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Call for Manuscripts for the 2020 *AILACTE Journal, Volume XVII*

Each year the Association of Independent Liberal Arts Colleges for Teacher Education (AILACTE) publishes a peer-reviewed journal. The goal of the journal is to disseminate scholarly work that will enhance the work of teacher education professionals in independent, liberal arts colleges and universities.

The 2020 journal will be a non-themed volume. Manuscripts may address any issue that will enhance the work of teacher educators in a liberal arts context. Topics that are appropriate for the journal include teaching and learning strategies, candidate and program assessment, diversity and inclusion, policy changes, program models, etc. Submissions are not limited to research studies, but manuscripts that are grounded in literature and supported by data will be given stronger consideration.

Manuscripts are due June 19, 2020 and must follow APA guidelines, 6th Edition. Submissions should be 20 pages or less; the 20 pages do not include the abstract and references. Additional information for submissions will be posted on www.ailacte.org in March. We look forward to reading your work and learning from your experiences, ideas, and research.

The 2021 journal will be a themed volume. The theme for the 2021 volume will be posted on the AILACTE website (www.ailacte.org) in July 2020.

Jackie Crawford (jackie.crawford@simpson.edu) and Elizabeth Leer (leere@stolaf.edu) are editors of the *AILACTE Journal*.

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From the Editors

As stated in the Call for Manuscripts, the goal of the *AILACTE Journal* is to "disseminate scholarly work that will enhance the work of all education professionals and particularly those in liberal arts higher education." We have always sought to contribute to the scholarly conversation on a wide variety of educational issues that are relevant to the liberal arts context, and Volume XVI continues that tradition. While each article in this non-themed edition addresses a different topic, all four manuscripts reflect a concern for preparing highly-qualified teachers who are able to effectively meet the needs of the highly-diverse students that they will encounter in their various classroom contexts.

The first two articles address teacher preparation directly. John Walcott analyzed program websites and publicly available documents from 128 teacher preparation programs at liberal arts institutions to explore their approaches to urban education. He discusses what "urban education" means in current parlance, how teacher preparation can respond to the challenges faced by urban educators, and how well liberal arts colleges and universities are engaged in quality teacher preparation for urban environments. He also provides an overview of programmatic components that are essential for effectively preparing urban teachers. Amber Bechard also addresses effective teacher education. Drawing on interview data from key stakeholders, she argues that teachers need specific training to identify and meet the unique needs of students who are "twice-exceptional," that is, students who demonstrate both intellectual gifts in one or more areas and significant learning challenges that make them eligible for special education, for example learning disabilities or autism spectrum disorder. She asserts that this growing population of students is often underserved because neither special nor general education teachers have been equipped to support their complexities.

Kate Strater and Erin Elfers turn our attention to the specific needs of a different group of students, those with intellectual disabilities. Their qualitative study examines the challenges encountered by these students as they transition from high school to post-school employment. Specifically, they studied a group of

9 students as they participated in a one-year internship during their last year of high school designed to enhance their self-determination and ease their transition to greater independence and the world of work. The authors offer several recommendations for maximizing the impact of similar transition programs. Finally, Kathryn Davis, Pamela Wash, Abbigail Armstrong, Crystal Glover, and Kavin Ming focus on a common tool used to assess beginning teacher competence: the edTPA. In a mixed-method study, Davis and her colleagues investigated the beliefs of faculty members about using the edTPA as the primary measure of a teacher candidate's readiness to teach. The faculty all worked at a liberal arts university that recently implemented the edTPA across all of its programs, and the investigators were also interested in whether or not faculty attitudes affected candidate scores on the assessment.

Many people are involved in the production of a journal. We would like to thank our authors; the members of our Editorial Review Board; Jackie McDowell, publications editor; Kathy Gann, technical editor; Alyssa Haarer, executive assistant; and Barbara Grinnell, graphic designer. We would also like to thank members of the AILACTE Executive Committee for their support.

Jacqueline Crawford, Simpson College
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Urban-Focused Teacher Preparation in Liberal Arts Colleges and Universities: Confronting the Challenges

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Abstract

The current narrative surrounding urban education, while incomplete, often focuses on concerns related to student achievement, failing schools, and teacher quality. This article targets teacher preparation as one response to these challenges and investigates the extent to which liberal arts colleges and universities are involved in this work. The article provides a summary of practices associated with effective urban-focused teacher preparation and analyzes data from liberal arts teacher education programs. Based on this research, the author categorizes the programs' various approaches and offers recommendations for maximizing the ability of such programs to effectively engage in this crucial work.

Keywords: teacher education, urban education

Urban-Focused Teacher Preparation in Liberal Arts Colleges and Universities: Confronting the Challenges

The current narrative surrounding urban education in the United States emphasizes failure and crisis. While this uncritical emphasis on the negative yields an incomplete and inaccurate characterization, research has highlighted the very real challenges facing many urban schools. Too many schools are characterized by low student achievement and graduation rates, a shortage of qualified teachers, and a lack of adequate funding or resources (Duncan & Murnane, 2014; Hollins, 2012; Howard, 2013; Kirp, 2013; Ladson-Billings, 2007). Furthermore, racism and discrimination in the form of school disciplinary practices, tracking, and limited opportunities are the reality (Carter, 2005; Noguera, 2008, Oakes, 2005). Moreover, a growing demographic divide between teachers and students complicates the student-teacher relationship and their efforts to succeed in reaching their goals (Jupp, 2013; Sleeter, 2001; Zeichner, 2003). While the term crisis should not be used indiscriminately to describe urban education in general, it is clear that many urban schools face significant obstacles.

Efforts to reform urban education have naturally included a focus on teachers, teaching, and teacher preparation. Teacher quality has a significant impact on student learning (Feiman-Nemser, 2001; Howard & Milner, 2014). Furthermore, the effects of teacher shortages and unqualified teachers are experienced disproportionately by students of color, in low-achieving schools, and in high poverty areas (Rizga, 2015; Zeichner, 2003). In addition to questions related to teacher preparation, it is also imperative to consider the types of programs and institutions that are engaged in this work. Currently, the majority (91%) of teacher candidates are enrolled in university-based teacher preparation programs (U.S. Department of Education, 2016), and many of these are part of liberal arts colleges and universities.

