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Abstract

Preparing P-12 educators to effectively teach and support diverse learners is increasingly critical. Cultural competence training and experiences in teaching diverse learners are essential components of teacher preparation, yet often new educators report feeling under prepared, and the characteristics of today's P-12 students continues to vary greatly compared to teacher demographics. This secondary data analysis explored new teachers' perceptions regarding their preparation for teaching diverse learners. The dataset was derived from survey responses from teacher program graduates, those same graduates after one year of teaching, and their supervisors who responded to standards-based, four-point Likert surveys. Descriptive and inferential statistics were used to examine results longitudinally and comparatively. Results indicated that preservice teachers might not be as prepared as they originally thought they were after facing diverse classroom realities. Yet, these first-year teachers' supervisors perceive a statistically significant higher level of preparedness than the teachers claim. Reasons for the decline in perception of preparedness and difference of ratings are explored; suggestions are offered for continuous improvement of educator preparation as well as for support of new teacher induction practices.

Keywords: teacher preparation, teacher competencies, teacher opinions, training needs, teacher induction, self-efficacy, diverse learners

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Perceptions of Teacher Preparation for Classroom Diversity

Preparing teachers to provide effective instruction in an environment of equity, high expectations, and cultural competence is ever more important given the increasing diversity of P-12 learners. United States (U.S.) classrooms reflect demographics that encompass high levels of learner diversity. As defined by the Council of Chief State School Officers (CCSSO), diverse learners are those “who, because of gender, language, cultural background, differing ability levels, disabilities, learning approaches, and/or socioeconomic status may have academic needs that require varied instructional strategies to ensure learning” (CCSSO, 2011). In the CCSSO’s introduction to the model core teaching standards, a vision is outlined for teachers to positively impact all learners; teachers must understand their own frames of reference and leverage the variety of assets for learning that students bring to the classroom (e.g., experiences, abilities, talents, and prior learning, as well as language, culture, and family and community values). While this definition of learner diversity is broad and the educational aim clear, a difference has emerged regarding teachers’ preparation and abilities to fulfill this vision with an increasingly diverse student population, which forms the focus of this secondary data analysis. Educator preparation programs (EPPs) are responsible for preparing graduates to design and implement quality learning experiences for *all* students; new teachers are expected to acknowledge variance in learner needs and adjust instruction accordingly. These expectations are explicitly included in the CCSSO teaching standards (see Table 1).

Unfortunately, research shows that teachers struggle to design instruction to reach every learner (Dixon et al, 2014), and first-year teachers might not be entirely prepared to teach diverse students effectively (Feiman-Nemser, 2001; Ford et al., 2007; Garcia et al., 2010; Kumar & Hamer, 2013). Underprepared teachers could result in diverse learners experiencing an overall

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inadequate education and even more concerning, as Kahn et al. (2014) noted, student abandonment of their own cultural values.

Table 1

InTASC Standards That Address Diverse Learners

InTASC Standards	InTASC Elements	Description
Learner Development	1(a-b)(d-i)	Modifies instruction to meet developmental needs; Accounts for individual learners' strengths & interests; respects learner differences
Learning Differences	2(a-k)	Individual learning needs – including ELL
Learning Environments	3(f)(g)(l)	Communicates with respect & responsiveness to cultural backgrounds; Promotes learning locally & globally; Diversity affects on communication
Content Knowledge	4(b)(m)	Delivers content in different ways; Integrates culturally relevant content; Recognizes & addresses personal biases
Application of Content	5(d)(g)(p)(q)	Helps students develop diverse social & cultural perspectives of local & global issues; Accesses resources for building global awareness & understanding
Assessment	6(g)(h)(k)(p)	Differentiated learning experiences & assessments; Accommodations for learners with disabilities & language learning needs
Planning for Instruction	7(b)(e)(i)(k)(m)(n)	Plans instruction for diverse learning needs; Collaborates with specialists when appropriate; accesses resources to support student learning
Instructional Strategies	8(a)(h)(k)(l)	Adapts instruction for learners' needs; Addresses all learning styles; Differentiates instruction
Professional Learning & Ethical Practice	9(a)(c)(e)(i)(m)	Build skills to teach all learners; Use data to adapt plans and practices; Reflect on personal biases and accesses to resources to increase understanding of identity, worldview and perceptions
Leadership & Collaboration	10(a)(b)	Shared responsibility for student learning; collaborates to meet the needs of diverse learners

Note. Adapted from the Interstate Teacher Assessment and Support Consortium (InTASC) model core teaching standards: A resource for state dialogue Council of Chief State School Officers (CCSSO, 2013).

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Context for Classroom Diversity

Given a teacher's responsibility for positive learner outcomes in increasingly diverse and interconnected classrooms, this secondary data analysis explored teacher preparation for teaching in these diverse classrooms. It is pertinent, therefore, to examine the teaching context in which new educators find themselves. National U.S. census data indicates a gap in the racial make-up of school-aged children and their teachers, a gap that has widened over the last three decades from what researchers such as Feiman-Nemser (2001) recognized in the early 1990s. The National Center for Educational Statistics (NCES, 2018) drew on census estimates to present demographic data of school enrollment among children ages 5 – 17 nationwide. Those estimates show a decline in numbers of white children from 65% in 1995 to 50% in 2015 and a large increase of the Hispanic population from 14% in 1995 to 26% in 2015 (NCES, 2018). However, teachers reflect a different demographic ratio as 80% of teachers are white and 8.8% identify as Hispanic (NCES, 2017). Growing racial diversity impacts the variation of cultural norms as well as languages teachers see in the classroom. The racial and ethnic gap between students and teachers can create issues in educational provision (Garcia et al., 2010). As findings from Dee (2004) showed, a racial or ethnic congruity between teacher and student positively impacts student achievement, therefore reasoning that a disparity precipitates a negative impact. This contrast is salient to consider as research has shown there are “racial and ethnic disparities” within the educational systems that teachers can help to reduce (Bottiani et al., 2017). The noted increase of Hispanic student population has occurred at the same time as an overall rise in the number of English Language Learners (ELL), which grew from 8.1% in 2000 to 9.5% in 2015 nationwide (NCES, 2017). Thus justified the greater need for specialized training and preparation for what demographic diversity brings to the P-12 learning environment.

