

Identifying the Needs of Intern Teachers in High Needs Areas of the Profession: District “Must Knows” for Providing Supports and Closing the Hiring Gap

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ABSTRACT

The pandemic has exacerbated teacher attrition in California with 88% of the hiring demand in high needs areas of education (Darling-Hammond et al., 2018). The shortage of credentialed teachers has increased the need to fill positions with intern teachers who have limited or no teaching experience. This is most prevalent in special education, mathematics, and science. Many intern teachers will leave the profession within the first two to five years of service. The impact will take its toll on the students with the greatest needs. This study explored the support and training needs of intern teachers in high need areas; critical components support systems needed to recruit, retain, and increase intern teacher longevity; and the existing systems of support for the intern teacher's success and retention. The findings may assist school administrators and university faculty in designing support systems for preparing, coaching, and supporting intern teachers to ensure their success in the profession.

Keywords: university coach, district support provider, intern teacher, a system of support, teacher shortage

A decline in the education labor force threatens public education systems and jeopardizes student achievement. According to Garcia and Weiss (2019), “the teacher shortage is real, large and growing and worse than we thought” (p. 2). Districts across the country are struggling to hire sufficient numbers of fully credentialed teachers. Projections forecasted that “by 2020, an estimated 300,000 new teachers would be needed per year, and that by 2025 that number would increase to 316,000 annually” (Sutcher et al., 2016, p. 16). The National Occupational Employment and Wage Estimates for the United States (U.S.) (2019) forecasted that employment needs would rise by close to four percent in special education and nearly two percent in the fields of science and mathematics.

Since 2017, the teacher shortage has expanded to subject areas historically not seen before, including social studies and world languages. According to Espinoza et al. (2018), an increase in teacher hiring, a decline in enrollment in teacher education programs, and a high teacher attrition rate have fueled the teacher shortage.

The literature review below explores the teacher shortage at the national and state level and investigates factors that contributed to the shortage. It also examines the evidence-based policy solutions and initiatives recommended by researchers and leaders in the field (Espinoza et al., 2018; Garcia & Weiss, 2019, Toropova et al., 2020). As noted by Goldring et al., (2014), teacher job satisfaction has been found to increase teacher retention and teachers' level of commitment to the profession.

Thus, the purpose of the study is to investigate the perceived areas of needed support and the levels of professional confidence as reported by intern teacher participants in a large urban K-12 school district. The survey data and focus group data will be useful to district and university faculty who may want to create a system of support to increase intern teachers' levels of confidence and to determine the existing quality of training and feedback being provided by their mentors and school leaders.

LITERATURE REVIEW

Garcia and Weiss define shortage as “the inability to staff vacancies at current wages with individuals qualified to teach in the fields needed” (2019, p.2.). According to Sutcher et al. (2016), the projected teacher supply and demand is estimated to quadruple by 2025. These numbers could be even higher as the COVID-19 pandemic and new variants of the virus continue to fatigue educators across the country. Early indicators reveal that teachers are electing not to return to the classroom, and schools nationwide are scrambling to find replacements. Additionally, districts are seeing a surge in retirements and an increase in the number of leaves of absence being requested by teachers (Lachlan et al., 2020).

Darling-Hammond et al. (2018) underscore the consequences of the declining workforce and its impact on students’ academic performance, teacher effectiveness, and the potential to vitiate the reputation of the profession. The U.S. Department of Education (2019) found that in almost every state in the nation there were large numbers of unfilled vacancies. In California, in 2014-2015, Sutcher et al. (2016) found that the California teacher shortage led to the hiring of 7,700 new teachers, 33% of whom were hired on emergency and temporary permits. Data from the California Commission on Teaching Credentialing (CTC) revealed a significant increase in intern teacher hires between 2014 and 2019, with approximately 2,200 interns hired to teach in the area of special education alone. “In special education, shortages are a five-alarm fire. The most vulnerable students -with the greatest needs- who require the most expert teachers are those with the least qualified teachers” (Darling-Hammond et al., 2018, p.11). In 2015–2016 and 2016–2017, one out of five teachers in special education left their positions, a ratio comparatively higher than seen in other areas of the profession. “In math, the number of fully prepared candidates holding preliminary credentials has decreased by 50% in six years, while the number holding intern credentials has increased by almost 80% in the same period. Similar patterns exist in science” (Darling-Hammond et al., 2018. p. 13).

Increased class size, an increase in non-teaching responsibilities, lack of high-quality preparation, inadequate support, and stagnant compensation (below that which is needed to sustain costs of living), have all had a hand in dissuading prospective teachers from entering the high needs areas of the teacher shortage (Billingsley & Bettini, 2019; Ondrasek et al., 2020). These statistics are alarming as they also have severe implications for the pipeline of applicants needed to go into the profession, particularly the high needs areas, such as special education, mathematics, and science.

States with lower salaries and more impoverished working conditions have even greater shortages, which often results in less support and training for the new teacher and fewer resources for the classroom. These dynamics lead to a revolving door of teachers who become disillusioned and leave the profession after only a year or two of service. As noted by Garcia & Weiss (2019), the teacher shortage is not caused by a single condition or factor; “multiple and interdependent drivers, all working simultaneously, cause the imbalance between the number of new teachers needed (demand) and the number of individuals available to be hired (supply)” (p.11).