Within the larger context of teacher preparation, this study focuses on those programs located in liberal arts colleges and universities. It is situated at the intersection of three current realities related to urban education in the United States: the perceived crisis in urban schools, the calls for improvement

in teacher preparation, and the fact that a significant number of urban teachers are emerging from university-based teacher preparation programs housed in liberal arts colleges and universities. Specifically, this project contributes to our understanding of whether or not, given current realities and constraints, liberal arts colleges have the resources to effectively prepare teachers for work in urban schools. This article provides a summary of the qualities and characteristics associated with effective preparation of teachers for work in urban schools, reports on the findings of a small study of urban-focused teacher preparation in liberal arts colleges, and offers recommendations informed by this discussion and analysis.

Understanding Urban Education

Given the various ways that researchers, practitioners, and the public use the term urban (Howard & Milner, 2014), it is essential to frame our understanding of urban education. Current statements about the crisis in urban education are often overstated, inaccurate, or simply assumed given the deficit perspective that dominates the rhetoric surrounding urban schools (Gadsden & Dixon-Román, 2017; Ladson-Billings, 2000; Pollack, 2012; Sirrakos Jr., 2017). This perspective is fueled by the negative connotations that have been mapped onto the term *urban* when describing schools, students, families, and communities. While in the past *urban* was defined in contrast to *village* to describe "the highly complex changes in ways of thinking and behaving that accompanied revolutions in technology, increasing concentrations of people in cities, and restructuring of economic and political institutions into large bureaucracies" (Tyack, 1974, p. 5), in recent years urban has become code for "low-income students and families of color" (Gadsden & Dixon-Román, 2017, p. 431) and "a signifier for poverty, nonwhite violence, narcotics, bad neighborhoods, an absence of family values, crumbling houses, and failing schools" (Kincheloe, Hayes, Rose, & Anderson, 2007, p. xi).

This narrow frame is dangerous because of the way it reinforces negative stereotypes, misrepresents many of the challenges facing urban schools and students, ignores societal and systemic issues, and hides the complexity, strength, and beauty of urban

schools and urban spaces. Leonardo and Hunter (2009) noted that "representations of urban schooling most commonly evoke images of the urban as 'jungle'" (p. 154), complete with racist overtones and visions of gangs, violence, and danger. They argued, however, that these characterizations ignore the way urban also can be envisioned as a sophisticated space of modernization and technology and as an authentic place of identity, home to the people who reside there and to their diverse and rich cultural practices. Discussions of urban education, therefore, need to move beyond the negativity associated with the term urban and "must consider how students and their families grow, think, behave, and enact their identities as well as the inextricability of these identities to local context and to locations within place" (Gadsden & Dixon-Román, p. 433). Teacher preparation needs to include a re-imagining of urban spaces and urban schooling, a "radical questioning of the way educators and concerned people currently imagine the urban from a place of decline to a place of possibilities" (Leonardo & Hunter, 2009, p. 164). Teacher candidates, then, need opportunities to engage in critical discussions about and interactions with both urban schools and communities and the dominant discourse surrounding urban education.

While seeking, then, to add to an informed and critical perspective of urban education, it is also necessary to understand how urban education is used to describe specific schools. Milner and Lomotey (2014) noted that urban schools are generally considered to be located in large metropolitan areas, include a diverse student population, and be underserved in terms of resources. Furthermore, there is a recognition that students in these schools are frequently marginalized due to societal and educational inequities. Within this group, however, there remain significant differences. Milner's (2012a) typology of urban education has proved useful in characterizing schools as urban intensive, urban emergent, or urban characteristic. Urban intensive schools are located in the small group of very large metropolitan cities such as New York, Chicago, and Los Angeles. Urban emergent schools are located in large cities such as Nashville, Tennessee, and Charlotte, North Carolina, and share many of the characteristics and challenges of urban intensive schools. Finally, urban

characteristic schools, while not located in large cities, encounter challenges often associated with urban schools.

The study of urban education, therefore, needs to include an understanding and celebration of the complexity, diversity, strengths, assets, and beauty inherent in urban communities and schools while also recognizing the unique and serious challenges regularly facing urban schools, educators, students, and the communities in which they are located. Urban education, then, describes both the realities of urban schools and communities and an approach to teaching and learning that acknowledges and builds on those realities.

Urban-Focused Teacher Preparation

Efforts to improve urban education are multi-faceted and reflect a variety of perspectives, but there is widespread agreement that teacher preparation must be at the heart of urban school improvement (Howard & Milner, 2014). As Milner (2012b) has strongly asserted, "There is no issue more important to improving urban education—particularly the instructional practices of teachers in urban classrooms—than the preparation of teachers" (p. 700). The focus on teacher preparation is also fueled by concerns about low student achievement and a shortage of qualified teachers (Duncan & Murnane, 2014; Howard, 2013; Kirp, 2013). In addition, the fact that 12% of public school teachers are in their first two years (Sawchuk & Rebora, 2016) highlights the need for teacher candidates who are ready to be successful on their first day in the classroom.

However, preparing teachers is demanding work, and this is especially true of urban-focused teacher preparation. Duncan-Andrade's (2011) assertion that "not every program needs to commit to preparing teachers to work in urban schools, but for those that do, it should be their only focus" (p. 322) reflects the challenging nature of this work along with the dedication needed to do it well. It also serves as a challenge to institutions that have not traditionally been involved in urban education. The question of whether or not these institutions can effectively engage in this work, and if so, how, is salient as we consider how to improve schooling for all students.

Although teacher preparation for urban education is still a developing literature field (Howard & Milner, 2014), there is a growing body of research articulating its essential components. Scholars have emphasized the need for preparation that immerses candidates in urban communities, provides an intellectual framework for understanding students' realities, critically engages with issues of equity and justice, and equips teachers to meet the needs of all learners. Furthermore, program structure must include coherence and integration of coursework with clinical practice, extended field experience, effective partnerships with local schools and communities, and attention to recruitment.

