%).

The percentages of students who were enrolled at the school were identified with the following educationally-relevant disabilities: Autism (34.15%); Intellectual Disability (16.04%); Multiple Disabilities (14.81%); Developmental Delay (12.34%); Other Health Impairment (.08%); Hearing Impairment (.08%); Visual Impairment (.08%); Deaf/Blind (.04%); and, Traumatic Brain Injury (.04%). The remaining students had no diagnosed disability (19.34%) and were part of the general education, Pre-K Counts curriculum.

3.2.3 Demographics, Educational Background, and Instructional Tenure of the Teaching Staff

There were 21 teachers employed by the school on a full-time (35 hours per week) basis (ABC Corporation, 2019). Included in the 21 teachers was one health and physical education teacher with no additional special education certification. There was also one art teacher that was additionally certified Nursery-12 special education. The Deaf Education teacher was certified in both speech corrections and

hearing-impaired education. The remaining 18 teachers held various certifications and, in most cases, dual certifications relating to education. Three teachers held an Early Childhood Education Certification (EC Ed) and eight teachers held an Early Intervention Certification (EI Ed K-6). Four teachers held a mentally and physically handicapped certification, while seven teachers were certified in special education grades PreK – 8. Two of these teachers were certified in special education from PreK – grade 12, and eight teachers were certified in special education birth – grade 12. Two teachers held waiver certificates to teach secondary special education based on the needs of the school.

The demographics, educational background and instructional tenure of the teaching staff were varied. Nine teachers had earned a Bachelor’s degree, while twelve teachers had earned a Master’s degree. Six of the 21 teachers identified as male. Nine teachers had 10 or more years teaching experience, with the longest teaching experience being thirty-nine years. Twelve teachers had less than 10 years of experience (range <1 year – seven years). All 21 of the teachers recognized and described their race as Caucasian.

3.2.4 Induction Programming and Professional Development

The current induction program at the ABC School was centered on the approved private school’s plan for professional development, which is approved by the Pennsylvania Department of Education every six years. The current iteration was approved for the ABC School on May 14, 2004. This study buttressed the current plan and informed committee members as to potential, critical opportunities for improvement of the induction plan. As the next iteration will be due to be submitted by May 13, 2020, this study was well timed and a necessary aspect for the ABC School.

Professional development associated with the existing induction program consisted of a full-year course of programming that was designed and developed by administration to support the first

year or new-to-the-school teachers. Its purpose was to inform new career special education teachers of the inclusive exposure and encompassment of school policy, procedures and environmental encapsulation (September – May). The program sought to provide high levels of interaction between the new career teacher and their mentor teacher.

The responsibilities of the newly inducted teachers were: (a) to participate in in-service components of the induction process; (b) to maintain a journal of activities related to induction programming (topic, date, recommended actions) aimed at enhancing the practice of reflective teaching; (c) to attend scheduled meetings of the Induction Team (Inductees, Support Teachers, and Coordinators); (d) to schedule observations of support teacher and other support team members (as appropriate) according to a specified schedule; and, (e) to participate in an evaluation of the induction program. From this, the newly inducted teachers were able to suggest modifications, as necessary (ABC School, 2014). Participation in the school's induction program was designed not only for first year teachers, it was also implemented for first-year or newly hired therapists, as well. These professionals, however, were not chosen to be participants for this study.

The Induction program was set up so that when a new teacher is hired, they attended a mandatory week-long orientation that all employees of the ABC Corporation must attend. During the orientation, the new teacher, along with other newly hired members of the ABC Corporation family, learned the mission statement, the guiding philosophy, and the vision statement. Additionally, the history of the corporation and the various current entities were described. From there, basics on corporate compliance, policy, legal rights, were reviewed. Also included in the orientation for all staff was an introduction to intellectual and developmental disabilities, an autism overview, emergency preparedness, records management, billing accuracy, and the health insurance portability and accountability act (HIPAA), in addition to other mandatory topics (ABC Corporation, 2019). From that

point, usually during the last day of orientation, the new teacher worked with the critical skills specialist and school specific trainer for more specified learning, such as Carelogic (ABC School specific billing program), specific feeding programs, specific splint or stander protocols, specific occupational therapy protocols, such as weighted or compression vests, posture chairs or wedges, and other implementations from the occupational therapy department.

One week before school starts, new teachers engaged in a number of in-service trainings. Their goal was to energize the staff for the upcoming school year and further informed the staff of any changes in policy or procedures, as well as reemphasizing current policy and procedures. The new teacher had the opportunity to meet and interact with their individual staff and prepared the room for the students. Information exchanges on the students were one of the most important aspects for the new teacher during this time. The information exchange provided detailed information on each student, such as dominant hand preference, preferred communication system utilized, potential behavioral concerns and even level of independence. If the teacher was taking over their classroom from a teacher still in the school, the exchange was completed between the previous teacher, the new teacher, the current staff, the behavioral therapist, the occupational therapist, the speech therapist and if necessary, the physical therapist. For a new teacher, the first week could have been very overwhelming; as such, specified induction activities were not completed during this time.

A mentor teacher was assigned by the induction coordinator to the new teacher. As explained through her interview, the induction coordinator related that when assigning a new teacher a mentor, she reviewed the new teachers assignment and looked for mentor teachers with similar assignments or past experiences in similar assignments, location and proximity between the potential pair and finally, she looked at other factors, such as past experiences and personality. Then the new teacher completed an efficacy checklist, listing what they believed that they needed help with the most and in what

sequences. The mentor teacher reviewed the IEP Calendar and assisted the new teacher in setting up the appointments for the IEP meeting as well as a pre-IEP meeting with therapists. The IEP document was reviewed, as well as the School Function Assessment (SFA) which was the assessment form that all students at the ABC School are assessed with. If additional assessments were used, the mentor teacher reviewed those as well. Generally during this time, the mentor also explained the email and intercom systems to the new teacher.

After the week of in-services was completed and the students had arrived, the mentor and new teacher set up a meeting schedule to touch base periodically during the year. In most cases, early on in the year, the mentor and new teacher met weekly to discuss challenges; this faded to bi-weekly and eventually only occurred on a monthly basis. As part of the school's professional development, each classroom staff was mandated to have met weekly and needed to document their meetings. Usually the mentor invited the new teacher to their classroom meeting and demonstrated how it was to be completed and then attended the new teacher's meeting and gave feedback.

A few weeks into the year, the mentor and new teacher met with the induction coordinator, the critical skills specialist and the director of children and youth and began the formal induction process. A copy of the "Survival Guide for New Special Education Teachers," along with a copy of, "What Every Special Education Teacher Should Know" was given to each teacher and the critical skills checklist was reviewed. In past years, because there were a large number of new teachers at the same time, a weekly professional learning community was held, that was moved to bi-weekly and finally ended up monthly. During this meeting, the critical skills specialist met with the new teachers as a group to discuss predetermined topics, to enhance new teacher learning and efficacy. Essential information that needed formal review from the mentor teacher included: Individual Education Program (IEP) development; behavior plans; lesson plan format and development; and a triage plan so

that the mentee was aware of what member of administration to talk to if the mentor was unavailable. The new teacher continued to meet with their mentor and the critical skills specialist throughout the year. They attended various additional in-services and continued their journey into completing their induction year. Between December and January, most teams met bi-weekly or even monthly and continued the journey into topics that were not as critical to complete, but still were extremely important. By the end of the year, the mentor and new teacher might only need to have met when specific questions arose. Topics for these meetings could have ranged from working with various staff, learning, and understanding protocols, and/or even included informal brainstorming sessions.

Mentors must have met specific criteria in order to serve in the induction programming. They must have had at least two years of successful teaching and had obtained or were working to obtain permanent certification. Mentor teachers must have demonstrated their support of effective teaching and they must have been able to have modeled behaviors of continuous learning and reflection.

3.3 Participants

3.3.1 Participants

The study included a population of 5 new special education teachers, who completed the induction program during the 2017-2018 school year, as well as their 6 mentors (a total of 11 teachers), as well as the Induction Coordinator who was a member of the administration. An additional new teacher that was part of the induction program during the 2017-18 school year was terminated just prior to data collection and was not deemed eligible by the ABC Corporation to participate in the study. Each participant had completed an individual induction program and had earned at least a Bachelor's degree

in education. All of the participants held an active Pennsylvania teaching certificate or a teaching certificate from a reciprocal state.

The goal of this study was to understand whether the current practices of the induction program were effective and what could have been done to improve them. As early career teachers became veteran teachers, they held with them the knowledge that they learned while engaged in the induction program. Thus, it was imperative that we gained perspective of both early career and veteran teachers. There were almost an equal proportion of teachers in life skills support $n = 4$ (36.4%) and autistic support teachers $n = 5$ (45.5%), while only a small number of respondents taught in multiple disciplinary handicapped classrooms $n = 2$ (18.2%).

3.3.2 Participant Selection

Special education teachers were recruited from the approved private day school that had either finished their induction program during the 2017-2018 school years or were mentor teachers to the newly inducted teachers. Teachers from the 2017-2018 induction program were utilized for the study participants, as teachers from the 2018-2019 induction program had not yet completed their program at the time of the studies data collection. Because the teacher selection pool was small, all teachers that met the qualifications and agreed to consent to participate were eligible to participate in the study. This study utilized a convenience sample (Creswell, 2015), to allow for exploration of the efficacy of the induction program within a given school. Once permission to begin the current study was obtained, the researcher solicited information from the Induction Coordinator and Executive Vice President to obtain the contact information of the participants that met inclusion criteria. Participants were contacted via electronic mail to participate in the study and then personal face to face communication was utilized by the researcher to confirm attendance to focus group and meeting time and place.

3.4 Design

This study followed a qualitative case study design (Shadish, Cook, & Leviton, 1991). Glesne (2011) states that qualitative research studies are best suited for contributing to a larger competency of “perceptions, attitudes, and processes” (p. 39). This research utilized a case study design in order to obtain greater understanding of the perceptions of new career special education teachers and to ascertain the many factors that bolster and augment their retention in the field of special education, as related to the induction program. The benefit of a case study design was rooted in collecting information through various means, rather than relying exclusively on one singular method.

The utilization of a case study in this research afforded substantial descriptions regarding the perceptions of both new career and mentor special education teachers (Lapan et al., 2012). The research tools for this study included in depth, face-to-face semi-structured individual and group interviews. The method of analysis included codification of data based on categories, theoretical themes that emerge, and themes illuminating the research questions that framed this study.

3.5 Instruments

3.5.1 Induction Program Coordinator Interview (IPCI)

To gather the perceptions, vision and interpretation of the induction program regarding the effectiveness of systems, and the potential gaps in execution of induction program at ABC School, the researcher had designed an instrument, the Induction Program Coordinator Interview (IPCI) (see Appendix E). The tool was created from various other research and previous literature on mentoring

and induction practices, as well as the School and Staffing Survey (SASS), which is utilized and endorsed by the National Center for Education Statistics (NCES, 2018); however, the SASS was only used to inform the current iteration of the interview and no questions were taken directly from the SASS. This meant that the researcher needed to collaborate with the Induction Coordinator to find how and for what purposes the program was originally conceptualized.

The interview for induction program coordinator consisted of the following three broad parts:

1. What is working within the current induction programming?
2. What are the challenges of the current induction programming? and;
3. What are the recommendations for improvement of the current induction programming?

The original interview instrument consisted of a collection of 4 main questions being: (a) the vision of the induction program; (b) what is working; (c) challenges that the induction program coordinator anticipated the teachers would have; and, (d) and challenges that are personally recognized by the induction coordinator, with additional probe questions that query the intended vision of the induction program and the actual execution of programming. Additionally, the interview solicited a review of systems within the induction program that were believed to cause challenges for new career teachers. For this study, semi-structured in-person interview was expected to last between 45 to 60 minutes, but in fact lasted approximately nearly 90 minutes and had to take place over two sessions. The data analysis approach was thematic coding and analysis. With these considerations in mind, the researcher generated a list of questions to best interpret the effective aspects along with the challenges foreseen within the induction program (see Appendix B).

3.5.2 Purpose and Development of the Group Interview

The intent of the new teacher and mentor interviews was to gather teachers' perceptions about the level of support provided by the induction program and what challenges the current iteration poses to the new career teacher, as well as discovering whether mentors perceive that they have been supported by the induction program in meeting the needs of teachers new to the profession. In exploring the potential outcomes, the researcher has broken down the overarching potential themes into sections:

1. What is working within the current induction programming?
2. What are the challenges of the current induction programming? and;
3. What are the recommendations for improvement of the current induction programming?

With the above considerations in mind, the researcher generated a list of questions to best interpret the effective aspects, along with the challenges foreseen, within the induction program (see Appendix C). The survey instrument consisted of a collection of 3 questions that probed the individual experiences of the induction program participants. For this study, 4 separate semi-structured group interviews lasted approximately 60 minutes each.

The interview questions were included in the semi-structured interview protocol for the group interview and each participant was given the opportunity to speak. According to Creswell (2015), the procedure for interviewing includes designing open-ended questions allows participants the opportunity to voice their experiences without restricting their views. In addition, open-ended responses empowered the participants to create their own options for responding and sharing their own experiences in the induction program. The interview questions were created to answer the research questions for the qualitative study. The researcher audio recorded and later transcribed every interview verbatim.

3.6 Study Procedures

This study consisted of three components, an individual interview with the induction coordinator, a focus group interview with the five new career teachers and a focus group interview with the six mentor teachers. The interview questions in appendices B and C were developed by the researcher to probe the perceptions of participants. The interview questions were developed in conjunction to buttress the survey data collected and were reviewed by doctoral student peers and colleagues, including the Induction Coordinator. The data from participants (along with the research topic discussed) included teachers' individual interpretation of the effectiveness of the induction program, as well as execution gaps, participant understanding of effectiveness and gaps from the perception of new career special education teachers (RT2); the understanding of effectiveness and gaps from the perception of the mentor special education teachers (RT3).

All interviews were conducted in person and audio recorded. The researcher asked the main question and allowed participants to answer. If there were lulls in conversation, the researcher asked probe questions to provide a continuation of the conversation. The interviews were held in a private meeting room at the ABC School during the month of May of 2019, and each lasted approximately 60 minutes. The first component of the study was to examine the perspectives of the induction coordinator. I met with the Induction Coordinator and ascertained through the interview questions how perceptions of the program could differ between the policy and/or procedures for the induction program and the execution and continued use of the induction program.

Potential subjects were invited to participate in this study using the invitation to participate (see Appendix D). Consent forms (Appendix E) and initial demographic information surveys (Appendix F) were sent to each individual a week prior to scheduled interviews. Recruitment of participants was based on those teachers at the ABC School that had completed their induction program during the 2017-

18 school year and the mentor teachers of the ABC School. Although IRB was not required by the governing board, participants were provided with documentation on how to contact IRB, had they any concerns during or after the study was completed. Once all potential participants consented to participate in the study, a meeting was scheduled. One hundred percent of invited participants accepted the invitation to participate in the study. One mentor participant declined to answer survey questions regarding their individual experiences with the induction program, as the induction program was not in effect during their first years of teaching.

Informed consent was obtained from each participant before interviews were conducted. Before each interview began, the researcher communicated the purpose of the current study to each participant or group, the amount of time the interview was expected to take, how the data gathered would be used, and the process by which the participants would receive a summary of the data from his or her interview (Creswell, 2015).

Interviews were conducted with the induction coordinator, new teachers who completed the induction program, and experienced teachers who mentored the new career teachers. Qualitative, semi-structured, individual and group interview protocols were used to conduct the interviews. Each interview was audio recorded and transcribed with field notes taken during the interview.

The researcher transcribed the data using software from the Apple iPhone and speech to text application and then listened to all the recordings and ensured that the translation was correct and verbatim. The researcher ensured the confidentiality of each participant by assigning a unique identification code to each transcribed interview summary. The researcher provided each participant with the option to have his or her summary sent through email or delivered in person. All participants agreed to receive reviews through email. Each participant received a summary of the data from his or her interview via email within two weeks of the initial interview, as a means for member checking

meant to verify the data provided by the participant. A follow-up meeting was scheduled with each participant within a week after the participant received his or her interview transcript. During the second meeting, participants were invited to confirm or correct the interview transcript provided to them.