Further, Darling-Hammond et al. (2018) noted that increased shortages suggest that new and experienced teachers may be even further discouraged and challenged by the following factors: increased levels of student apathy, a greater emphasis on testing and accountability, a lack of administrative support, lack of parental involvement, personal safety concerns, high student absenteeism, and a lack of training to deal with these issues.

As such, Sutcher et al. (2016) identified six national critical policy solutions to boost teacher recruitment and retention efforts, included in which are (a) service scholarships and loan forgiveness programs, (b) high retention pathways, mentoring and induction, (c) competitive compensation, and (d) recruitment policies to expand the qualified educator pool. California, like a few other states, has begun taking steps to close the hiring gap. In 2018, the California legislature designated \$45 million to help classified staff become certificated, \$10 million to start new undergraduate programs for teacher education, and \$5 million to launch a center on teacher careers and a resource center for teaching candidates. Another \$75 million was earmarked to support teacher residencies and to recruit and retain teachers in high needs areas and in bilingual education. Additionally, another \$50 million was set aside to recruit and retain special education teachers. However, as Garcia and Weiss (2019) point out, it could take three to five years before results are known, and only time will determine if the funds will have made a difference.

Alternative Credentialing Pathway

Aspiring teachers in California have two different options for obtaining their teaching credentials: the traditional pathway or an alternative pathway. The traditional pathway typically consists of up to two years of post-baccalaureate preparation courses, including field experience and clinical practice experience. The alternative pathway permits an intern teacher to complete all coursework and field experience while also being the teacher of record in a paid position. An

Institution of Higher Education (IHE) or a school district, county office of education, or a consortium of districts may offer the intern credential. All intern programs must be approved by the California Commission on Teacher Credentialing (CTC) and must meet Commission-adopted standards (Suckow & Lau, 2019).

In addition to providing coursework, the intern teacher program must also provide support from university and district personnel. Additionally, the CTC requires that intern teacher programs and districts implement a mentor model since the “[e]vidence suggests that strong induction and support for new teachers can be an effective policy to ensure well-prepared individuals remain in the classroom” (Espinoza et al., 2018, p.16). The CTC-recommended model requires that a mentor in the same field or teaching assignment as the intern be assigned to support, coach, and guide the new teacher during the first and second years of teaching. Additional support might also include regular collaborative planning and articulation meetings with colleagues as well as scheduled networking opportunities with other teachers in the field. There may also be a minimum number of mandated formal and informal annual observations for mentors to provide constructive feedback and reflection time to the intern mentee (Darling-Hammond et al., 2017).

The Research Site

This study was conducted in a large urban school district in California. The district employs, on average, about 75 intern teachers annually. The district enrolls over 100,000 K-12 students and serves a diverse population, with more than 60 language groups and 15 ethnic groups represented. Fifty-five percent of the total student population is eligible for free and reduced-price meals. Additionally, English learners (EL) comprise 25% of the total student enrollment, and 14% of students receive services through a special education program.

The district employs over 5,000 teachers (California Department of Education, 2020), and it reported in the 2020-2021 Estimated Teacher Hiring Report that it was anticipating hiring 500 new teachers to fill positions in special education, math, English, social studies, and foreign languages (California Department of Education, 2020).

The Research Problem and Purpose

In 2016, the district had exhausted its pool of fully credentialed teacher applicants. To fill these vacancies, they hired intern teachers. In 2018, a review of the district’s intern teacher retention data raised questions about the high departure rate of this population of teachers. In that year (2018), the district employed 69 intern teachers and was in a continuous recruitment-and-hiring cycle to maintain adequate staffing levels, particularly in the high need areas of special education, mathematics, and science. Hence, the purpose of this study was to ascertain the confidence levels and perceived needs of, as well as existing support for, intern teachers in a large urban school district, as well as to explore the reasons for lack of retention.

The Research Questions

The goal of this study is to identify critical components of a system of support as perceived by intern teachers, based on self-reported perceptions. Additionally, the self-report instrument sought to ascertain the intern teachers’ level of confidence in eight areas of their teaching responsibilities. The data from this survey may be utilized to create a system of support for intern teachers where the goal is high-quality teaching, recruitment, retention, and teacher longevity. The mixed methods data collection and data analysis will serve to answer the following questions:

1. What are the support and training needs of intern teachers in high needs areas of the teaching profession?
2. What are the intern teacher’s perceived levels of confidence in critical areas of teaching including pedagogy, collaboration, positive behavior supports, and assessment of the IEP process?
3. What are the existing supports that facilitate intern teacher success and retention?

METHOD

The design of this exploratory sequential mixed methods approach is grounded in the existing body of knowledge on the national and state teacher shortage. Further, the information may assist school administrators, university faculty, and policymakers in designing systems of support needed to recruit, attract and retain interns in high need areas of the teaching profession. The use of this design permitted the researchers to investigate and inquire into the support and training needs of the participants through an open and unstructured format that was guided by the interns’ personal experiences and

perceptions. The data collection was conducted through the administration of an initial survey and with subsequent focus group interviews. Finally, the quantitative and qualitative data were reviewed, analyzed, and compared to determine if potential trends existed to determine the types of supports and needs of the interns.

Participants

Participants were randomly selected from a convenient sample of 74 first- and second-year intern teachers who were invited to participate in the study. Participation was voluntary, and candidates signed *affirmations of participation*. For the Needs Assessment, which provided the quantitative data, 40 participants returned the initial survey. Ten of the 40 participants were randomly selected for focus group interviews. The interviews provided the qualitative data for this study.