Immersion in Urban Communities

Teacher candidates need to be engaged with and culturally immersed in urban communities (Ladson-Billings, 2000, 2001; Sleeter, 2001; Noel, 2013) in order to move beyond the "artificial" domains of the university and a single field-based practicum (Solomon & Sekayi, 2007) and to confront the negative stereotypes often resulting from limited contact with urban communities (Solomon & Sekayi, 2007; Zygmunt-Fillwalk & Leitze, 2006). Teacher preparation programs have been successful in confronting these challenges by involving teacher candidates in community-based projects, service learning, and personal interaction with urban communities. These involvements have provided teacher candidates with a deeper and more realistic perspective of urban communities (Massey & Szente, 2007; Solomon, Manoukian, & Clark, 2007) and have been linked to positive changes in attitudes toward issues of multiculturalism and difference (Zygmunt-Fillwalk & Leitze, 2006).

Intellectual Framework

In addition, teacher candidates need a framework through which they can understand their students' experiences, cultural and linguistic background, and strengths and weaknesses in order to contribute positively to their students' academic achievement (Banks, 2016; Duncan-Andrade, 2011; Emdin, 2016; Milner, 2006; Tidwell & Thompson, 2009) and to confront prevailing deficit perspectives (Sirrakos Jr., 2017; Stairs, Donnell, & Dunn,

2012). They need to understand the multiple and complex characteristics that students bring to the classroom and the way these impact their experiences, behavior, and learning (Banks, 2016). As articulated by Howard and Milner (2014), "In its simplest conception, research has suggested that teachers need to build knowledge about and be aware of the racial and cultural background of students in order to address the range of needs students bring to school" (p. 206).

Furthermore, successful urban education programs should help teacher candidates recognize the impact of race, culture, and social class in urban communities (Milner, 2006). Pollack (2012) has highlighted the use of targeted critical listening through the use of observation, reflection, and journaling as effective in helping teacher candidates uncover and challenge deficit narratives. In addition, the use of counterstories grounded in the knowledge and experience of people who have often been marginalized in our society can help teacher candidates reject and challenge deficit narratives (Yosso, 2006). Specialized coursework and structured field experiences along with field- and inquiry-based approaches and school partnerships are crucial in helping teacher candidates develop the necessary framework for understanding their students' realities (Tidwell & Thompson, 2009).

Critical Engagement with Equity and Justice

Critical engagement with issues of equity and justice is also an essential component of urban-focused teacher preparation. Teacher candidates must be prepared to engage in the struggle to transform both the school and society (Giroux, 2009; Giroux & McLaren, 1996; Kincheloe, 2004). They need to understand the ways that schools support the dominant ideology and thereby reproduce social inequality and that the pursuit of justice in education necessarily includes a fight for justice in society (Ewing, 2018; Love, 2019; Sensoy & DiAngelo, 2017). Cultural studies should be at the heart of teacher preparation to provide candidates with the framework necessary to examine school and classroom relations (Giroux, 2009). Similarly, the development of critical consciousness, including "critiquing relations of power, questioning one's assumptions about reality, and reflecting on the

complexities of multiple identities" (Nieto & McDonough, 2011, p. 366), is a necessary part of effective teacher preparation.

Darder (2012) also argued that teacher education must help teacher candidates "develop a critical understanding of their purpose as educators …" (p. 104). Building on Darder's critical bicultural principles, Lopez (2012) stated that urban teacher preparation must "empower teachers in creating culturally democratic classrooms, where the lived experiences of bicultural students are not only validated but also utilized to foster critical consciousness and social transformation" (p. 169). Teacher candidates must be equipped to challenge their internal biases, listen to the voices of their students and families, and understand the way schools work to reproduce inequality (Lopez, 2012).

Meeting the Needs of All Learners

Furthermore, urban-focused teacher preparation must prepare candidates to meet the needs of all students. Howard (2003) noted that teachers "will continue to come into contact with students whose cultural, ethnic, linguistic, racial, and social class backgrounds differ from their own" and therefore "must be able to construct pedagogical practices that have relevance and meaning to students' social and cultural realities" (p. 195). Teacher candidates, therefore, need to understand their students and how to engage in pedagogical practices that promote the achievement of all learners. They need to be equipped to build on and value students' experiences and implement asset-based pedagogies founded on the belief that students can find success in school (Michie, 2019; Stairs, Donnell, & Dunn, 2012). Preparation should include an emphasis on culturally responsive, relevant, and sustaining pedagogy (Gay, 2010; Ladson-Billings, 1995; Paris & Alim, 2016) and multicultural education (Grant, 2012; Nieto & Bode, 2012).

Program Characteristics

Certain program characteristics are also requisite to effective teacher education. The first is coherence and integration of coursework and clinical practice. Programs that incorporate coherent visions of teaching integrated across courses and

field experiences have a greater impact than those that consist of a largely disconnected set of courses (Darling-Hammond, Hammerness, Grossman, Rust, & Shulman, 2005). Therefore, field placements—such as student teaching and other practicum experiences—need to be accompanied by courses that give teacher candidates the opportunity to bridge the gap between theory and practice (Milner, 2006).

Second, field experiences have long been considered a crucial, if not most important, component of preservice teacher preparation (Hollins & Torres Guzman, 2005), and research has demonstrated the positive effect of early field experiences and longer internship placements (Darling-Hammond, et al., 2005). Darling-Hammond (2008) noted that over 300 teacher education programs have added a fifth year to the traditional four-year bachelor's degree program in order to incorporate a yearlong teaching internship that allows teacher candidates to focus exclusively on learning to teach and to better link coursework and teaching.