3.6.1 Data Analysis

Once data were collected, an inductive strategy was utilized to analyze data in order to develop and uncover themes that further expand and guide the inquiry process. The process evolves into the beginning of an analytic pathway, guiding the researcher further into the data and revealing additional relationships (Yin, 2013). This strategy mirrors the “*grounded theory*” approach to data analysis. According to Yin (2013), in this theory, the researchers ascribe codes to the data and each individual code represents a unique concept or abstraction of potential interest and learning.

In order to better understand the process of data analysis, I conducted a series of procedures to better guide me in analyzing and interpreting interview data. Prior to transcription, I reviewed and relistened to each participant’s or groups’ interview in its entirety to get a better-informed understanding of the overarching themes of what each participant attempted to reveal during the sessions (Hycner, 1985). After reviewing each recording in its entirety, I listened to each recording for a second time, to gain better understanding of the essence provided and began to look for themes to emerge.

The next step in data analysis included transcribing the collated data from the audio recording or subsequent interview notes into a Microsoft Word document using a verbatim transcription service. The files were transcribed from the Apple iPhone application Voice Recorder from TapMedia Ltd with ratings and reviews at 4.7 out a 5.0 scale. Computer file folders with anonymized transcriptions were then created with code names that were then put into a University of Pittsburgh Box Drive and a flash

drive that was given to the Executive Director of the program. The researcher utilized Excel software that is developed and manufactured by the Microsoft Corporation and data extraction from Qualtrics. This software permitted the researcher to organize, format, and calculate data with formulas using a spreadsheet system by rows and columns. This process enabled the analysis of the data that was present in this case study. This software program was developed for, and is utilized by, other researchers for data analysis and reporting.

In the next step in the process of data analysis the researcher re-examined the field notes that were created during each interview session. These necessary field notes were used by the researcher as a facilitation of the process and allowed the researcher to categorize the data, along with discovering the themes presented through the interviews. The field notes documented various nuances and specific anecdotes that were brought to the attention of the researcher during the initial phases of analysis. With the completion of the review of field notes and construction of the transcripts, the researcher began to read each transcript, one transcript at a time. Each transcript was then be re-read and re-examined following Colazzi's (1978) recommendation to identify discernable statements that directly connected to the proposed inquiry from the interview. At this point, individual notes in the margins of the transcripts themselves were created by the researcher, as well as, the development of interpretative meanings for each of the discernable statements. Transcripts were read through once again. Colored highlighting was used to distinguish between each piece of transcript allocated to a factor/category and subcategory. Coded sections were then extracted from the interviews using the software and placed in a framework matrix under the relevant categories.

Based on individual responses of the interviews, the researcher was able to get precise information and understand how aspects of the induction program were positively or negatively affecting the retention rates of the approved private school, if at all. Compliance and transcription of

data was examined with rigor to further promote credibility, transferability, and dependability of the study and establish a functional system of supports (Zhang & Wildemuth, 2016). Upon completion of this process and successful defense, the data will be shared with both the administration through document sharing for the Induction Committee Review Board as well as the teachers through further informing the practice in sharing the findings at a teacher in-service.

4.0 Results

4.1 Introduction

The purpose of this section is to present the research questions, the data collection, and the findings of this study. The purpose of this study was for new and mentor teachers to review the current iteration of the induction program; identify effective practices, identify challenges associated with the induction program and to make recommendations to the induction program committee for improvements with the hope that those improvements would result in reduced attrition rates in the future. After coding of the data, the following themes emerged: (a) mentor-mentee pairing, (b) collaboration, (c) access to information, (d) communication from administration, (e) resource of time, (f) training, and (g) acknowledgement of mentors.

4.2 Survey Results

4.2.1 Survey Data

To address the research questions, an electronic survey was administered to 11 teachers who have recently completed their induction program and those mentors that have mentored or were eligible to mentor during the 2017-2018 school years. The teachers were selected from the total population of 21 teachers currently in teaching positions at the ABC School. The response rate was 100%, with all teachers completing the survey. The demographic profiles of the sample of eleven teachers were then

generated. As Table 2 indicates, the majority (91%) of the sampled respondents were female. Ten (9%) respondents identified as female and one (9%) respondent identified as a male. All respondents reported their race as Caucasian, $n = 11(100\%)$. As also indicated in Table 2, there are almost an equal proportion of teachers of elementary $n = 4$ (36.4%) teachers of high school $n = 5$ (45.5%), while only a small number of respondents teach middle school $n = 2$ (18.2%).

Table 2. Participant Demographics

Variable	Category	Number of Responses	Percentage
Gender	Male	1	9.1
	Female	10	90.9
Race	Caucasian	11	100
Grade Level Taught	Elementary	4	36.4
	Middle School	2	18.2
	High School	5	45.5
Type of Classroom	Autistic Support	5	45.5
	Life Skills Support	4	36.4
	Multiple Disability Support	2	18.2
I have been teaching for:	0 – 4 Years	2	18.2
	5 – 10 Years	1	9.1
	11 – 15 Years	3	27.3
	21 – 25 Years	1	9.1
	25 Plus Years	4	36.4
I have been in my current position for:	0 – 4 Years	8	72.7
	11 – 15 Years	1	9.1
	16 – 20 Years	1	9.1
	25 Plus Years	1	9.1
Highest Level of Education	Bachelor's Degree	1	9.1
	Bachelor's Degree +	3	27.3
	Master's Degree	6	54.5
	Master's Degree +	1	9.1

Table 2 also shows that the largest group of respondents as teachers in autistic support classrooms ($n = 5$). Four teachers work in Life Skills Support classrooms ($n = 4$) and an additional two teachers teach in Multiple Disability Support classrooms ($n = 2$). Table 2 further shows a wide range of teaching experience at the ABC School. The range of experience of participating teachers was from

0 years to over 25 years. Four of the participants $n = 4$ (36.4%), have over twenty-five years of experience. Three participants $n = 3$ (27.3%) have between eleven to fifteen years' experience. Two of the participants selected their experience range as from 0 to 4 years' experience (18.2%). One of the participants has 5 to 10 years' experience (9.1%). One additional participant has between twenty-one to twenty-five years' experience $n = 1$ (9.1%).

Although most of the teacher respondents had 5 or more years in teaching, the majority of respondents have only been in their current position for less than 4 years $n = 8$ (72.7%). Table 2 further shows that $n = 3$ (27.3%) of respondents have been teaching in their current position consistently for 5 years or more. An interesting difference between the demographic composition of mentor and mentee groups shows that several of the new teachers that just completed their induction program, had an equal amount of experience as a small portion of the mentors. A complication of the study comes from the data obtained from the ABC Corporation. The ABC Corporation only calculates from date of hire at the school and not prior teaching experiences. This data set conflicted with survey data, as participants relayed all prior and current teaching experience and not just that since their hire date at the corporation. The majority of participants have obtained their master's degree or master's equivalency degree $n = 7$ (63.6%) with 1 participant acquiring more credits past the master's level $n = 1$ (9.1%), indicating that the sample of respondents had a relatively high level of educational attainment.

It must be noted that while there were eleven participants in the study, only 10 participants completed the additional non-demographic section. Mentor Teacher C explained that while she has been a mentor for many years, she did not have an induction program herself. The induction program was only formalized in its current iteration in 2004 and she did not experience the program firsthand; therefore, she did not feel that she could not answer the questions reliably. Therefore, she chose not to answer the questions relating to the induction program.

In response to the survey question regarding the participants' perceived individual effectiveness in their current teaching position, with a seven-point Likert scale ranging from: highly effective, mostly effective, effective, neither effective or ineffective, ineffective, mostly ineffective, and highly ineffective (question 9 on the survey instrument, Appendix F), the larger number of participants ($n=6$; 60.0%), indicated that they believed their individual level of effectiveness to be "mostly effective". A smaller percentage ($n=4$; 40.0%) believed that their level of effectiveness was "highly effective"; while one participant ($n=1$; 10%) felt that their individual effectiveness within their current position was "ineffective". The survey question had a mean score of 1.8 with a standard deviation of 0.83. Table 3 elaborates on participants descriptive statistics regarding mentor assistance and their individual perceived effectiveness as teachers.

In response to the survey question regarding the administration's support of their professional growth (question 11 on the survey instrument, Appendix F), the greater number of participants ($n=5$; 50%), indicated that they believe the agreement for support of administration as "mostly agree". A smaller percentage ($n=3$; 30.0%) "agree"; two participants ($n=2$; 20%) marked their agreement as "disagree". Additionally, one participant ($n=1$; 10%) gave a response "strongly agree"; ($M = 2.55$, $SD = 0.89$).

In review of the survey question regarding mentor's suggestions for improving work (question 12 on the survey instrument, Appendix F), the largest portion of participants ($n=5$; 50.0%), indicated that they "agree" that the mentors' suggestions were helpful, with additional participants ($n=3$; 30%) show that they "mostly agree" with the statement. An additional participant ($n=1$; 10%) stated that they "strongly agree" and one participant ($n=1$; 10%) feels that they "disagree" with the mentor suggestions helped in improving their work ($M = 2.6$, $SD = 0.80$).

In review of the survey question relating to new strategies learned through the induction program (question 13 on the survey instrument, Appendix F), the greater number of participants ($n=4$; 40.0%), indicated that they “mostly agree” with the statement. Additional participants ($n=3$; 30%) stated that they “agree” with the statement; however, a smaller group of participants ($n=2$; 20%) showed that they “disagree”, while an additional participant ($n=1$; 10%) “strongly disagreed” with the statement ($M = 3.1, SD = 1.22$).

Looking at the question regarding useful feedback from mentor teacher (question 14 on the survey instrument, Appendix F), a larger proportion of participants ($n=5$; 50%) stated that they “agree” with the statement, while equal number of participants ($n=2$; 20% each) thought that they “somewhat agree” or were “neutral” to the statement. One participant posted that they “disagreed” with the statement ($M = 3.0, SD = 1.26$).

Turning to challenges being experienced by new teachers and their feeling of support from mentor teachers (question 15 on the survey instrument, Appendix F), four participants (40%) state that they “somewhat agree” with the statement. An additional three participants ($n=3$; 30%) state they “agree” with the statement. One participant ($n=1$; 10%) feels that they “strongly agree” with the statement; while one additional participant ($n=1$; 10%) listed that they “disagree” with the statement ($M = 2.6, SD = 0.92$).

In response to the survey question regarding the perceptions of the effectiveness of the ABC School’s induction program (question 16 on the survey instrument, Appendix F), the majority of participants ($n=4$; 40.0%), indicated that they “mostly agree” to this statement. Additional participants ($n= 3$; 30.0%) “agree” that the current iteration is effective; however, a small minority of respondents ($n=2$; 20%) felt that they would “strongly disagree” with the statement. One participant did however

believe the converse ($n=1$; 10.0%) selecting that they would “strongly agree” with the statement ($M = 2.6$, $SD = 0.92$).

Table 3. Descriptive Statistics for Mentor Assistance and Perceived Effectiveness

Statement	Agreeance	Number of Responses	Percentage	Mean	Std Deviation
I would describe my level of effectiveness for my current teaching position as:	Highly Effective	4	36.4	1.82	0.83
	Mostly Effective	6	54.5		
	Ineffective	1	9.1		
The administration has been supportive of my professional growth:	Strongly Agree	1	9.1	2.55	0.89
	Mostly Agree	5	45.5		
	Agree	3	27.3		
	Disagree	2	18.2		
My mentor’s suggestions for improving my work are helpful:	Strongly Agree	1	10.0	2.6	0.80
	Mostly Agree	3	30.0		
	Agree	5	50.0		
	Disagree	1	10.0		
I have learned many new strategies through the completion of the induction program:	Mostly Agree	4	40.0	3.1	1.22
	Agree	3	30.0		
	Disagree	2	20.0		
	Strongly Disagree	1	10.0		
I have received useful feedback from my mentor teacher:	Agree	5	50.0	3.0	1.26
	Somewhat Agree	2	20.0		
	Neutral	2	20.0		
	Disagree	1	10.0		
When I faced challenges with the induction program, I felt supported by the mentor teacher:	Strongly Agree	1	10.0	2.6	0.92
	Mostly Agree	4	40.0		
	Agree	3	30.0		
	Disagree	2	20.0		
The current iteration of the induction program is effective:	Strongly Agree	1	10.0	2.6	0.92
	Mostly Agree	4	40.0		
	Agree	3	30.0		
	Disagree	2	20.0		

4.2.2 Open-Ended Survey Data

Question 8 of the survey instrument asked, “What led you to become a teacher”? Answers included the “desire to work with people with disabilities”, “my brother with special needs”, and “helping kids”. Additional responses ranged from a desire to help others, to being raised in the school environment, and have both parents working as teachers.

Participants were also asked, “What will keep you teaching after the completion of the induction program?” (Question 10). A number of responses centered on the students. (“I remained in this teaching position because of my love for the students, seeing growth of the students, helping kids, passion for the students and love of working with the kids and staff.” One comment focused on the enjoyment of the profession, while one respondent was not sure what their intrinsic motivation was to continue teaching.

4.3 Interview Results

4.3.1 Interview Data

The researcher interviewed three different types of participants, including induction program coordinator, two groups of newly inducted teachers and two groups of mentor teachers. As a result of data analysis, the following themes emerged: (a) mentor-mentee pairing, (b) collaboration, (c) access to information, (d) communication from administration, (e) resource of time, (f) training, and (g) acknowledgement of mentors. Those results will be summarized below.

4.3.1.1 Mentor-Mentee Pairing

Mentoring is a critical and key aspect to successful induction program. Several items of concern have been brought up by the participants regarding the mentoring aspect. First and foremost, the process of how mentors are selected was discussed by all interview groups. The induction program coordinator stated that she looks at classroom and disability type and definitely looks at proximity between mentor and new teacher. There were some new teachers that did not feel they had a successful pairing with their mentor such as new teacher B who said, “my mentor was gone for like two months, so I was unable to speak to her, so I found myself going to other people, that I felt I had a better connection with and thought fit my teaching style better.” Mentor teachers also spoke on their feelings of the pairings. Mentor teacher A shared a difficult experience, “I have only been asked to mentor one teacher and I thought it didn’t go very well at all.” She went on to discuss her thoughts on the pairing, stating “I think I was paired up with the teacher, because we have the same type of population.”

However, there were some participants that related a more positive story. New teacher D was happy to relate that she and her mentor still talk. Mentor teacher D reminisced about her experience, “She (my mentor) allowed me to come in and sit and watch a lesson she was doing, so that I got a general sense of how things worked.” New Teacher D commented on her positive experience. “I could go to her, ask her anything about room set up, different activities I could have or just anything and she always, she always had an answer for me.” She expressed her belief of effectiveness through, “she definitely (gave me) confidence.”

Mentor Teacher B remembered, “I was not mentored, when I came and so, I went and attached myself to somebody that had my room before me and I asked them a million questions, I mean, I drove them crazy, but luckily, she was patient.” Mentor Teacher E mirrored this statement, “When I began,

there was no induction program that was formalized at all, you just depended on the other staff on your floor.”

4.3.1.2 Collaboration

Another topic that emerged from the discussion with the participants was collaboration. Many of the participants spoke of collaborating with their mentors through meetings, but other teachers went to speak about collaboration and meetings with the critical skills specialist and how they were able to help them through the program. Many teachers, both new and mentors, felt that collaborations with each other was a challenge due to limited time. Additionally, the process of creating professional learning communities was discussed in order to engage new teachers together in an open training environment. New teacher E had this to say about the topic, “it would be nice to go and see other rooms... the older version of (the students they teach), like what happens in those rooms, in comparison to my own?” This topic was also discussed by mentor teachers, as a pathway to engage and discover what similar classroom teachers for similar disability demographics were doing to provide quality education to their students and further develop a highly effective curriculum not only for the type of classroom, but also for the different ages of the students. This collaboration could produce a foundation similar to state standards that are applied at young ages and continue to develop over the course of the student’s educational journey.

