

Early Career Special Education Teachers' Views on Preclinical Field Experience in Rural Areas

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Preclinical field experience helps teacher candidates practice teacher roles and responsibilities in authentic learning environments. Based on the framework of situated learning and sensemaking theory, this mixed method study argues that the preclinical field experience activities in rural areas contribute to special education teachers' (SETs) confidence and perceptions of preparedness. We used a survey and interviews with early career SETs who had preclinical field experience in rural areas. In this mixed method study, early career SETs showed overall positive views of their preclinical field experiences, in particular for gaining a better sense of their profession and readiness; however, during the individual interviews, early career SETs expressed desire to have had more experience in specific areas (e.g., assessment, classroom management, collaboration with family, IEPs). The findings of this study underscore that preclinical field experience plays a critical role in shaping teachers' confidence and perceptions of preparedness. Also, the areas where SETs shared they needed more support indicate that teacher educators need to provide more experiential opportunities during teacher preparation.

Keywords: rural education, early career special education teachers, preclinical field experience

In the United States, about 57% of school districts are in rural areas with 24% of school-aged students attending rural schools (Institute of Education Science, 2013). Between 1999 and 2015, the overall enrollment of students with disabilities in rural schools increased by about 0.4% while midwestern rural regions showed 2.1% enrollment growth of students with individualized education programs (IEPs) (Johnson et al., 2018). Although it is logical to expect to have more rural teachers because of the increase in exceptional student enrollments, rural areas experience significant teacher attrition. For example, Meyer and colleagues (2019) reported that multiple midwestern states (e.g., Colorado, Missouri, Nebraska, and South Dakota) lost about 17% of rural teachers between 2015–2016 and 2016–2017 school years. In particular, about 40% of initially licensed teachers of one midwestern state left their position within three years of teaching (Department of Elementary

and Secondary Education, 2018). These rural special education teachers (SETs) often move to less rural areas (Meyer et al., 2019) or leave the education field completely (Dewey et al., 2017).

Teacher attrition needs to receive administrative attention because of its multiplicative impacts on various areas within a school. For example, rural school districts resort to hiring unqualified or underqualified teachers to fill the vacancies (Shepard et al., 2016; Sutchter et al., 2016). Teacher shortages increase inequity in learning opportunities for students with disabilities in rural areas as many emergency hires have no teaching experience and have not worked with individuals with disabilities. Not being able to maintain early career SETs becomes a critical barrier for providing individualized education for students with disabilities (Feng & Sass, 2017; Milanowski & Odden, 2007; Ronfeldt et al., 2013).

Furthermore, rural school districts must spend considerably to replace, retrain, and re-acculturate new teachers. In addition, it is estimated that replacing a new teacher impacts rural schools financially through administrative costs of approximately \$4,300 (Carroll, 2007). With all the adverse effects caused by teacher shortages, it is critical to investigate rural SETs' attrition factors and find strategies to encourage early career SETs to stay longer in rural areas.

Literature Review

Areas of Skills Early Career SETs Need More Support

SET preparation research consistently showed that early career SETs experience difficulties in implementing specific skills required to fulfill their roles and responsibilities. For example, many beginning SETs shared challenges related to non-instructional duties like excessive paperwork (McLeskey et al., 2004), understanding the school system (Kilgore et al., 2003), locating instructional materials and resources (Whitaker, 2003), and collaborating with general education teachers (GETs) (Griffin et al., 2009). Other SETs shared that they struggle with instructional duties, such as teaching multiple subjects to a range of grade-level students (Schwartzbeck et al., 2003). Unlike their urban counterparts, rural SETs encounter challenges related to the need for broader skills with fewer potential supports (Fuqua & Roberts, 2021). They frequently teach a range of grades and subjects with students with different disabilities because of staff shortages (Brownell et al., 2005). Adding to these challenges, early career SETs perceived that they have little support from their workplace to resolve these issues (Billingsley, 2010; Bettini et al., 2016), which negatively affected their instructional effectiveness (Bettini et al., 2016) and increased teacher stress (Leko & Smith, 2010). In response, Berry and Gravelle (2013) highlighted the need for better support for rural SETs in these challenging areas because such challenges cause teacher job dissatisfaction and teacher attrition. SETs are not always prepared appropriately for their dynamic roles and responsibilities (Shepherd et al., 2016).

The Initial Special Education Preparation Standards Council for Exceptional Children provide guidance for preparing SET candidates (CET, 2012). The standards reflect the roles, responsibilities, and expectations for early career SETs. The expected competencies include: a) understanding individual developmental and learning differences, b) creating safe, inclusive, and culturally responsive learning environments, c) individualizing learning experience, d) using multiple ways to assess students to make instructional decisions, e) using evidence-based instructional planning and strategies, f) using professional learning and ethical practice, and g) collaborating with other stakeholders. However, when early career SETs start their profession, these expectations depend on school-specific needs, and are difficult to predict when accepting a teaching position. Early career SETs who are not prepared for their roles and responsibilities are less likely to thrive and stay longer in the rural schools.

Field Experience as a Teacher Recruitment and Retention Tool in Rural Areas

Field experience opportunities play a critical role in preparing teacher candidates to be ready for their profession. For example, field experience provides practicing opportunities for preservice teachers to transfer course knowledge into practice (Brownell et al., 2020; National Education Association, 2013). In addition, field experience contributes to self-confidence in using required skills to meet student needs. By practicing professional skills, preservice teachers become confident in making positive impacts on student outcomes, which leads to the retention of early career teachers (Burley et al., 1991).

To maximize their effectiveness, researchers emphasized providing field experience opportunities in authentic settings, and aligning the field experience with coursework, teacher competencies, and career expectations (e.g., Brownell et al., 2020; Darling-Hammond et al., 2005; Kang et al., 2018; Shepherd et al., 2016). Participating in field experience where authentic interaction occurs with future colleagues and students enables teacher candidates to become active agents in a specific context and better

understand the area's norms and culture that are hard to know as an outsider. For example, teacher candidates report that immersion in urban communities aids in the development of skills necessary to independently teach in such environments in the future (Anderson & Stillman, 2010). Knotts and Keeseey (2016) also reported that rural teacher candidates could find unique communication methods with educational stakeholders after being immersed in the rural community through field experience. Additionally, such field experiences changed preservice teachers' beliefs, attitudes, and perceptions about schools and communities (Versland et al., 2020). Furthermore, more community engagement helps teachers' career plans, especially for those who did not come from the area surrounding a school community (Ulfers, 2016). Such field experiences have been used frequently as a teacher retention and recruitment tool in rural areas (Versland et al., 2020).