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Students from various economic backgrounds represent another layer of diversity for which teachers must prepare as “socioeconomic status (SES) is a major predictor of educational achievement” (Dietrichson et al., 2017, p. 243). From 2000-2015, students eligible for free and reduced school lunches rose nationwide from 38% to 52% (NCES, 2018) representative of an increased number of students living in poverty. As Dietrichson et al. (2017) found, students from low-income backgrounds may have less access to resources (i.e., books and technology), less academic expectations or expressed interest from parents, or not as much assistance with homework – especially if their caregivers work multiple jobs. This has been exacerbated by the Covid 19 pandemic, which has exposed a great crisis of unequal access in education for students from disadvantaged backgrounds (Montacute, 2020). Consequently, it is important that teachers know how to address needs for students’ whose learning may be impacted by these socioeconomic conditions.

Learner diversity also embraces students with varying levels of physical and intellectual abilities. This facet of classroom diversity continues to increase as the percentage of students with disabilities also continues to grow. According to data gathered by the NCES (2017), students ages 6 – 21 with a disability increased by about 200,000 from 2000 – 2015. Learners with disabilities who spend 80% or more of their day in a traditional classroom increased from 47% in 2000 to 63% in 2015 (NCES, 2017). Under the framework of inclusion, students with unique learning needs are spending more time in traditional classrooms. Diverse intellectual abilities not only include students with cognitive limitations but also learners who are gifted; gifted and talented students make up 6.7% of students across the U.S (NCES, 2018). Teachers support students with these distinct learning needs according to guidance of the National Association for Gifted Children (NAGC) and the Council for Exceptional Children (CEC) who

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recognize the importance of collaborations with parents, colleagues, and students (NAGC-CEC, 2013). General classroom teachers must be prepared to differentiate instruction and collaborate well so all students may learn in ways that coincide best with their physical and/or intellectual ability – including giftedness.

Finally, childhood mental health disorder diagnoses have increased over time (Centers for Disease Control and Prevention [CDC], 2019) – and are more prevalent for students living in poverty, dealing with other health challenges or disabilities, or who experience challenging life events or environments (Merikangas et al., 2009). Stagman and Cooper (2010) noted that one in five children birth to 18 has a diagnosable mental disorder [and] one in ten youth have serious mental health problems that are severe enough to impair how they function at home, in school, or in the community. Such disorders or problems can include depression and anxiety, substance abuse, and other diagnosed or undiagnosed disorders (Brown et al., 2018). Behavior problems, ADHD, depression, and anxiety are among the most common disorders which often exhibit as secondary symptoms of other problems or exist comorbidly (CDC, 2019; Koller & Bertel, 2006). Since mental disorders often present themselves at an early age and negatively impact cognitive, social, and emotional development (Balow, 2018), teachers must be prepared to address needs of affected students in the classroom. Yet, teaching standards do not directly and explicitly address preparation of teachers to handle mental health challenges in the classroom (Buchanan & Harris, 2014), and teachers themselves have exhibited concern in their ability to support students (Koller & Bertel, 2006).

Diversity is clearly a complex and multidimensional construct for educators and EPPs to consider. Given an increasing level of classroom complexity and intersectionality, it is essential that teachers develop skills to work with diverse learners, to use effective teaching strategies that

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address learning differences, and to develop belief in themselves to do both well. Furthermore, teachers need to be aware of the demographic disconnect they likely will find between themselves and their students to build their confidence in handling diversity-related educational challenges (Acquah & Commins, 2013). It is therefore of great interest to examine if new teachers indeed find themselves prepared to attain these imperatives.

Teacher Preparedness

To develop teachers' abilities to address the needs of diverse learners and build cultural competence, EPPs work with preservice teachers to expand their knowledge, skills, and dispositions (Lee & Hemer-Patnode, 2010). EPP's thread professional standards of practice into curricula and clinical experience to best prepare new teachers for diverse classrooms, as well as to maintain accreditation, which is intended to assure a common and appropriate standard of teacher performance (Hollins, 2011). Programs adopt and assess aspects of diversity-related teaching skills based on national teaching standards (see Table 1). This teaching skill set requires development through several varied experiences (Kahn et al., 2014). Training for teaching diverse learners most often occurs through dedicated multicultural classes, imbedded diversity curricula and content, and field work in diverse classrooms (King & Butler, 2015). Quality training for today's classrooms begins early in a teacher education program, follows through internships and student teaching, and continues through professional development during the first years of teaching (Lee, Hemer-Patnode, 2010; Feiman-Nemser, 2001).

Although some research is available regarding teacher readiness for instructing diverse learners, there is limited examination of new teacher's perspectives of their own preparation, their view of preparedness after they gain teaching experience, or the perspective of their school supervisors. According to John Hattie (2015), about 20–25% of total learning variance is in the

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hands of the teacher, whose instructional knowledge and skills do indeed make a difference. However, Hattie's (2015 & Visible learning, 2018) meta-analysis of factors that influence student learning found that a teacher's training program only yielded an effect size of 0.10, indicating only a small likelihood of impact on the learners. This raises questions with respect to the impact of preparation experiences for teaching the most diverse learners. In a study conducted by Boyd et al (2008), initial indicators showed that preservice preparation could influence the effectiveness of teachers, particularly those in their first year. The study estimated the effects of preparation program features on teachers' value-added to student test-score performance; findings linked the amount of practice teaching during preparation as a benefit to first-year teachers.

Still, researchers have reported that new teachers felt inadequate when confronted with cultural challenges in the classroom. As Kumar and Hamer (2013) found, "when preservice teachers' learning is put to the test, the stresses associated with first-time field experiences in schools diminish their capacity for critical thinking and self-reflection" (p. 173). Prior research also examined experiences of preservice teachers who began their diversity training through single courses and internships (McDonough, 2009). However, as McDonough (2009) found, professional development and research of these experiences must continue as graduates enter the field and fine-tune their knowledge and dispositions. As an exemplar, one of McDonough's (2009) cases followed a classroom teacher post-graduation who had supports and school-wide frameworks to help address classroom diversity, a transition-focused approach. The study indicated that novice teachers' knowledge and dispositions concerning learner differences must continue to be developed and supported through training and mentorship once employed.

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Similarly, Feiman-Nemser's (2001) work brings to the discussion the importance of well-designed induction programs. Her call to action acknowledged that if schools want to see improved outcomes for students, teachers need powerful learning opportunities at every stage of their career, not just during teacher training. Even well-prepared new teachers have more to learn if they are to master the demanding teaching their EPPs prepared them for (p. 1026).

Additionally, Valiandes' (2015) research found that a teacher's ability to differentiate instruction based on student need has a corresponding effect on student achievement, can lead to equal opportunities for improvement, and can even optimize teaching effectiveness. Valiandes (2015) also noted that teachers reported progression through different stages of their own development before feeling confident in their ability to differentiate instruction. Teachers cited seminar training, professional development, and school-based support as integral to their differentiated instruction efforts (Dixon et al., 2014 & Valiandes, 2015). These studies show that new teachers need continued professional development and mentorship in order to increase confidence in addressing classroom diversity (i.e., different cultures and learning abilities among students).