4.3.1.3 Access to Information

Many of the respondents commented on the need to have commonly known policies/procedures to be listed in a specified location or document for easy reference. The induction program coordinator commented, “Then (the teachers) come to the school and they have the school specific procedures and policies. They are given printed information and shown on our shared drive, on our computer network,

where to find all of that information and how to look it up.” She reiterated later, “I think we make sure they are given a combination of printed material that they can go back to as well as showing them what is available on the computer network. And then when I meet with them for the first time, I again show them, here are paper copies of the induction program, but let’s look at the G: drive, (our shared drive), ‘have you used it yet?’ A lot of information is on that shared G: drive, such as procedural information. We want to make sure they are able to access that, because there is so much information given in that first week, those first couple weeks, that trying to put it into perspective.”

On the other hand, teachers experienced challenges in accessing this information. Thus, Mentor Teacher C said, “Some of that is hard to find. But some of that is on the G: drive. The G: drive used to be organized and used to have an index, but at some point, it got taken out of the organized person’s hands and ...” Mentor Teacher B replied, “Like if you can’t find something, or if you don’t know where something is, it’s like... I can’t find it; I go and ask somebody else, if they know where it is.” Mentor Teacher C revisited her claim, “Some of it is in different places, but it’s not in one place where you can easily access it.” Mentor Teacher B later stated, “Rather than even going on there (G: drive) you can just have it, because you’re going to use it more than once in a blue moon.” All respondents verbally affirmed this statement during the respective group interview. They felt that a physical (printed) manual could be a good alternative to its current iterations of various pieces scattered throughout a shared computer drive.

The newly inducted teachers echoed this idea. New Teacher A stated, “I’m still learning new ‘policies and procedures’ (makes air quotations with his fingers) that I was never told about, and I was just magically supposed to know. I remember directly asking my supervisor is there a rulebook that states some of the stuff and there’s not.” New Teacher B concurred, “I will definitely agree with that. There are a lot of things that I don’t know, and I wouldn’t even think to ask.” Both respondents

described separate instances where they felt confusion and individual frustrations over procedures that New Teacher A remembered being queried, “Why didn't you know that?” Other new teachers feel similarly. New teacher C was frustrated and recounted, “I don’t know how to say it, but it just seems things are not clear. The ways to do things are just not clear. It seems to be a lot of people have opinions but not like, ‘this is how we do it.’” New teacher D agreed, “There’s nothing finite.”

4.3.1.4 Communication from Administration

Another related challenge that was discussed by the participants was the need to have a documented chain of command and clear line of communication with not only the new teachers, but all teachers. Discussion and concern from most participants grew as they recounted their personal experiences with getting conflicting information from various parties from the administration. This conflicting information has new teachers questioning policy and could be streamlined so that all information comes from either overall information to all teachers or new teacher specific from the mentor teacher as a sounding board and information exchange unit. Mentor Teacher A described a scenario where administration would discuss opportunities for new teachers with the mentor and then then the mentor would have discussions with the new teacher. The interviewer reiterated the comment, “The process that the mentees are requesting is that the administration should come to the mentor and say, ‘this teacher is missing X, Y, and Z, can you touch base with them and fix X, Y, and Z.’” There was an overall consensus from participants.

The induction program coordinator believed similarly that a mentor needs to drive the program and run the chain of command,

I think one of the key roles of the mentor teacher is, to develop that relationship and then to be able to ask, to discern, ‘Do I need the supervisor to be aware of this? Do I just need to go to the induction coordinator and say ‘here's what we're talking about, here’s what’s coming up, here?’

is something I think they need. That's one of the key roles of the induction coordinator. To find those other supports and resources, so whether I have a person come in and I talk with them a little bit, whether I have, maybe there's some real challenges surrounding behavior management and whether I have our behavior coordinator, counselor, person meet with them aside for a specific kid and just talk to them. The mentor teacher has that key role in deciding who needs to know what and when.

4.3.1.5 Resource of Time

Another common theme that emerged from the interview data was the lack of resources including planning time. Mentor Teacher B started out, “there’s not time for meetings.” Mentor Teacher C agreed, “For challenges, I would agree that time is a big one. You have your own stuff to do and all you’re planning and I’m here late all the time.”

New Teacher E reflected, “I don't think time to meet with the person was much of an issue (after school)” However, when discussing the need to meet during the school day, she felt that this would be, “not even possible.” When the induction coordinator was asked, “What aspects of induction program, do you see creating the greatest challenges for new career teachers?” she emphatically responded, “Time; there is never enough.” She went on to discuss streamlining paperwork and finding time to meet before or after school and the need for new teachers to focus on, “what am I learning?” “What are the new strategies?” and the potential for a new teacher to sit down regularly with their mentor and observe their mentor.

4.3.1.6 Training

From both the sides of the new teachers and the mentor teachers called for organized training components and discussed what they might look like. The request for a timeline of completion of activities and a calendar of meetings and topics could be a very fortuitous addition to the program.

New Teacher A shared his frustration regarding the current training schedule, “It could be run a lot smoother...and (we could) actually have the meetings.” A greater discussion occurred of how trainings should look to best fit not only first year teachers within the induction program, but also new teachers to the ABC School that have already been teaching. Teachers thought that those trainings need more focus on site specifics, rather than overall general planning. Mentor Teacher A suggested, “The visual, a visual calendar would be wonderful. Like to have a date set up, and maybe that is something you could do right in the beginning. Even if it is just a suggested calendar; we suggest you have this done by this date.” Mentor Teacher F said, “I know one thing, like I agree with the timeline.” An interesting issue was brought to light by Mentor Teacher E. In the discussion she shared that for the induction program as a whole there have been many positive changes that she has seen over the course of her tenure at the school, “I think it (the induction program) has become more formalized and that happened by need; the need to train people differently.” Additional discussion occurred on the uniqueness of special education teachers creating individualized plans for students and the induction program being a unique plan for the individual new teacher as managed and overseen by the mentor teacher.

4.3.1.7 Acknowledgement of Mentors

Acknowledgement of mentors was called for not only by one group of mentors, but also the induction coordinator, who stated: “One of the things I would like to recommend to the head of our school is to consider an honorarium for our mentor teachers. Thanking them, encouraging them to

continue on. There could be some honorarium or something. I think that it's very much that the people who are very successful mentor teachers do it because they love learning, they love helping, and they like to show what they know... It might require some financial commitment to provide additional time per month, per week, or per year, or something... to be able to have this time that they are going to be paid; that they can take sit and do whatever. It might take some time for an honorarium. I think that there are some things we can do." Mentor Teacher B did broach the topic during her group interview, "My daughter acted as a mentor last year, I think, in the (REDACTED) School district and she got extra money for it. She got like a thousand dollars for a semester."

4.4 Summary

Chapter 4 explored the results of the data that was collected through surveys and interviews gathered within the ABC School, an approved private school, from teachers who shared information about their perceptions of its induction program. These themes were identified as: (a) mentor-mentee pairing, (b) collaboration, (c) access to information, (d) communication from administration, (e) resource of time, (f) training, and (g) acknowledgement of mentors. Teachers identified some of the effective practices of the induction program as the support for the new teachers by the mentors, campus administrators, and induction trainers; being able to meet with teachers who taught the same subject and/or are on the same grade level; having knowledgeable peer mentors; and many others. Teachers also identified several items that they felt challenged the effectiveness of the program and should be stopped or change. Chapter 5 will discuss the findings, conclusions, recommendations, and implications of this study.

5.0 Discussion

The central purpose of the study was to determine the characteristics of the induction programs in the ABC School that contribute to its effectiveness, the challenges encountered by the teachers, and their suggestions for improvement of the program. Specifically, this study examined the perceptions of a select group of special education teachers in order to improve the practices used in the induction programs. The questions of research were: (a) what is working within the current induction programming? (b) what are the challenges encountered by the teachers in the current induction programming? (c) what are the recommendations for improvement of the current induction programming? This study adds to the literature by providing a specific view into the practices used in an approved private school. These induction practices of the approved private school bear some similarities to, but are often very different from their general, public education counterparts and the induction programs operated by other various school districts. The success of the program was determined by surveying and interviewing first-year teachers' and their mentors' perceptions of the induction programs.

5.1 Research Question 1: “What is Working Within the Current Induction Programming?”

Reviewing data as presented, there were several themes that were viewed as components of the program's effectiveness from the perspective of participants. This unique perspective reveals that many of the effective practices are viewed as such, commonly and mainly due to their interconnectedness. Mentor pairing, collaboration, and the resource of time all work together to improve the first-year

teaching experience and induction program for the new teacher. Each theme can also be viewed independently to ascertain the effective practices that were found.

One of the prominent themes that emerged throughout the interviews was the importance of mentor-mentee pairing, as evidenced by numerous examples of successful mentor-mentee pairings and reported by participants. This theme has been highly discussed in previous research; specifically, it is consistent with research by White and Mason (2006), who state that a goal for any mentoring program should be to match new teachers and mentors appropriately, so that the greatest amount of support is available. Mentoring is seen as a gateway to collaboration amongst colleagues and furthering efficacy of new teachers during their induction year. Furthermore, mentoring fosters peer feedback which is often taken better and easier for the new teacher, rather than coming down from administration, which has the potential for increasing new teachers' anxiety. Finally, mentoring has the potential to facilitate information exchange and reduce overwhelming feelings of the new teacher. In her own placement practices, the ABC School's induction coordinator reviews physical location and access to mentor teachers, similar student populations and personality ideals and beliefs, all of which have been identified as best practices by researchers in the field (e.g., Billingsley, 2004). While survey results did not directly state whether the participants view their own pairing as being effective, a large number of participants did agree that the recommendations and suggestions from their mentors were helpful. It could be derived that if new teachers did not feel this advice from their mentor was effective, it would coincide with their thought of being effectively paired with their mentor.

In conjunction with mentor pairing, an additional and related theme to emerge from the interviews was the theme of collaboration. Collaboration was discussed positively by participants, who felt that there was appropriate, available time to collaborate with classroom staff, therapists, and other collaboration partners, after the student day has ended. This is similar to the findings of Carr & Evans

(2006) who suggested that collaboration between teachers, administrators and other school professionals can maximize teacher success. While participants shared that currently there are small amounts of collaboration amongst disability category teachers, and additional collaboration happens mostly amongst the high school teachers, additional opportunities for collaboration exist.

Analyzing this theme further, collaboration is extremely important to the new teacher, especially through the mentor relationship. However, once the teacher moves from their induction period, additional realms of professional development emerge for the teacher and additional possibilities of fostering and developing collaboration amongst teachers begin to be utilized. For example, in the ABC School, a group of master teachers with oversight from the education coordinator work in collaboration to review topics of curriculum and review best practices and make recommendations for change. This group meets monthly and reports their findings as part of their individual professional development programs during the school year. A new teacher completing their induction program is additionally required to complete professional development during the induction period and collaboration with master teachers. An interesting aspect of collaboration from the study resulted in a fracturing of perspective. Whereas participants viewed collaboration as an effective practice, there were certain nuances that will be discussed later as challenges.

One final theme that emerged from the study was the resource of time; specifically, time to meet after the students leave for the day. Throughout the study, participants solidified the thought that there was sufficient time available to meet with other collaboration partners, therapists and administrators, as well as completing paperwork, such as IEP's and lesson plans for the classroom after the students have left for the day. This effective practice is aligned similarly (e.g., Billingsley, 2007; Smith & Ingersoll, 2004) with research that states that teachers must be provided time to collaborate and complete paperwork during their school day and preferably have similar planning times. As teachers

in the ABC school are required to be present thirty minutes prior and one hour after the students leave, the participants indicated that this time is adequate for the completion of these tasks. As with the theme of collaboration, the resource of time was a unique theme in as much that it was perceived by participants as both an effective practice for being able to meet after school, it was deemed a challenge by participants to meet for observations or collaborations during the instructional day.

While both mentors and new teachers were quick to discuss collaboration, training, and the resource of time as effective practices, when pushed further; some aspects of these practices also produced challenges within the induction program.

5.2 Research Question 2: “What Are the Challenges of the Current Induction Programming?”

While there were many positive aspects discovered by the interviews and surveys, there was also a great number of challenges that have been identified by the participants. It was observed from field notes that the first new teacher interview and the first mentor interview were perceived as very heavily packed with challenges, while both the second new teacher and mentor interviews had more positive and effective practices discovered. This will be further discussed in future research recommendations.

As stated earlier, there were a number of effective practices that upon further glance held challenges for both the mentor and new teacher from the study. Looking further into the challenges associated with the induction program, we find that a chief complaint regarding the induction program that was mentioned by all three participant groups was collaboration and training, which is not surprising and becomes a paired challenge. Teachers were eager to discuss collaboration and observing and being observed by their mentors; however, in reality there is limited time for teachers to meet and

collaborate with their mentors and/or new teachers during the instructional day. Thus, the challenge of collaboration also correlates with that of the resource of time. The induction coordinator definitely echoed this concern. When asked what the largest challenge facing new teachers at the ABC School was, she stated emphatically that a large issue that she sees is the need for time to collaborate and train with mentors. Both new teachers and mentor teachers agreed that a lack of time was a large challenge during the instructional day. These findings are consistent with previous research, such as Morrison's (2010), who shared the top concern for beginning teachers was inadequate planning time with colleagues and inadequate planning time for themselves.

For new teachers, finding time to meet during the instructional day or finding the time to observe their mentor or to be observed by their mentor is often difficult or impossible. The induction coordinator thought out of the box in using various technologies, such as video recordings to aid in recording lessons and using feedback to aid new teachers in their performance, which surprisingly was not a key recommendation found from the research. This unique accommodation to allow mentor observations is one possibility that needs to be considered by the induction program for teachers to observe and be observed for both new and mentor teachers. Finding from Smith and Ingersoll (2004), where the researchers state that finding adequate time or opportunities for observation through different accommodations are imperative for a successful induction, are in parallel. While this is a potentially viable option, additional options are necessary to find in order to better the induction program and improve the effectiveness to increase new teacher pedagogy and potentially reduce the attrition rates.

An additional concern that was uncovered by many participants from the study was teacher access to information and communication regarding policies and procedures. Specifically, teachers shared that "if you aren't told (about policies and procedures) how are you to know?" This theme is similar to the findings of Andrews & Quinn (2005), where the researchers found that administration's

ability to fully provide teacher supplies, materials and resources to best serve the new teacher through their induction year, was critical in retaining special education teachers. Not only better access to information requested from the new teacher participants, this request also came from the mentor teachers as well. Items such as a written teacher manual, the visual representation of the chain of command mentioned earlier, and a written policies and procedures document, were all items that were highly sought after from the majority of participants. This finding was somewhat surprising, given that all of these items exist currently in the ABC School. What seems to be the overarching reality is that while these documents exist, it is more of the ease of access for these items over the actual access of these items that has teachers looking at administration to aid them in their day to day struggles. Further, access to information, such as a new teacher manual, is a challenge for many new and mentor teachers alike. Again, while most of the information is available electronically, many participants would feel more supported having a physical copy of policies and procedures for a quick desk reference. Additionally, there was a call from participants for even the simplest of policies and other “unspoken” policies to be written down for personal reference. The view of the induction coordinator is that these policies and procedures are located on a common electronic drive where the teachers have access to them while connected to the system. The participants voiced opinions that while the documents are available, the drive has been changed over the years, it is difficult to find these documents in time of need and the naming of the documents does not always best coincide with the information found in the documents themselves, which makes accessing said documents confusing, cumbersome, and time consuming.

