

RESULTS OF AN EVALUATION STUDY OF INDUCTION AND MENTORING FOR BEGINNING SPECIAL EDUCATION TEACHERS: WHAT DO THEY NEED?

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Abstract

This study reviews the results from a three-year evaluation study of one local school district's induction and mentoring program for beginning special education teachers in the United States. Data were collected for two years, with an intervention implemented in year three. Results indicate that through strategic and intentional support, the district improved how it supported this unique group of novice professionals. Designing induction and mentoring programs with the intent to maintain and foster the professional development of beginning teachers has implications for supporting the district's intellectual capital in developing feelings of efficacy in teaching. Connecting induction and mentoring support with teacher preparation programs is discussed as a promising strategy to develop more systematic efforts in these areas. The essential skills for successful mentor teachers in support of learning focused relationships are identified.

Keywords: *Induction and Mentoring; Professional Development; Teacher Preparation; Special Education; Evaluation Study*

Introduction

A critical shortage of special education professionals across the United States and other countries, including the United Kingdom, Australia, China, and the United Arab Emirates currently exists (American Association for Employment in Education, 2009; European Agency for Development in Special Needs Education, 2010; Wang & Mu, 2014). The U.S. Bureau of Labor Statistics (2012) predicts that this critical shortage of special education teachers will reach 80,000 by the year 2020 within the United States. This projected shortage is a result of the increased numbers of students identified as needing services within special education, thus generating the need for teachers with this specialized training, combined with a larger number of teachers retiring from the field (Goldring, Taie, & Riddles, 2014). The lack of available special education teachers to meet current demand is documented within the United States and internationally (Martinez & Hallahan, 2000; Wang & Mu, 2014). To exacerbate this need, there is a lack of sufficient supply in teachers graduating from teacher preparation programs focusing on this population (Cook & Boe, 2007). In an attempt to address the lack of special education teacher preparation programs available, online and alternative licensure programs have appeared throughout the United States (Cochran-Smith, 2014). Ensuring future teachers are provided the necessary technical knowledge, skills and dispositions to effectively address the unique needs of students with disabilities is the continuing challenge, regardless of the preparation route.

Once teachers are trained, the next challenge is supporting them in the classroom so that they will remain in the field working with this population of students. Annual attrition rates of special education teachers vary and have been estimated to be as high as 22% (Aud et al., 2011), compared to 16% for all other teachers. Smith & Ingersoll (2004) found that first-year special education teachers were 2.5 times more likely to leave the profession compared with teachers

in general education settings. Similar findings have been identified by other investigations (Boe, 2006; McClesky, Tyler, & Flippin, 2004). Results of the 2012-2013 Teacher Follow-up Survey revealed that the second highest subgroup of teachers to leave the field after those who are retiring are teachers who have taught for one to three years (Goldring, Taie, & Riddles, 2014). An analysis of relevant research reveals common factors that play a role in teacher retention include extensiveness of teacher training, type and level of administrative supports, mentoring supports for early career special educators, working conditions, and school climate (Billingsley, Carlson, & Klein, 2004; Boe, Cook, & Sunderland, 2006; Cancio, Albrecht, & Johns, 2013; Dempsey, Arther-Kelly, & Carty, 2009; Goldring, Taie, & Riddles, 2014). Feelings of efficacy are important to those entering a helping profession. Future special educators want to know that they are making a difference in the lives of the students they teach.

School districts in the United States have formalized induction and mentoring programs to assist and encourage beginning teachers in their first year of practice (Berry, Hopkins-Thompson, & Hoke, 2002; Smith & Ingersoll 2004). The implementation and consistency of induction programs are largely left up to individual school districts to monitor. In addition, few districts have programs that are specifically designed to meet the unique needs of special education teachers who are new to the field (Billingsley, Griffin, Smith, Kamman, & Isreal, 2009). Providing induction and mentoring programs demonstrates promise in supporting beginning teachers' success (Drago-Severson & Pinto, 2006; Ingersoll & Kralik, 2004; Smith & Ingersoll, 2004). There is a need for additional research regarding the efficacy of providing induction and mentoring support for beginning special education teachers (Billingsley et al., 2009).