Even when teacher training is well designed and has gone well, many new teachers still discover their preservice education did not entirely prepare them for their own classrooms. As Carol Bartell (1995) wrote, "teachers are never fully prepared for classroom realities and for responsibilities associated with meeting the needs of a rapidly growing, increasingly diverse student population" (pp. 28-29). The reality exists that students introduce variability in behaviors, abilities, needs, and daily life struggles. Uncertainty exists regarding expectations of student ability, student engagement and discipline, readiness to learn, and the limits of teacher responsibility (Johnson, 2004). New teachers must rapidly adjust to a group of learners with instructional competence and confidence while simultaneously assimilating into a school culture.

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New teachers often find themselves questioning how to effectively apply knowledge and skills to teach diverse learners as they are supervised and evaluated. This act of questioning is particularly true for those teaching in schools outside of the communities most familiar to them (Johnson, 2004). Researchers estimate that 44% of teachers will leave the profession within the first five years if they are not well supported (Whitaker et al., 2019). This statistic makes it vital to nurture new teacher capacities for using the skills learned within their EPPs to succeed in unique and diverse classroom environments.

The purpose of this secondary data analysis was to explore new teachers' perspectives regarding their preparedness to teach diverse learners when compared to their perspectives one year later after their first year of teaching, then suggest research-based approaches toward any necessary program improvement. Perspectives of supervisors related to new teacher preparedness was also desired since supervisors of first year teachers, often school administrators, evaluate teacher effectiveness, plan for professional development, and arrange school-based supports. Supervisors also have a holistic view of teacher effectiveness and employ teachers who have graduated from multiple programs - each with their own unique features. Thus, inclusion of supervisors' voices alongside teachers in this study emphasizes a shared responsibility to examine the new teacher workforce and ultimately, improve opportunities for student learning.

This study drew from existing survey data where questions regarding diverse learners were explored as per the research questions:

- How confident do new teachers feel in their preparation to teach diverse learners as they exit a teacher training program?
- In what ways do these perspectives change after one year of teaching?

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- How do supervisors perceive the quality of first year teachers' abilities to teach diverse learners?
- What are the similarities and differences between perceptions of preparedness of completers, first year teachers, and their supervisors?

Conceptual Framework of Professional Standards

The Interstate Teacher Assessment and Support Consortium (InTASC) model core teaching standards (CCSSO, 2013) provide a framework for preservice teacher training and new teacher professional learning (see Table 1). InTASC standards also conceptualize assumptions, expectations, and beliefs about learner differences foundational to this study (Maxwell, 2005). The framework acknowledges the increasing complexity and sophistication of core teaching practices and understandings necessary to teach all learners. Most U.S. EPPs, including the one representative of data in this study, base teacher training curriculum and evaluation of candidates' knowledge, skills, and dispositions upon the ten InTASC teaching standards (Hollins, 2011). The standards define what teachers should know or be able to perform upon entering a P-12 classroom and encompass aspects of teaching diverse learners.

Additionally, InTASC standard learning progressions describe graduated levels of teaching practices as new teachers gain experience and expertise, moving along a continuum from directive and procedural to facilitative, and eventually –collaborative (Snow et al., 2005). EPPs assess preservice teachers according to InTASC standards in order to monitor candidates' during training and then into classrooms after graduation. Five key assumptions support this developmental approach: 1) teaching and learning are complex, 2) expertise is not linear and can be learned, 3) growth occurs through reflection upon experiences, 4) teacher development depends on context and levels of support, and 5) the focus is on the practice and performance of

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teaching, not the teacher (CCSSO, 2011). The standards also align to survey constructs in this study establishing continuity and criterion validity. Considering these standards for effectiveness, it is compelling to examine whether EPPs adequately prepare teachers to address learner differences.

Methods

Sleeter and Owuor (2011) recommended research using large, longitudinal data of pre-service teachers through their first year in the field to explore their preparation for classroom multiculturalism. Therefore, this study was a secondary statistical analysis of five years of survey data regarding perceptions of preparedness and performance of first year teachers to instruct diverse learners. Teachers graduated from a regional Midwestern U.S. university. The study utilized a systematic, data-driven approach to develop research questions, identify and evaluate the dataset, then draw meaningful conclusions (Johnston, 2014). The approach included the use of descriptive and inferential statistics to relate teachers' perceptions at the time of completing a training program and one year after teaching, as well as supervisors' evaluation of new teachers' performance. The raw data used in this study was previously collected by the EPP for program assessment and accreditation purposes and readily accessible to researchers.

Identifying the Dataset

Established methods and a systematic process of a secondary analysis were followed to ensure appropriate dataset congruency. The researchers included two EPP faculty members, the EPP data manager who had access to the original data, and an external statistician. Close access to adequate documentation of the original dataset, including protocols and procedures, added to validity of the collection process (Johnston, 2014). The dataset represented 72 teachers who

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graduated over five academic years – from the spring 2016 semester through the spring 2020 semester.

Table 2
Dataset and Response Rate of ES, TTS, and SS

Year	Exit Survey	Transition to Teaching Survey	Supervisor Survey	Individuals with ES, TTS and SS	Individuals with usable ES, TTS and SS
2015-2016	26*	40	27	13	12
2016-2017	42	32	21	18	13
2017-2018	41	26	11	8	6
2018-2019	40	36	21	20	20
2019-2020	59	49	28	28	21
Total	224	183	89	87	72
Response (%)	100%	82%	40%	39%	33%

Note. Year indicates completion of the TTS/SS with the ES completed one year prior. *Includes only spring 2016 completers.

Teachers completed training at the early childhood ($n = 7$), elementary ($n = 48$), or secondary levels ($n = 17$). In the spring of 2020, the university inclusive of the EPP had an enrollment of 1,150 – of which 30% were education majors; the EPP maintains approximate annual enrollment of 165 preservice teachers. During their program, teachers were required to successfully complete courses and key assessments related to inclusive methods for students with special needs, cultural diversity, and working with ELL students in the general education setting.

The dataset represented an aggregate of completers across all levels and areas of preparation and five academic years in order to maintain an adequate sample size for comparison. Participation was limited to teachers from these cohort years for whom Exit Survey, first-year Transition to Teaching Survey, and Supervisor Survey results were all available (see Table 2). First-year teachers for whom all three surveys were not available were excluded from analysis. The data set was representative of 33% ($n = 72$) of all completers ($n = 224$) during the established timeframe. Participation was limited to those surveys entirely answered as well as to

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teachers who completed the undergraduate initial licensure program which eliminated variability of the dataset and allowed for comparison.