Tied to information access and just as critical to providing a positive environment for both new and veteran teachers; communication from administration was deemed confusing and ineffective and was revealed as cause for concern within the ABC School, according to participants. It was reported

by participants that a lack of definitive chain of command and less than clear communication from administration partners were predominate challenges within the induction program. Participants shared stories of conflicting information exchanges occurring amongst various administrators and feelings of frustration when one administrator counters or corrects what a previous administrator shares with the new teacher. This premise is consistent with research from White & Mason (2006) and Mekos & Smith (2018), who argued that schools and districts run the risk of inundating new teachers with information and procedures from various administration members lead to greater attrition rates; further finding that support from administration is a large factor in reducing the rate of attrition for the new teacher. Therefore, mentors must act as information providers and repositories to meet teachers' needs.

Additional challenges, such as the resource of time, further merged with the theme of training through the practice of bi-weekly training meetings with the Critical Skills Specialist. With new teachers already writing lesson plans, IEP's and holding classroom meetings with staffs and meeting with therapists; new teachers must find time to meet with their mentor teachers and complete their induction checklist and go over specific classroom challenges that come about over time. Further, assumedly depending upon induction class size, the critical skills specialist has bi-weekly meetings with new teachers to discuss various protocols that they might encounter over the course of their year. Unfortunately, this practice has not been consistent in its development. While the meetings themselves were deemed effective, new teacher participants would like to see a proposed meeting/training agenda that focuses on a specified topic that is predetermined, with a discussion on prior experience, current experience exchange and proposed changes in individual styles to better engage with students, as well as re-introducing these meetings in their induction program. Additionally, a timeline for a completion of induction tasks was called for by participants to better plan their individual learning, along with looking at meeting with mentors throughout the year to best coincide with their timeline, or a visual

schedule. The respondents felt that a training calendar, for both meeting with their mentor and new teacher group meetings, would greatly benefit their ability to be an effective teacher, while managing planning and meeting schedules through a valued resource of time. While many respondents believed that the small professional learning community of new teachers' meetings had benefit to engaging these tasks, some felt a planned topic and additional time for question and answer needed to be incorporated, as well as actually holding the meetings, instead of cancelling them for various reasons. This concern is very much consistent with the research of Andrews and Quinn (2004), where the researchers determined that a consistent orientation and effective training program is essential for new teachers to acclimate to the environment and climate of their new school. Schlichte, Yssel, & Merbler (2005) further found that teacher knowledge obtained through training is an important aspect that aids in the reduction of attrition rates in new special education teachers.

5.3 Research Question 3: “What Are the Recommendations for Improvement of the Current Induction Programming?”

One recommendation made by the participants was to implement effective pairing processes to match new teachers with their mentors. Studies suggest that one of the effective components of teacher induction programs is the type of support that matches the new teachers' needs, such as effective pairings (Griffin et al., 2003). Selecting mentors based on number of years of experience can be disputable because effective mentors are not simply teachers who are effective at teaching students; they are people who are good at delivering personal, emotional and instructional support to adult learners (Mekos & Smith, 2018).

In the literature review conducted for this study, it was found that in collaborations, new career teachers feel less isolated (Guerra, Hernandez, Hector & Crosby, 2015) and collaboration could promote more effective communication (Smith & Ingersoll, 2004). When matching mentors with novice teachers, Saphier, Freedman & Aschheim (2007) suggest three criteria: proximity, grade level, and content area. However, according to those authors, familiarity with intended mentor or other attributes, such as gender or other demographics are not a necessary system to consider. Based on these criteria, effective pairings of mentors are an integral part of effective induction programming.

Tied to the theme of collaboration, universally, all participants called for the formation of professional learning communities. In contrast to the traditional paradigm of professional development in which teachers attend off-site workshops, conferences and on-site in-services that may or may not inspire them to alter their thinking and instruction, the Professional Learning Community (PLC) connects teachers in site-based, ongoing, collaborative professional development (Linder, Post & Calabrese, 2012). The formation of PLC's could have a potential impact on reducing teacher attrition at the ABC School. Additionally, in order to improve collaboration, the participants believed that while the corporation overview training sessions are necessary to expose new employees to the school to the mission statement and core values and beliefs, the specific trainings necessary for the school should be conducted by the school team and should occur earlier in the school year. Further, the development of collaboration groups or professional development groups (PLC's) is an ongoing idea that is already being done informally with a great deal of support from the induction coordinator and the executive director of the school, but has the ability to be better fleshed out as professional development becomes more predominant into the school culture with additional guidelines from administration.

Another recommendation from the participants, related to the challenge described above, was improvement in the ease of access to information and communication. Specifically, one

recommendation for future enhancement for the program would be to create a section on the electronic drive with a folder especially for all new teacher documents and filed and re-labeled with the title of the document to match. Another suggestion was related to the improvement of communication from administration. Figure 1 shows that the new teacher is bombarded with information from a variety of different entities throughout the school day. This information overload for the new teacher can be overwhelming at best, but also could potentially lead to higher attrition rates for the schools and districts. With a proposed new mechanism for the chain of command and communication flow (See Figure 2), when issues arise within the classroom, therapists and administrators would go to the mentor teacher and provide information and feedback to better support the new teacher. The new model should not be interpreted to suggest that administrators and therapist could not go directly to the new teacher, but in general it would make sure that information is consistent and if not, the mentor can sort out details prior to confusing the new teacher.

Ironically, while participants found that time before and after school is adequate to meet and collaborate, they also felt that there was no time during the school day for mentors to observe and give feedback for the new teachers, or for the new teachers to observe their mentors to gather vital information with dealing with specific classroom concerns. The induction coordinator was able to recommend video recordings of lessons to be shared between mentor and new teacher. The mentor teacher would be able to review lessons performed by the new teachers, while modeling their own lessons for the new teachers to learn from. This feedback is similar to the research of Andrews & Quinn (2005) who further buttressed this thought, writing that observations are a vital aspect of new teachers throughout the induction program. While in person observations are still the most revealing and recommended means to work through potential issues, the use of video recordings could allow mentors to observe new teachers and new teachers to observe mentors in their natural environment, while still

maintaining the instruction day programming. Additionally, while paperwork is listed as a major contributor to the role of overload and conflict for the resource of time (e.g., Billingsley, et al., 1993; Billingsley, et al., 1995; and Brownell, et al., 1995).

It was further recommended that the induction coordinator provide a training calendar with guidance from the critical skills specialist to touch base monthly and discuss a planned topic, but also open up the forum to questions from new teachers in an open and safe learning community. Further, it was recommended that the induction coordinator set deadlines for completion of activities to keep the process moving throughout the school year. Finally, most of the participants called for bi-weekly meetings with the critical skills specialist to resume with the development of a topic calendar. They also suggested the meeting agenda to offer time during the meeting for specific questions unable to be answered by the mentors.

Finally, congruent with research from Butcher & Kritsonis (2007), findings of this study showed that it is important to acknowledge the expertise of mentor teachers and compensate them for their contribution to the professional development of new teachers in the field. Serpell (2000) states that mentoring “is identified by researchers as the most critical component of induction programs” (p. 14). Ironically, there is currently no acknowledgement for experienced veteran teachers that are willing to take on the challenge of mentoring new teachers in the field of special education at the ABC School. The induction program coordinator revealed that recruiting mentors can be cumbersome, due to the lack of acknowledgement or compensation for their additional time invested above and beyond their current teaching responsibilities. As such, a recommendation from the induction coordinator sought not only to acknowledge the mentor teacher for their service, but also called for an addition of an honorarium for mentor teachers that continue to serve in this capacity. This addition of recognition and monetization for services rendered by the mentor teachers could potentially be an effective recruitment

technique for the induction coordinator. It could further interest veteran teachers into becoming a mentor teacher and also increase retention of mentors throughout the program. Additionally, new teachers need to be acknowledged as well. New teachers require acknowledgement as novices in the field and they require opportunities to learn from mistakes in a safe arena and not expected to be masters of their craft during the induction period.

In contrast to the research of the literature review, in this study participants did not feel overloaded with paperwork. One possible reason for this difference could be reduced student caseload of between 5 and 8 students in the ABC School in comparison to regular public schools where student caseloads may range from 20-30 students. Other variances between research from the literature and results from participants include caseload size and lack of resources, that did not seem to affect the participants during the current study. Surprisingly, behavior management and parental support were also not evidenced through interviews of the participants from the study. Further, another aspect participants did not note either a positive or a negative perception of was that of administrative support of the induction program itself. While there was a great deal of discussion on communication from the administration, their support of the induction program never was mentioned through both mentor and new teacher interviews. While survey question 11 queries participant thoughts into administration supporting their professional growth with a wide majority (81.9%) agreeing with the statement. The topic of support from administration for the induction program itself was never discussed.

In summary, while there were a number of challenges that were brought to light from the views of the participants, there were also a large number of positive aspects that are already observed in the current program that are working and effectively allowing new teachers to not only become master teachers; but further develop their own craft to mentor the next generation of teachers that arrive at the front doors of the ABC School. With these positive and effective practices already in place and in

conjunction with those recommendations from the participants, it is believed that there will always be effective teachers working and enhancing the lives of the students at the ABC School.

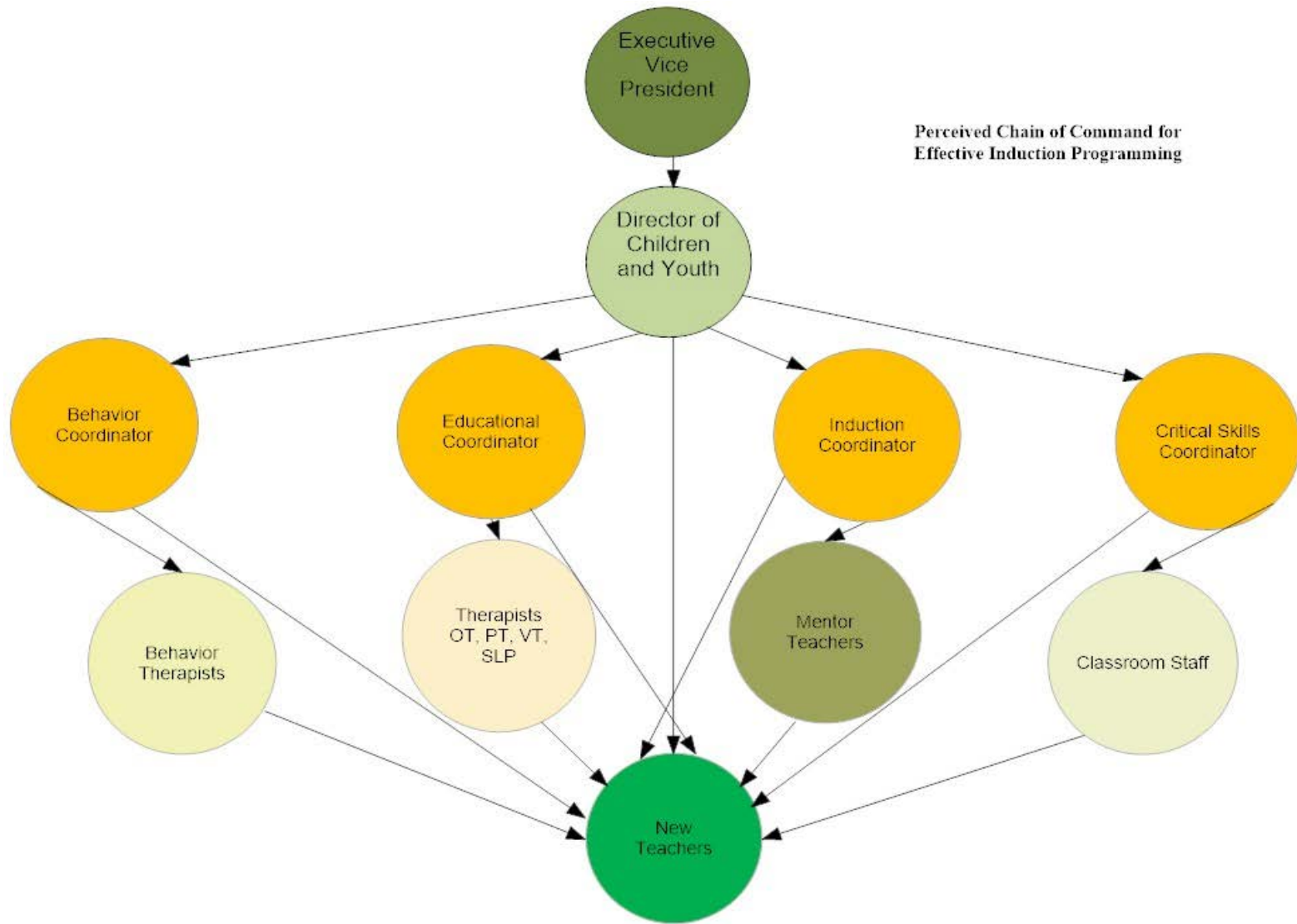


Figure 1. Researcher Perceived Chain of Command

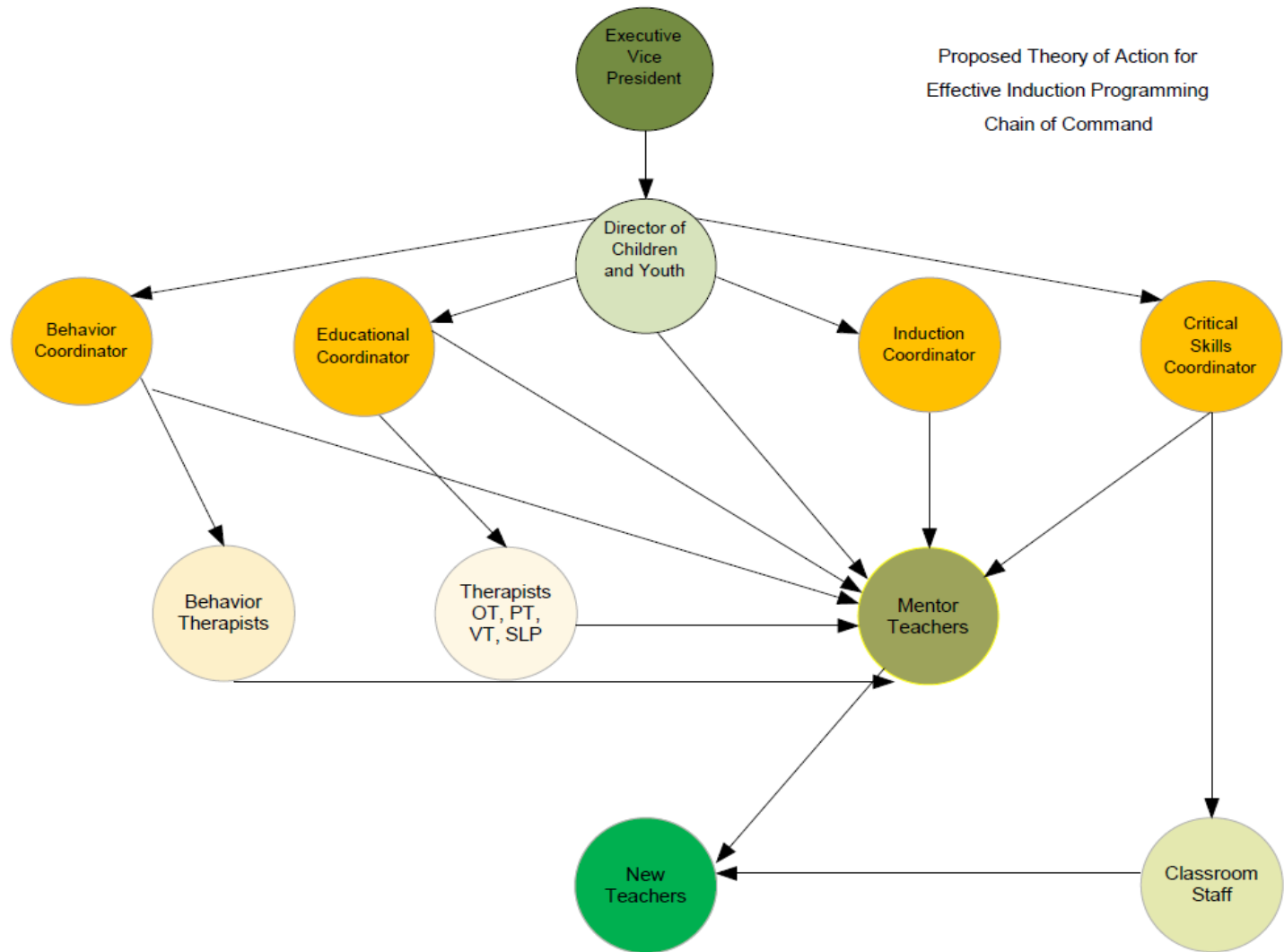


Figure 2. Researcher Proposed Chain of Command

5.4 Recommendations for the ABC School from the Study

In review, there seemed to be a number of unique challenges addressed in the current iteration of the induction program for the ABC School. The findings of this research will serve as a basis for recommendations provided to administration and staff of the ABC School. Those recommendations will be put into a PowerPoint Presentation (See Appendix G) and shared during a meeting with administration and an in-service presentation for all teachers and staff of the ABC School. In addition, a poster presentation of the research findings from the study (See Appendix H) will be shared. Below is a summary of the recommendations that will be included in the presentation:

1. Create a pairing matrix utilizing the three suggestions from Saphier, Freedman & Aschheim (2007): proximity, grade level, and content area; however, noted, familiarity with intended mentor or other attributes, such as gender or other demographics are other systems to consider.
2. Create professional learning communities to improve collaboration between colleagues as co-teachers, or amongst colleagues as community teachers. Specifically, create bi-monthly meetings for collaborations by discipline (ex. life skills support, multiple disciplinary handicapped support, and verbal behavior support) and additionally create bi-monthly meetings by grade distinction (ex. elementary, middle school, and high school).
3. Create a new teacher handbook with all corporate and school policies and procedures, including the current chain of command and proposed chain of command for information exchange between new and mentor teachers to improve new teacher

- efficacy. Or, create a section on the computer drive for new teachers and make it more user friendly. Specifically, name files according to their titles and create folders to make information more easily accessible.
4. Implement proposed new chain of command for administration to interact with mentor teacher to funnel information and training, while giving both new and mentor teachers definitive knowledge of chain of command for questions and/or concerns.
 5. Create a system of electronic observation recordings and allow mentors and mentees to meet either before instructional day, after the instructional day, or during school in-services to discuss observations or other issues as they arise.
 6. Reestablish critical skills training sessions for the ABC School to review skills necessary for both the new teacher and new staff of the ABC School. These sessions will focus on critical skills such as observation best practices, data collection and reporting, program specific policies and other best practices for teachers and staff. Further, create a timeline to complete necessary modules in their individual training program and create a visual meeting calendar for first year teachers and staff.
 7. Acknowledge and compensate mentor teachers. Introduce and recognize mentor teachers at in-services, provide biographies of mentors to further work to recruit new mentor teachers.
 8. Review reauthorization and conduct future studies to determine effectiveness of implemented changes to program.

5.5 Implications for Practice

Future implications for practice are applied in a number of various ways. Results from the study examined only one induction program; however, this program and its effective practices and challenges are limited unto itself. Findings of the study did not compare or contrast other programs within the approved private school causing questions of transferability of results. Are these isolated instances or are they indicative across other programs? Effective Induction programming for new teachers has been investigated by researchers for many years. Researchers have explored the reasons why new teachers are abandoning the field of special education, specifically, early in their career. This study took a specific look inside the dynamics of a specific Northwestern Pennsylvania approved private school to explore effective induction program factors that may affect new teachers at that school. This study led to an improved understanding and development of strategies and programs to improve the effectiveness and reduce challenges of the current induction program of the ABC School. While the findings of this case study have limited external validity, some of the lessons learned from it could benefit not just the stakeholders at the ABC School, but also other educators, including teachers and administrators, across the country.

Thus, the results of this study could be used to guide decisions and appropriately respond to ineffective induction practices and concerns on a school local level. Stakeholders and policymakers that are attempting to address the yearly loss of and struggle to recruit, hire and train new teachers may now have a greater insight into specific effective induction programming factors to improve the conditions of their school. These stakeholders may also utilize the results of this study to further address potential retention issues that might be present within their schools and school districts. New teachers will feel the positive benefits of this project when professional induction programs are revised and implemented to address the issues revealed through the study.

Effective induction programs for any segment of an educational system can be successfully implemented with collaborative efforts between stakeholders, lawmakers and administrators, such as private religious educational facilities, general public educational schools, and even cyber school systems that employ new and mentor teachers that may work remotely and never have the capacity to meet in a face to face arena.

Some specific recommendations of the study could be also adapted to benefit other schools' induction programs. For example, a current (See Figure 1) and proposed chain of command (See Figure 2) that has been created by the researcher and the induction coordinator, could be implemented into general education schools or other approved private schools to aid in providing effective and timely communication to the new teacher without inducing unnecessary anxiety and stress for the new teachers. Further, the proposed chain of command could aid therapists and other administrators in having few points of contacts to disseminate information and avoiding potentials in unintentional gaps in communication. Another important implication is revisiting this study after implementing suggestions in practice. Perhaps once stakeholders and the administration have implemented the recommendations to the induction program, results will show a more positive environment and a reduction in attrition.

5.6 Limitations and Implications for Future Research

In review of the study, there are several potential methodological limitations that need to be recognized and discussed. First, as this study was conducted in such a specific setting using qualitative case study methodology, generalizability of the findings diminishes greatly. While the study follows the policy framework on the creation of highly effective teachers and attends to the

local context of approved private schools, the context at levels beyond the private sector in the public educational arena is not explored. It is conceivable that the perceptions of teachers within the approved private school may be reticent to those other approved private schools with in the same given state, but experiences of new career teachers may vary greatly between inclusive and reverse inclusive settings as general education can play a greater part in the shaping of mentoring pairs and curricular development and presentation. This study was designed to focus specifically on induction programming in an approved private school in Pennsylvania and did not include induction programming specifics from other states. Pennsylvania is a medium sized northern state with a mid-level per capita income and a highly centralized unionized educational system that has legislatively mandated induction programming for new career teachers. Research would lend to the idea that each state would have different visions of induction programming and preparation of highly effective teachers. Research would also suggest that induction programs for private institutions and public institutions would also vary greatly in development and execution.

While there is a limited number of researchers who have focused on the effective programming for first-year teachers solely in special education, additional studies focusing on special education programming could increase the understanding on the effectiveness of the different themes highlighted in this research. Specifically, additional studies about mentoring, collaboration and building peer and administrative relationships should be conducted in the field of special education that can help in facilitating new teachers to be better equipped in teaching inside the classrooms with special focus into the uniqueness of the special education realm, as compared to those studies that include the general education curriculum. Additionally, it could be suggested to replicate the study across various locations, settings and through different stakeholders.

An additional suggestion for future research is looking at under-reported demographics and setting characteristics in the literature. Valuable information can be determined and derived from the reporting of demographics of participants and the setting of research that could better support future effective practices of programs. In addition, the population for the study was limited to special education teachers at all grade levels who completed their induction programming within the 2017-2018 school year and their supporting mentors within the special education program during the 2018-19 school year. The findings are limited to this population and should not be generalized to all new career teachers.

Data to answer the identified research questions were gathered solely through the self-reported perceptions of the participants. Perceptions of other individuals such as administrators were not included but could be included in future studies. Related to this limitation, future studies should include a range of stakeholders such as administrators, as well as other teachers and related professionals. Including their perspectives would reveal results based on the unique lens and viewpoints as pertaining to the induction program and allow for their specific experiences to further impact the research, while informing the stakeholders from a very novel perspective.

Further limitations of the study include that the primary investigator served as the only interviewer and data coder throughout the study. Having only one person as data coder is problematic because of the observer bias. Additional coders could have reviewed both data and theme analyses and further discovered additional themes not currently identified by the sole researcher/coder. An additional thought is that had an additional interviewer been available, or time permitted, individual interviews for all participants potentially could reduce participant's feelings of wariness or unwillingness to answer difficult questions and better report specific effective practices and challenges not currently identified. Additionally, as a mentor, my individual

presence could possibly influence mentors and new teachers to both embellish and/or withhold critical information and influence responses that could skew data. The use of an interviewer not associated with the school could have changed participants' responses.

The results of the study; however, were found to be similar to those found by other educational researchers. Furthermore, additional participants or a larger participant base could have allowed for better results and a greater in-depth analysis into the revealed effective practices and challenges associated with the induction program at the ABC School or any school.

Another potential limitation of the study was the use of focus group, rather than individual, format for the interviews. During both the first new teacher group interview and the mentors' interview there seemed to be a focus on challenges and the negativity seemed to permeate from the teachers that were frustrated to teachers that then wanted to air their own frustrations. While this program kept dialogue flowing, it had the potential to skew individual perceptions towards more of a negative connotation and potentially did not allow participants to share all of what they deemed to be effective. Alternatively, they could have also made additional suggestions, or expressed additional frustrations. Again, while the study itself had a relatively small participant base, there were a select few participants that seemed to use the survey and interview to vent over past personal issues that may or may not have been directly affected by the induction program; rather than allow opportunities to look at those practices that are effective, or could have potential for change to become more effective.

Finally, the link between teacher attrition/ retention and the practices used in the ABC School's induction program was hypothesized but not examined. Specifically, it remains unknown whether these recommendations to the induction program will have any impact on the retention. Attrition rates could be examined in a few years after the proposed recommendations are

implemented to determine if there has been any positive effect. Additional further research could be reviewed after the reauthorization of the induction program is concluded in 2020 and the study could be reviewed again in 2025 to see if new teacher and mentor perceptions change over time, or whether the implementation of recommendations from this study would positively impact teacher retention. In addition, future research should use quantitative data that would present a correlation between effective induction programming and retention. Finally, future research could focus on identifying additional ways in which effective induction programs are able to create a positive school culture that promotes inclusion of special education teachers as members of the schoolwide learning community and how it could promote a framework for the general education population.

5.7 Summary

New teachers are coming into the classroom ill prepared for the day to day challenges they may experience (Ingersoll & Smith, 2004). New teachers often have little to no practical applicable knowledge of the classroom since a college education provides an extensive theoretical background with only minimal practical teaching experiences (Ingersoll, 2001). Administrators need to provide time for special education teachers to work collaboratively with their mentors and peers to establish their individual efficacies. Additionally, administrators are responsible for creating the positive school culture for all students and teachers, including the professional development of staff. School leaders can reflect upon the support structure of schools and create an environment where teachers are able to both thrive and grow professionally, while collaborating

with their peers and colleagues and doing their best with their individual students (Ingersoll & Smith, 2004).

This study provided a detailed examination of the perceptions of early career and mentor special education teachers in a specific approved private school in Northwest Pennsylvania. This study examined data gathered after respondents participated in year-long induction program during their first year of teaching in the selected school system. While the study was not designed to examine the correlation of induction practices with teacher retention, they provided the researcher with a set of rich data that helped to determine if teachers' perceptions of these challenges and experiences impact the reasons for remaining. Replication and extension of this research could investigate induction programs tailored specifically for other approved private schools or through a longitudinal study to be commenced in upcoming years. This addition to the literature could aid in the validation of effectiveness when changes are made to the current iteration of the induction program.

This study is important because becoming an effective teacher is not just having a degree and holding a certificate, it is much more. Becoming a highly qualified teacher takes resolve and an effective support system. It also requires that the school as an organization creates and cultivates a positive culture for both personal and professional growth. This means that while administrators must create the community of learning, they must also entrust their mentor teachers to impart their knowledge to the new teachers, so as not to overwhelm them.

The commitment to retaining highly effective teachers also requires that administrators use data to analyze which practices and resources are effective, what challenges exist, and how to make the necessary changes to increase the retention of new teachers. Because of their role in the school as an organizational leader, the support that administrators provide to new teachers will

continue to have a positive effect on a new teacher's decision to remain teaching past their induction period and better prepare students for the world around them.

Appendix A Attrition Rate Calculation for the ABC School

In reviewing both teacher positions start and termination dates from 2009 to current the following was revealed. When Microsoft excel filters for date of hire were applied to the raw data of all teachers, the results showed that there are 8 teachers of the approved private school faculty that were hired on or before 2009 and are still currently working at the ABC School. The data show that prior to 2010 attrition seemed to be a non-issue, or data obtained from the Human Resources Department of the ABC School only detailed terminations after 2009 for the purposes of this study. However, the five-year period from 2009 to 2014 shows a total teacher population of nineteen teachers listed at the beginning of 2009. Of those nineteen teachers that were employed in 2009, nine teachers $n = 9$ (47%) were terminated by the ABC School during that time period between 2009 and 2014. Of the nine teachers terminated, the reasons obtained are as follows: four teachers $n = 4$ (44.44%) were terminated after leaving for a local district, two teachers $n = 2$ (22.22%) left for changes in careers; leaving the profession of teaching altogether, one teacher $n = 1$ (11.11%) left for health reasons, one teacher $n = 1$ (11.11%) relocated out of the district, and one teacher $n = 1$ (11.11%) chose to leave the profession to raise their family. Two teachers left in 2010, two left in 2011, two left in 2012, two left in 2013 and finally one left in 2014. During this five-year period, ten new teachers were hired to fill vacancies; however, two of the teachers were also terminated during this time. This brings the total number of active teachers at the end of 2014 to nineteen. The formula for calculating employee turnover is $R=S/((B+E)/2)$, whereas R is the turnover rate, S is the number of Separated Employees and B represents the beginning size of the workplace, while E represents the ending size of the workplace (Adkins, 2019). With this formula in mind, the beginning number of teachers in 2009 was nineteen and the ending number was

nineteen. B+E would equal thirty-eight. The number for S, or separated employees would be nine. Therefore, the rate of turnover, or R value would be 47.36%.

Data from August 2014 shows the beginning population size of the ABC School as nineteen teachers on staff. From 2015 until February 2019, twenty new teachers have been hired; 2015 $n = 3$, 2016 $n = 3$, 2017 $n = 7$, 2018 $n = 5$, and 2019 $n = 2$. Between the time periods of 2014 to present, eighteen teachers were terminated. Of the eighteen teachers; the reasons obtained are as follows: five teachers $n = 5$ (27.78%) relocated their families outside of the region, three teachers $n = 3$ (16.67%) retired from the ABC School, two teachers $n = 2$ (11.11%) were removed from their position by the administration for not meeting the requirements of the position, one teacher $n = 1$ (5.56%) left for health reasons, one teacher $n = 1$ (5.56%) left to pursue work at a local district, and six teachers $n = 6$ (33.33%) left due to unknown reasons. The final ending population size of the ABC School from February 2019 is 21 teachers on staff. Once again, based on the formula, B+E would equal forty. The number for S, or separated employees would be eighteen. Therefore, the rate of turnover, or R value would be 90.00%.

Appendix B Induction Program Coordinator Interview Protocol

Introduction (3 min.)

Thank you for participating in this interview. The purpose of this study is to explore the factors that have had a profound impact on the induction program from the perspective of the induction coordinator. During the interview, I will ask you questions that have you thinking about the history of the induction program, how it came to be and what its original purpose was, as well as examining if the original purpose is being reflected in its current practices. We will examine what you believe is working well and if there are any challenges that have been identified by you over the course of implementation. I will also ask you about what opportunities or recommendations you have to improve the current iteration of the induction program. This data will be used in combination with other data from my study. Remember, your participation in this study is voluntary. You may stop your participation at any time. Any information you provide will be kept confidential. I will not use your information for any purposes outside this project. In addition, I will not include your name or anything else that can identify you in my reports from the interview. I am the only person who will be conducting the interview.

The interview will involve a series of questions. Do you have any questions?