Theoretical Framework

Our theoretical framework includes situated learning theory (Lave & Wenger, 1991) and sensemaking theory (Weick, 1995). Both theories amplify the rationale of providing location-specific field experience. Situated learning theory indicates the learning should occur in an authentic context to get to know about ordinary teacher practice by actively engaging in the learning activities (Brown et al., 1989; Lave & Wenger, 1991). In this situated learning context, teacher candidates get to experience the norms of future workplaces. Although some of the norms are not explicitly shared in public, getting to know about the hidden rules is known as a critical factor in teacher success and retention (Mastropieri, 2001). Sensemaking theory (Weick, 1995) explains that SET roles and responsibilities are hard to predict because of misalignment between teacher preparation and teacher roles and responsibilities. Indeed, preparation programs cannot directly teach everything needed related to details in diverse contexts like student characteristics, service-delivery model, instructional content, and non-instructional responsibilities (Billingsley & Bettini, 2019); however, authentic field experiences help early career SETs make sense of uncertain teacher

roles and responsibilities by situating the knowledge and experience they gained from their teacher preparation programs with mentorship (Jones et al., 2013; Mathews et al., 2017).

In teacher preparation, preclinical courses cover the knowledge of teacher roles and responsibilities and sometimes offer teacher candidates aligned field experience. These courses are offered before student teaching. Given that these courses intend to help teacher candidates understand teacher roles and responsibilities, teacher candidates need to be involved in field experience that is carefully aligned with coursework (Leko et al., 2015). Without situated experience, it is difficult to sense teachers' roles and responsibilities. However, little research has been conducted on preclinical field experience, particularly with respect to preparing SETs for roles and responsibilities in rural classrooms (Azano & Steward, 2015).

Therefore, the purpose of this study is to examine the effects of preclinical field experience in rural areas on SET candidates' confidence and perception of the preparedness. This study addresses three main questions: (1) How do early career SETs, prepared through rural education experiences, report confidence in their preparation and skills for teaching? (2) What components of their preparation program do special education teachers feel were the most beneficial for their preparation? (3) What types of preparation did early career SETs wish to have before starting their teaching profession?

Methods

The university where this study took place is in a large, rural county in the midwestern United States. The university's mission statement and strategic initiative plans indicate that it places a high value on professional-based learning and community engagement. The teacher preparation program at this university offers an undergraduate level Elementary Education and Special Education dual program for an initial teaching license. To complete the special education teacher preparation program, preservice SETs need to complete 137 credit hours related to Elementary Education and Special Education. Additionally, teacher candidates need to complete 40 hours of *preclinical* special

education-related *field experience* before practicum and student teaching. Those experiences align with coursework and teacher competencies that effective SETs need to demonstrate on their first day of teaching (Table 1). The field experiences occur at the surrounding rural school districts.

Participants in this study were graduates of the special education preparation program where the first author was a course instructor. Most students enrolled in this program are considered first-time-in-college (FTIC), beginning coursework immediately after high school. According to the annual program data, most students are white females (about 90%) and from the three nearby midwestern states. About half of these students come from rural areas, and most of those students plan to return to their hometowns after completing this program. Each year over the last five years an average of 28 students have graduated with a special education degree. Of those, about 99% of graduates had teaching positions when graduating. Recently, the rural area where the university is located has had difficulty recruiting and retaining special education teachers. As a result, some of the teacher candidates from this program started their teaching profession through a paid student teaching incentive with a commitment to stay for several years before moving.

Research Design

This study used a mixed method sequential explanatory design (Creswell & Plano Clark, 2011) to examine the effects of preclinical experience on early career SETs' perceptions of their effectiveness. This study used quantitative data obtained through a survey with four-point Likert scale questions (Phase One). The dataset does not meet the assumptions for robust statistical analyses (e.g., chi-square, factor analysis); therefore, only descriptive statistics will be used to describe findings. The findings of Phase One data were

supplemented through qualitative data obtained through semi-structured individual interviews (Phase Two) (Creswell & Plano Clark, 2011) (Figure 1). In other words, we used qualitative interview data to explain the quantitative survey findings. This section explains the methods for each phase, including participant recruitment process, data collection and data analysis.

Phase One: Quantitative Data (Survey)

Participant Recruitment. We used social media in recruiting participants to share their perceptions of the effects of preclinical field experience on their own preparedness and confidence in using core skills for their teaching. SETs with teaching experience totaling five years or less were invited to participate in the survey, as existing studies found that the first five years of teaching experience is a critical period for teachers to make decisions for their career plan of whether stay in the profession or not (e.g., Hammerness, 2008). Participants were recruited for one month, following the close of the school year. Of a potential 140 early career SETs who graduated within the five years prior, 30 graduates (21%) responded to the survey. It is unknown how many of these graduates interacted with recruitment efforts on social media.

Participants. Most participants in this study survey were white and female, reflecting the typical demographics of U.S. educators (with white females being about 80% of the whole population), and the general population of this teacher education program (Taie & Goldring, 2020). Out of 30 early career SETs, 67% worked in special education settings (e.g., resource rooms and self-contained classrooms) while 20% worked in inclusive settings. About 83% of the participants worked with students in elementary grades (K–5) while 17% worked at secondary grade levels (6–12) (Table 2).