Instruments

Data from three surveys were gathered and examined: Exit Survey (ES), Transition to Teaching Survey (TTS) and Supervisor Survey (SS). The surveys were part of the common metrics project by the Network for Excellence in Teaching (NExT Consortium, 2016) and were utilized by all EPPs in the state where teachers in this study were prepared. NExT developed the surveys using rigorous processes to ensure validity and reliability, including multiple psychometric analyses, focus groups, pilot testing, revision, and careful alignment with accreditation standards (see nextteachers.org/surveys-1). The surveys were also aligned with one another establishing concurrent validity, as well as the InTASC standards establishing construct validity. Survey items were rated by participants on a four-point Likert scale using leveled descriptors: agree (4), tend to agree (3), tend to disagree (2), and disagree (1). While the surveys were administered in their entirety, only results from the nine items in the construct of *diverse learners* were analyzed to answer the research questions.

Due to copyright restrictions, the survey cannot be distributed in whole or in part and survey items may not be presented word-for-word; thus, the concept of each item is presented. The survey items about diverse learners are represented by to the following core concepts: *cultural backgrounds, varied learning needs, different developmental levels, socioeconomic backgrounds, learners with special needs* (i.e., Individualized Education Programs and 504 plans), *mental health needs, giftedness, ELL, and accessing resources for student support*. The Cronbach's alpha coefficient for the diverse learner construct of each of the three surveys was 0.94 indicating good reliability as a measure of the construct for each survey. Comparing the

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survey results while controlling question variation retained validity and reliability of the dataset. Since all surveys were aligned and criterion validity established through InTASC standards, comparisons of items were possible.

The EPP surveyed graduates at completion of their student teaching experience just prior to exiting the program using the ES; this occurred at the end of the fall or spring semester. Student teachers represented in the dataset were required to complete the survey as part of the senior seminar graduation requirement, thus a consistent 100% response rate was achieved. The ES was deployed using the Qualtrics online survey tool via an institutional, password protected account. Completers were queried to respond to items with the prompt, “To what extent do you agree or disagree that your teacher preparation program gave you the basic skills to do the following?”

The TTS survey completion request was sent to first-year teacher cohorts who had completed the exit survey. Contact information after graduation was attained from the ES, state employment data, school websites, personal emails, social media, and through collaboration with the institutional alumni office. The request for survey completion was sent via email with instructions and a password protected link approximately one year after program completion. Teachers responded to the same general questions they completed on the ES with the prompt, “To what extent do you agree or disagree that your teacher preparation program prepared you to do the following”?

The SS was deployed using the same process as the TTS to all supervisors of respondents who completed the TTS. The survey asked supervisors to assess the quality of graduates’ teaching abilities with the prompt, “To what extend do you agree or disagree that this teacher does the following?” Supervisors were given the same Likert scale for responses, with the added

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option of “Not Able to Observe”. Supervisor participation was dependent upon the response of first-year teachers. The entire SS was administered, however, as with the other two surveys, only the sections regarding diverse learners were utilized in this study.

Procedures

Data were collected for nine semesters across five academic years. The original data were stored as spreadsheets of raw data, pdf files for initial download of descriptive results, and as prepared annual reports in the password protected intuitional database. Following approval from the institutional review board, data were obtained for the secondary analysis from the stored files by the data manager. The original dataset was not altered, but only graduates for whom the ES, TTS and SS were all available were included in the study (see Table 2). Researchers recoded the original variables in order to properly handle missing responses. Missing data from incomplete surveys eliminated results from analysis. Recoded responses were stored in a new dataset and codes documented. A spreadsheet was created to organize demographic information and survey item responses to meet the needs of the current project. Since survey data were longitudinal and stored in different datasets from cohort years, the accuracy of the identifiers was matched and checked when the datasets were merged. Institutional graduation data was used to confirm exit and first-year teacher lists for each academic year.

Analysis

Descriptive statistics were employed to summarize and analyze the dataset as well as to examine variance over time and across perspectives (Pyrzczak & Oh, 2018). Descriptive statistical methods included frequency calculations, response agreement percentages, means, score difference in values, and standard deviations for survey items regarding teaching diverse learners (see Tables 3 and 4). Frequency distribution was computed to summarize results according to

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Likert-level responses on a one-to-four scale and to show how frequencies were distributed over values. Frequency tables and cross-tabulations of all items were included in the analysis as well as maximums and minimums to examine how much scores varied from one grouping to another. Percentages were calculated to gauge the percent of responses corresponding with the frequencies; percentage of agreement was calculated by combining Likert scores of 3 and 4 to indicate overall agreement and 1 and 2 to indicate a level of disagreement. Means were calculated to identify measures of central tendency and provide findings representative of the entire set of scores. Score value disparities for each question and aggregate results per level of preparation were calculated to examine the differences between ES and TTS responses in addition to TTS and SS responses. Standard deviation was also calculated to measure the average difference between mean values and identify items with greater variation. Data was organized according to question, survey type, and level of teacher preparation. Data was analyzed both longitudinally, that is graduates' scores compared to their own one year later and their supervisor, as well as by aggregate (see Table 4). Comparative analyses of descriptive results were used to examine patterns of similarities and differences. Further, a paired t-test was used to determine if there was a significant difference between the means of the ES and TTS, ES and SS, and TTS the SS. Finally, Pearson's correlation coefficient was used to determine levels of internal consistency of the surveys and correlations between responses at the construct (Table 5) and item levels (Table 6).

Results

Utilizing the surveys yielded comparable results to explore perspectives. Results for each of the nine items and the diverse learner construct (i.e., composite mean of nine items) for all three surveys are presented in Table 4. Comparative results for the aggregate cohort for the

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diverse learner construct, as well as disaggregated by level of preparation, are also provided (see Table 3). The convergence of data represents an understanding of preparing and supporting teachers to instruct diverse learners.