Confidentiality and Consent

Please turn in your consent to participate in the interview. Your name is requested below for research purposes only. Please be assured that all information will be de-identified. That is, ID codes will be assigned when data are transcribed. Your responses will be kept strictly confidential at all times. Should you have any questions or concerns about the interview, please contact Shawn Miller at SAM355@pitt.edu.

Induction Program Coordinator Interview

1. What is the vision for the induction program as seen as the induction coordinator?
 - a. What is your vision as coordinator of the induction program for creating highly effective teachers? How is this vision reflected in the induction program?
 - b. What would you say are the primary reasons why teachers participate in the induction program? How do they benefit from the program?
 - c. What types of support does the induction program provide for a new career teacher in creating a classroom management system?

(prompt) What types of support does the induction program provide for a new career teacher in the area of pedagogy and instruction?

(prompt) What types of support does the induction program provide for a new career teacher in creating a positive classroom climate?
 - d. What types of support does the induction program provide for a new career teacher in learning the culture of school as well as learning individual policies and procedures? Describe what this looks like.
 - e. How effective would you describe the induction program in its current incarnation? How many different incarnations have there been? What were the main changes from previous programs to this program that have aided in creating highly effective teachers?
2. What aspects of the induction program are most effective? How do the effective practices of the induction program alter the rate of attrition for the school?
 - a. What individual aspects of the induction process are working well from your perspective? From your vision, what aspects do you think the teachers will say are working well? What aspects do you see that create the greatest challenges for new career teacher? How is this measured?
 - b. The objective of the induction program is to provide structure and support, through which the new career teacher can objectively analyze the effectiveness of his/her teaching and utilize available resources for professional development. In your opinion, has the induction program fully met its intended objective and created highly effective teachers for Elizabeth Lee Black School? Why, or why not?
 - c. How effective do you believe the induction program is in delivering a productive basis of learning, for new career teachers? Do you believe that the more effective the induction program, the more the attrition rate will decrease?

3. Are there any challenges that new career teachers face that aren't currently addressed by the induction program?

a. Are there challenges that new career teachers are facing that aren't addressed in the induction program? How do mentor teachers assist the new career teachers in overcoming these obstacles? What supports are given to the mentor teachers? What benefits do mentors receive for providing their mentorship to new teachers?

b. What do you believe new teachers will say are their biggest challenges? Can the induction program work to address some of those issues?

4. Are there any challenges that you encounter with the induction program?

a. How would you like to see the induction program changed? (additions to the program/deletions from the program)

b. Do you perceive the induction program as a valuable on-the-job training asset? Why or why not?

Closing (2 min.)

This concludes our interview. Is there anything else you would like to add? Thank you for participating in this interview. I will send you a transcribed copy of this interview for you to review once it is completed. If you have any questions for me, you may contact me at SAM355@pitt.edu or via cellular phone at 8144503565. Again, thank you very much for your time and participation.

It is extremely appreciated.

Appendix C Group Interview Protocol

Introduction (3 min.)

Thank you for participating in this group interview. The purpose of this interview is to explore the factors that have a profound impact on the induction program from the perspective of the new career teacher as well as the mentor teacher. During our interview we will examine what is believed to be working well and if there are any challenges that have been identified by you through your own individual experiences. We will also explore what opportunities or recommendations exist to improve the current iteration of the induction program. As a review, here is a copy of the Induction Program Process Sequence for you to refer to during the interview. This data will be used with other data for my study. Remember, your participation in this study is voluntary. You may stop at any time, if you feel stressed during the interview. Any information you provide will be kept confidential. I will not use your information for any purposes outside this project. In addition, I will not include your name or anything else that can identify you in my reports from the interview. I will be conducting the interview.

The interview will involve a series of questions. The interview should last about 45 to 60 minutes and will be audio recorded and then transcribed. Do you have any questions? If there are questions, I will answer them with full confidence; if there are none, I will ask the interviewee to sign and date the interview waiver.

Confidentiality and Consent

Please turn in your consent to participate in the interview. Your name is requested below for research purposes only. Please be assured that all information will be de-identified. That is, ID

codes will be assigned when data are transcribed. Your responses will be kept strictly confidential at all times. Should you have any questions or concerns about the interview, please contact Shawn Miller at SAM355@pitt.edu.

Group Interview

1. Describe your experiences with the ABC induction program at the ABC School.
2. How has the program helped you as a teacher?
3. What has been the most positive part of your participation in the program?
4. What challenges have you experienced during your participation in ABC induction program?
5. What could be changed to improve the effectiveness of ABC induction program?
6. Are there any other comments or thoughts that you would like to share about the ABC program?

Closing (2 min.)

This concludes our interview. Is there anything else you would like to add? Thank you for participating in this interview. I will send you a transcribed copy of this interview for you to review once it is completed. If you have any questions for me, you may contact me at SAM355@pitt.edu or via cellular phone at 8144503565. Again, thank you very much for your time and participation. It is extremely appreciated.

**Appendix D Letter of Invitation to Participate in a Research Project on Successful
Induction Programming via Email**

Project Title: EFFECTIVE PRACTICES TO REDUCE ATTRITION IN AN APPROVED PRIVATE SPECIAL EDUCATION SCHOOL: A FOCUS ON INDUCTION PROGRAMMING

My name is Shawn Miller and I am a graduate student in the Educational Doctorate in Special Education at the University of Pittsburgh, School of Education.

I am conducting research on the role of successful practices and challenges associated with induction programming for new career teachers for the partial fulfillment of the Doctor of Education (Special Education) degree. I would like to extend an invitation to you to participate in this research.

If you decide to participate, a group interview of you and your peers would be arranged at a time and place of convenience of all participants. The interview is expected to last about 45 minutes. During this interview, I will be asking you questions to find out about how you feel about the current induction program, what you believe are the most successful and effective practices associated with the induction program, and what challenges you have observed or encountered through your personal experience. Finally, I will ask for your recommendations on what aspects of the induction program need to be addressed or altered to improve upon your personal experiences.

In an effort to streamline the interview process, I will collect some personal data from you such as your age, race, educational background and a brief history of your career path prior to the interview. These questions accompany this letter and can be submitted prior to or during the interview. The information will be kept private and confidential. You will be given a coded ID and identifiable information will never be used in a publication or presentation. I will not disseminate your details to any organization or company. This is personal research for academic purposes and is not connected with the government.

Again, this interview will take approximately 45 minutes. There are no right or wrong answers. What are important are your opinions. After the interview, I may contact you later to clarify certain points and you will have the opportunity to review what you have said in your interview through reading of your interview transcript.

Participation in this research is completely voluntary and you may choose to withdraw from the research at any time or not answer questions that you do not feel comfortable answering.

The participant information form and consent form have been attached for your information. If you have any further questions about the research, please feel free to contact me via email at SAM355@pitt.edu.

If you have any questions about your rights as a research participant, you may contact a staff member of the University of Pittsburgh Institutional Review Board at email at irb@pitt.edu.

Thank you,

Shawn Miller, Principal Investigator

Graduate Student University of Pittsburgh

Email: SAM355@pitt.edu

Appendix E Consent Form

Successful Induction Programming Study Consent Form

You are being asked to take part in a research study of effective practices and challenges of the induction program. We are asking you to take part because of your direct knowledge of the induction program and your individual experiences for this study. Please read this form carefully and ask any questions you may have before agreeing to take part in the study.

What the study is about: The purpose of this study is to learn how effective practices and challenges in induction programming affect new career teachers through their first year of teaching. You must have completed your induction program or near completion to take part in this study.

What we will ask you to do: If you agree to be in this study, we will conduct an interview with you. The interview will include questions about your job, your experiences with the induction program, your successes associated with the induction program, challenges you have experienced with the induction program, and potential recommendations and suggestions on improvement of the induction program. The interview will take about 45 minutes to complete. With your permission, we would also like to audio record the interview.

Risks and benefits:

There is the risk that you may find some of the questions about your job conditions to be sensitive. However, I do not anticipate any risks to you participating in this study other than those encountered in day-to-day life.

There are no direct benefits to you. However, recommendations may assist future new career teachers as they progress through the induction program.

Your answers will be confidential. The records of this study will be kept private. Any report that is made public will not include any information that will make it possible to identify you. Research records will be kept in a locked file; only the researchers will have access to the records. If we audio record the interview, we will destroy the tape after it has been transcribed, which we anticipate will be within two months of its taping. A copy of transcribed data will be given to the Executive Vice President of the Corporation in the form of a flash drive for their review.

Taking part is voluntary: Taking part in this study is completely voluntary. You may skip any questions that you do not want to answer. If you decide not to take part or to skip some of the questions, it will not affect your current or future relationship with the interviewer. If you decide to take part, you are free to withdraw at any time.

If you have questions: The researchers conducting this study are Shawn Miller and Dr. Anastasia Kokina. Please ask any questions you have now. If you have questions later, you may contact Shawn Miller at SAM355@pitt.edu. You can reach Dr. Kokina at kokina@pitt.edu or (412) 648-

7373. If you have any questions or concerns regarding your rights as a subject in this study, you may contact the Institutional Review Board (IRB) at (412) 383-1480 or access their website at <http://www.irb.pitt.edu>.

Statement of Consent: I have read the above information and have received answers to any questions I asked. I consent to take part in the study.

Your Signature _____ Date _____

Your Name (printed) _____

In addition to agreeing to participate, I also consent to having the interview audio recorded.

Your Signature _____ Date _____

Signature of person obtaining consent _____ Date _____

Printed name of person obtaining consent _____ Date _____

This consent form will be kept by the researcher for at least three years beyond the end of the study.

Appendix F Demographic Information Survey

Demographics	
1. What is your current teaching position?	Autistic Support Life Skills Support Multiple Disciplinary Support Mental Health Partial Transition Other (Please describe)
2. What grade level do you currently teach?	Early Intervention Elementary Middle School High School
3. I have been teaching for:	0-4 years 5-10 years 11-15 years 16-20 years 21-25 years 25 plus years
4. I have been in my current position for:	0-4 years 5-10 years 11-15 years

	<p>16-20 years</p> <p>21-25 years</p> <p>25 plus years</p>
<p>5. The highest level of education I have achieved is:</p>	<p>Bachelors</p> <p>Bachelors +</p> <p>Masters</p> <p>Masters +</p> <p>Doctoral</p>
<p>6. Please specify your gender.</p>	<p>Female</p> <p>Male</p>
<p>7. Please specify your race.</p>	<p>American Indian or Alaska Native</p> <p>Asian</p> <p>Black or African American</p> <p>Hispanic</p> <p>Native Hawaiian or Other Pacific Islander</p> <p>White</p>
<p>8. What lead you to decide to become a teacher?</p>	
<p>9. How would you describe your level of effectiveness of your current teaching position?</p>	<p>Highly effective</p> <p>Mostly effective</p> <p>Effective</p> <p>Ineffective</p>

	<p>Mostly ineffective</p> <p>Highly ineffective</p>
10. What will keep you teaching after your completion of the induction program?	
11. The administration has been supportive of my professional growth?	<p>6 - Strongly agree</p> <p>5 - Mostly agree</p> <p>4- Agree</p> <p>3 - Disagree</p> <p>2 - Mostly disagree</p> <p>1 - Strongly disagree</p>
12. My mentor's suggestions for improving my work are helpful?	<p>6 - Strongly agree</p> <p>5 - Mostly agree</p> <p>4- Agree</p> <p>3 - Disagree</p> <p>2 - Mostly disagree</p> <p>1 - Strongly disagree</p>
13. I have learned many new strategies through the completion of the induction program?	<p>6 - Strongly agree</p> <p>5 - Mostly agree</p> <p>4- Agree</p> <p>3 - Disagree</p> <p>2 - Mostly disagree</p> <p>1 - Strongly disagree</p>
14. I have received useful feedback from my mentor teacher?	<p>6 - Strongly agree</p>

	<p>5 - Mostly agree</p> <p>4- Agree</p> <p>3 - Disagree</p> <p>2 - Mostly disagree</p> <p>1 - Strongly disagree</p>
<p>15. When I faced challenges with the induction program, I felt supported by the mentor teacher?</p>	<p>6 - Strongly agree</p> <p>5 - Mostly agree</p> <p>4- Agree</p> <p>3 - Disagree</p> <p>2 - Mostly disagree</p> <p>1 - Strongly disagree</p>
<p>16. The current iteration of the induction program is effective.</p>	<p>6 - Strongly agree</p> <p>5 - Mostly agree</p> <p>4- Agree</p> <p>3 - Disagree</p> <p>2 - Mostly disagree</p> <p>1 - Strongly disagree</p>

Appendix G Administration PowerPoint Presentation

EFFECTIVE PRACTICES TO REDUCE
ATTRITION IN AN APPROVED
PRIVATE SPECIAL EDUCATION
SCHOOL: A FOCUS ON INDUCTION
PROGRAMMING

A Defense

Shawn Addison Miller, Ed. D.
University of Pittsburgh

1

Reviewing the Problem



2

The Issues reviewed

- National attrition rate for general education 6%
- National attrition rate for special education 22%
(Perry & Hayes, 2011).

The Cause and a Possible Solution

- New teachers can often be left in isolation to "figure it out" for themselves (Breaux & Wong, 2008).
- A mentoring teacher can greatly impact the success of the new teacher (Wilson & Lumadue, 2013).

3

Statement of the Problem

- With induction and mentoring programs being viewed by new career teachers as complex systems, the need for review of best practices is extremely critical for new teachers to be successful (Hargreaves & Fullan, 2000).


Purpose of the Study

- The purpose of the current study was to understand new teachers' perceptions about support provided by their mentor, as well as mentors' perceptions about administrative support during the mentoring process.

4

The Research Questions

1. What are the stakeholders' perceptions of components that make this program effective?
2. What are the stakeholders' opinions regarding the challenges they face through the induction program?
3. What are the stakeholders' suggestions for improvement of the current iteration of the induction program?



5


The literature review

Results

<p><i>Effective Practices</i></p> <ul style="list-style-type: none"> • Mentoring and collaboration (81.81%) • Networking with other teachers through various outlets (45.45%) • Support of administration (45.45%) • Positive environment (18.18%) 	<p><i>Challenges Reported</i></p> <ul style="list-style-type: none"> • Inadequate support from mentor (45.45%) • Caseload (54.54%) • Access to resources (81.81%) <ul style="list-style-type: none"> • Access to time (Meeting, Observation, Planning) • Access to facilities • Access to curriculum, training and orientation • Access to materials • Access to human capacity (Staffing)
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

6

Methods of Inquiry



7

School Context	Participants
<ul style="list-style-type: none"> • ABC school • An approved private day school (APS). • Located in the North West region of the Commonwealth of Pennsylvania. • Founded in 1952. • Designated as an APS in 1968. • Twenty-one classrooms. • Maximum 10 students per room 	<ul style="list-style-type: none"> • 11 teachers and 1 administrator • 5 new career teachers <ul style="list-style-type: none"> • 4 females, 1 male, 100% Caucasian • 6 mentor teachers <ul style="list-style-type: none"> • 6 females, 100% Caucasian • 1 induction coordinator <ul style="list-style-type: none"> • Female, Caucasian


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Student Information	Student Disability Information
<p>There are currently 248 students that attend the school.</p> <ul style="list-style-type: none"> • White (66.66%); • Black (10.28%); • Black or African American (9.87%); • Hispanic (4.52%); • BI-Racial (2.88%); • Other Race (2.46%); • Asian (1.64%); • Arab (0.82%); • Unknown (0.41%); • Declined to Answer (0.41%). <p><small>(ABC School, 2018)</small></p>	<p>Percentages of students enrolled are identified with the following educationally-relevant disabilities:</p> <ul style="list-style-type: none"> • Autism (34.15%); • Intellectual Disability (16.04%); • Multiple Disabilities (14.81%); • Developmental Delay (12.84%); • Other Health Impairment (.08%); • Hearing Impairment (.08%); • Visual Impairment (.08%); • Deaf/Blind (.04%); • Traumatic Brain Injury (.04%); • The remaining students have no diagnosed disability (19.94%). <p><small>(ABC School, 2018)</small></p>

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Instruments

- The Induction Program Coordinator Interview (IPC)
 - The tool was created from various other research and previous literature on mentoring and induction practices, as well as the School and Staffing Survey (SASS), which is utilized and endorsed by the National Center for Education Statistics (NCES, 2018).
 - Sample Question: Are there any challenges new teachers face that aren't currently addressed by the induction program?