Table 1*Examples of Preclinical Field Experience Activities*

Course work	Preclinical Activities	Activity purposes aligned with course objectives	Activity description and settings	Student products
Intro SPED I	Service-learning project	To understand diverse individuals with disabilities and their needs	Interacting with individuals with disabilities through recreational or educational activities (e.g., bowling, crafting) at university campus or community locations (e.g., group homes, community center, early childhood center) depending on the activities	Service-learning activity log Reflection paper
Intro SPED II	Teacher observation and interview project	To understand teachers' roles in supporting students' unique needs across settings	Observing students with disabilities in general and special education settings at local schools and interviewing both special and general education teachers of the focus student	Observation and interview log Reflection paper
Special Education Methods Courses	Life skill field day	To provide life skill lessons in supporting students with disabilities	Inviting rural K–12 students with moderate to severe disabilities to the university campus and teacher candidates delivering life skill lessons	Life skill lesson plan Reflection paper
	Collaborating and co-teaching days	To understand the roles and responsibilities of SETs in collaborating with GETs	Collaborating and co-teaching with general education major teacher candidates in delivering literacy lessons	Observation log Lesson plan Reflection paper
	Teaching at rural schools	To practice multiple skills from coursework to support student needs in the classroom settings	Planning for the full day lessons, collaborating with SETs, and delivering instructions; reflecting on their role as prospective beginning SETs	Lesson plan Reflection paper

Figure 1

Research Design

Phase	Procedures	Products
<div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: fit-content; margin: 0 auto;">Quantitative Data Collection</div>	<ul style="list-style-type: none"> • Distributing online survey via social network • 30 SETs with less than five-year experience completed the survey 	<ul style="list-style-type: none"> • Numeric data
<div style="text-align: center;">↓</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: fit-content; margin: 0 auto;">Quantitative Data Analysis</div>	<ul style="list-style-type: none"> • SPSS 	<ul style="list-style-type: none"> • Descriptive statistics
<div style="text-align: center;">↓</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px; width: fit-content; margin: 0 auto;">Develop an Interview Question</div>	<ul style="list-style-type: none"> • To explain the survey results • Interview protocols 	<ul style="list-style-type: none"> • Interview protocol
<div style="text-align: center;">↓</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: fit-content; margin: 0 auto;">Qualitative Data Collection</div>	<ul style="list-style-type: none"> • Individuals semi-structured interviews with three early career SETs (N=3) 	<ul style="list-style-type: none"> • Interview transcripts
<div style="text-align: center;">↓</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: fit-content; margin: 0 auto;">Qualitative Data Analysis</div>	<ul style="list-style-type: none"> • Coding and thematic analysis • Within- and across thematic analysis 	<ul style="list-style-type: none"> • Coded text • Thematic analysis
<div style="text-align: center;">↓</div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px; width: fit-content; margin: 0 auto;">Integration of Quan and Qual Findings</div>	<ul style="list-style-type: none"> • Interpretation and explanation of the Quan and QUAL results 	<ul style="list-style-type: none"> • Discussion • Implications • Future research

Table 2*Survey Participant Demographic Data*

Demographic	N	Percent
Gender		
Male	2	6.7
Female	28	93.3
Race		
Black or African American	1	3.3
White	28	93.3
Rather not to respond	1	3.3
Teaching experience		
Less than 1 year	11	36.7
1–2 years	7	23.3
2–3 years	8	26.7
3–5 years	4	13.3
Grade levels of students		
K–5	25	83.3
6–12	5	16.7
Classroom setting		
Inclusion	6	20
Resource room	14	46.7
Self-contained classroom	7	23.3
Other	3	10

Data Collection and Data Analyses.

An online survey was developed based on other studies of teachers' perceptions of preparedness and confidence in completing roles and responsibilities (e.g., Condermann & Johnston-Rodriguez, 2013). The purpose of the survey was to examine SETs' perceived preparedness and confidence. This survey included two sections. The first section includes ten questions about the participants' demographic information (e.g., age, race, teaching experience, teaching placements) (see Table 2). Two questions were about the participants' intentions to stay at their current teaching sites the following year. The second section of the survey contained questions about the participants' perceptions of their preparedness and confidence in using specific teaching skills. The first author reviewed preclinical courses and field experience materials taught at the teacher preparation program to develop the questions, including course maps, course syllabi, and field experience descriptions. The first author gathered all course outcomes from each syllabus into a Word

document and eliminated identical ones. She matched each course outcome with competencies of the national CEC initial teaching standards (2012). To compare participants' perceptions on their level of preparedness and confidence, the first author duplicated each statement twice to make parallel statements, starting with "I am well prepared to . . ." and "I am confident in . . .". One question examined the degree to which the SETs agreed that preclinical field experience had prepared them for working with students with disabilities. This section included 23 Likert-scale items (Appendix A).

Each statement used a four-point Likert scale (1 = *strongly disagree*, 2 = *disagree*, 3 = *agree*, and 4 = *strongly agree*). The validity check was conducted by two special education faculty members of the teacher preparation program, where participants of this survey completed their degrees. Based on their feedback, minor editing for wording was completed. Internal consistency was measured via Cronbach's alpha (α) coefficient to investigate the reliability of survey items. The field's acceptable criterion for α is greater or equal to .80

(Henson, 2001). The score reliabilities across the overall survey, preparedness, and confidence were $\alpha = 0.95, 0.90,$ and $0.89,$ which indicated high internal consistency. The online survey, vetted and approved by Institutional Review Board (IRB) was distributed via a Google Form. Descriptive statistics, including mean score and standard deviation (SD), were used to analyze the survey responses from participants. We listed survey responses of the highest to lowest mean scores of the two domains to compare participants' preparation and confidence. Then, Q1, which measured the overall preparedness and not specific skills, was removed, and we grouped survey findings into tertiles (high, middle, and low groups) based on participants' responses. Tertiles (T1, T2, T3) on perceptions of preparedness and perceptions were determined by subtracting the minimum and maximum mean scores, then dividing by three. T1 had a range of scores from 3.7 to 3.51; T2 from 3.50 to 3.32; and T3 from 3.31 to 3.13.

Phase Two: Qualitative Data

Recruitment for Interviews. Participants for the semi-structured interviews were recruited through the survey in the first phase of this study. The survey's last question asked about their intention to participate in the follow-up interview. Four teachers initially agreed to participate, but one of them could not complete the interview because of a schedule conflict.

Participants. Three early career SETs volunteered to participate in an interview. All participants were white females representing the general early career teacher population of the region. They were teaching in the same rural area where they had completed preclinical field experience during the teacher preparation. Amy and Shelby taught at an elementary school while Jane was a middle school SET. Jane had completed a semester of teaching, Shelby had completed her second year of teaching, and Amy had completed her first year of teaching. All the participant names are pseudonyms.