Table 3

ES, TTS, and SS Question, Survey, and Level of Preparation Change Score Values

	Question	ES M	TTS M	ES to TTS Change Value	SS M	TTS to SS Change Value
1.	Cultural backgrounds	3.40	3.36	-0.04	3.64	0.28
2.	Varied learning needs	3.54	3.46	-0.08	3.50	0.04
3.	Different developmental levels	3.51	3.35	-0.16	3.62	0.27
4.	Socioeconomic	3.40	3.31	-0.09	3.57	0.26
5.	Special needs	3.19	3.13	-0.06	3.58	0.45
6.	Mental health	3.06	3.00	-0.06	3.64	0.64
7.	Gifted	3.08	2.94	-0.14	3.47	0.53
8.	English Language Learners	3.14	2.96	-0.18	3.62	0.66
9.	Resources	3.36	3.20	-0.16	3.54	0.34
	Diverse Learners Construct	3.30	3.19	-0.11	3.57	0.38
	Early Childhood (n = 7)	3.24	3.17	-0.07	3.49	0.32
	Elementary Education (n = 49)	3.68	3.51	-0.17	3.70	0.19
	Secondary Education (n = 17)	3.20	3.12	-0.08	3.68	0.56

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Table 4

Exit Survey, Transition to Teaching Survey, and Supervisor Survey: Descriptive Statistics

Question	N	Disagree (1)	Tend to Disagree (2)	Tend to Agree (3)	Agree (4)	% of Agree	M	SD
Exit Survey (ES) (M = 3.30; SD = 0.68)								
1. Cultural backgrounds	72	0	3	37	32	95.8	3.40	0.57
2. Varied learning needs	72	0	5	23	44	93.1	3.54	0.63
3. Different developmental levels	72	0	6	23	43	91.7	3.51	0.65
4. Socioeconomic	72	0	5	33	64	93.1	3.40	0.62
5. Special needs	72	0	15	28	29	79.2	3.19	0.76
6. Mental health	72	1	17	31	23	75.0	3.06	0.79
7. Gifted	71	0	17	31	23	76.1	3.08	0.75
8. English Language Learners	72	1	14	31	26	79.2	3.14	0.77
9. Resources	72	0	4	38	30	94.4	3.36	0.59
Transition to Teaching Survey (TTS) (M = 3.19; SD = 0.77)								
1. Cultural backgrounds	72	1	6	31	34	90.3	3.36	0.70
2. Varied learning needs	72	0	5	29	37	93.1	3.46	0.63
3. Different developmental levels	72	0	2	31	33	88.9	3.35	0.67
4. Socioeconomic	72	0	9	32	31	87.5	3.31	0.68
5. Special needs	72	2	12	33	25	80.6	3.13	0.79
6. Mental health	72	5	16	25	26	70.8	3.00	0.93
7. Gifted	72	4	20	24	24	66.7	2.94	0.92
8. English Language Learners	72	3	19	28	22	69.4	2.96	0.86
9. Resources	72	2	8	35	26	85.9	3.20	0.75
Supervisor Survey (SS) (M = 3.57; SD = 0.62)								
1. Cultural backgrounds	64	0	3	29	38	95.7	3.64	0.55
2. Varied learning needs	70	0	3	29	38	95.7	3.50	0.58
3. Different developmental levels	68	0	2	22	44	97.1	3.62	0.55
4. Socioeconomic	67	0	3	23	41	95.5	3.57	0.58
5. Special needs	69	1	4	18	46	92.8	3.58	0.67
6. Mental health	61	1	3	13	44	93.4	3.64	0.66
7. Gifted	60	1	4	21	34	91.7	3.47	0.70
8. English Language Learners	37	1	1	9	26	64.6	3.62	0.68
9. Resources	65	0	3	24	38	95.4	3.54	0.59

Note. Missing items were coded as intentional skips.

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Exit Survey (ES) Results

Overall, ES results indicated that preservice teachers graduate feeling confident in their training to teach diverse learners in their classrooms ($M = 3.30$, $SD = 0.68$) with a mean rating between tends to agree (3.0) and agree (4.0); see Table 4. Percentage of individual question agreement ranged from 75.0% (*Mental health*) to 95.8% (*Cultural backgrounds*) with a high level of agreement indicated for the collated *diverse learner* construct (86.4%). The minimum item score was *Mental health* ($M = 3.06$) and the maximum item was *Varied learning needs* ($M = 3.54$). Of the nine survey questions, means ranged 0.48. The item with the lowest standard deviation occurred in the area of *Cultural backgrounds* ($SD = 0.57$) and the highest in the area of preparation for *Mental health* ($SD = 0.79$). When examined at the individual level, reported graduate means at program completion ranged from 2.11 - 4.0.

Transition to Teaching Survey (TTS) Results

Results of the TTS revealed that after their first year in the classroom, teachers perceived their preparation as slightly less effective than when they first completed their training program. A mean of 3.19 ($SD = 0.77$) was indicated – a 0.11 decrease from the ES with a range in differences of 0.04 - 0.18 (Table 4). The TTS was the only survey on which single item means dropped below a tendency to agree ($M = 3.0$) as *English Language Learners* ($M = 2.96$) and *Gifted* learners ($M = 2.94$) occurred slightly into the range of tend to disagree ($M = 2.00 - 2.99$).

Percentage of item agreement ranged from 66.7% (*Gifted*) to 93.1% (*Varied learning needs*) with an 81.5% level of overall diverse learner construct agreement. The TTS level of agreement was a 4.9% decrease from the ES one year prior. The minimum score indicated was *Gifted* ($M = 2.94$) and the maximum item was *Varied learning needs* ($M = 3.46$), which was also the item with the lowest standard deviation ($SD = 0.63$). Of the nine survey questions, means

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ranged 0.52. The highest standard deviation occurred in the area of preparation for *Mental health* ($SD = 0.93$).

When examined at the individual level, reported teacher means ranged from 1.33 - 4.00. Of these, 52.8% ($n = 38$) demonstrated the same or higher means compared to the ES indicating that they perceived their preparation to be commensurate or improved after one year of teaching experience. However, score value changes from the ES to the TTS ranged from -1.67 to $+1.33$ with an average negative change of -0.62 .

Supervisor Survey (SS) Results

According to the SS, supervisors indicated that first year teachers demonstrated the ability to teach diverse learners (Table 4). Results of the SS revealed a diverse learner construct mean of 3.57 ($SD = 0.62$). This mean is $+0.38$ higher than the TTS, indicating teachers after their first year in the classroom perceived their preparation as less effective than their supervisors judge their abilities (Table 3). Furthermore, results on all nine items indicated an increase from the TTS to the SS with a range of $+0.38$ (0.04 - 0.66).