Third, the importance of close university-school partnerships is also linked to effective teacher preparation. Darling-Hammond (2006) affirmed the need for teacher education programs to develop proactive relationships in places "where practice-based and practice-sensitive research can be carried out collaboratively by teachers, teacher educators, and researchers" (p. 309) and in schools that include diverse learners. Stairs and Friedman (2013) relied on a situative perspective on learning—stressing the need to situate learning within the context of the object of study—to describe and discuss the positive impact of urban school-university partnerships on preservice teacher preparation. Noel (2013) also advanced the value of building on community strengths in the work of urban-focused teacher preparation and urged "teacher educators to move all or part of their programs directly into urban schools and communities" (p. 217). These partnerships are crucial in providing teacher candidates opportunities to learn about and practice culturally responsive pedagogy "in schools and classrooms that value students' diverse cultures in connection with university programs that hold a strong commitment to educating students in historically underserved urban schools" (Olson & Rao, 2016, p. 139).

Finally, the issue of recruitment is crucial in the preparation of urban teachers in two key ways. First, given the demographic divide that commonly exists between urban students and teachers and the importance of increasing the diversity of the teaching force, recruitment of teacher candidates of color is an essential strategy for improving urban schools (Duncan-Andrade, 2011; Ladson-Billings, 2001; Sleeter, 2016). Second, programs are encouraged to screen teacher candidates in order to identify individuals who possess the necessary experiences, characteristics, and dispositions—including persistence, empathy for others, an understanding of diversity, and a commitment to equity and justice (Ladson-Billings, 2001)—to succeed both in teacher preparation and in classroom teaching.

Teacher Preparation in Liberal Arts Colleges and Universities

Continued focus on and assessment of the manner in which teacher candidates are being prepared for work in urban schools is both warranted and necessary. Given the complex nature of teaching and of teacher preparation it is important to explore the question of whether and how liberal arts colleges of education can effectively engage in this work. The purpose of the study reported here is to provide a starting point for an understanding of the extent to which such institutions are engaged in urban-focused teacher preparation.

Method

A content analysis of program web-sites and publicly available documents of teacher preparation programs provided data about the manner in which these programs were engaged in urban-focused teacher preparation. Programs were chosen for inclusion in the study based on their membership in a national association of teacher preparation programs at liberal arts colleges. This purposive sampling (Miles & Huberman, 1994) provided a list of 128 institutions, public and private, of various sizes and geographical regions throughout the United States.

The data gathered from the various programs were analyzed using a set of provisional codes (Miles & Huberman, 1994) based

on the current discourse surrounding urban-focused teacher preparation. These included explicit mention of urban education and communities along with reference to issues and practices associated with urban education, including multicultural education, culturally relevant pedagogy, equity, social justice, field placements, and community involvement. In order to increase accuracy, the coding process was repeated for each set of documents and then, when necessary, subjected to further review to resolve discrepancies.

Findings

The analysis revealed four distinct approaches to the preparation of teachers for work in urban schools (see Table 1). A small percentage (8%) of programs demonstrated a clear focus on preparing teachers for work in urban schools. This was clearly evident throughout their program and appeared in mission and vision statements along with program and course descriptions. Teacher candidates at these institutions would clearly understand urban education as the unique focus of the program. For example, a private liberal arts college of 3000-4000 students in the Midwest highlighted its urban location, the students' continuous involvement with service- learning experiences in urban classrooms, required field service experience in an urban school, and its commitment to preparing responsive educators able to thrive in diverse settings.

Other institutions (8%) included an urban option. Some of these programs allowed students to participate in an urban cohort or to choose urban education as an area of study. Others offered the opportunity to participate in an optional program or do their teaching internship in an urban center. However, urban education was not articulated as the focus of the entire program. For example, this urban option was present in a small college (1000 students) in the Eastern United States that advertised a collaborative program with a partner organization that would work with its students to facilitate service learning and field placements in a metropolitan area located approximately 70 miles from its campus. The program also included a required course as part of its teacher preparation program designed to expose students to

issues of race, class, and culture in urban schools. The program clearly demonstrated a desire to be involved in preparing teachers for work in urban schools without making this the focus of its entire program.

Table 1

Teacher Preparation Categories

Category	Description	Number of Institutions
Urban Focus	• clearly stated urban focus throughout program • continuous involvement in urban classrooms • required field service in urban school • commitment to culturally relevant teachig	10 (8%)
Urban Option	• urban education not given as focus of program • optional participation in study of urban education, urban placement, or urban cohort • commitment to culturally relevant teaching	10 (8%)
Urban Values	• reflects values associated with urban teacher preparation • commitment to social justice, diversity, multicultural education	21 (16%)
No Evidence	• no reference to urban education or associated values	87 (68%)

A larger number of programs (16%) reflected values associated with urban teacher preparation. These included an emphasis on social justice, diversity, multicultural education, and other qualities associated with effective urban schooling. These themes, however, were not evident throughout the program and were not part of a specific urban focus or option. For example, the introductory webpage for the teacher education program at a small, faith-based university in the Midwest clearly stated its commitment to multicultural education and diversity in its work with teacher candidates. Similarly, the School of Education at a slightly larger liberal arts institution in the Eastern United States highlighted its commitment to social justice and diversity in its philosophy statement. In each case, however, these values were not explicitly tied to a broader focus on urban education. Finally, the majority of schools (68%) did not give any specific evidence

of involvement with urban-focused teacher preparation or of values and issues associated with urban education.

Discussion

In summary, this broad review of one group of teacher education programs affiliated with liberal arts colleges and universities suggests a useful categorization of these programs into *urban focus*, *urban option*, *urban values*, or *not evident* in terms of their level of involvement in urban education. While there are limits to what we can learn from a study of this nature, the clear differences in the way these liberal arts colleges and universities describe their goals related to teacher preparation in general and urban-focused teacher preparation in particular can serve as the foundation for further discussion and research. Furthermore, an analysis of these programs in light of a research-based understanding of effective preparation of teachers for work in urban schools and communities provides a starting point for considering whether or not small, liberal arts institutions can effectively prepare teachers for urban schools and/or how they can minimize the limitations and constraints they encounter.