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Instruments

- Group Interviews
 - The two semi-structured group interview questions are designed to better understand how the experiences and beliefs of new career teachers and their respective mentors assist in identifying successes and challenges of the specific phenomenon being researched.
 - Sample question: What could be changed to improve the effectiveness of the ABC Induction Program?

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Study Procedures


- Invitation to participate (Appendix D)
- Completion of Consent to Participate (Appendix E)
- Completion of Demographic Information Sheet (Appendix F)
 - Setting
 - Time allotted and time till completion
 - Data recording
 - Order of Interviews



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Data Analysis

- Transcribe audio tapes
- Listen to audio tapes separately
- Read transcripts
- Verify data of transcripts
- Re-read transcripts
- Read field notes taken during interviews
- Find main themes and anecdotal/descent themes.



THE POWER OF KNOWLEDGE
LEADS TO BETTER IDEAS AND
GROWTH


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Dissemination of Data Results

- Presentation of data and recommendations to Induction Committee.
 - Committee will utilize data to review current program, make necessary changes and present to state for re-approval.
- Presentation of data results to peers and colleagues at school in-service.
 - Data to be shared with colleagues to show that administration is listening to the needs of the teachers.

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Results



- After coding of the data, the following themes emerged: (a) mentor-mentee pairing, (b) collaboration, (c) access to information, (d) communication from administration, (e) resource of time, (f) training, and (g) acknowledgement of mentors.

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Survey Results Demographics

Variable	Category	Number of Responses	Percentage
Gender	Male	1	0.0
	Female	10	100.0
	Other	0	0.0
Ethnicity	Hispanic	1	100.0
	White	0	0.0
	Other	0	0.0
Years of Experience	0-5 years	1	100.0
	6-10 years	0	0.0
	11+ years	0	0.0
Highest Level of Degree	Elementary degree	1	100.0
	Secondary degree	0	0.0
	College degree	0	0.0
	Postgraduate degree	0	0.0

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Survey Results Perceptions

Statement	Response	Number of Responses	Percentage	Mean	Std. Deviation
I would describe the role of the induction program as being an effort to:	bring someone up to speed	1	100.0		
	help someone become a professional	0	0.0	1.00	0.00
	introduce someone to the profession	0	0.0		
The administration has been supportive of the professional growth of the participants:	strongly agree	1	100.0		
	agree	0	0.0	2.00	0.00
	disagree	0	0.0		
My principal's expectations for me were too strict or too lax:	strongly agree	1	100.0		
	agree	0	0.0	0.0	0.00
	disagree	0	0.0		
I participated in a variety of ways through the completion of the induction program:	strongly agree	1	100.0		
	agree	0	0.0	0.0	0.00
	disagree	0	0.0	0.0	0.00
I have received useful feedback from my mentor teacher:	agree	1	100.0		
	strongly agree	0	0.0	0.0	0.00
	disagree	0	0.0		
When I had challenges with the induction program, I felt supported by my mentor teacher:	strongly agree	1	100.0		
	agree	0	0.0	0.0	0.00
	disagree	0	0.0		
The course exceeded my expectations in offering:	strongly agree	1	100.0		
	agree	0	0.0	0.0	0.00
	disagree	0	0.0		

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Results - Open Ended Questions

- What led you to become a teacher?
 - Desire to work with people with disabilities
 - My brother has special needs
 - Helping kids
- What will you keep you teaching after the induction program?
 - My love of the students
 - Seeing the growth of the students
 - I'm not sure what still motivates me

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Interview Results

- Mentor-Mentee Pairing
 - Process for selection
 - Proximity
 - Population (grade level/disability area)
 - Personality
- Collaboration
 - Respondents felt time to meet after school day is appropriate.
 - Respondents felt time to meet during the instructional day is a challenge (collaboration and/or observations with mentors).
 - Group Trainings - Valued aspect for learning and comparing experiences.
 - Professional Learning Communities - Utilized in prior years, has fallen to the wayside.

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Interview Results

- Access to Information
 - Need for common repository for information. (Already available, but not effective, i.e. confusing)
 - Some respondents request physical copy.
- Communication from Administration
 - Multiple sources of verbal information from administration can be confusing for both new and mentor teachers.
 - Request for Chain of Command (Already available).

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Interview Results

- Resource of Time
 - No planning time during the day.
 - No time to meet with Mentor Teacher during the day to collaborate or observe.
 - No time to collaborate with others in discipline or through similar grades.
- Training
 - Call for organized training components (Timeline completion and training calendar).
 - Set agenda and topics to be discussed and allow time for questions from the field.
 - Work to engage mentors for additional trainings and promotion of Professional Learning Communities (PLCs).

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Interview Results

- Acknowledgement of Mentors
 - Call to thank mentors for their support and encourage them to keep on mentoring.
 - Develop an honorarium to enhance and improve mentor work with new teachers.
- Summary
 - After interviewing participants, the following themes emerged: (a) mentor-mentee pairing, (b) collaboration, (c) access to information, (d) communication from administration, (e) resource of time, (f) training, and (g) acknowledgement of mentors.

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Discussion

- The questions of research were: (a) what is working within the current induction programming? (b) what are the challenges encountered by the teachers in the current induction programming? (c) what are the recommendations for improvement of the current induction programming?



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Research Question 1: "What is working within the current induction programming?"


- Mentor-Mentee Pairing
 - Seen as a gateway to collaboration.
 - Mentoring fosters peer feedback.
 - Mentoring facilitates information exchange and reduces overwhelming feels of the new teacher.
 - Ability for administration to match new teachers and mentors appropriately (White & Mason, 2006).
- Collaboration
 - Participants feel collaboration with mentors to be effective.
 - Participants felt there is time before or after school for collaboration, meetings and to complete paperwork.
 - Opportunities for collaboration amongst disability groupings/age level groupings exist but need support.

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Research Question 1: "What is working within the current induction programming?"

- Resource of time
 - Participants felt that there is sufficient time to meet with collaboration partners before or afterschool.
 - Teachers must be provided time to collaborate and complete paperwork (Billingsley, 2007; and Smith & Ingersoll, 2004).

"I don't think time to meet with the person (mentor) was much of an issue (after school)" New Teacher 6.



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Research Question 2: "What are the challenges of the current induction programming?"

- Collaboration
 - There is time for collaboration before/after school, but no time during the instructional day.
 - insufficient time for observation of new teachers or mentor demonstrations (Smith & Ingersoll, 2004)
- Access to information
 - Participants would like to possess a new teacher handbook (information is available in digital form but is in numerous folders) (Andrews & Quinn, 2005).
 - Participants would like to possess a chain of command (this document is already available in digital form).

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Research Question 2: "What are the challenges of the current induction programming?"

- Communication from Administration
 - Participants felt that communication from administration is confusing and ineffective (Mekos & Smith, 2018; and White & Mason, 2006).
 - Participants would like to possess a chain of command (this document is already available in digital form).
- Resource of time
 - Participants felt that there is sufficient time for general completion of work, but additional trainings and other collaborations compete for this time period.
 - Participants felt that time during the instructional day has great challenges to meet with collaboration partners or complete trainings or meetings with parents/administration.

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Research Question 2: "What are the challenges of the current induction programming?"

- Training
 - Participants felt there is time before or after school for collaboration, meetings and to complete paperwork, but additional trainings compete for precious time during these time periods.
 - Inconsistent training opportunities.
 - Inconsistent training procedures.



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Research Question 3: "What are the recommendations for improvement of the current induction programming?"

- Mentor-Mentee pairing
 - Participants felt additional criteria needs to be implemented for best pairing of collaboration teams. Research recommends proximity, grade level, and content level (Saphier, Freedman, & Aschheim, 2007). Induction coordinator includes individual personalities in pairing matrix.
- Collaboration
 - Participants felt that additional formations of PLC's would improve collaboration and individual teaching pedagogies (Linder, Post & Calabrese, 2012).
 - Collaborations of PLC's formerly done in the past, but not consistent or monitored by administration. Participants would like to develop guidelines.

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Research Question 3: "What are the recommendations for improvement of the current induction programming?"

- Access to information
 - Participants would like to possess a written: new teacher handbook, policy and procedures guide, and admiration chain of command or have a specified area on the g: drive for new teachers to access all the information in one repository.
- Resource of time
 - Participants request opportunities to observe and be observed by their mentor teachers through digital means.



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Research Question 3: "What are the recommendations for improvement of the current induction programming?"

- Training**
 - Participants felt that a training calendar with predetermined agenda topics available for new teachers and mentors.
 - Participants would like to possess a suggested timeline for completion of activities so that they are able to move through the Induction process at a smooth and predictable pace.
- Acknowledgement of Mentors**
 - Induction coordinator would like to see expertise of mentors compensated (Butcher & Kritsonis, (2007).
 - Compensation of honorarium could combat recruitment challenges of mentor teachers being displayed currently.

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Discussion

- Research Question 3: "What are the recommendations for improvement of the current induction programming?"
 - Chain of command – Perceived

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Discussion

- Research Question 3: "What are the recommendations for improvement of the current induction programming?"
 - Chain of command – Proposed

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Recommendations

- 1. Create a pairing matrix utilizing the three suggestions from Saphier, Freedman & Aschheim (2007): proximity, grade level, and content area; however, noted, familiarity with intended mentor or other attributes, such as gender or other demographics are other systems to consider.
- 2. Create professional learning communities to improve collaboration between colleagues as co-teachers, or amongst colleagues as community teachers. Specifically, create bi-monthly meetings for collaborations by discipline (ex. life skills support, multiple disciplinary handicapped support, and verbal behavior support) and additionally create bi-monthly meetings by grade distinction (ex. elementary, middle school, and high school).

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Recommendations

- 3. Create a new teacher handbook with all corporate and school policies and procedures, including the current chain of command and proposed chain of command for information exchange between new and mentor teachers to improve new teacher efficacy. Or, create a section on the computer drive for new teachers and make it more user friendly. Specifically, name files according to their titles and create folders to make information more easily accessible.
- 4. Implement proposed new chain of command for administration to interact with mentor teacher to funnel information and training, while giving both new and mentor teachers definitive knowledge of chain of command for questions and/or concerns.

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Recommendations

- 5. Create a system of electronic observation recordings and allow mentors and mentees to meet either before instructional day, after the instructional day, or during school in-services to discuss observations or other issues as they arise.
- 6. Reestablish critical skills training sessions for the ABC School to review skills necessary for both the new teacher and new staff of the ABC School. These sessions will focus on critical skills such as observation best practices, data collection and reporting, program specific policies and other best practices for teachers and staff. Further, create a timeline to complete necessary modules in their individual training program and create a visual meeting calendar for first year teachers and staff.

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Recommendations

- 7. Acknowledge and compensate mentor teachers. Introduce and recognize mentor teachers at In-services, provide biographies of mentors to further work to recruit new mentor teachers.
- 8. Review reauthorization and conduct future studies to determine effectiveness of implemented changes to program.



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Implications for practice

- Findings of the study did not compare or contrast other programs within the approved private school causing questions of transferability of results.
 - Are these isolated instances?
 - Are they indicative across other programs?
- Limited External Validity
 - Could be adapted to other Approved Private Schools?
 - Would there be similarities with General Education Schools?
- Study could be used a guide
 - Responding to ineffective induction practices.
 - Responding to concerns on the local school level.
 - Responding to schools with high levels of attrition.
 - Further address potential retention issues.

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Limitations and Implications for Future Research

- Limitations -
 - Generalizability - very specific setting and methodology.
 - Pennsylvania specific
 - Approved Private School Setting
 - Limited participants
 - Only focused on Special Education
 - One School focus
 - Researcher known by participants
 - Researcher sole coder
 - Focus group v. Individual interviews
 - Link between attrition/retention rates and practices hypothesized but not fully examined

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Limitations and Implications for Future Research

- Implications –
 - Additional studies regarding mentoring, collaboration with peers/administration in special education.
 - Additional studies to be replicated across various locations, settings and through different stakeholders.
 - Additional future research looking at under-reported demographics and setting characteristics in literature.



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Comparing Results to the Literature Review

<i>Effective Practices Literature Review</i>	<i>Effective Practices Reported</i>
<ul style="list-style-type: none"> • Mentoring and collaboration (81.81%) • Networking with other teachers through various outlets (45.45%) • Support of administration (45.45%) • Positive environment (18.18%) 	<ul style="list-style-type: none"> • Mentor/Mentee pairing. • Collaboration with mentor. • Time to meet before and afterschool for some collaboration with mentor.

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Comparing Results to the Literature Review

<i>Challenges Literature Review</i>	<i>Challenges Reported</i>
<ul style="list-style-type: none"> • Inadequate support from mentor (45.45%) • Caseload (54.54%) • Access to resources (81.81%) <ul style="list-style-type: none"> • Access to time (Meeting, Observation, Planning) • Access to facilities • Access to curriculum, training and orientation • Access to materials • Access to human capacity (Staffing) 	<ul style="list-style-type: none"> • Collaboration with mentor during the instructional day. • Access to information. • Communication from administration. • Access to time (Meeting, Observation, Training) • Inconsistent training access and procedures in addition to time constraints for training opportunities.

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Summary


- ▶ New teachers are coming into the classroom ill prepared (Ingersoll & Smith, 2004).
- ▶ This study provides an examination of the perceptions of early career and mentor special education teachers.
- ▶ The commitment to retaining highly effective teachers requires that administrators use data to analyze which practices and resources are effective, what challenges exist, and how to make the necessary changes to increase the retention of new teachers.
- ▶ The support that administrators provide to new teachers will continue to have a positive effect on a new teacher's decision to remain teaching past their induction period and better prepare students for the world around them.



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Questions

Questions from the Committee.



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References

(Note: The text in this section is extremely small and mostly illegible. It appears to be a list of references.)

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Bibliography

- ABC Corporation (2019). *Human resources employee data*. Retrieved from ABC Corporation, June 26, 2019.
- ABC School. (2014). *Professional Development Plan with Induction-2014 update*. Retrieved from G://Induction Resources.
- Adkins, W. (2019, March 04). *The formula for calculating employee turnover*. [Web page]. Retrieved from <https://smallbusiness.chron.com/formula-calculating-employee-turnover-10638.html>
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall.
- Ambrosetti, A., & Dekkers, J. (2010). The interconnectedness of the roles of mentors and mentees in pre-service teacher education mentoring relationships. *Australian Journal of Teacher Education*, 35(6), 42-55.
- Andrews, B., & Quinn, R. (2005). The effects of mentoring on first-year teachers' perceptions of support received. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 78(3), 110-117.
- Anhorn, R. (2008). The profession that eats its young. *Delta Kappa Gamma Bulletin*.74(3), 15-26.
- Arends, R., & Rigazio-DiGilio, A. (2000). *Beginning teacher induction: Research and examples of contemporary practice*. Paper presented at the annual meeting of the Japan-United States Teacher Education Consortium. (ERIC Document Reproduction Service No. ED450074).
- Bay, M., & Parker-Katz, M. (2009). Perspectives on induction of beginning special educators: Research summary, key program features, and the state of state-level policies. *Teacher Education and Special Education*, 32(1), 17-32.
- Billingsley, B. (1993). Teacher retention and attrition-in special and general education: A critical review of the literature. *The Journal of Special Education*, 27(2), 137-174.
- Billingsley, B. (2003). *Special education teacher retention and attrition: A critical analysis of the literature* (COPSSE Document No. RS-2). Gainesville, FL: University of Florida, Center on Personnel Studies in Special Education.
- Billingsley, B. (2004). Special education teacher retention and attrition: A critical analysis of the research literature. *The Journal of Special Education*, 38(1), 39-55.
- Billingsley, B. (2007). Recognizing and supporting the critical roles of teachers in special education leadership. *Exceptionality*, 15(3), 163-176.