Instrumentation

The instrumentation for this study included one needs assessment survey and focus group interviews. The use of multiple data collection sources (survey and focus group interviews) allowed for comparison and corroboration across data sets.

Survey

The Intern Teachers Needs Assessment Survey (ITNAS) was sent through district email using JotForm. Of 74 surveys sent, data were received and tabulated from 40 respondents, resulting in a 55% return rate. Intern teachers were informed that the survey was anonymous. The needs assessment was developed by the researchers and explicitly designed for the purposes of this study. The ITNAS included adapted questions from the *Inclusion Checklist* (Villa & Thousand, 2016) for special education, while other questions were customized to correspond to this study's purpose. The survey consisted of 49 items that solicited teacher intern perceptions utilizing a four-point Likert scale (e.g., Confident, Moderately Confident, Somewhat Confident, and Not Confident). The first five questions of the survey were based on the intern's current teaching assignment. The next six questions asked about the information and resources available to facilitate the onboarding experience, three questions referenced the quality of feedback, two questions inquired about the frequency of collaboration, and fourteen questions focused on the intern teachers' level of confidence in various areas of teaching: pedagogy, behavior support and management, the IEP process, assessment, data collection, analysis of data, and the value of coursework. The survey also included open-ended questions that prompted elaboration on additional potential areas of support and provided qualitative data.

Focus Groups Interviews

Focus group interviews were a critical counter to the survey and provided the narrative that broadened previously obtained information. Ten intern teachers were blindly and randomly selected from the pool of 40 respondents who returned the survey. Eight of the participants opted to attend face-to-face interviews, and two chose to participate via video conferencing. The participants were all informed of their voluntary participation and that the interview was being recorded and transcribed. They were told the purpose of the study after they completed the interview.

The interview protocol consisted of seven semi-structured questions that paralleled the sections of the ITNAS. The questions were designed to elicit the interns' support needs relative to their experience and confidence in their teaching assignment, the quality of the training received from district administrators and other personnel, and the quality of feedback received from their district support provider and university coach. The researchers informally facilitated the interviews.

Data Collection/Data Analysis

The mixed-methods data collection provided a platform for the convergence of data to examine with greater depth areas where the interns identified a need for additional support and professional development. The qualitative data (e.g., focus interviews, open-ended survey responses) were analyzed using a manual coding system. The voice-recorded interviews were then transcribed. Later, the researchers worked independently to identify recurring words and phrases.

The quantitative data (e.g., Likert responses) from the ITNAS were tabulated by percentages and median and mean scores using Excel software. These descriptive statistics were analyzed and ranked to rate the interns' satisfaction with availability of resources, quality of feedback and frequency of collaboration. A cross-analysis of the Likert ratings and open-

ended questions provided information as to the confidence level of interns in critical areas of teaching. Lastly, all three datasets (the ITNAS, open-ended questions and the focus group interviews) and the subcategories that emerged from them provided information that corresponded to the three research questions.

RESULTS

The open-ended section of the survey addressed the first research question: What are the support and training needs of intern teachers in high needs areas of the teaching profession? In response, four predominant categories emerged: (a) technology, (b) specific academic needs, (c) behavior management, and (d) special education and compliance.

Technology was a high priority with the interns indicating the need for more training in the district's data and learning management system (i.e., PowerSchool), the district's Individualized Education Program (IEP) web-based system (i.e., SEAS) and other software programs and tools to support instruction (i.e., google classroom, Unique, News2You, Boardmaker, iPad, smart board). The greatest obstacles reported to meeting this need were the lack of training, lack of time, and lack of equipment.

The second greatest area of need identified was how to meet the specific academic needs of students. In this realm, the interns underscored the necessity for additional support in differentiation and curriculum adaptations, and instructional delivery models.

The next priority was found in behavior management where open-ended responses revealed the need for additional training and support. For example, “[I] would like more feedback on how to integrate restorative practices into my own classroom,” “behavior supports” and “classroom management.”

The fourth area of noted concern was in special education and compliance. Specifically, the interns identified the following: IEP development, the IEP process, timelines, accommodations and modifications, data collection and assessments, and articulation and training for support staff.

Levels of Confidence

An analysis of the quantitative and qualitative data provided the answer to the second research question: What are the intern teacher's perceived levels of confidence in critical areas of teaching? The Likert scale items on the survey and the focus group interviews revealed four distinct categories: pedagogy, behavior support, assessment, and the IEP process.

In the category of pedagogy (Figure 1), the majority of respondents indicated that they felt very confident (3.20) with establishing and maintaining classroom routines and transitions but felt less confident (3.08) in differentiating the content of the curriculum, especially for students with disabilities. The respondents also indicated they felt slightly less confident (3.05) in developing tasks and activities involving the teaching of standards, aligned activities, assessments, and the developmental sequence of instruction.

In response to the two questions regarding the confidence level of interns in using positive reinforcement strategies versus behavior support strategies, the interns indicated feeling only slightly more confident in one area than the other (Figure 2). In response to the implementation of positive reinforcement strategies, the interns showed just a slightly higher level of confidence with a mean score of 2.70 in the use of positive reinforcements as opposed to the use of behavior support strategies when responding to inappropriate behaviors (means score of 2.42).