First, it is important to highlight that the majority of these institutions did not give specific evidence of involvement with the preparation of teacher candidates for urban schools. The location of many of these institutions—far from urban centers—explains some of this. While not stated explicitly, it is likely that many are focused on preparing teachers exclusively for rural or suburban settings. It may also be that some programs do not feel the need to include an explicit focus on urban teaching and learning. They may not believe that "urban teachers need more than the generic teaching competencies…" (Oakes, Franke, Hunter Quartz, & Rogers, 2002, p. 228) and therefore feel that teacher preparation does not need to consider the types of schools in which teacher candidates are likely to work (Hollins, 2006). This one-size-fits-all approach to teacher preparation contradicts current literature about effective practices in urban teacher preparation and would certainly be a cause for concern. More study is warranted to determine how many, if any, teacher preparation programs represent this perspective.

Second, although many liberal arts colleges and universities—32% of the programs reviewed—are making efforts at including coursework, values, or experiences related to urban education, very few (8%) meet the standard of incorporating a unique and specific focus on urban education throughout their program. Duncan-Andrade's (2011) stance that programs that intend to prepare teachers for work in urban schools need to be solely focused on that goal would suggest that it might not be possible, then, for small, liberal arts institutions to attempt this work. However, given the reality that many teacher candidates from these programs do take positions in urban schools, suggesting that they stop their efforts is not an option. Nevertheless, these programs need to recognize the constraints they face and search out ways to maximize their ability to offer effective preparation to their teacher candidates heading to urban communities.

The literature has highlighted the need for teacher preparation that immerses candidates in urban communities, provides an intellectual framework for understanding students, critically engages with issues of equity and justice, and prepares teachers to meet the needs of all learners. Further study is required to investigate the extent to which the urban focus programs realize these goals, but programs in the urban option and urban values categories clearly fall short. Some of the programs provide urban immersion opportunities through their optional urban education cohorts; others include courses designed to engage students critically in issues of justice, equity, culture, difference, and power, among others. Several programs also include courses in multicultural education or diverse learners. However, candidates' opportunities related to these characteristics are uneven, sporadic, and not infused throughout the program.

Teacher preparation literature has also stressed that program design must include coherence and integration of coursework with clinical practice, extended field experience, effective partnerships with local schools and communities, and attention to recruitment. Reference to these qualities is absent from all but the urban focus programs. The nature of an urban option program excludes the level of integration and coherence necessary to provide teacher candidates a deep and critical level of understanding

of urban teaching, students, communities, and sociocultural factors. Additionally, while urban option programs have established partnerships with urban collaboratives or schools, there is no evidence that the work of the partner organization plays a role in the teacher preparation program beyond providing an urban field placement for teacher candidates.

Rather, the data suggest that "add-on" or superficial approaches to urban-related issues that are criticized in the literature (Sleeter, 2001; Solomon & Sekayi, 2007) are a reality in many teacher preparation programs. Those that offer an urban option for student teaching or include a course or two designed to introduce students to issues related to urban education are not providing their teacher candidates with the coherency required of effective programs. Furthermore, these distinct experiences are not able to give candidates the space needed for reflection, dialogue, and cultural immersion that have been demonstrated to be effective in providing students with the necessary framework for successful urban teaching and to combat deficit-based stereotypes and perspectives (Milner, 2006; Noel, 2013; Pollack, 2012; Sleeter, 2001). Although providing students with the opportunity to join a teacher collaborative in an urban community to complete their teaching internship seems like an efficient way to provide interested candidates with urban experience, it involves only limited engagement with urban communities and lacks the appropriate integration of theory and practice.

Finally, these programs do not mention recruitment efforts designed to increase the number of teachers of colors or candidates predisposed to working successfully in urban communities. While additional research is required to thoroughly understand these programs, the data suggest that the great majority of teacher preparation programs in these institutions fail to meet the standards identified in the research literature.

As noted above, there are clear limitations to a study of this nature. An analysis of program documents and websites offers only a surface view of these institutions. Further research is needed to fully understand the manner in which specific programs are addressing issues related to urban teaching and learning. In depth case studies including interviews with faculty,

teacher candidates, and school-based mentors along with observations of specific courses and field placements would increase our understanding of how these programs are enacted and understood along with a sense of their effectiveness. This study, however, increases our understanding of the extent to which these teacher preparation programs are engaged in urban-focused teacher preparation and provides a foundation for further study.

Implications

The limitations of the vast majority of programs highlighted here are substantial and troubling. While this is not an in-depth study, the evidence suggests that the vast majority of these teacher education programs fall far short in providing the focus, experiences, content, and coherence required for effective urban-focused teacher preparation. Programs that truly desire to realize their commitment of preparing teacher candidates to teach all students, therefore, must take steps to improve their capacity. Building on the existing scholarship on the preparation of teachers for work in urban schools, these programs can begin by incorporating a commitment to program coherence and integration, deep and effective partnerships with urban schools and communities, and intentional and strategic recruitment of students and faculty.

First, teacher education programs need to assess their coursework and student learning outcomes to ensure that preparation to meet the needs of all learners and to prepare culturally responsive and competent teachers is a part of all classes and field experiences. Only through this commitment to program coherence and integration will they be able to provide their teacher candidates with "a common, clear-vision of good teaching that permeates all coursework and clinical experiences, creating a coherent set of learning experiences" (Darling-Hammond, 2006, p. 305). While the idea of an urban option does not meet the requirement for coherence throughout the program nor reflect a complete focus on urban education, smaller programs may be able to successfully incorporate optional urban placements for field work if, and only if, these experiences are grounded in coursework and community experiences that provide the knowledge, skills, and dispositions

required for successful teaching in urban schools. All teacher candidates need to be prepared to teach all students, and therefore introductory and pedagogy courses must address issues of equity, diversity, and justice as well as prepare teacher candidates to meet the needs of an increasingly diverse student population. These courses, then, will provide a foundation and framework to prepare teacher candidates for clinical experiences in urban communities as well as providing all candidates, even those who choose not to pursue an urban placement, with necessary preparation for teaching.