Interview Questions. Based on the survey responses, interview questions were developed. The interview protocol was approved through IRB. Each interview asked interviewees about: (a) teaching and profession context, (b) overall early career teaching experience, (c) areas or aspects of preclinical field experience beneficial for their current teaching roles and responsibilities, and (d) areas or aspects of preclinical field experience for which they wished to be better prepared. Four interviewing questions (see Appendix B) were introduced during the interview to guide conversation, but the participants were allowed to share any aspects of unique experiences during their preparation and practice.

Data Collection and Analysis. The first author of this study and each participant met virtually using Zoom. Each interview lasted between 30 and 60 minutes and was recorded. The researcher transcribed each interview. The researcher and a research assistant separately conducted inductive coding to identify words, concepts, phrases, or themes that frequently appear (Creswell & Plano Clark, 2011). The research team cross checked codes each other and found 95% agreement. After discussion, they reached 100% agreement for the initial coding. Then, the researchers engaged in axial coding to do thematic analysis. Then, they conducted within- and cross-case analyses to reduce the risk of inferential errors that may arise from using either method alone. Axial coding and thematic analyses through within- and cross-case analyses showed 100% agreement between coders.

Findings

In this following section, we described findings of each phase. Following guidelines for mixed method study (Creswell & Plano Clark, 2011), both qualitative and quantitative findings will be integrated in the discussion section.

Quantitative Findings from the Survey: Early Career SETs' Perceived Preparedness and Confidence

The mean and SD for early career SETs' preparedness and confidence scores for SETs' competencies are presented in Table 3. All means

fall above 3.13, indicating that teachers feel more prepared or confident than not. The range of means across skills was from 3.13 to 3.7.

The average perceived preparedness from three statements is slightly higher than perceived confidence. While these differences are small and would not show significance, for programmatic purposes, the results may be helpful for gaining insight into the experiences of preservice SETs. For example, regarding the statement “*create safe, inclusive, culturally responsive learning environments to students with exceptionalities*,” the results of the survey show higher preparedness (Q4: M=3.7, SD=0.47) than confidence (Q5: M=3.63, SD=0.49). The mean score for the statement asking their preparedness for *collaboration skills with students’ families* (Q20:

M=3.53, SD=0.63) was higher than the one for their confidence in using the skill (Q21: M=3.4, SD=0.67). Similarly, they responded that they were well prepared to use collaboration skills with other educators (Q22: M=3.5, SD=0.50), and they were confident in doing this (Q23: M=3.37, SD=0.67). On the other hand, the mean of six statements showed a higher rating for confidence than preparedness. The statements regarding “*Professional learning and ethical practice*” (M=3.6, SD=0.62 for preparedness; M=3.7, SD=0.47 for confidence) and “*Supporting social, emotional, and behavioral needs of students*” (M=3.23, SD=0.63 for preparedness; M=3.3, SD=0.6 for confidence) are examples. “*Selecting*” (Q12 & Q13: M=3.13, SD=0.73) or “*using evidence-based instructional strategies*” (Q14 & Q15; M=3.23, SD=0.63), showed identical means for preparedness and confidence (Table 3).

Table 3

Descriptive Statistics for Early Career SETs’ Perceptions about Preparation and Confidence for SET Roles and Responsibilities

Specific Skills	CEC Competency*	Preparation		Confidence	
		M	SD	M	SD
Entered the field with appropriate knowledge and skills needed to immediately add value to the organization in which I work.	NA	3.27	0.64	*	*
Provide meaningful learning experiences to students with exceptionalities.	1	3.64	0.49	3.67	0.48
Create safe, inclusive, culturally responsive learning environments for students with exceptionalities.	2	3.7	0.47	3.63	0.49
Individualize learning for students with disabilities.	3	3.43	0.57	3.47	0.51
Supporting social, emotional, and behavioral needs of students.	3	3.23	0.63	3.3	0.6
Use multiple methods of assessment and data sources in making instructional decisions.	4	3.2	0.61	3.23	0.63
Select evidence-based instructional strategies.	5	3.13	0.73	3.13	0.73
Use evidence-based instructional strategies.	5	3.23	0.63	3.23	0.63
Adapt evidence-based instructional strategies.	5	3.2	0.67	3.27	0.64
Professional learning and ethical practice.	6	3.6	0.62	3.7	0.47
Use effective collaboration skills with families of students.	7	3.53	0.63	3.4	0.67
Use effective collaboration skills with other educators.	7	3.57	0.50	3.37	0.67

Notes. This competency is based on CEC initial teacher competency.

* There was no survey item investigating the overall confidence.

Each statement used a four-point Likert scale: 1 = *strongly disagree*, 2 = *disagree*, 3 = *agree*, and 4 = *strongly agree*.

Table 4

Ranked Skills Based on Mean Scores of Perceptions about Preparation and Confidence for SET Roles and Responsibilities

Tercile	Perception of preparation by skills (Survey #)	Perceptions of confidence in implementing skills (Survey #)				
		M	SD	M	SD	
Higher	Create safe, inclusive, culturally responsive learning environments to students with exceptionalities (Q4)	3.7	0.47	Using professional learning and ethical practice (Q19)	3.7	0.47
	Provide meaningful learning experiences to students with exceptionalities (Q2)	3.64	0.49	Provide meaningful learning experiences to students with exceptionalities (Q3)	3.67	0.48
	Using professional learning and ethical practice (Q18)	3.6	0.62	Create safe, inclusive, culturally responsive learning environments to students with exceptionalities (Q5)	3.63	0.49
	Use effective collaboration skills with other educators (Q22)	3.57	0.50			
	Use effective collaboration skills with families of students (Q20)	3.53	0.63			
Middle	Individualize learning for students with disabilities (Q6)	3.43	0.57	Individualize learning for students with disabilities (Q7)	3.47	0.51
				Use effective collaboration skills with families of students (Q21)	3.4	0.67
				Use effective collaboration skills with other educators (Q23)	3.37	0.67
Lower	Supporting social, emotional, and behavioral needs of students (Q8)	3.23	0.63	Supporting social, emotional, and behavioral needs of students (Q9)	3.3	0.6
	Use evidence-based instructional strategies (Q14)	3.23	0.63	Adapt evidence-based instructional strategies (Q17)	3.27	0.64
	Use multiple methods of assessment and data sources in making instructional decisions (Q10)	3.2	0.61	Use multiple methods of assessment and data sources in making instructional decisions (Q11)	3.23	0.63
	Adapt evidence-based instructional strategies (Q16)	3.2	0.67	Use evidence-based instructional strategies (Q15)	3.23	0.63
	Select evidence-based instructional strategies (Q12)	3.13	0.73	Select evidence-based instructional strategies (Q13)	3.13	0.73