To identify and assess the unique needs and possible solutions related to special education teachers, the National Center to Inform Policy and Practice in Special Education Professional Development (NCIPP) was established through a United States Office of Special Education Programs (OSEP) grant. Throughout the course of a five-year funded project, NCIPP staff reviewed the research in this area and developed a series of research briefs. These staff members determined that special education teachers who are new to the field require specialized supports in areas such as inclusion, collaboration, and interaction with adults; pedagogical concerns; and support in managing and organizing paperwork (Billingsley et al., 2009). The NCIPP project identified and reviewed model school districts that were purposeful and successful in the support provided to beginning special education teachers (BSETs). Information gained from both research and practice has been utilized to provide strategic technical assistance to individuals at both state and local education agencies for the purpose of improving the induction and mentoring support to beginning practitioners.

Evaluation of One Induction and Mentoring Program

Scientific Problem: Given the challenges beginning special education teachers (BSETs) face their first year of teaching, what entry level skills do BSETs demonstrate at the start of their career; and what technical knowledge, skills and dispositions are lacking, especially considering the various routes of teacher preparation? How has one school district's induction and mentoring program worked to support BSETs and what can be learned from evaluating this work?

Aim of the research: The purpose of this article is to present the findings of an evaluation study that was conducted with one school district in the United States that had an established induction and mentoring program for BSETs which had never been formally evaluated. It was hypothesized that providing a supportive and structured induction and mentoring program would result in new teachers being better prepared to address the program goals identified by the school district, and become more effective special educators, regardless of the prior preparation to become a teacher. The current investigation is part of a larger evaluation study.

Methodology used: A team comprised of university faculty and school district staff, with technical assistance provided by NCIPP staff, worked together to design and evaluate the

induction and mentoring program for BSETs that had been operating at one district for thirteen years. The study was conducted over the course of three years. A survey was designed and distributed to new teachers at the end of their first year as practicing educators. During the final year of the project, those completing their second year of teaching were interviewed to determine the long-term effects of the district's induction and mentoring program for BSETs. Teachers were asked to consider what they had learned from their first year induction and mentoring program and what aspects they continued to use throughout their second year of teaching.

Survey Design

As part of the technical assistance provided by NCIPP, state and local education agencies involved with the project were guided through an informational webinar directing groups through a series of questions to support the development of program goals that were specific to each groups' induction and mentoring program. Those working on the project from the university-district staff reviewed and discussed the district's documentation regarding the induction and mentoring for all beginning teachers and identified four program goals: 1) Improve collaborative skills through opportunities for networking and reflective practices; 2) Understand essential district policies and initiatives that have professional implications for special educators; 3) Identify and access personnel and resources available for classroom and individual student support; and 4) Implement technical knowledge, skills and dispositions as they relate to their assignment as a special educator. Questions developed for the survey came from the program goals identified, as well as from questions posed from the district and university staff. Finally, NCIPP staff provided feedback on the developed questions and survey design to support the evaluation of an induction and mentoring program for beginning special education teachers that was based upon the existing literature and project goals.

Frequencies, means, and standard deviations were calculated to determine how participants respond to assistance in establishing an overall picture of perceptions relative to the construct of novice special education teachers. The instrument was designed considering both validity and reliability. Validity was first established by considering the areas of need identified by NCIPP's research and review of the related literature (i.e., increased perceptions of preparedness in the areas of inclusion, collaboration, and interactions with adults; pedagogical concerns; and managing and organizing paperwork). Second, the four program goals were factored into the design of the instrument. Reliabilities were established in the survey response options by ensuring they were consistent for participants through the use of a 6 point Likert scale (i.e., very well to not at all) and the format of the survey design was separated into sections having similar response formats. These two design aspects aided in decreasing non-response or incorrect response issues from participants, thus increasing reliability of the instrument (Kent, 2001). Cronbach's alpha was used to determine consistency in interpretation of the instrument (i.e., similarity in participant responses). Reliability was found to be high as the analysis yielded a Cronbach's alpha of .864 for questions two through eight (relating to teacher training) and .966 for questions 12 through 25 (relating to district induction and mentoring program).

University and school district staff collaborated in analyzing results. Information was reviewed using the *Statistical Package for the Social Sciences* (IBM SPSS Statistics 22) computer program. The intent of this evaluation was to determine the relationship among variables obtained from individuals in similar positions and stages of career development at three points in time to gain a better understanding of factors that contribute to making up a more complex characteristic (Mertens, 2005). The evaluation studied the variety of relationships among special education teachers new to the field at the end of their first of teaching. It was hypothesized that having a strong teacher preparation program, and a supportive induction and mentoring program, new teachers would be better prepared to address the Program

Goals identified by the school district, as well as become more effective special educators. District staff was also interested in learning of unique differences within the induction and mentoring program. University staff conduct end of year interviews for those completing their second-year of working as special education teachers (2014) to understand this population's perceptions regarding how their university training and the district's induction and mentoring support continued to inform their second year of teaching.