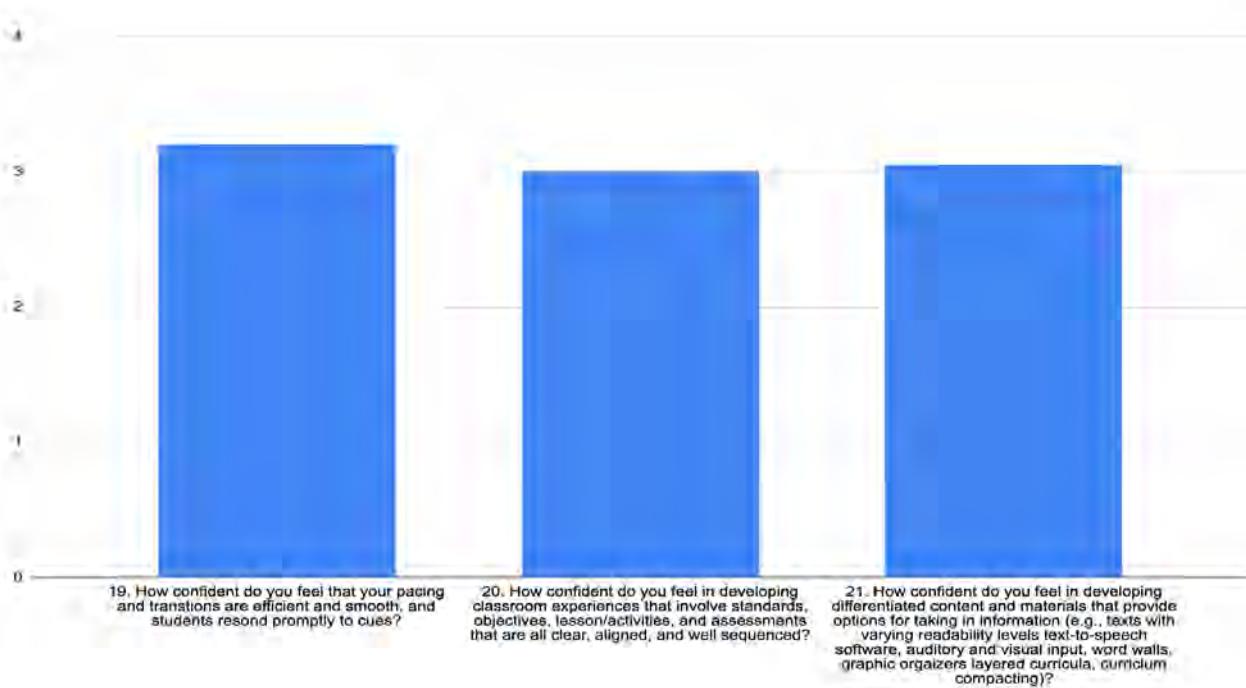
Figure three assessed the interns perceived level of confidence with assessments. When asked about their confidence level in designing assessments that enable students to demonstrate their knowledge in multiple ways, the respondents ranked themselves with a mean score of 3.25. A lesser degree of confidence was evidenced by a mean score of 3.07 in the use of data to guide instruction. A slightly lesser degree of confidence (2.93) was indicated with ease of data collection using varied sources including interviews, observations, and formative and summative assessments. Lastly, in knowledge of administration of standardized assessments, interns reported a mean confidence level of 2.08.

In the category of confidence with IEPs (Figure 4), the interns (those in SpEd assignments) indicated a moderate level of confidence (3.07) in facilitating conversations but slightly less confident in explaining all components of the IEP (2.73). Interns indicated the same confidence level in using the district's IEP management system and required district forms (2.73). Qualitative data from the focus group interviews supported the ITNAS ratings as interns in special education expressed the desire for support with IEP compliance. Specifically, as it pertained to the district's web-based IEP system, timelines, excusal forms, different types of IEPs (e.g., initial, interim, triennials, annuals etc.) and working with members of the IEP team. Further, the special education interns expressed a desire to observe different types of IEP meetings and indicated that

general education teachers would benefit from additional training in IEP implementation, especially as it pertains to goals and accommodations.

Figure 1

Intern Teacher Pedagogy Confidence Levels



Note: Mean responses to questions about intern teacher levels of confidence in pedagogy.

Existing Supports

ITNAS data and focus group interviews revealed the following categories to be of perceived efficacy and benefit to the intern: information and resources about the internship experience, the quality of feedback, and the frequency of opportunities for collaboration. These categories address the third research question: What are the existing supports that facilitate intern teacher success and retention?

In response to survey question six, the interns believe that their university coursework and the information and resources they received prepared them well to serve as an intern teacher (Figure 5). Accordingly, the focus group interviews corroborated these findings with participants commenting the following, “The university coursework helped a lot because I could relate what I had heard or seen in class to my own classroom... it helped me reflect on what I had learned and helped to tie theory and practice.” Another intern stated that “the coursework prepared me for IEP writing, managing the assessments, designing the work around the assessment, and instructional delivery...”