Researchers ranked SETs' perceived preparedness and confidence scores into 'high, middle, and low' tertiles (Table 4). Perceptions of confidence in implementing skills indicated similar findings to the perception of preparedness, with only subtle differences. *Creating or providing meaningful learning environments to students with disabilities* (CEC 1, 2), *pursuing life-long professional learning or ethical practices* (CEC 6), and *using collaboration skills with other fellow educators or families of students with disabilities* (CEC 7) were ranked into the higher group of perceptions of preparation by skills. *Individualizing learning for students with disabilities* (CEC 3) was ranked in the middle group in preparation, along with confidence in using collaboration skills (CEC 7). SETs' perceptions of preparation in *supporting social, emotional, and behavioral needs of students* (CEC 3), *using multiple assessments and data sources in making instructional decisions* (CEC 4), and *selecting, using, and adapting evidence-based instructional strategies* (CEC 5) were listed in the lower group.

Qualitative Findings from Interviews: Reflections on Early Career SETs

Findings from interviews with three of the early career SETs provided more in-depth information to understand the survey findings. Through dialogue, researchers were able to decipher what skills participants wished they had more preparation for and their suggestions for how to implement changes. This section shares findings of: (a) field experiences that early career SETs felt beneficial,

and (b) areas and aspects of field experience that early career SETs felt needed improvement (see Table 5).

Supportive Preclinical Field Experiences

All three teachers agree that their preclinical field experience was beneficial for their current practice. Through the thematic analysis, researchers were able to identify two overall themes related to which aspects of preclinical field experiences they found beneficial along with additional sub-themes (see Table 4).

Classroom Experience. These three teachers stated that having classroom experience was helpful for developing a sense of classroom cultures, and that lived experience helped them make a smooth transition into their current teaching position.

Jane described the preclinical experience as "eye-opening" because it helped her better understand school expectations of SETs during her teacher preparation. Jane also said interacting with students and practicing aligning standards, instruction, and assignments were helpful. At the end of the preclinical field experience, Jane had to take a long-vacant SET position prior to completing student teaching. Although she did not have enough time to prepare for her new classroom, Jane reflected that she could complete most of her duties with success. Jane shared that her preclinical field experience made her feel confident and prepared on her first day of teaching.

Table 5

Interview Summary

	Jane	Amy	Shelby
Beneficial Areas and Aspects of Preclinical Field experience	<p>Classroom experience</p> <ul style="list-style-type: none"> • Interacting with students in the classrooms • practicing aligning standard, instruction, and assignments • Meaningful and authentic tasks • Saw an IEP documents through IEP software that teachers are using • Practice collaboration all the time, that is what she uses every day as a special teacher 	<p>Classroom experience</p> <ul style="list-style-type: none"> • Staying in the classroom • Meaningful and authentic tasks • Reviewed IEP document through scavenger hunt • Special education teacher showed how to use online software to complete IEPs 	<p>Classroom experience</p> <ul style="list-style-type: none"> • Starting field experience in the real classroom from freshmen was helpful • Coming up with strategies based on the needs of students with students • Meaningful and authentic tasks • Always practiced collaboration strategy not only in the field experience but also during course work • Collaboration as a critical survival strategy
Challenging Areas and Aspects of Preclinical Field Experience	<p>Difficulty in transferring knowledge into practice</p> <ul style="list-style-type: none"> • understanding paperwork (e.g., goals, progress monitoring) • Updating progress monitoring <p>Need practicing with authentic student samples.</p> <ul style="list-style-type: none"> • Practicing paperwork <p>Lack of knowledge and training</p> <ul style="list-style-type: none"> • Collaborating and communicating with family 	<p>Difficulty in transferring knowledge into practice</p> <ul style="list-style-type: none"> • IEP amendment and progress monitoring • Connecting data collection with IEP goals <p>Lack of knowledge and training</p> <ul style="list-style-type: none"> • Behavior and classroom management • Parent teacher conference with families 	<p>Difficulty in transferring knowledge into practice</p> <ul style="list-style-type: none"> • Completing IEPs • Documenting student progress • Data collection

Shelby shared that having field experiences in various classrooms from her first year at college was powerful because those experiences helped her think through strategies to meet students' needs.

You are immediately in the classrooms (during freshman year—you're in the classrooms. . . . I had all my practical experiences . . . like all of the different field experiences. They prepare you to like think on your feet. I had it all planned

out then when I go there, I was told that three of my kindergarteners didn't speak very much English. So you just kind of have to think on your feet. And I think all the experiences . . . definitely helped. (Shelby, personal communication, June 28, 2019)

Meaningful and Authentic Tasks. Teachers felt that the preclinical field experience was beneficial because those experiences included meaningful and authentic tasks. Teachers shared moments describing how IEP-related activities or collaboration practice were meaningful to them.

IEP-Related Activities. Amy said that she loved the preclinical field experience as a part of her coursework because she was able to see how the knowledge learned from the coursework applied to what she would do in her future teaching. She also mentioned that those experiences were authentic and based on hands-on activities. Specific examples for those activities include IEP scavenger hunt or writing IEPs by using electronic IEP software, *SPED track*. "She showed us SPED track at that time. And I'm grateful because that's what we use (Amy, personal communication, June 25, 2019). Jane shared looking at the actual IEP was meaningful.

[My cooperating teacher] opened up SPED track, which is the program that we used, and she showed us kind of how to navigate around. And that was the first time I had seen like a real IEP. So that was very eye opening for me. (Jane, personal communication, June 24, 2019)

Collaboration. Jane and Shelby shared that practicing co-teaching and collaborating with general education teacher candidates during teacher preparation helped their level and quality of collaboration with other educators at their current workplace.