Years One and Two

At the end of year two of the project, the university-district evaluation team, with technical assistance from NCIPP, analyzed the results of the first two years of data and determined areas in which to intervene. The purpose of interventions was aimed at improving the district's induction and mentoring program based upon feedback received from beginning teachers. It was determined to focus on Program Goals #1 and #4, and this resulted in the alignment of Individualized Education Program (IEP) goal writing with the Common Core State Standards, along with a focus on collaboration with general education classroom teachers. Another change that was made between years two and three was the identification of a new mentor for beginning special education teachers. The composition of school district staff had changed due to retirements and selected staff members were moved to support the continued induction and mentoring programs throughout the district. This new mentor became a part of the evaluation team and was included in the project evaluation team. This person participated in subsequent meetings and decisions. District staff with position responsibilities as mentors are given a three-year assignment to support beginning teachers within the district. These mentors have five or more years of successful teaching experience, are considered master teachers based upon annual evaluations, and apply to work in this role.

Results

The school district supports hundreds of beginning teachers each year, along with teachers who are new to the district. Over the course of this project, a total of 378 teachers completed the mentor program designed specifically for beginning teachers and included those who teach at the elementary and secondary levels, mental health providers, school librarians, and speech-language pathologists. During the three years of the project, a total of 40 beginning special educators participated in this program. The district has one mentor with background in special education designated specifically for first year special education teachers.

Job assignments varied for the beginning group of special educators. Teachers reported they worked in the areas of early childhood special education, moderate intensity special education needs, severe intensity special education needs, learning disabilities, visual impairments and blindness, emotional-behavioral special education needs, and speech/language disabilities. Job settings also varied for teachers who reported working in general education classrooms, self-contained classrooms, learning labs, center-based programs, preschool settings and integrated learning centers [ILCs]. ILCs are a common setting within the district and is described as special education teachers and paraprofessionals providing direct and indirect support and services to students with disabilities by adapting curricula with the goal of supporting the least restrictive environment as that of the general education classroom to the greatest extent possible. Some teachers reported a combination of classroom settings, and others indicated their assignments were itinerant. Finally, teachers were asked to indicate their grade level and could choose more than one level. Teachers reported working at levels that included preschool, elementary, elementary as well as middle school, middle school level only, high school level only, and elementary, middle and high school levels combined. One teacher reported working in all levels while one teacher reported working in transitional services to post-secondary options.

Pre-Intervention Years (One and Two). Teachers were asked to answer questions based on a six-point Likert scale with responses choices ranging from very well to not at all. Questions addressed teachers' feelings of preparedness in working in their current position from the perspectives of their university teacher preparation program as well as the district's induction and mentoring program. As it related to their teacher preparation programs, participating teachers felt they were generally prepared for their current position ($X=4.56$). When reviewing other feelings of preparedness, teachers felt generally prepared to collect and analyze student assessment data ($X=4.61$), work collaboratively with general education teachers ($X=4.56$) and parents ($X=4.39$), and handle the behavior management challenges their students presented ($X=4.38$). Beginning special education teacher felt the least prepared to provide academic instruction for their students ($X=4.11$) and develop individualized education programs (IEPs) that were connected to content area standards ($X=4.17$).

An additional series of questions were asked that aided in evaluating the district's overall induction and mentoring goals. Teachers were asked a series of questions regarding their feelings of preparedness after completing the district's induction and mentoring program. As a group, teachers felt that the district's program generally prepared them to work in their current position ($X=4.26$), similar to their teacher preparation program. After completing a year long induction and mentoring program, participants felt most prepared to collaborate with other professionals ($X=4.61$), solve problems with other professionals ($X=4.43$), effectively implement the IEP process ($X=4.43$), and deal with instructional challenges ($X=4.35$). The novice teachers felt least prepared to collect and analyze data ($X=3.87$), effectively use technology in professional practice ($X=3.78$), and learn to solve problems with parents ($X=4.00$).

Intervention Year (Three). As indicated, district and university staff met between years two and three to discuss the results of the first two years of the project. Upon a review of these results, it was determined that the induction and mentoring program for beginning teachers would focus on Program Goals #1 and #4 and a subsequent focus on the alignment of IEP goal writing with the Common Core State Standards, including an emphasis on collaboration with general education classroom teachers. In addition, a new mentor for special education was brought in due to staff changes. The previous mentor remained involved with the project and took on the role of the lead for the Experienced Special Education Teacher Induction Program.