Percentage of item agreement varied from 64.6% (*ELL*) to 97.1% (*Different developmental levels*) with a high level of overall construct agreement (91.32%). This SS level of agreement indicated a $+10.96\%$ difference when compared to the TTS. On the question related to teaching ELL, a skip pattern was noted as supervisors were provided with an option to mark the item as "Not Able to Observe". Of the total respondents ($n = 72$), 51.4% ($n = 37$) of supervisors indicated this choice (Table 4). Neither this option, nor a comparable alternative was provided on the ES or TTS. Of the nine survey items, means ranged 0.17; the minimum score indicated was *Gifted learners* ($M = 3.47$) and the maximum item was both *Mental health* and *Cultural*

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backgrounds ($M = 3.64$). The highest standard deviation occurred in the area of preparation for *Gifted* learners ($SD = 0.70$).

When examined at the individual level, reported supervisor means ranged from 1.67-4.0. Of these, 73.61% ($n = 53$) resulted in the same or higher means compared to the TTS, indicating supervisors perceived teachers' abilities to work with diverse learners higher than the teachers themselves felt prepared to do so. Positive score values between the TTS to SS ranged from +0.11 to +2.67. Results displayed a mean of 3.19 and an average positive difference from TTS ratings of +0.85. There were nine supervisors who reported the same result as the teachers. Of these, three had means of 4.0 and one a mean of 3.0. Alternatively, 43% ($n = 31$) received lower performance scores from supervisors than what the teachers rated their preparation on the TTS. The mean SS score for those with lower ratings than those on the TTS was 3.13 (range of different scores = -0.08 to -1.63) with an average range difference of -0.73, whereas supervisors who rated teachers higher than the teachers rated their preparation, had a mean SS score of 3.40 (range of different scores = 0.11 to 2.67) with an average difference of +0.85.

Summary of Comparative Findings

Means scores across the three surveys were similar - ranging from 3.19 to 3.57. All means remained in the range of "tend to agree" to "agree" (i.e., from 3.0 - 4.0). The highest means were reported by the supervisors regarding teachers' abilities to work with *diverse learners*, and the lowest means by the teachers themselves after one year in the field (see Table 5). When the new teachers completed the ES, their mean score on the nine diversity items was $M = 3.30$. The mean score for the TTS completed after one year of teaching was $M = 3.19$. The teachers decreased slightly in their feeling of being prepared to teach diverse learners. When comparing the averages of the nine diversity items between the TTS and ES, there yielded a

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statistically significant result $t(9) = 6.2, p < .05, d = 2.0$. The effect size (Cohen's d) was large.

The item with the highest score change value from the ES to the TTS occurred for working with *English Language Learners* (-0.18) (Table 3).

In addition, there was a marked difference between the response of supervisors compared to the teacher responses regarding their own preparedness. While the TTS mean was $M = 3.19$, the SS mean was 3.57. This difference was found to be statistically significant, $t(9) = 5.552, p < .05, d = 1.9$. Supervisors perceived teachers' abilities to work with diverse learners higher than the teachers themselves felt they were prepared, most notably in the area of *English Language Learners* (+0.66), *Mental health* (+0.64), and teaching *Gifted* (+0.53) learners. There was no significant difference in means when data was disaggregated by program level of preparation. There was a correlation between the ES and the TTS of 0.416, which was statistically significant ($p < .05$). There was no correlation between the SS and the ES or TTS (Table 5). At the item level, correlations showed a weak to moderate positive relationship. *Cultural backgrounds*, *Varied learning needs*, *Special needs*, *Mental health*, *Gifted*, and *ELL* each had significantly significant correlations ($p < .05$) between the ES and the TTS (Table 6).

Table 5
Correlation of Subscale Constructs and Measures of Internal Consistency for Survey Data

Survey	ES	TTS	α
Exit (ES)			0.89
Transition to Teaching (TTS)	0.416*		0.93
Supervisor (SS)	-0.015	0.035	0.97

* $p < .05$.

Table 6
Exit Survey (ES), Transition to Teaching Survey (TTS), and Supervisor Survey (SS): Item Correlations

Individual Items	ES vs TTS	ES vs SS	TTS vs SS
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Cultural backgrounds	.30*	.21	.16
Varied learning needs	.36*	.06	.16
Different developmental levels	.05	.38	.24
Socioeconomic	.05	.11	.12
Special needs	.26*	-.07	-.01
Mental health	.33*	-.06	-.15
Gifted	.52*	-.12	-.12
English Language Learners	.45*	-.18	-.10
Resources	.17	-.02	-.02

* $p < .05$.

Discussion

This secondary analysis, which leveraged EPP program accreditation survey data, indicated that preservice teachers graduate feeling confident in their preparation for diverse classrooms, continue to feel prepared as they begin teaching, yet begin to recognize specific aspects of learner diversity for which they were less prepared. According to their supervisors, they are teaching diverse learners effectively. Results provide support for examining specific aspects of learner diversity for which teachers felt prepared, the continuum of teacher skill development, the impetus for focused induction support, and the relationship of these to preparation program improvement (Dixon et al., 2014; McDonough, 2009; & Valiandes, 2015). More importantly, findings allow vital perspectives of teachers and their supervisors into the conversation and consider implications for accelerating teaching effectiveness for an increasingly diverse student population.

The focus of preservice training and induction practices need to keep pace with the enormous shifts in the student population and the increasing diversity of their learning needs. Based on an extensive literature review, Rowan et al. (2021) posit advice that future teachers be prepared *about, to, and for* diversity. That is, new teachers need a knowledge base about different types of diversity and need to know how to respond to diversity in educational decision making (e.g., curriculum, pedagogy, assessment) underpinned by a position that “take(s)

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diversity as something to be normalized, celebrated, and valued” (p.146). Even though the percent of students from diverse backgrounds has increased (NCES, 2018 & Brigandi et al., 2019), teachers in this study specifically felt less prepared to teach *gifted* learners, *English Language Learners* and students with *mental health* needs, a finding that remained consistent from the time of exiting teacher training to one year in the field. Rowan et al. (2021) found that considerably less attention is given in the literature on teacher preparation to some aspects of diversity than others. There is a broad scope, but an uneven amount of attention devoted in teacher preparation for various groups of diverse learners with a major focused on cultural/ethnic identity. This indicates a call to build confidence, skills, and abilities in definite areas such as those indicated by teachers in this study.

New Teacher Perceptions & Supervisor Perspectives

This study addressed the question, “How confident do new teachers feel in their preparation to teach diverse learners as they exit a teacher training program?”. Results indicated that preservice teachers graduate feeling confident in their training, particularly for learners from diverse *cultural backgrounds* and with a *variety of learning needs*. Although still indicating satisfactory preparation, graduating teachers did indicate they felt slightly less prepared when it came to work with students with *Mental health* concerns than other aspects of learner diversity. Although new teachers in this study found themselves to be prepared, their confidence in that preparation waned slightly during their first year. This indicates that teachers in the study felt more prepared for diverse classrooms than what the broader literature would suggest (Feiman-Nemser, 2001; Ford et al., 2007; Garcia et al., 2010; Kumar & Hamer, 2013; Rowan et al., 2021). Prior research has indicated that new teachers often indicate they feel less prepared to work with students with diverse needs (Eberly et al., 2010), and might not be prepared for the complex and multilayered nature of diverse classrooms (Rowan et al., 2021).