We practiced collaborating during college all the time. And (now) I have an hour each day where I meet with my team. And so, we're able to talk about like kids and what's going on, if they have like behaviors that are coming out or missing assignments. Just simple things like that can do so much for a team and for your kids and for like

the whole level aspect is great. (Jane, personal communication, June 24, 2019)

Besides roles and responsibilities SETs need to do, Shelby highlighted collaborating as a critical strategy for early career SETs, which is why her preclinical field experience was beneficial for her current practice.

It's easy for first- or second-year teachers to get discouraged, because it is so overwhelming. And what I usually tell people is like go and find your person. And I think we get told that in college all the time. . . . Go find your someone that you can complain to about the stupid things, that you can cry to when you're frustrated, that you can go get lunch with. You have to have a person or school, or a couple that you can rely on . . . If you don't, that's where I see people like exiting the career, not being a teacher anymore, because you can't do it alone raising all these kids and making sure they get their education. It is such a team effort. . . . We also always did group projects. Whether you hate group projects or not. It's definitely a group effort. (Shelby, personal communication, June 28, 2019)

Preclinical Field Experience for Which SETs Wished to Be Better Prepared

During the interviews, all three early career SETs reported that although they had the knowledge of many aspects of their practice (e.g., IEPs, behavior management, collaboration), they felt underprepared to implement this knowledge and lacked confidence that their skills were applied appropriately. In this section, researchers organized teachers' voices according to these themes (See Table 4).

Applying Course Knowledge in Practice. All three teachers shared their lack of preparation and confidence in writing IEPs. They admitted that they were prepared for writing IEPs in some ways, but they did not feel completely prepared. They also reported that they wished to have more preparation for IEP-related skills, including data collection, progress monitoring, and amendments.

IEP Writing. Shelby shared the challenges of applying her course knowledge on writing IEPs. She

learned about IEPs from courses, and she felt she knew enough about completing them. However, actually writing an IEP was a different story.

I did not feel as prepared in was kind of all the different IEPs. . . . We have our transition class and assessment class, and those two are great. But I know that like sitting down and writing my first IEP for the first time and (like) making sure I check all the boxes and all the different changes. . . . I knew what an IEP was. I knew how to kind of write one. But like sitting down and writing one I was like “HUH?” . . . I didn’t know exactly what I should have been doing or (like) different steps. (Shelby, personal communication, June 28, 2019)

Progress Monitoring. All three teachers were concerned that they did not feel confident monitoring student progress or doing service amendments based on process monitoring. For example, Jane faced a challenging moment when she had to update an IEP for her students only two days after starting her teaching, and she needed to evaluate if the student met benchmarks of existing IEP goals.

I had to go through all of their goals and find like three to four samples to file away and I just I was not very comfortable with going through all of their paperwork and like making sure that it met their goals. And a lot of it was because I didn’t write those goals. And I didn’t have a full understanding of what they were looking for. It stressed me out. (Jane, personal communication, June 24, 2019)

Shelby also expressed being overwhelmed in documenting student progress.

We do a lot with like individual lesson planning and assessment and things like that. But when it comes to like chronological from point A to point B over like a hundred-day time frame. I think that was a little bit overwhelming . . . I struggled with a lot my first year is documenting my progress notes. All the goals my kids had and having to write their progress on the progress notes. I would get to some of them and be like, “oh crap, I did not document this very well my first year.” And I am still kind of

struggling with that my second year. I’ve gotten better . . . being able to think ahead. (Shelby, personal communication, June 28, 2019)

Amy wished she had more experience making IEP amendments because she did not know about it before doing it for her students:

Since college, we were exposed to the IEP, and we ended up doing a few IEPs. I’m glad that I had that. But I also wished I would have had more experience with like amendments to IEPs, because I had no clue that was something or progress reports at the end of every semester. Let’s say we have a first-grader coming into second grade. We have to amend their service times. Let’s stay in first grade they only provide you like 30 minutes for reading. And second grade they provide you 50 minutes. So I would have to call the parents and say: “Hi, I need to amend your child’s minutes for services next year because second grade is at different times. Would that be okay?” And they have to say yes or hopefully not no. But after that I have to go through and do like a notice of action and all this stuff to amend their service minutes. I wish I would have been prepared for that. (Amy, personal communication, June 25, 2019)

Data Collection. Three teachers shared their challenges related to data collection, which also affected IEP writing components. For example, Jane shared that she had to lead IEP meetings several days after being hired. Jane said it was challenging to create IEPs for students she had just met, and she was not sure what data to collect to write students’ present-level statements. Similarly, Amy also wished she had learned to collect behavioral data explicitly.

Another thing is I wish they would have done a class with that showed you how to take data collection. For their IEP goals, because trying to look at a bunch of IEP goals and then think of ways to take that data collection took me awhile to figure out as well. That is definitely something with data collections that paperwork side. (Amy, personal communication, June 25, 2019)

Shelby was unsure what documents she needed or what data to collect, saying “Okay, I have

this progress note due in two weeks. What documentation do I need? What do I need to do in my classroom? Do I need to do a running record?" (Shelby, personal communication, June 28, 2019).

Need to Practice with More Authentic Samples. The teachers pointed out the need for practicing with student samples, which would help them learn and sustain knowledge. Jane shared practicing with student samples would be helpful.

It would be very beneficial to get a ton of work samples from children and tell the SET student: "Hey, find um, find this child's comprehension." And then like having to go through those documents and say like, "Oh, this child has this much comprehension." Just getting the experience of going through the paperwork and the data and finding those tasks. (Jane, personal communication, June 24, 2019)

Lack of Knowledge and Training. SETs felt they needed more training in several areas, including behavior and classroom management, collaborating with parents, and parent-teacher conferences.

Behavior and Classroom Management. Amy said her class had more than five students with behavior issues, so she wished for more field experience activities related to classroom management. "More behavior. I felt like I was very unprepared for. And I know this year this coming year I think I have five or six kiddos with behavior. So that'll be interesting" (Amy, personal communication, June 25, 2019).