Secondly, school and community partnerships need to be a necessary and essential component of these programs. Zeichner and Payne (2013) have argued for the creation of "hybrid spaces" in which "academic, school-based, and community-based knowledge come together in less hierarchical and haphazard ways to support teacher learning" (p. 6). These focused partnerships provide teacher candidates with diverse perspectives and sources of knowledge and push teacher education programs to involve expert, practicing teachers throughout the program. The image of school-based teacher preparation needs to go beyond considering our local schools as sites for the placement of teacher interns to include embracing expert teachers as school-based teacher educators essential to our programs and involved in planning, teaching, and program evaluation. This is an effective practice in teacher education in general, and it is essential for programs that, due to small program size, may not have enough faculty with urban knowledge and experience who can provide the type of mentoring and support needed by teacher candidates.

Finally, intentionality in faculty and student recruitment should be a fundamental component of urban-focused teacher preparation programs. Many liberal arts colleges and universities confront the reality of relatively small numbers of teacher candidates and faculty. They understandably find it difficult to offer expert and first-hand knowledge about urban teaching to their teacher candidates. They may also find it more difficult to recruit a diverse group of teacher educators than larger university-based programs located in urban centers. These realities make it difficult for such institutions to offer programs characterized

by the qualities associated with effective urban-focused teacher preparation. While school and community partnerships should be leveraged to provide expert teachers who can help fill this gap, these programs also need to commit to recruiting and attracting a diverse faculty with experience in urban schools. In addition, just as in-service P-12 teachers need continued professional development related to urban teaching and learning, current teacher education faculty must be provided with opportunities for continued growth in their understanding of urban education and of effective teacher preparation. This will also require the support of the administration and admissions offices in order to dedicate the necessary resources to recruit a diverse pool of teacher candidates. Furthermore, programs should institute a screening process for those interested in urban education to ensure that these teacher candidates have the knowledge, skills, and dispositions to succeed in this work (Ladson-Billings, 2001).

Conclusion

There is still more to learn about how to effectively prepare teachers for work in urban schools, especially in the context of small, liberal arts, teacher preparation programs. Of the programs reviewed, only ten (8%) showed evidence of being urban-focused, and the limited scope of the study does not ensure that their programs incorporated all of the qualities associated with effective teacher preparation. In addition, although many of the institutions reviewed are involved in some ways in preparing teachers for work in urban communities, there is little evidence that they provide the sort of urban focus required for effective teacher preparation.

There is an obvious need for more research of programs that are being effective, even in small ways, and for collaboration among programs to facilitate the sharing of ideas related to coursework, student and faculty recruitment, field experiences, school partnerships, and how to confront the challenges that exist in small programs with limited resources. The current reality is that many graduates of these programs will teach in urban communities and that the student characteristics traditionally associated with urban schools—cultural and linguistic diversity, low socio-economic

status, and diverse student populations—are evident in a growing number of schools across the nation. Therefore, a commitment to prepare teacher candidates for work in urban education and to taking the steps necessary to overcome existing challenges and constraints is an obligation rather than an option.

References

Banks, J. A. (2016). *Cultural diversity and education: Foundations, curriculum, and teaching* (6th ed.). New York: Routledge.

Carter, P. L. (2005). *Keepin' it real: School success beyond black and white*. New York: Oxford University Press.

Darder, A. (2012). *Culture and power in the classroom: Educational foundations for the schooling of bicultural students*. Boulder, CO: Paradigm Publishers.

Darling-Hammond, L. (2006). Constructing 21st-century teacher education. *Journal of Teacher Education, 57*(3), 300-314.

Darling-Hammond, L. (2008). Teacher learning that supports student learning. In B. Z. Presseisen (Ed.), *Teaching for intelligence* (2nd ed.). Thousand Oaks, CA: Corwin Press.

Darling-Hammond, L., Hammerness, K., Grossman, P., Rust, F., & Shulman, L. S. (2005). The design of teacher education programs. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do* (pp. 391-441). San Francisco: Jossey-Bass.

Duncan, G. J., & Murnane, R. J. (2014). *Restoring opportunity: The crisis of inequality and the challenge for American education*. Cambridge, MA: Harvard Education Press.

Duncan-Andrade, J. M. R. (2011). The principal facts: New directions for teacher education. In A. F. Ball & C. A. Tyson (Eds.), *Studying diversity in teacher education* (pp. 309-326). Lanham, MD: Rowman & Littlefield Publishers, Inc.

Emdin, C. (2016). *For white folks who teach in the hood...and the rest of y'all too*. Boston: Beacon Press.

Ewing, E. L. (2018). *Ghosts in the schoolyard: Racism and school closings in Chicago's South side*. Chicago: University of Chicago Press.

Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record, 103*(6), 1013-1055.

Gadsden, V. L., & Dixon-Román, E. J. (2017). "Urban" schooling and "urban" families: The role of context and place. *Urban Education, 52*(4), 431-459.

Gay, G. (2010). *Culturally responsive teaching: Theory, research, and practice* (2nd ed). New York: Teachers College Press.

Giroux, H. A. (2009). Teacher education and democratic schooling. In A. Darder, M. P. Baltodano & R. D. Torres (Eds.), *The critical pedagogy reader* (Second ed., pp. 438-459). New York: Routledge.

Giroux, H. A., & McLaren, P. (1996). Teacher education and the politics of engagement: The case for democratic schooling. In P. Leistyna, A. Woodrum & S. A. Sherblom (Eds.), *Breaking free: The transformative power of critical pedagogy* (pp. 301-331). Cambridge, MA: Harvard Educational Review.

Grant, C. A. (2012). Cultivating flourishing lives: A robust social justice vision of education. *American Educational Research Journal*, 49(5), 910-934.

Hollins, E. R. (2006). Transforming practice in urban schools. *Educational Leadership, 63*(6), 48-52.

Hollins, E. R. (2012). *Learning to teach in urban schools: The transition from preparation to practice*. New York: Routledge.

Hollins, E., & Torres Guzman, M. (2005). Research on preparing teachers for diverse populations. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education: The report of the AERA panel on research and teacher education* (pp. 477-548). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Howard, T. C. (2003). Culturally relevant pedagogy: Ingredients for critical teacher reflection. *Theory Into Practice, 42*(3), 195-202.