Intentional changes that were implemented included the mentor providing opportunities for BSETs to meet as a group to answer questions and address concerns more directly related to special education outside of gatherings that occurred for all beginning teachers. The mentor differentiated the planned implementation for the year for new teachers by focusing on feedback provided at the beginning of year three. This information coincided with the results of years one and two, in that beginning special education teachers identified concerns in applying the Common Core within special education and its alignment with IEP goals and objectives. Support was individualized and included instruction regarding how to access Extended Evidence Outcome (EEOs) standards in writing measurable goals that aligned with grade level standards and how to monitor progress in reaching these goals. Comfort and skill levels varied among the beginning teachers, and support was tailored to meet those individualized needs. Teachers were provided supplemental resources that included articles, books and available professional development opportunities from within the district. Teachers were encouraged to advocate for co-teaching trainings that addressed specifically identified needs including: collaboration with general educators and identification of common planning time, communication skills development that included personality and teaching style, and increased flexibility in scheduling.

These individualized areas of focus were achieved because the mentor established a trusting relationship within and among the group. The mentor was instrumental in supporting

beginning teachers in reflecting upon their teaching effectiveness and developing professional goals on self-identified areas of improvement. A unique aspect of the induction and mentoring program for beginning teachers was the tacit understanding that information shared between mentor and beginning teacher remained confidential and was not considered to be a factor in formal evaluation of the beginning teachers. The mentor role was defined as a coach who guides the novice teacher in self-discovery as it relates to the practice of teaching. It should be noted that the lack of formal evaluation responsibilities on the part of the mentor appears to be unique to this district.

Basic and advanced statistical analyses were conducted on the data collected in year three to be compared with data collected in years one and two. Based on a review of frequencies, means, and standard deviations, two observations were noted. First, questions two through eight of the survey asked participants to consider how well their *pre-service preparation program* prepared them for various aspects of their current position (e.g., collect and analyze data, work collaboratively with general educators and parents, handle behavior management challenges, provide academic instruction, and develop IEPs that are connected to content area standards). Little difference was noted in how participants responded between years one and two, and the intervention year three. Second, questions 12 through 25 asked participants to consider similar concepts regarding the effectiveness of the *district's induction and mentoring program* in preparing them for their current position. There were distinct differences noted in the means from years one and two, as compared with intervention year three.

These similarities and differences were confirmed when running a one-way analysis of variance (ANOVA). The purpose of running an ANOVA was to determine whether there were any significant differences between the means of three or more independent (unrelated) groups. Next, post-hoc analyses were conducted to determine which groups differed from each other (Huck, 2011). In looking at the independent variables of years for participants and the dependent variable of the intervention of change in the induction program, along with change in mentor, the results of year three indicate that there were no significant differences (2-tailed Sig. = 0.857, $p < 0.05$) in how participants responded to questions regarding their teacher preparation. There were, however, significant differences (2-tailed Sig. = 0.004, $p < 0.05$) in how participants responded to questions relating to the district's induction and mentoring program. This suggests that participants, as a whole, perceive that their pre-service training generally prepared them for their role as a special education teacher as they experienced it with the district. Furthermore, the district's induction and mentoring program was generally supporting beginning teachers in their special education roles, and changes noted for year three participants may be the result of district interventions implemented in year three. Moreover, the district appears to have made significant improvements to an already well-established induction and mentoring program for beginning special education teachers (Table 1).