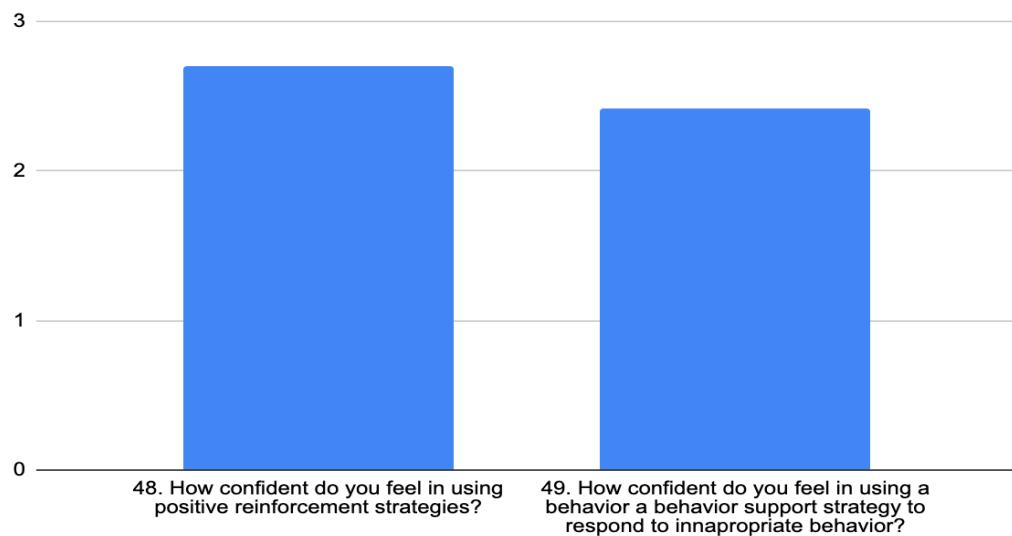
Questions seven and nine, specific to the information about serving as an intern, resulted in a mean score of 3.20 for information received from the university and a score of 3.23 for information received from the district. This indicated that interns felt adequately prepared with the necessary information to serve as an intern.

Question eight, knowledge demonstrated by the district support provider and university coach, indicated a strong agreement with a mean score of 3.25. The interns shared that the district support provider helped them with tasks such as reclassifying students, entering assessment data, modeling computer-based assessments, providing feedback on test administration, writing IEPs, conducting IEP meetings, time-management, and lesson planning.

Questions ten and eleven asked about resources available to the intern (3.10) and to their students (3.08). These mean scores indicate that interns were satisfied with the information and resources available to them and to their students.

Figure 2

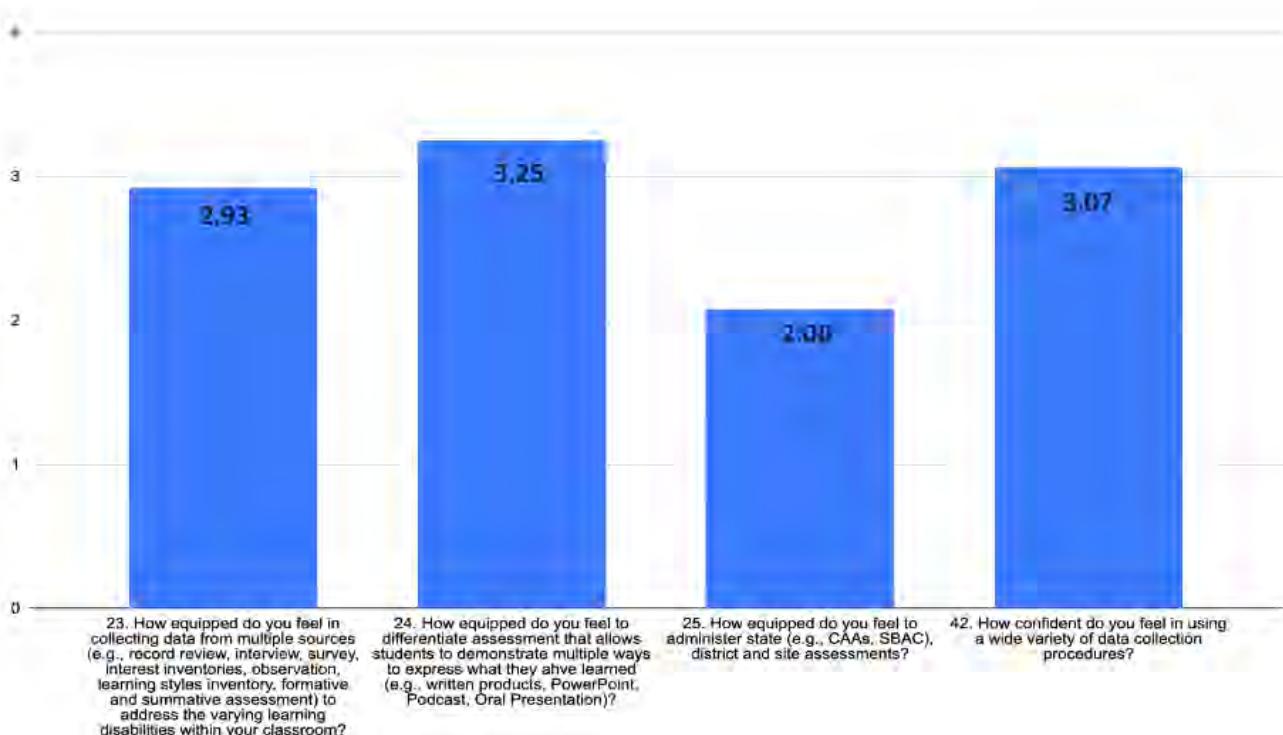
Intern Teacher Behavior Supports Confidence Levels



Note: Mean responses to questions about interns' levels of confidence in using behavior support strategies.