Howard, T. C. (2013). How does it feel to be a problem? Black male students, schools, and learning in enhancing the knowledge base to disrupt deficit frameworks. *Review of Research in Education, 37*, 54-86.

Howard, T. C. & Milner IV, H. R. (2014). Teacher preparation

for urban schools. In H. R. Milner IV & K. Lomotey (Eds.), *Handbook of urban education* (pp. 199-216). New York: Routledge.

Jupp, J. C. (2013). *Becoming teachers of inner-city students: Life histories and teacher stories of committed White teachers*. Rotterdam, The Netherlands: Sense Publishers.

Kincheloe, J. L. (2004). The bizarre, complex, and misunderstood world of teacher education. In J. L. Kincheloe, A. Bursztyn & S. R. Steinberg (Eds.), *Teaching teachers: Building a quality school of urban education* (pp. 1-49). New York: Peter Lang.

Kincheloe, J. L., Hayes, K., Rose, K., & Anderson, P. M. (2007). Preface. In J. L. Kincheloe, K. Hayes, K. Rose, & P. M. Anderson (Eds.), *Urban education: A comprehensive guide for educators, parents, and teachers*. Lanham, MD: Rowman & Littlefield Education.

Kirp, D. L. (2013). *Improbable scholars: The rebirth of a great American school system and a strategy for America's schools*. New York: Oxford University Press.

Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal, 32*(3), 465-491.

Ladson-Billings, G. (2000). Fighting for our lives: Preparing teachers to teach African American students. *Journal of Teacher Education, 51*(3), 206-214.

Ladson-Billings, G. (2001). *Crossing over the Canaan: The journey of new teachers in diverse classrooms*. San Francisco: Jossey-Bass Inc.

Ladson-Billings, G. (2007). Pushing past the achievement gap: An essay on the language of deficit. *The Journal of Negro Education, 76*(3), 316-323.

Leonardo, Z., & Hunter, M. (2009). Race, class, and imagining the urban. In Z. Leonardo, *Race, whiteness, and education*. New York: Routledge.

Lopez, E. (2012). Transforming practice: Critical bicultural pedagogy and teacher education. In A. Darder, *Culture and power in the classroom: Educational foundations for the schooling of bicultural students* (pp. 165-173). Boulder, CO: Paradigm Publishers.

Love, B. L. (2019). *We want to do more than survive: Abolitionist teaching and the pursuit of educational freedom*. Boston: Beacon Press.

Massey, C., & Szente, J. (2007). Building partnerships to prepare teachers for urban schools. *Childhood Education, 83*(3), 136-141.

Michie, G. (2019). *Same as it never was: Notes on a teacher's return to the classroom*. New York: Teachers College Press.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: SAGE Publications, Inc.

Milner, H. R. (2006). Preservice teachers' learning about cultural and racial diversity: Implications for urban education. *Urban Education, 41*(4), 343-375.

Milner, H. R. (2012a). But what is urban education? *Urban Education, 47*(3), 556-561.

Milner, H. R. (2012b). Challenges in teacher education for urban education. *Urban Education, 47*(4), 700-705.

Milner, H. R., & Lomotey, K. (Eds.). (2014). *Handbook of urban education*. New York: Routledge.

Nieto, S., & Bode, P. (2012). *Affirming diversity: The sociopolitical context of multicultural education* (Sixth ed.). Boston: Pearson Education, Inc.

Nieto, S. & McDonough, K. (2011). "Placing equity front and center" revisited. In A. F. Ball & C. A. Tyson (Eds.), *Studying diversity in teacher education* (pp. 363-384). New York: Rowman & Littlefield Publishers, Inc.

Noel, J. (Ed.). (2013). *Moving teacher education into urban schools and communities: Prioritizing community strengths*. New York: Routledge.

Noguera, P. A. (2008). *The trouble with Black boys: …and other reflections on race, equity, and the future of public education*. San Francisco: Jossey-Bass.

Oakes, J. (2005). *Keeping track: How schools structure inequality* (2nd ed.). New Haven, CT: Yale University Press.

Oakes, J., Franke, M. L., Hunter Quartz, K., & Rogers, J. (2002). Research for high-quality urban teaching: Defining it, developing it, assessing it. *Journal of Teacher Education, 53*(3), 228-234.

Olson, J. D., & Rao, A. B. (2016). Becoming a culturally responsive teacher: The impact of clinical experiences in urban schools. *Journal of Urban Learning, Teaching, and Research, 12*, 133-141.

Paris, D., & Alim, H. S. (Eds.). (2016). *Culturally sustaining pedagogies: Teaching and learning for justice in a changing world*. New York: Teachers College Press.

Pollack, T. M. (2012). The miseducation of a beginning teacher: One educator's critical reflections on the functions and power of deficit narratives. *Multicultural Perspectives, 14*(2), 93-98.

Rizga, K. (2015). *Mission High: One school, how experts tried to fail it, and the students and teachers who made it triumph*. New York: Nation Books.

Sawchuck, S., & Rebora, A. (2016). New teachers make up a significant segment of profession. *Education Week, 36*(7), 1, 14.

Sensoy, O., & DiAngelo, R. (2017). *Is everyone really equal? An introduction to key concepts in social justice* (Second ed.). New York: Teachers College Press.

Sirrakos Jr., G. (2017). Beyond a deficit perspective. In G. Sirrakos Jr. & C. Emdin (Eds.), *Between the world and the urban classroom* (pp. 53-67). Rotterdam, The Netherlands: Sense Publishers.

Sleeter, C. E. (2001). Preparing teachers for culturally diverse schools: Research and the overwhelming presence of whiteness. *Journal of Teacher Education, 52*(2), 94-106.

Sleeter, C. (2016). Wrestling with problematics of whiteness in teacher education. *International Journal of Qualitative Studies in Education, 29*(8), 1065-1068.