Table 1. Program Analysis

Survey Questions	Beginning Teacher Results*			
	Year Assessed	Years 1&2 (N=22)	Year 3 (N=18)	≥ 0.50 <i>highlighted</i>
Q 12. How well did the induction and mentoring program WITHIN the School District <i>prepare you for your current position?</i>		4.26	5.11	0.85
Q13. How well did the School District's induction and mentoring program support you in <i>dealing with behavior management challenges</i> you encountered this year?		4.26	4.94	0.68
Q14. How well did the School District's induction and mentoring program support you in <i>dealing with instructional challenges</i> you encountered this year?		4.35	4.89	0.54
Q15. How well did the School District's induction and mentoring program support you in <i>improving your instruction</i> this year?		4.35	5.11	0.76
Q16. How well did the School District's induction and mentoring program support you in <i>thinking critically about your instruction?</i>		4.96	5.17	0.21
Q17. How well did the School District's induction and mentoring program support you in <i>collecting and analyzing data to inform your instruction?</i>		3.87	4.56	0.69
Q18. How well did the School District's induction and mentoring program <i>help you learn to solve problems with other professionals?</i>		4.43	5.22	0.79
Q19. How well did the School District's induction and mentoring program prepare you to <i>collaborate with other professionals?</i>		4.61	5.17	0.56
Q20. How well did the School District's induction and mentoring program help you <i>learn to solve problems with parents?</i>		4.00	5.00	1.00
Q21. How well did the School District's induction and mentoring program prepare you to <i>effectively implement the IEP process?</i>		4.43	5.17	0.74
Q22. How well did the School District's induction and mentoring program support you in <i>understanding the essential district policies and initiatives relevant to special educators?</i>		4.65	4.94	0.29
Q23. How well did the School District's induction and mentoring program prepare you to <i>access resources relevant to special educators?</i>		4.22	5.06	0.84
Q24. How well did the School District's induction and mentoring program prepare you to <i>effectively use technology</i> (e.g. PowerSchool, EXCEED, instructional and assistive technology) in your professional practice?		3.78	4.83	1.05
Q25. How well did the School District's induction and mentoring program support you in <i>reflecting on your professional practice?</i>		4.96	5.22	0.26
Q26. To what extent would you agree or disagree with the following statement: <i>I am a better special education teacher because of participating in the School District's induction and mentoring program.</i>		4.34	5.11	0.77

*2-tailed Sig. = 0.004, $p < 0.05$ for Q12-25.

Differences noted in the means for first year teachers included responses to the following items: learning to solve problems with parents, effectively using technology, feelings of preparedness for their current position, and access to district resources. These findings are similar to what has been identified in the research literature indicating that first year teachers need supports in interactions with adults, and in managing and organizing paperwork (Billingsley et al., 2009).

Interview of Second Year Teachers. As a follow up to this collaborative project, both district and university staff were interested in understanding the effects of the district's induction and mentoring program for those completing their second year of teaching. Research suggests that effective teacher preparation along with induction and mentoring supports positively impacts teacher performance and may impact longevity within the field (Darling-Hammond, 2000; Miller, Brownell, & Smith, 1999). Graduates of the 2012-2013 induction and mentoring program were interviewed in April, 2014 to determine what content from the mentoring and induction program were identified by special education teachers for continued applications during their second year of teaching. An additional purpose of the interviews was to solicit suggestions for program improvement.

A graduate student and faculty member from the university partner conducted the interviews. A list of all possible second year special education teachers who completed the program during the 2012-2013 academic year (N = 14) was provided to the researchers. Teachers were contacted via emails and phone calls, with two follow up attempts to solicit participation. A total of eight teachers (57%) indicated their willingness to participate in a twenty minute phone interview. Questions were sent to the participants prior to the interview. Finally, teachers indicated their consent to participate by reviewing the consent form and provided their names using Survey Monkey. Information was analyzed using systemic coding procedures for the purpose of identifying themes and categorizing units of information (Lincoln & Guba, 1985).

Interview Themes. First, participants verified that they participated in the district's induction and mentoring program for beginning teachers the previous year. They were all new to the district and all completing their second year of teaching. Next, the focus of their teacher preparation program experiences was at the elementary/primary level. As a group, they wished they had received more secondary education experiences within their teacher preparation programs. Learning how to adapt and develop experiences for students at the secondary level was an identified area of need. Third, as a group, they would have liked to have received more experiences writing Individualized Education Programs (IEPs) from both their teacher preparation program and district induction and mentoring programs. They also indicated a preference for more experiences working with the computer software required to develop and implement IEPs, and more information regarding the legal aspects and how to effectively run IEP meetings. Finally, special education teachers who had training in the same area(s) as their mentor (e.g., Emotional Behavioral Disabilities, Severe Intensity Special Education Needs, etc.) felt the experiences and support from their mentor was more valuable than as compared with special education teachers who had training or assignments different than their mentor (e.g., ILC). For example, one Speech Language Pathologist wanted to know why she was assigned a mentor with background in special education, rather than speech pathology. While the mentor was helpful in understanding district policies and procedures, the mentor was less helpful in questions she had pertaining to her area of expertise. In addition, experienced teachers from the same building and department who worked with beginning teachers were helpful as a supplement to beginning teachers' program mentor (e.g., other ILC teachers). Again, one beginning teacher who worked in an ILC with students with Severe Intensity Special Education Needs shared that having teammates with whom she interacted with on a daily basis were more helpful to her teaching than her mentor with whom she interacted with on a weekly basis.