Figure 3

Intern Teacher Assessment Confidence Levels

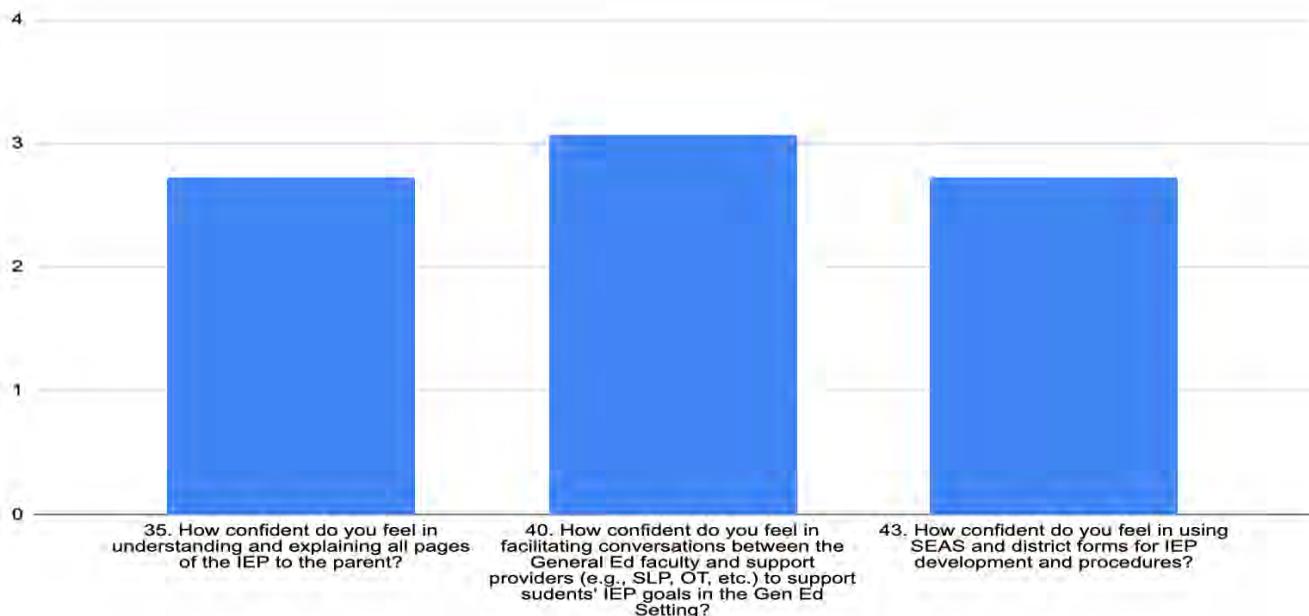


Note: Mean responses to questions about interns' levels of confidence in assessment.

In the area of collaboration (Figure 6), and in reference to the frequency of opportunities to collaborate, the interns affirmed having positive experiences with a mean score of 3.03, frequency of opportunities to collaborate with general education teachers to access general ed curriculum, and a mean score of 3.20 for opportunities to collaborate with other general education and special education faculty to improve their practice.

Figure 4

Intern Teacher IEP Process Confidence Levels



Note. Mean responses to questions about interns' levels of confidence in the IEP Process.

In the category of feedback (Figure 7), the interns indicated that the feedback they received from their district support provider was of high quality, as evidenced by a mean score of 3.83. They indicated a similar level of quality from their site administrator, and a just a bit lesser quality of feedback from their university coach (mean scores of 3.23 and 3.03).

Comments obtained during focus group interviews further corroborated these results as the interns offered the following. “If it wasn’t for my district support provider, I wouldn’t be able to do what I do today.” A second candidate said, “I received timely and great feedback from my district support provider.” In reference to the site administrator, one intern teacher stated that her administrator had provided her with curriculum samples and ideas, maintained an open-door policy, and was knowledgeable about special education. The intern further elaborated, “My principal was positive and encouraging. I am thriving this year! I’m stronger than I thought I’d be—I’ve seen many positive changes in my students’ behavior.” And yet, another intern shared, “My principal was really good at explaining what I needed to do. Whether it was students with an IEP, [the state language assessment], or reclassification. The benefit of working with my principal was that she sent me to many training sessions on topics such as restorative justice, behavior intervention plans, writing IEPs, and [IEP system] training.” As for the university coach, one intern said, “From my university [coach], I received timely and quality feedback,” while another intern stated, “The biggest support was from my university [coach]. He really painted a picture of what my classroom should be like. What I needed to do to make it look like that. How to get students to act appropriately in class. He gave me the idea of a token economy system.”

DISCUSSION

An ever-revolving door of inexperienced educators hired to fill high needs areas of the teacher workforce often leave school districts scrambling to fill positions. The impact is detrimental to student achievement, school budgets, and the

reputation of the profession. According to Toropova et al. (2020), overall job satisfaction leads to teacher retention, and supports longevity and recruitment efforts.