Collaborating with Parents. All interviewees wished to have had more preparation in collaborating with parents in several ways. For example, Jane said,

I was just in shock whenever I found out the kids' home lives. Just the, um, the poverty levels, the experience that they've gone through. I wasn't prepared for that. So it was so hard not to—like get too attached. And not want to—'cause I—you can't do anything about it. So, that was my hardest thing is just trying to realize, like y'know, I'm doing all I can here. And you just hope they have help at home. (Jane, personal communication, June 24, 2019)

Jane continued,

Parent contact could be a little bit more helpful. We did practice in practicum a little bit with reaching out to the parents and writing a letter. But even working on like—y'know not only greeting them, just one time when you start, but reaching out to them and talking to them. Like—I tried to reach out at least once a month and not only give like a negative thing. But just praise the child on what they're doing as well. Just the progress, a little bit more parent contact, and just getting experience to understand that you can't control what's going on at home (Jane, personal communication, June 24, 2019).

Parent-Teacher Conferences. Like Jane, Amy wished to have learned more about leading parent-teacher conferences in special education. Although she practiced a parent-teacher conference in elementary education courses and she knew she worked for a special education teacher, she did not think about preparing for special education-related parent-teacher meetings.

I think even like if we were to have done like a practice parent-teacher conference. But we did a practice one. And I remember in one of my regular ed classes . . . I wish like I would have been on the special ed side of a parent-teacher conferences before I went into one this year. Because I like, I don't know what to say . . . The first one I remember I just felt like I said a lot of negative stuff, and I'm like I really wish I would have done like a positive, negative, positive type of a thing. (Amy, personal communication, June 25, 2019)

Discussion

The purpose of this study was to examine the perceived preparedness and confidence of early career SETs who had rural field experiences. This study argued that the preclinical field experience activities in rural areas improve preservice SETs' sensemaking about their roles and responsibilities at their future workplaces and help SETs pursue their careers in the same area. Findings of this study provided a compelling rationale for teacher educators in rural areas to find ways to facilitate

preclinical field experience for preservice SETs at the surrounding rural schools. Beginning SETs who completed preclinical field experiences at rural areas before practicum and student teaching showed overall positive views of their preclinical field experiences; however, they also shared the areas where they wished to have more field experience. Survey results and interview responses resulted in a deeper understanding of which skills most contributed to confidence and knowledge reflections. For example, when examining the ranked preparation and confidence items (Table 4), themes reported in interviews (Table 5) supported and clarified why some survey items had greater variation and lower mean scores. This section discusses early career SETs' preparedness and confidence based on the synthesis of the findings of the survey and interviews and the preclinical field experience activities.

How and Why Did Early Career SETs Feel Confident and Prepared?

Survey responses (Q2–5 & 18–19) paired with interview responses (see Table 5) confirm that early career SETs felt prepared and confident in *providing quality learning environments or experience, creating safe, inclusive learning environments for students with exceptionalities, and using professional learning and ethical practices*. As Shelby shared during the interview, the authentic learning environment of preclinical placements in rural education classrooms supported teacher candidates in developing routines and understanding responsibilities and roles in such skills. Indeed, observing the unique roles of teachers in local rural settings through *Teacher Observation and Interview Projects*, in addition to *Teaching at Rural Schools* (Table 1), helped them to integrate skills in their current practice.

While both prepared and confident in individual teaching pedagogy, early career SETs responded that they felt highly prepared but are less confident in using interactive skills such as *collaborating with families* (Q20 & Q21), *collaborating with colleagues* (Q 22 & Q 23), and *managing student behaviors* (Q8 & Q9) in the survey (Table 3). During the interviews, SETs shared their confidence in collaborating with other educators. Through *co-teaching and*

collaboration days, indeed, teacher candidates collaborated with other teacher candidates or other school personnel (Table 1). In addition, interviewees responded that they had multiple group work opportunities with instructors' explicit guidance for collaboration with other educators. However, their work environment and personnel dynamics in their workplace seem to reflect their confidence in collaborating with other educators. On the other hand, these teachers did not have as many opportunities to practice collaborating with family members. Early career SETs wished to have had more practicing opportunities to communicate with parents or lead parent–teacher conferences with families with disabilities. Lastly, early career SETs expressed a desire to have more experience in behavior management and progress monitoring. Several of the areas in which SETs felt underprepared (e.g., parent contact, managing IEP meetings) are activities that are frequently led by fully licensed teachers both for legal reasons and for protective reasons. These data show the importance of close alignments between coursework and field experiences (Leko et al., 2015) and the need to continue to develop experiences to supplement those that cannot be authentically experienced in the practicum environments.

How and Why Did Early Career SETs Not Feel Confident and Prepared?

Despite intense preclinical field experience opportunities, participants in this study shared the areas where they wished to have had more preparation. The survey findings showed that SETs felt both less prepared and less confident in *supporting social, emotional, and behavioral needs, using multiple methods of assessment and data sources in making instructional decisions, and selecting, using, and adapting evidence-based strategies*. On the other hand, the common challenge addressed during interviews was completing IEPs, understanding their connections with data collection, and progress monitoring. These teachers shared that they learned how to complete IEPs during the teacher preparation program; however, they felt using the knowledge to complete their roles and responsibilities is another story. The gap between SETs' perceived

preparation and confidence in these areas is understandable given that no specific field experience was assigned for IEP-related activities (Table 1), and IEPs consist of comprehensive paperwork that is impossible to practice within one specific field experience. Although teachers shared excitement about an IEP electronic software program, it is surely difficult for teachers to use the program without the foundational understanding of IEPs. This is not the first study to note that IEP paperwork and data-driven practices are areas that need more support and continue to be an area that all programs can benefit from examining (Hester et al., 2020; Poznanski et al., 2018; Robinson et al., 2019; Rokowski, 2020).

Limitations

This study has several methodological limitations. All participating teachers completed one specific SET preparation program. Also, three SETs who participated in the interviews worked for a single school district. These factors make this study's findings difficult to generalize in other school districts, regions, and states. Therefore, future research needs to replicate this study by recruiting beginning SETs in different locations who started their teaching profession in the areas where they had preclinical field experience.

This study explored the teachers' perceived preparedness and confidence in using skills related to SET roles and responsibilities. Several factors might affect teacher responses. For example, clinical activities like student teaching might affect preservice SETs' understanding of roles and responsibilities. In addition, work environment, including administrator support, collaborations with other school personnel, and professional development resources, shapes the quality of early career SETs' professional experience (e.g., Billingsley & Bettini, 2019). Therefore, future research needs to control for these variables in analyzing the effects of preclinical field experience on early career SETs' experience.