Beginning special education teachers indicated that toward the end of their first year the information shared from their mentor became redundant. They did not appear to have as much need for their mentor as compared to the beginning of their first year (i.e., first 6 months of teaching, compared with last few months of school year). There appeared to be a shift in level of needs for the beginning teachers as the year progressed. Toward end of year teachers expressed that they experienced more time conflicts, as compared with the beginning of the school year. They did not appear to ‘need’ their mentor as they did in beginning of year. Beginning special education teachers did not need to see mentor or have mentor observe them every week, expressing they would have preferred to meet every other week so as to have more time for teaching.

Conclusion and Considerations

The goal of this evaluation project was to assess one local school district’s induction and mentoring program specifically provided to beginning special education teachers to make informed decisions regarding information learned and possible changes for program improvement. Results indicate that a local school district’s intentional focus to improve their induction and mentoring program for beginning special education teachers produced the following outcomes:

- A greater focus on writing goals and objectives within the IEP that are connected to the Common Core State Standards,
- Additional skill in the use of assessment data for the development of IEP goals and objectives,
- Better approaches to monitor and collect data in the day-to-day classroom settings,
- Supported opportunities for beginning teachers to work more effectively with general education teachers.
- Improvements in how beginning teachers perceived they are supported from the district’s induction and mentoring program.

An area of improvement that was considered was how teachers can be better supported in the IEP process. When reviewing teachers’ perceptions of preparedness from their teacher preparation program as compared to implementation within the district, teachers felt better prepared to develop individualized education plan documents that were connected to content area standards, however, these same individuals felt less prepared to effectively implement the IEP.

These findings may be typical of initial professional development. Understanding the theory of a construct and implementing that theory in real-life situations is relative to higher level thinking skills. Considering Bloom’s taxonomy (Anderson & Krathwohl, 2001), typical development of new understandings follows the process of knowledge, comprehension, application, analysis, synthesis and evaluation. For example, the process of learning through Bloom’s Taxonomy guides students through the process of remembering new content, demonstrating their understanding of new content, applying information learned in actual situations, breaking down concepts into smaller parts and finding evidence to support generalizations, compiling ideas to create new whole or purpose alternative solutions, and finally making and defending judgments based on internal evidence or external criteria. These progressions in understandings are provided within teacher preparation programs using case studies and simulations.

Once employed within a school district, implementing the IEP process involving real students, parents and professionals may result in new understandings when applying Bloom’s taxonomy and intentional support is needed using this same progression. District staff may want to consider each of the six levels when offering support to special education teachers who are new to the field. Understanding the individual needs of teachers relative to the cognitive, affective, and psychomotor domains of the taxonomy as applied to understanding the IEP process may aid in improving individualized supports.

An area of improvement that was identified in years one and two was the need for additional expertise in collecting and analyzing data. Again, when reviewing teachers' perceptions of preparedness from their teacher preparation program as compared with their induction and mentoring program, teachers felt less prepared to apply data that was collected and analyzed to inform instruction once they are working in the field. This may also come back again to Bloom's taxonomy as it applies to contemporary practices and implementation when using district data. It would be beneficial for teacher preparation programs to work with school districts to strategically and intentionally address real-world data collection and analyses during field experiences that are supported by pre-service mentors and district mentors. Understanding the degree to which teacher preparation programs are addressing contemporary practices such as Multi-Tiered Systems of Support (i.e., Response to Intervention and Positive Behavioral Intervention and Supports) and the related progress monitoring practices may aid in understanding the differences in perceptions of preparedness.

The final area of program evaluation for district staff was implementation of technical knowledge, skills and dispositions as they relate to their assignment as a special educator. Pedagogical knowledge was assessed as being relatively strong for those completing the survey. Teachers felt the district induction and mentoring programs better prepared them for their current position, as compared to the more general information provided by their teacher preparation program. Skills and dispositions associated with implementation may be better understood through analyses of administrator evaluations that are conducted four times throughout the first year of the new teacher. Analyzing teacher evaluation data and sharing this information with induction and mentoring staff may inform the district regarding how the induction and mentoring programs might better support teachers new to the district and field through intentional connections. A topic for further inquiry is the degree to which building principals share observations and concerns with district and building mentors so as to provide the best support possible. Through this project, district staff identified and implemented plans to improve the connection among building mentors, building principals and district mentors during the year of induction and mentoring. It is postulated that this will aid in improving technical knowledge, skills and dispositions of special educators new to the field and district long term.