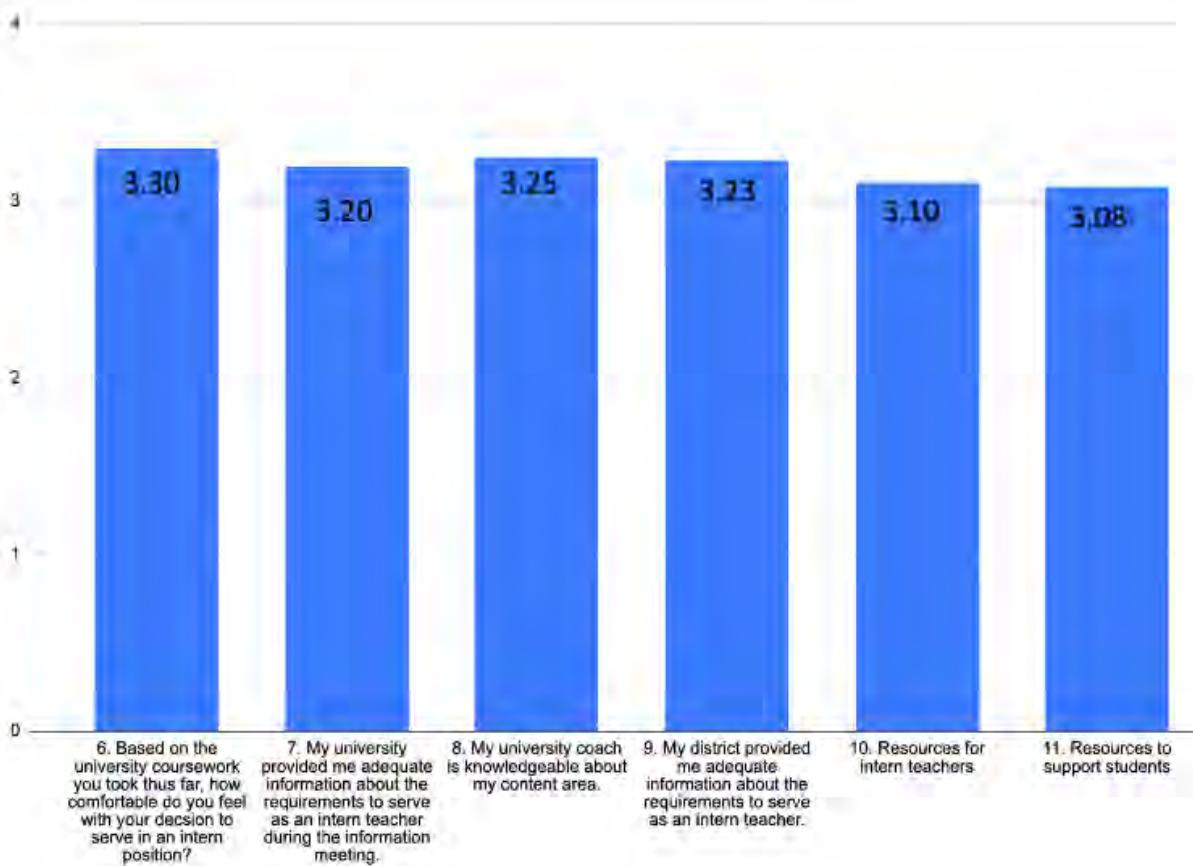
The purpose of this exploratory sequential mixed methods study was to identify the support and training needs of intern teachers serving in high needs areas of the teaching profession. More specifically, this study sought to answer the three following research questions:

1. What are the support and training needs of intern teachers in high needs areas of the teaching profession?
2. What are the intern teacher's perceived levels of confidence in critical areas of teaching including pedagogy, collaboration, positive behavior supports, and assessment of the IEP process?
3. What are the existing supports that facilitate intern teacher success and retention?

A mixed methods approach was used to collect data on the perceived needs and level of confidence of 40 intern teacher participants.

Figure 5

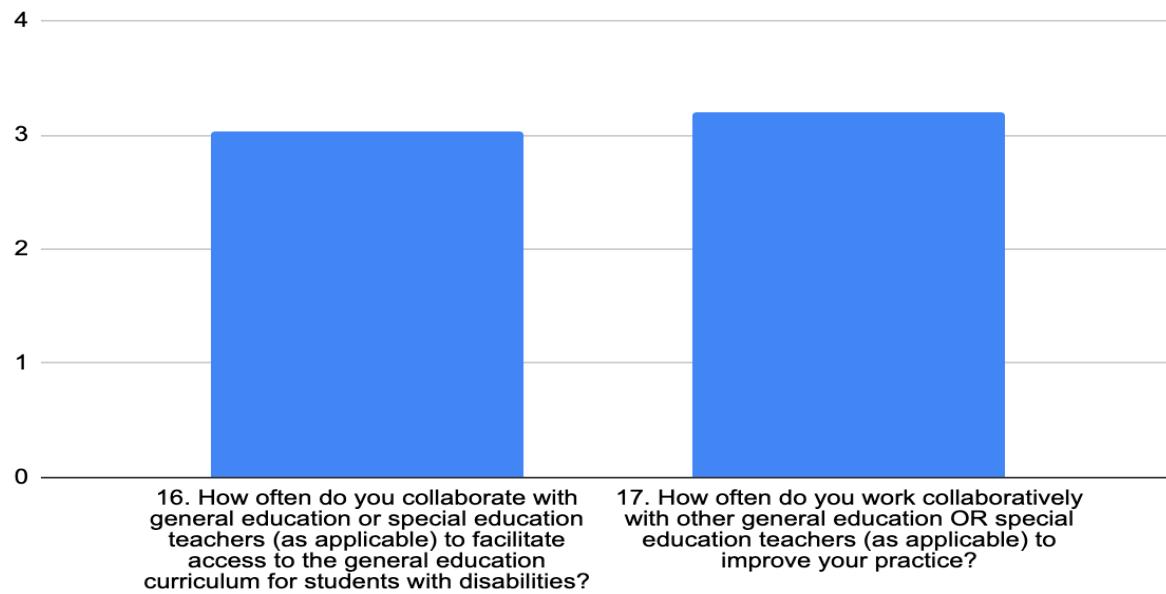
Available Information and Support for Intern Teachers



Note. Mean responses to questions about available information and support resources for an internship.