Implications

Implications for Teacher Educators

Preclinical field experience placements aid teacher candidates in developing a sense of confidence in applying what they have learned in the classroom to their future practice. While SETs felt more prepared and confident for the skills that they had practiced during preclinical field experience, they did not feel confident in some skills, such as IEP drafting skills or collaborating with families because the skills were hardly included in the designated preclinical field experience. However, shaping more professional-based and authentic field experience would not be possible without having strong partnerships with surrounding school districts.

Therefore, teacher educators need to engage in continuous collaboration with local schools in providing a variety of preclinical field experience. In addition, teacher educators need to consider having strategic curriculum plans, aligning coursework and preclinical field experience (Leko & Smith, 2010) with effective pedagogies. For example, SETs in this study shared that they were excited to learn about the materials they would use in their future classroom. However, those SETs reported difficulties in completing IEPs because they were not sure how collecting data, progress monitoring, and drafting PLAAFP statements and IEP goals relate with each other. Bruner's spiral curriculum (2009) suggests that students learn better when key concepts are repeated but with varying intensity throughout the curriculum. Teacher educators will need to use effective scaffolding pedagogical strategies (e.g., reflection, connotation, interleaving) along with revisiting key concepts so that teacher candidates can make connections with IEP components in the big picture and make sense of applying the whole process in their profession.

Implications for Researchers

This study suggests the need for research examining outcomes of providing profession-based authentic and diverse field experience in multiple aspects. First, future research needs to examine the effects of preclinical field experience on SETs' intent to stay at their workplace. To discuss SET retention,

the additional data to be collected should include quality of work environment (e.g., opportunities for SETs to grow, collaborate, mentorship). The targeting outcome is not only limited to the position of early career teachers but also needs to include administrator satisfaction. In addition, future research needs to pay attention to student outcomes because the foundational goal for teacher preparation and field experience is to provide positive impacts on students with disabilities.

Implications for School Administrators

This study also indicates the need for rural school administrators to clarify SET roles and responsibilities and communicate these expectations with preservice teachers, teacher educators, and early career SETs. Given the critical impact of role confusion on SET attrition, school administrators need to collaborate with teacher educators to provide more practicing opportunities for preservice SETs in the building, aiming for recruiting new SETs who could remain for long periods of time at the school (Gehrke & McCoy, 2007; Versland et al., 2020). To facilitate teacher retention, school administrators need to provide practicing teachers and mentors with continuous training on how to support each other and collaborate. SETs leave the field when SETs feel the workplace is not favorable for personal and professional growth (Billingsly & Bettini, 2019). When SETs get more support from colleagues, they are known to feel less stress and burnout and are less likely to plan to leave (Berry et al., 2011; Garwood et al., 2018). Thus, administrators need to establish supportive teaching environments.

Conclusion

This study provides an initial examination of early career SETs' perceptions of preclinical field experience and its influence on their preparedness and confidence in exercising the expected teacher roles and responsibilities. Despite some methodological limitations and affecting variables, the findings of this study underscore the idea that preclinical field experience plays a critical role in shaping teachers' perceptions of preparedness and confidence. Also, the areas in which SETs need more support indicate that teacher educators must provide more experiential opportunities during

teacher preparation. Careful consideration of adding and aligning field experiences to reinforce teacher candidates' course knowledge can improve their perceptions of preparedness and confidence as early career SETs. These efforts will help SETs become more prepared for their roles and responsibilities, feel more positive self-efficacy, and, with support, remain in their workplace.

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Appendix A. List of Survey Items

- Q1. As a graduate of the Special Education Program, I entered the field with appropriate knowledge and skills needed to immediately add value to the organization in which I work.
- Q2. I am well prepared to provide meaningful learning experiences to students with exceptionalities.
- Q3. I am confident in using my knowledge about exceptionalities to provide meaningful experience to students with exceptionalities.
- Q4. I am well prepared to create safe, inclusive, culturally responsive learning environments to students with exceptionalities.
- Q5. I am confident in creating safe, inclusive, culturally responsive learning environments to students with exceptionalities.
- Q6. I am well prepared to individualize learning for students with disabilities.
- Q7. I am confident in individualizing learning for students with disabilities.
- Q8. I am well prepared in supporting the social, emotional, and behavioral needs of the students/adults that I work with.
- Q9. I am confident in using supporting the social, emotional, and behavioral needs of the students/adults that I work with.
- Q10. I am well prepared to use multiple methods of assessment and data sources in making instructional decisions.
- Q11. I am confident to use multiple methods of assessment and data sources in making instructional decisions.
- Q12. I am well prepared to select evidence-based instructional strategies to advance learning of students with disabilities.
- Q13. I am confident in selecting evidence-based instructional strategies to advance learning of students with disabilities.
- Q14. I am well prepared to use evidence-based instructional strategies to advance learning of students with disabilities.
- Q15. I am confident in using evidence-based instructional strategies to advance learning of students with disabilities.
- Q16. I am well prepared to adapt evidence-based instructional strategies to advance learning of students with disabilities.
- Q17. I am confident in adapting evidence-based instructional strategies to advance learning of students with disabilities.
- Q18. I am well prepared to engage in the lifelong learning to advance the profession.
- Q19. I am able to continuously learn and adapt to new environments.
- Q20. I am well prepared to use effective collaboration skills with families of my students.
- Q21. I am confident in using effective collaboration skills with families of my students.
- Q22. I am well prepared to use effective collaboration skills with other educators (e.g., paraprofessionals, general education teachers, administrators).
- Q23. I am confident in using effective collaboration skills (e.g., paraprofessionals, general education teachers, administrators).

Appendix B. Interview Guiding Questions

1. Please describe your current teaching position (e.g., setting, grade, student profiles under your caseload, years of your teaching experience).
2. How was your experience as a special education teacher?
3. From your teaching preparation program, what areas or aspects of your preparation (e.g., course work, experience) were the most beneficial for you to be a strong special education teacher?
4. What areas of preparation did you wish to have before starting your teaching?