This study has the potential to inform teacher preparation programs to address ongoing improvement. Regardless of the training route, preparation programs need to improve the connection between theory and practice through intentional and authentic field experiences that consider how best to work with students with special needs in the areas of assessment, behavior, and educational planning. The findings of this study support the literature reviewed by Billingley et al. (2009) and preparation programs may wish to consider how to operationalize suggestions provided by the National Council for the Accreditation of Teacher Education (NCATE) Blue Ribbon Panel Report (2010) challenging preparation programs to take a clinical approach to teacher preparation. Focusing on the findings of this study, preparation programs can be more purposeful when working with school districts during teacher candidates' field experiences by using authentic processes and procedures for making instructional decisions, identifying special education programs and classroom teachers who are intentional in the behavior management techniques applied, and by providing teacher candidates opportunities to review student educational plans that focus on authentic assessment and behavior dimensions.

The requirements for successful induction and mentoring programs for beginning special education teachers are predicated on the availability of mentor teachers who can demonstrate the essential knowledge and skills required of the teacher leadership role. Teacher leaders rely on influence gathered from the wisdom of practice, and the acquisition of transformational leadership behaviors that entice novice teachers to become a vital part of a school's organizational culture. The model of adaptive leadership (Heifetz, Grashow

& Linsky, 2009) provides a conceptual guide for teacher leaders who assume positions of influence in support of novice teachers that prepare them for the complexities of the teaching profession. The traditional response to complex challenges, frequently demonstrated through the “quick fix” that is readily available to solve technical problems, does not work in the context of adaptive challenges that require fundamental shifts in the way teacher leaders think and behave. The concepts of embracing disequilibrium, generating leadership, and taking responsibility for personal actions provide a strong foundation that guides the actions of the adaptive teacher leader. Some descriptors that distinguish the qualities of the adaptive leader include the following:

- Leaders are like oysters (sufficient irritation eventually produces a pearl).
- Leaders attract and direct attention to an issue.
- Adaptive leaders recognize that creative tension is a very different holding environment than emotional tension when developing a broader repertoire of professional practice in the beginning teacher.
- Leadership from teachers who are assigned the role of coach or mentor does not require formal authority.
- The responsibilities of teacher leaders are focused on identification of adaptive work for new teachers are value-laden (both conservative and progressive ideologies).
- People with the problem ARE the problem, and they are the solution.
- Adaptive work requires a longer timeframe than technical work.
- Adaptive work is experimental.
- Adaptive challenges generate disequilibrium and avoidance.
- Leaders are always failing someone!

Heifetz and Linsky (2002) draw a clear distinction between technical problems and adaptive challenges in their ongoing work identified as “leadership without easy answers.” The distinctions between technical problem orientations contrasted with an adaptive challenge orientations to managing change are quite striking. These considerations on the critical dimensions of direction, protection, conflict, and norms are summarized in Table 2.

Table 2. Considerations from Technical and Adaptive Leadership

Area of Focus	Technical Leadership	Adaptive Leadership
Direction	Provide both the definition and solution to the problem	Frame issues for consideration by apprentices and identify key questions to consider
Protection	Protect novice teachers from external threats	Disclose external threats and inform novice teachers of potential challenges
Conflict	Restore order and protect novice teachers from conflict	Expose conflicts and encourage novice teachers to confront challenges
Norms	Maintain commitment to operational norms and agreements	Allow challenge to norms and support challenges within the organization

The focus of teacher leadership from an adaptive paradigm is defined as mobilizing adaptive work through leadership as an activity, with or without authority, not defined by personality, traits, power, influence, or position. An important consideration for teacher leaders who pursue the roles of coach and mentor is to maintain the quality of heart that seeks to engender positive responses to adaptive challenges among all teachers and specialized

instructional service provides. When the values that define the teacher leader who provides leadership without easy answers become compromised, a different level of understanding and support emerges. The innocence and imagination that characterizes the strong teacher leader becomes cynicism, dressed up as realism. The curiosity and doubt that signifies openness to new ideals becomes arrogant certainty, dressed up as authoritative knowledge. Most importantly, the compassion that defines an authentic leader becomes callousness, dressed up as the thick skin of experience.