This finding does coincide with prior research that teachers’ perspectives change between their time in a teacher preparation program and the field due to lack of independent experience (Whipp, 2013), suggesting that even after EPPs address InTASC preparation standards, adequate preservice preparation may still not be enough. This finding correlates with that of Kahn et al. (2014), who observed that dispositions for and understanding of diversity are developed through experience. Kumar and Hamer (2013) further noted that stressors associated with early school experiences can diminish the capacity for critical thinking and self-reflection, both which are essential to address the needs of all learners.

English Language and Gifted Learners

While results indicated only a slight decline overall from the ES to the TTS, there was a marked difference on two items: perceptions on preparation for providing instruction to *ELLs* and *Gifted* learners both declined markedly after one year. The teachers' perspectives in this study support prior findings on both aspects of learner diversity. Orosco & Abdulrahim (2018) also found that teachers were not prepared to teach ELLs – specifically in mathematics. Without specialized preparation, even well-trained teachers may find it difficult to meet the needs of ELLs (Samson & Collins, 2012; Gándara & Santibañez, 2016). Similarly, both preservice and in-service teachers have reported lack of training and professional development for working with gifted students (Brigandi et al, 2019; Hiatt & Fairbairn, 2018; Ottwein, 2020). Some researchers have recommended that to reach diverse learners, teachers should focus on high leverage practices that cut across grades, subjects, and diverse student populations, but others have pointed out that concerns exist in this model regarding issues of social justice and cultural responsivity that could be overlooked (Richmond, Salazar, & Jones, 2019).

These results point to an issue of scope versus specificity. While knowledge, skills, and dispositions of the ten InTASC standards are broad in scope, skill development in areas of teacher responsibility, such as ELL, mental health, and gifted education requires focused effort. This specificity v. generality dilemma in how to reach diverse learners might be managed by encouraging teachers to approach the variety of learners in their classroom as a resource, rather than thinking particular skills for each category of student are needed. Thus, a preservice training focused on high impact practices to teach all learners could also be considered.

Another important consideration emerges regarding expectations of new teachers to be experts in the most complex aspects of teaching increasingly diverse learners. Barnes and

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Smagorinsky (2016) noted that often EPPs and school districts expect beginning teachers to be highly skilled after a few semesters of coursework, practica, and a semester of student teaching – the teachers themselves hold this expectation as well. However, as documented by Liston et al. (2006), numerous studies cite a progression on the continuum of professional learning with skills achieved sometime in the fourth year of teaching or beyond. During their first years in the field, teachers practice and apply skills for instructing diverse learners in authentic classroom settings. Danielson (2007) acknowledged that new teachers should expect at least five years of experience to exhibit proficiency in all areas of teaching, and even longer to exhibit sophisticated skills at the highest level. When teachers have been asked what would be useful in addressing the challenges, their suggestions are clear: observe other highly effective teachers, work with a mentor or coach, and participate in a professional learning community (Gándara & Santibañez, 2016). Teachers in their first years would benefit from these opportunities to build on preservice training, stabilize their strategies, and gain adaptive expertise (Feiman-Nesmer, 2001). Stakeholders would be wise to consider how teachers are prepared to provide instruction to *ELLs* and *Gifted* learners given these suggestions and the perspective of teachers expressed in these results.

Pre-service Teacher Self-Efficacy

Kumar and Hamer (2013) found upon program completion that some preservice teachers felt prepared to teach in diverse classrooms, and indeed, teachers in this study indicated the same. However, they felt slightly less prepared within their first year of teaching. Data from supervisors in this study revealed that first year teachers exhibited the ability to teach diverse learners. When considering the research questions regarding similarities and differences between new teachers and their supervisors, an interesting finding emerged. Analysis showed that

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supervisors perceived teachers' abilities to work with diverse learners at higher scores than the teachers themselves felt they were prepared. The means for all nine survey items remained in the range of tend to agree to agree (i.e., from 3.0 - 4.0) with the highest means reported by the supervisors and the lowest means by the teachers themselves after one year in the field (see Table 5). Survey items in which TTS and SS responses diverged the most were those for teaching students with *Mental health* needs, *ELLs*, and *Gifted* learners. The teachers felt less prepared, yet their supervisors indicated they were performing well in these areas.

A potential response to these findings may be to explore conceptualization of teacher confidence or self-efficacy. According to Zee and Koomen (2016), "self-efficacious teachers have been shown to be less anxious about and to have more positive attitudes toward inclusive education and sociocultural diversity than inefficacious teachers" (p. 994). As Darling-Hammond (2006) observed, even small cases of teaching success are related to a sense of efficacy which in turn is linked with a teacher's effectiveness and dedication to teaching. Furthermore, Warren (2018) proposed focusing on preservice teacher empathy-building through which they recognize their own biases, beliefs, values, and attitudes about cultural differences.

On one specific question related to teaching ELLs, an interesting skip pattern occurred in which 49% of supervisors marked the item as "Not Able to Observe" (see Table 4). This brings into question whether new teachers actually felt less prepared in this area, if supervisors did indeed perceive teacher's skills as adequate, or if first-year teachers had the occasion to use skills to teach ELLs. Although it is not possible to fully ascertain causation for the large score change values on these responses via secondary data analysis, this result does inform induction support when considering recency effects. As teacher candidates enter the field, they retain knowledge and skills from preparation that make sense or have direct application to their classroom; the

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longer time period between when preservice training addresses skills to teach specific groups of diverse learners and the need to recall and use said skills in the classroom could reduce pedagogical fidelity or a teacher's trust in their own ability to perform specific teaching tasks.

A Coordinated Response

Addressing the complex nature of preparing new teachers for diverse classrooms through a combination of coursework and relevant experience expands the responsibility of preparation to both EPPs and school districts. Because it is impossible to anticipate or replicate every possible classroom encounter, results from this study support the idea that development of abilities to teach diverse learners must seamlessly continue after initial teacher training. As Lee and Hemer-Patnode (2010) and McDonough (2009) found, training for teaching in diverse classrooms must continue beyond teacher preparation programs. Results also clearly indicate an early focus in three areas, mental health, ELL, and gifted learners, would do well to support teachers.