Figure 6

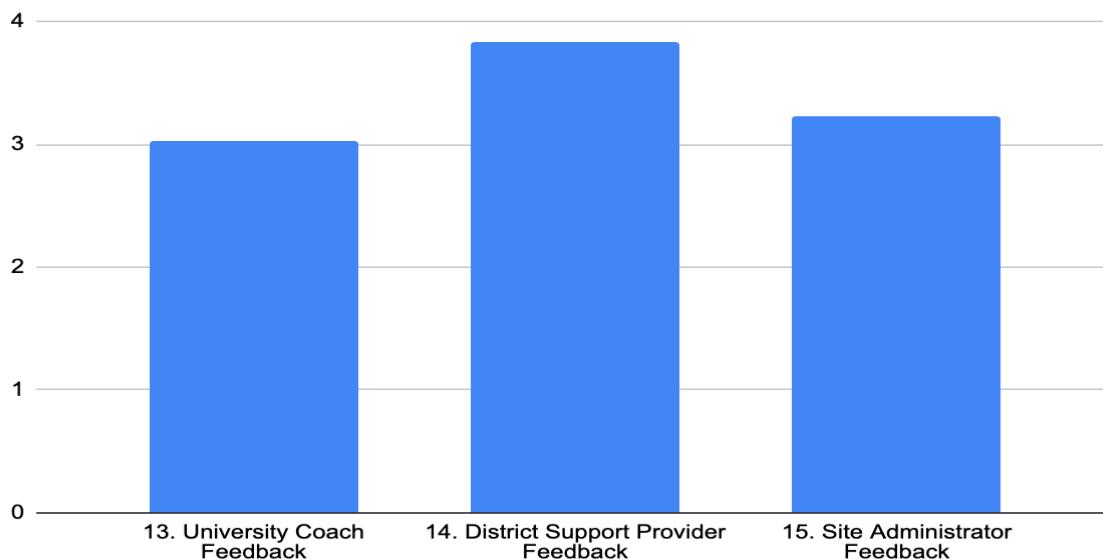
Regularity of Collaboration Between Intern Teachers and General or Special Education Teachers



Note. Means scores for regularity of collaboration with general education or special education teachers.

Figure 7

Intern Teacher Quality of Feedback



Note. Quality of feedback received from university, school district, school site coach, provider, or administrator.

For research question one, data from the needs assessment provided insight as to the support and training needs of intern teachers. This data revealed that interns serving in high needs areas would benefit from additional support in technology and in meeting the specific academic needs of the varied learners through differentiation, curriculum adaptations and modifications, as well as in teaching through various delivery models. The interns also noted the need for additional support in the use of positive behavior strategies and how to utilize behavior supports. Lastly, interns teaching in special education programs, expressed the need for support with the IEP process, ensuring compliance, managing timelines, and promoting collaboration among IEP participants.

For research question two, assessing perceived levels of confidence, the interns were asked to rate themselves in the following categories: (a) pedagogy, (b) behavior supports, (c) assessment, and (d) the IEP process. Accordingly, the interns indicated a high level of confidence in the category of pedagogy, and moderate confidence in the IEP process and in administering assessments and interpreting data. Finally, they shared that they felt only fairly confident in using behavior supports for inappropriate behaviors and positive behavior management strategies in the classroom.

In addressing the third research question, the interns were asked to rate the adequacy of information and resources about the internship requirements and experience provided to them. They were also asked to rate the quality of the feedback given to them by their university coach, site administrator and district support provider. Finally, they were asked to rate the frequency of opportunities for collaboration with general education faculty and special education faculty. While the findings demonstrate a high degree of satisfaction with each area above, district personnel may still want to inquire about the expectations and needs of individual interns so as to better align their support services to their specific needs.

Research in this field suggests that the teacher shortage will continue to be an obstacle in the teacher hiring process, especially as the country emerges from the COVID-19 pandemic. Teachers in high need areas such as special education, math and science will continue to be in short supply. Districts will need to be proactive and provide attractive incentives and motivating work environments to entice teachers into the profession and to retain them over time. Many other factors plague the profession and administrators will have to explore ways to recruit and retain the educator pool. Creating a well-planned, well-researched, and well-implemented system of supports to attract teachers to the profession and ensure their success is essential to the ultimate goal of teacher longevity.

Limitations

District-led training and support services were offered informally when the study was initiated but became more formalized and focused as the study progressed. This may have changed the participants' perceptions, especially for those interns who were interviewed later in the study. The size of the sample may not make the findings generalizable to the general population. The researchers are faculty members of the university where some of the interns attend, and one of the contributing authors is an employee of the school district where the participants are employed. The participants' responses may have been biased due to these factors. Although not observed, it is possible that the participants may have refrained from speaking openly about their experiences and needs during the interview sessions.

Suggestions for Future Research

Future research should draw on the data in this study to design and implement a system of supports utilizing an evidence-based mentoring and professional development model. School districts and collaborating universities could use this information to identify critical components of support systems that can guide teacher professional development and coursework in identified areas of need(s). Following the development of a system, a pre/post evaluative study could be conducted to measure the effectiveness of the supports and the impact on teacher recruitment, retention, job satisfaction and longevity in the profession.

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