The critical skills that support an effective mentor relationship with new teachers are provided through learner focused dynamics that provide support, challenge, and creation of personal vision (Wellman & Lipton, 2003). Costa and Garmston (2002) identified a model of cognitive coaching as the nonjudgmental mediation of thinking that allows beginning special education teachers to improve by encouraging self-directed learning to improve instruction. The role of mentor and coach is expected to provide varying levels of challenge and support, depending on the specific demands of a classroom-teaching situation. The framework of questions that mentors apply to analyze the success of coaching impact include the following:

- Consciousness of thinking: Is the mentor aware of the beginning special education teacher's intentions, conclusions, and perspectives on teaching?
- Efficacy: Does the mentor engage the novice teacher to apply thinking in becoming increasingly resourceful as a problem solver?
- Craftsmanship: Is the mentor engaging the beginning teacher in reflection, introspection, and analysis?
- Flexibility: Can the mentor invite the novice teacher to project, diverge, or increase flexibility in perspective taking?
- Interdependence: Does the mentor maintain a trusting relationship with colleagues?

The systematic attention to the requirements for effective mentoring relationships is an important predictor of induction and mentoring program success. The ability to provide supervision on a continuum from directive to independent structures relies on a progression of skills ranging from listening/clarifying/encouraging (independent), through problem solving/negotiating (collaborative), to directing/reinforcing (directive). Glickman, Gordon and Ross-Gordon (2010) highlight the importance of mentoring and supervising as a developmental process focused on improving teacher effectiveness. A focus on peer coaching provides a recognizable structure to support teachers for personal improvement that improves outcomes for students.

Finally, it is important that university teacher preparation programs take the initiative to establish partnerships with schools and classroom teachers in support of their teacher candidates through structured and intentional relationships between classroom teachers and university supervisors. Involving district induction mentors in teacher candidate field experiences is one way to purposefully encourage a fluid transition from pre-service teacher preparation to effective beginning special education teacher.

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RESULTS OF AN EVALUATION STUDY OF INDUCTION AND MENTORING FOR BEGINNING SPECIAL EDUCATION TEACHERS: WHAT DO THEY NEED?

Summary

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A partnership of school district staff and university faculty worked in partnership, with assistance from the National Center to Inform Policy and Practice in Special Education Professional Development, to evaluate the school district's induction and mentoring program for beginning special education teachers. This collaborative effort continued through three cycles of induction and mentor programming over a period of three calendar years. Teachers completing the program were asked to participate in a survey at the end of their first year of teaching. During the final year of the study, those completing their second year of teaching were asked to participate in phone interviews regarding the continued impact of the school district's induction and mentoring program. The goal was to evaluate the impact of an established induction and mentoring program specific to beginning special education teachers and make informed decisions regarding effective practices and possible changes to the program.

A survey was given to beginning special education teachers at the end of their first year to teaching. Year one and two results indicated that program goals of improving collaborative skills, opportunities for networking, and reflective practices were areas of need. At the beginning of year three of the project, the school district made the decision to intentionally focus on improving their induction and mentoring program for beginning special education teachers by focusing on writing Individualized Education Program (IEP) goals and objectives that are connected to the Common Core State Standards, providing training sessions that incorporated the use of assessment data in the development of IEP goals and objectives, focusing on better monitoring and data collection in the day-to-day classroom

settings, and training beginning teachers in working more specifically with general education teachers. Improvements were seen in how beginning teachers perceived the support provided from the district's induction and mentoring programs. Findings of the evaluation study indicated that as a result of these intentional changes, beginning special education teachers perceived they were better supported by the district's induction and mentoring program as compared with the previous two years of program completers. These feelings of efficacy may translate into longevity within the school district, as well as the field. Longitudinal studies assessing the effects of continued support in the form of professional development are needed. Information learned through this evaluation study can be used to inform how teacher preparation can better prepare pre-service teachers entering the teaching profession.

The critical skills that are necessary for educators to assume the important roles of coach and mentor for beginning teachers are found in the emerging literature on teacher leadership. Teacher leaders demonstrate facility with the concept of adaptive leadership that does not require formal authority to ensure successful performance in support of novice teachers. Teacher leadership from an adaptive paradigm is defined as mobilizing adaptive work through leadership as an activity, with or without authority, not defined by personality, traits, power, influence, or position. The cultivation of learning focused relationships supports an effective program of mentoring and induction support for beginning special education teachers.