Novice teachers need continued support to properly utilize the skills and knowledge they learned through the EPP (Skeen, 2019), and building confidence for teaching diverse learners according to the InTASC standards. Development of teaching expertise is nonlinear, and as teachers gain experience, they demonstrate increasingly complex and sophisticated methods required for the context of today's classrooms. It is clear that "teachers need time to process new ideas, consolidate skills, and begin to make changes to their teaching practice" (Kutaka et. al, 2017, p. 150). As Haynes et al., (2014) identified, "improvement of teaching is a collective rather than individual enterprise" (p. 5). To systematically develop teacher expertise, induction support is a purposeful approach to enrich teachers' pedagogical skills and enhance student achievement.

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Preparing teachers for diverse classrooms requires a continuum of training spanning from the EPP, to induction support, then sustained through professional development so new teachers develop the self-efficacy and confidence required to teach diverse learners (Bastian & Marks, 2017; Feiman-Nemser, 2001; Johnson, 2004; McDonough, 2009; Zee, M., & Koomen, H., 2016). Proper induction support relies on communication and collaborations between EPPs and schools so that on-the-job training and professional development can continue where EPPs left off (Brigandi et al, 2019 & Johnson, 2004). EPPs and P-12 schools need to collaborate in supporting preservice teachers to feel comfortable and confident to implement the promising teaching practices they learned through the EPP and their first year of experience. Often teachers are motivated to gain expertise through recognition of their effort and skills, a prospect in which EPPs are uniquely situated to assist their alumni.

Prior research shows that supporting teachers through induction and mentorship can improve their ability to teach diverse learners by increasing their confidence and self-efficacy in addition to their knowledge and skills (Liston et al, 2006; Skeen, 2019; Zee, & Koomen, 2016). Targeted support could amplify these outcomes. Marzano et al. (2011) proposed that focused feedback and practice for specific strategies as well as opportunities to observe and discuss expertise could advance teachers on the continuum of professional learning. Strategies such as instructional rounds, expert coaching, expert videos, teacher-led development, and virtual communities are proposed strategies to assist teachers in skill development.

Opportunities to observe the moment-to-moment adaptations a veteran teacher makes regarding the use of specific strategies and to discuss effective teaching are an important part of developing expertise. Without it, new knowledge about teaching is often limited to personal trial and error (Marzano et al., 2011), leaving many teachers feeling underprepared, even though their

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supervisors find their abilities to be acceptable. The principles of andragogy (Knowles, 1984) further remind schools and EPPs alike that new teachers need to be involved in the planning and evaluation of their instruction. Experiences, including mistakes and areas in which they lack confidence, as well as teaching tasks that have immediate relevance to solving classroom challenges should provide the basis for professional learning activities. Specifically, Marzano et al. (2011) suggested that mentors provide induction support through teacher self-rating of performance, classroom walkthroughs, mentor observations, cueing teaching of new strategies, and surveying learners to gain feedback.

As suggested by Anderson et al. (2019) and demonstrated through this analysis, identification of areas of diversity to target in preparation and induction can be a key contribution of EPPs. Data for accreditation and continuous improvement efforts, such as these ES, TTS, and SS survey results, are arguably under-used sources of information that can inform the profession. There is considerable potential to identify foci for targeted new teacher skill development as well as program improvement. Provision of induction supports through partnerships connecting preservice preparation to targeted and comprehensive early-career support in schools could become a natural extension of EPP efforts, particularly given the “rise in evaluation systems that hold teacher education programs accountable for the performance and retention of program graduates” (Bastian and Marks, 2017, p. 389). These partnerships have the potential to increase teacher retention, improve classroom effectiveness, and increase teacher capacity to address the needs of diverse learners (Haynes et al., 2014). New teachers deserve a sustained investment in their development, so they feel well equipped to become highly skilled in their field. As Skeen (2019) indicated, induction programs independent of teachers’ employers may be an important aspect of success. Professional development should occur in areas defined

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by new teachers as weaknesses in their preparation and by supervisors in the lack of implementation. Marzano et al. (2011) acknowledged that changes to professional learning practices are not easily implemented by schools and often require a redistribution of resources. As indicated by Bastian and Marks (2017), change is also needed to support EPPs at the preparation level if a collaborative response to teachers needs is to be realized.

Study Limitations

Although secondary data analysis is well positioned to investigate a complex aspect of teacher preparation, limitations have been identified. Efforts were made to address researcher bias through discussions, yet bias remains an inherent issue in interpretation of results. Furthermore, the available data were collected for accreditation purposes and not expressly to address the research questions of secondary analysis; thus, a potential limitation is that some important information or factors were not available. Additionally, participants were not representative of all completers as only respondents for whom all three surveys had been completed were included. Connecting with completers who did not submit a TTS or following up with supervisors who did not complete the SS even though the first-year teacher did respond might yield additional insights. Furthermore, the small number of completers for early childhood and the mix of content area preparation for secondary teachers restricts generalizability to those levels of preparation in particular. Finally, findings are limited to self-study of the EPP and not necessarily beyond.

Conclusion

The consensus that a well-prepared teacher has a positive effect on diverse learners and that many teachers perceive they are underprepared for this task allows for greater attention targeting areas of development identified by new teachers and their supervisors. This study

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added perspectives not readily available in the research: those of first-year teachers and their supervisors, key viewpoints for examining teacher preparedness and effectiveness. The design of this study that compared teacher and supervisor responses longitudinally within the framework of teaching standards is a viable method for assessing teacher preparation program effectiveness. The three surveys provided a comparative exploration of the topic, and supervisor feedback added a unique correlational element that researchers could consider for future studies. Additionally, a key strength of this study was the reliability and validity of the survey instruments as established by a third-party team of research experts and reconfirmed within the study. Several institutions located in the same state as this EPP complete the equivalent survey cycles using the same instruments, therefore it would be intriguing to explore results from this study in comparison to the collective aggregate. A comparison of new teachers' responses in rural versus urban contexts would also offer impactful insight to preparation programs, as would further investigation of the predictive validity of school context factors as they relate to new teachers' perception of preparedness for the responsibilities they face.

Results from this study support the notion that new teachers should not be expected to graduate from a preparation program completely prepared for intricacy of diverse classrooms. Instead, they should possess a solid understanding of the diversity they will encounter and know what skills and dispositions required to best teach diverse learners. Then, new teachers should have access to additional training and mentorship that helps them to appropriately address specific learner needs. The beginning years are crucial in a teacher's growth, but even more critical in the lives of the diverse learners they teach. They all need to know that they have support in their journey.

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