- Boe, E., Bobbitt, S., Cook, L., Whitener, S., & Weber, A. (1997). Why didst thou go? Predictors of retention, transfer, and attrition of special and general education teachers from a national perspective. *The Journal of Special Education, 30*(4), 390-411.
- Boe, E. E., Cook, L. H., & Sunderland, R. J. (2007). *Trends in the turnover of teachers from 1991 to 2004: Attrition, teaching area transfer, and school migration*. Philadelphia, PA: University of Pennsylvania.
- Brownell, M., Hirsch, E., & Seo, S. (2004). Meeting the demand for highly qualified special education teachers during severe shortages: what should policymakers consider? *The Journal of Special Education, 38*(1), 56-61.
- Butcher, J., & Kritsonis, W. A. (2007). Human resource management: Managerial efficacy in recruiting and retaining teachers--National implications. *The Lamar University Electronic Journal of Student Research*.
- Cancio, E. J., Albrecht, S. F., & Johns, B. H. (2014). Combating the attrition of teachers of students with EBD: What can administrators do? *Intervention in School and Clinic, 49*(5), 306-312.
- Carr, S. C., & Evans, E. D. (2006). Helping beginning teachers remain in the profession: A successful induction program. *Teacher Education and Special Education, 29*(2), 113-115.
- Colaizzi, P. F. (1978). Psychological research as the phenomenologist views it. In R. Vaile & M. King (Eds.), *Existential phenomenological alternatives for psychology* (pp. 48-71). New York: Oxford University Press.
- Correa, V. I., & Wagner, J. Y. (2011). Principals' roles in supporting the induction of special education teachers. *Special Education Leadership, 24*(1).
- Craven, J. A. (1998). Mentoring future mentors: The preparation of science teacher educators. *Electronic Journal of Science Education, 3*(1), 1-10.
- Creswell, J. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Los Angeles, CA: Sage Publishing.
- Creswell, J. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (5th ed.). Boston, MA: Pearson Education, Inc.
- Creswell, J., Shope, R., Plano Clark, V., & Green, D. (2006). How interpretive qualitative research extends mixed methods research. *Research in the Schools, 13*(1), 1-11.
- Darling-Hammond, L. (2006). Constructing 21st century teacher education. *Journal of Teacher Education, 57*(10), 1-15.
- Duke, C., & Gates, R. (1990). *The status of teacher induction programs in rural Pennsylvania school districts*. Retrieved from: <http://files.eric.ed.gov/fulltext/ED329414.pdf>

- Feiman-Nemser, S. (2003). What new teachers need to learn. *Educational Leadership*, 60(8), 25-29.
- Fidler, E., & Haselkorn, D. (1999). *Learning the roles: Urban teacher induction practices in the United States*. Belmont, MA: Recruiting New Teachers.
- Finster, M., (2017). *Development and validation of a novice teacher and supervisor survey*. Rockville, MD: Westat.
- Flanagan, J., & Fowler Jr., W. (2010). Induction programs effect on beginning teachers' feelings of preparedness and plans to remain in teaching. *SREE Conference*. Retrieved from: <https://login.proxy.libraries.rutgers.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED512717&site=ehost-live>
- Fore, C., Martin, C. & Bender, W. (2002). Teacher burnout in special education: The causes and the recommended solutions. *The High School Journal*, 86(1), 36-33.
- Fullen, M. (2004). *Leadership and sustainability: Systems thinkers in action*. Thousand Oaks, CA: Corwin Press.
- Gehrke, R. S., & McCoy, K. (2012). Designing effective induction for beginning special educators: Recommendations from a review of the literature. *The New Educator*, 8(2), 139-159.
- Gersten, R., Keating, T., Yovanoff, P., & Harniss, M. (2001). Working in special education: Factors that enhance special educators' intent to stay. *The Council for Exceptional Children*, 67(4), 549-567.
- Gilles, C., Wilson, J., & Elias, M. (2010). Sustaining teachers' growth and renewal through action research, induction programs, and collaboration. *Teacher Education Quarterly*, 37(1), 91-108.
- Glesne, C. (2011). *Becoming a qualitative researcher: An introduction*. Boston, MA: Allyn and Bacon.
- Goodlad, J. I. (1984). *A place called school*. New York, NY: McGraw-Hill.
- Gratch, A. (1998). Beginning teacher and mentor relationships. *Journal of Teacher Education*, 49(3), 220-227.
- Griffin, C.C., Winn, J.A., Otis-Wilborn, A., & Kilgore, K.L. (2003) *New teacher induction in special education. (COPSSE Document Number RS-5)*. Gainesville, FL: University of Florida, Center on Personnel Studies in Special Education. Retrieved from: <https://journals-sagepub-com.pitt.idm.oclc.org/doi/pdf/10.1177/0888406408330870>
- Guerra, N. S., Hernandez, A., Hector, A. M., & Crosby, S. (2015). Listen-Identify-Brainstorm-Reality-Test-Encourage (LIBRE) Problem-solving model: addressing special education teacher attrition through a cognitive-behavioral approach to teacher induction. *Action in Teacher Education*, 37(4), 334-354.

- Hagaman, J. L., & Casey, K. J. (2018). Teacher attrition in special education: Perspectives from the field. *Teacher Education and Special Education, 41*(4), 277–291.
- Hargreaves, A., & Fullan, M. (2000). Mentoring in the new millennium. *Theory into Practice, 39*(1), 50-56.
- Heider, K. L. (2005). Teacher isolation: How mentoring programs can help. *Current Issues in Education, 8*(14), 1-8.
- Hord, S. M. (2004). Professional learning communities: An overview. In S. Hord (Ed.), *Learning together, leading together: Changing schools through professional learning communities*. New York, NY: Teachers College Press, 5-14.
- Horn, P. J., Sterling, H. A., & Subhan, S. (2002). Accountability through "best practice" induction models. Washington, DC: Department of Education.
- Hughes, G. D. (2012). Teacher retention: Teacher characteristics, school characteristics, organizational characteristics, and teacher efficacy. *The Journal of Educational Research, 105*(4), 245-255.
- Huling-Austin, L. (1992). Research on learning to teach: Implications for teacher induction and mentoring programs. *Journal of Teacher Education, 43*(3), 173-180.
- Huling, L., & Resta, V. (2001). Teacher mentoring as professional development. *ERIC Digest.*, 1-6. Retrieved from:
<http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED460125&site=ehost-live>
- Ingersoll, R. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal, 38*(3), 499-534.
- Ingersoll, R. (2012). Beginning teacher induction: What the data tell us. *Kappan, 93*(8), 47-51.
- Ingersoll, R., & May, H. (2010). *The magnitude, destinations and determinants of mathematics and science teacher turnover*. Philadelphia, PA: Consortium of Policy Research in Education, University of Pennsylvania.
- Ingersoll, R. M., & Smith, T. M. (2004). Do teacher induction and mentoring matter? *NASSP Bulletin, 88*(638), 28-40.
- Ingersoll, R. & Strong, M., (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of Educational Research, 81* (2), 201–233.
- Ingersoll, R., & Strong, M. (2012). What research tells us about the impact of induction and mentoring programs for beginning teachers. *Yearbook of the National Society for the Study of Education, 111*(2), 466-490.

- Israel, M., Carnahan, C., Snyder, K., & Williamson, P. (2013). Supporting new teachers of students with significant disabilities through virtual coaching: A proposed model. *Remedial and Special Education, 34*(4), 195-204.
- Jaspers, W. M., Meijer, P. C., Prins, F., & Wubbels, T. (2014). Mentor teachers: Their perceived possibilities and challenges as mentor and teacher. *Teaching and Teacher Education, 44*, 106-116.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational researcher, 33*(7), 14-26.
- Jones, N., Youngs, P., & Frank, K. (2013). The role of school-based colleagues in shaping the commitment of novice special and general education teachers. *Exceptional Children, 79*(3), 365-383.
- Keigher, A. (2010). *Teacher attrition and mobility: Results from the 2008-09 Teacher Follow-Up Survey. First Look*. NCES 2010-353. Alexandria, VA: National Center for Education Statistics.
- Kelley, L. M. (2004). Why induction matters. *Journal of Teacher Education, 55*(5), 438-448. Retrieved from: <http://doi.org/10.1177/0022487104269653>
- Kent, A. M., Green, A. M., & Feldman, P. (2012). Fostering the success of new teachers: Developing lead teachers in a statewide teacher mentoring program. *Current Issues in Education, 15*(1), 1-17.
- Krenn, H. (2017). *The Step by step guide to evaluation. How to become savvy evaluation consumers*. Battle Creek, MI: W.K. Kellogg Foundation. Retrieved from: https://courseweb.pitt.edu/bbcswebdav/pid-24398147-dt-content-rid-25484835_2/courses/2184_UPITT_EDUC_3007_SEC1500/WKKF_StepByStepGuideToEvaluation%281%29.pdf
- Lapan, S., Quartaroli, M., & Riemer, F. (2012). *Qualitative research: An introduction to methods and designs*. San Francisco, CA. Jossey-Bass.
- Lindell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology, 86*(1), 114-121. doi: <http://dx.doi.org.pitt.idm.oclc.org/10.1037/0021-9010.86.1.114>
- Linder, R. A., Post, G., & Calabrese, K. (2012). Professional learning communities: Practices for successful implementation. *Delta Kappa Gamma Bulletin, 78*(3), 13.
- Long, J. (2010). The fatal attraction of mentoring: Mentoring for retention of beginning teachers. *The International Journal of Interdisciplinary Social Sciences, 5*(2), 265-274.
- Madigan, J. B., & Schroth-Cavataio, G. (2012). *Mentorship of special educators*. Thousand Oaks, CA: Corwin/Sage.

- Mann, C. J. (2003, January). Observational research methods. Research design II: cohort, cross sectional, and case-control studies. (Research Series). *Emergency Medicine Journal*, 20(1), 54+. Retrieved from: http://link.galegroup.com.pitt.idm.oclc.org/apps/doc/A97821507/AONE?u=upitt_main&sid=AONE&xid=d5a231bd
- Marshall, K., Karvonen, M., Yell, M., Lowrey, A., Drasgow, E., & Seaman, M. (2013). Project ReSpec: Toward an evidence-based mentoring model for induction teachers. *Journal of Disability Policy Studies*, 24(3), 127-136.
- McLaughlin, M. (1987). Learning from experience: Lessons from policy implementation. *Educational evaluation and policy analysis*, 9(2), 171-178.
- McLeskey, J., Tyler, N., & Flippin, S. (2004). The supply of and demand for special education teachers: A review of research regarding the chronic shortage of special education teachers. *The Journal of Special Education*, 38(1), 5-21.
- McMurrer, J. (2007). *Implementing the No Child Left Behind teacher requirements*. Washington, DC: Center for Education Policy.
- Merriam, S. B. (2015). Qualitative research: designing, implementing, and publishing a study. In V. Wang (Ed.), *Handbook of Research on Scholarly Publishing and Research Methods* (pp. 125-140). Hershey, PA.
- Morrison, M.J. (2010). *The effects of induction, mentoring and local school culture on retention of beginning special education teachers*. Retrieved from ProQuest Dissertations and Theses. [http://libproxy.nau.edu/docview\(288412299\)](http://libproxy.nau.edu/docview(288412299)).
- Nance, E., & Calabrese, R. L. (2009). Special education teacher retention and attrition: The impact of increased legal requirements. *International Journal of Educational Management*, 23(5), 431-440.
- National Center for Educational Statistics, (2015). *National Center for Education Statistics*. Retrieved November 10, 2018 from: <https://nces.ed.gov/surveys/sass.pdf>
- Neill, S., Bland, P., Church, E., Clayburn, C., & Shimeall, W. (2011). Helping teachers be successful: Lessons for administrators. *Administrative Issues Journal: Education, Practice and Research*, 1(2), 54-68.
- New Teacher Center. (2016). *State policy review: New educator induction Pennsylvania*. Retrieved from: <https://newteachercenter.org/wp-content/uploads/SPR-pennsylvania-2016-v7-2.pdf>
- Odell, S.J. (2006). Designing and implementing quality mentoring programs: Overview and framework. In J.R. Dangel (Ed.), *Research on teacher induction: Teacher education yearbook XIV* (pp. 203-211). Lanham, MD: Rowman & Littlefield.
- Parsons, E. (2005). From caring as a relation to culturally relevant caring: A White teacher's bridge to Black students. *Equity & Excellence in Education*, 38(1), 25-34.

- Pearson, S. (2008). Deafened by silence or by the sound of footsteps? An investigation of the recruitment, induction and retention of special educational needs coordinators (SENCOs) in England. *Journal of Research in Special Educational Needs*, 8(2), 96-110.
- Perry, B., & Hayes, K. (2011). The effect of a new teacher induction program on new teachers reported teacher goals for excellence, mobility, and rates. *The International Journal of Educational Leadership Preparation*, 6(1), 1–12.
- Quinn, R., & Andrews, B. (2004). The struggles of first-year teachers: Investigating support mechanisms. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 77(4), 164-168.
- Saphier, J., Freedman, S., & Aschheim, B. (2002). *Beyond mentoring: Comprehensive induction programs: How to attract, support, and retain new teachers*. Teachers21.
- Schlichte, J., Yssel, N., & Merbler, J. (2005). Pathways to burnout: Case studies in teacher isolation and alienation. *Preventing School Failure: Alternative Education for Children and Youth*, 50(1), 35-40.
- Senge, P.M., Camron-McCabe, N., Dutton, J., Kleiner, A., Lucas, T., Smith, B. (2000). *Schools that learn: A fifth discipline fieldbook for educators, parents and everyone who cares about education*. New York, NY: Currency/Doubleday.
- Serpell, Z. (2000). Beginning Teacher Induction: A Review of the Literature. *American Colleges for Teacher Education*. Washington, D.C.
- Silins, H. & Zarins, H. & MSmith, T., & Ingersoll, R. (2004). What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal*, 41(3), 681-714. <http://doi.org/10.3102/01623737026003681>
- Snowden, D., & Boone, M. (2007). A leader's framework for decision making. *Harvard Business Review*, 85(11), 68.
- Strong, M. (2005). Teacher induction, mentoring, and retention: A summary of the research. *The New Educator*, 1(3), 181-198.
- Troman, G., & Woods, P. (2001). *Primary teachers' stress*. Psychology Press. London: Routledge.
- Veenman, S. (1984). Perceived problems of beginning teachers. *Review of Educational Research*, 54(2), 143-178.
- Williams, N. V., Gillham, J. C., & Evans, L. A. (2016). The preparation of new teachers for the profession: Ohio's resident educator program. *Leadership and Research in Education*, 3(1), 4-15.
- Wilson, N., & Lumadue, R. (2013). *Perceptions of an induction program from beginning teachers and teacher mentors in an urban school district* (Doctoral dissertation, Texas A & M University--Commerce).

- Whitaker, S. (2000). What do first-year special education teachers need? *Teaching Exceptional Children, 33*, 28-36.
- White, M., & Mason, C. Y. (2006). Components of a successful mentoring program for beginning special education teachers: Perspectives from new teachers and mentors. *Teacher Education and Special Education, 29*(3), 191-201.
- Wong, H. K. (2004). Induction programs that keep new teachers teaching and improving. *NASSP bulletin, 88*(638), 41-58.
- Yin, R., (2013). *Case study research: Design and methods*. (5th ed.). Los Angeles, CA: Sage.
- Zhang, Y., & Wildemuth, B. (2016). Qualitative analysis of content. *Applications of Social Research Methods to questions in Information And Library Science, 318*.
- Zhang, G., & Zeller, N. (2016). A longitudinal investigation of the relationship between teacher preparation and teacher retention. *Teacher Education Quarterly, 43*(2), 73-92.