Solomon, R. P., Manoukian, R. K., & Clarke, J. (2007). Preservice teachers as border crossers: Linking urban schools and communities through service learning. In R. P. Solomon & D. N. Sekayi (Eds.), *Urban teacher education and teaching* (pp. 67-87). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Solomon, R. P., & Sekayi, D. N. (2007). Introduction. In R. P. Solomon & D. N. Sekayi (Eds.), *Urban teacher education and teaching* (pp. 1-13). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Stairs, A. J., Donnell, K. A., & Dunn, A. H. (2012). *Urban teaching in America: Theory, research, and practice in K–12 classrooms*. Los Angeles: Sage Publications, Inc.

Stairs, A. J., & Friedman, A. A. (2013). Urban immersion: The impact of preservice preparation in an urban school-university partnership. In J. Noel (Ed.), *Moving teacher education into urban schools and communities: Prioritizing community strengths* (pp. 39-55). New York: Routledge.

Tidwell, M., & Thompson, C. (2009). Infusing multicultural principles in urban teacher preparation. *Childhood Education, 85*(2), 86-90.

Tyack, D. (1974). *The one best system: A history of American urban education*. Cambridge, MA: Harvard University Press.

U. S. Department of Education, Office of Postsecondary Education. (2016). Pathways to teaching. Higher Education Act Title II Reporting System.

Yosso, T. J. (2006). *Critical race counterstories along the Chicana/Chicano educational pipeline*. New York: Routledge.

Zeichner, K. M. (2003). The adequacies and inadequacies of three current strategies to recruit, prepare, and retain the best teachers for all students. *Teachers College Record, 105*(3), 490-519.

Zeichner, K., & Payne, K. (2013). Democratizing knowledge in urban teacher education. In J. Noel (Ed.), *Moving teacher education into urban schools and communities: Prioritizing community strengths* (pp. 3-19). New York: Routledge.

Zygmunt-Fillwalk, E. M., & Leitze, A. (2006). Promising practices in preservice teacher preparation. *Childhood Education, 82*(5), 283-288.

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Teacher Preparation for Twice-Exceptional Students: Learning from the Educational Experiences of Teachers, Parents, and Twice-Exceptional Students

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Abstract

The increasing population of students defined as "twice-exceptional" (2e) exhibits identified or unidentified intellectual or creative gifts in one or more areas, and also faces significant learning challenges and may have autism spectrum disorder, learning disabilities, or other characteristics that make them eligible for special education. However, neither special nor general education teachers are prepared for the unique complexities of these students, because preservice and in-service teacher education rarely addresses 2e students. This study examines the stories of teachers, parents, and 2e students themselves, to listen to their experiences in school and seek their insights to inform preservice and in-service teacher education. This study (1) provides insights for educators from 2e students, parents, and teachers; (2) promotes a deeper understanding of issues that go beyond individual faculty contexts and experiences; and (3) provides empirical evidence in support of transforming teachers and teacher education programs.

Keywords: inclusion, twice-exceptional, professional development, special education, qualitative methods

Beth explained the escalation of her 2e son's struggles in school: "At this point (age 11) he was frequently talking about suicide as a 'way out' of his problems." Rhonda, a 2e parent, lauded a teacher who effectively supported her child:

> What I appreciated was how she could see his strength [and] was willing to offer a potential solution to a problem that was not even in her area of expertise. She cared about him, saw connections, and was willing to try to help. That is a professional educator.

Tamika, a 2e student, reflected on her experiences in school and emphasized that teacher training "is crucial to prevent years of unnecessary trauma caused by being punished for not learning the same ways as the majority."

Twice-exceptional (2e) students and their parents have plenty to say about the challenges they face in schools. Experienced teachers also have perspectives on 2e students they have supported. Teachers' education and in-service professional development programs must be designed to raise their awareness of the 2e population, because teachers can be essential agents in identifying and nurturing all sorts of genius.

Teachers are professionals who can change the world through their impact on students (Tirri, 2017). It will require substantial investment to redesign preparation and professional development programs so that all teachers receive the specialized training they need to identify talents and challenges effectively and serve a diversity of learners.

Twice-exceptional students can be very complex and have needs that are usually met in gifted or special education settings, yet these students are often served in general education settings. Teachers' training programs on gifted, general, and special education often lack explicit instruction on this population as well (Foley-Nicpon, Assouline, & Colangelo, 2013). Meeting the needs of 2e students must be a shared responsibility and requires collaboration between different specialty areas of teacher education.

Definition

In 2014, the National 2e Community of Practice (COP) developed a comprehensive definition of twice-exceptional individuals:

> Twice-exceptional individuals evidence exceptional ability and disability, which results in a unique set of circumstances. Their exceptional ability may dominate, hiding their disability; their disability may dominate, hiding their exceptional ability; each may mask the other so that neither is recognized or addressed. (Baldwin, Baum, Pereles, & Hughes, 2015, p. 212)

Significance

It has been estimated that 5%–7% of children with identified disabilities may also be gifted and talented (Assouline & Whiteman, 2011; National Education Association, 2006; Whitmore, 1981). Because of a phenomenon called "masking," in which cognitive strengths compensate for weaknesses or weaknesses overshadow strengths, teachers often fail to recognize 2e students' unique needs (Baldwin, Baum, et al., 2015; Foley-Nicpon, et al., 2013). This means that the estimate of 5%–7% prevalence may be too low. Empirical investigation of twice-exceptionality remains scarce, however (Foley-Nicpon, et al., 2013), and there are even fewer empirical data specifically on preparing teachers to support 2e students. This is probably due to a shortage of faculty researchers who can generate and translate new knowledge about effective practices into teacher preparation programs (Smith, Robb, West, & Tyler, 2010), which are often divided into silos where special education is treated separately from gifted education.

Twice-exceptional students have been gaining explicit attention since Melody Musgrove, Director of the Office of Special Education Programs for the United States Department of Education, published "Letter to Delisle" (2013) and a memorandum on it to state directors of special education (2015). In the latter document, Musgrove urged the states to remind school districts of their "obligation to evaluate all children, regardless of cognitive skills, suspected of having one of the 13 disabilities

outlined in 34 CFR §300.8" (p. 2). She specifically mentioned students with high cognition, whom districts have been reluctant to assess appropriately and who often do not receive services. A lack of understanding of twice-exceptionality is a huge barrier to recognizing and supporting these students (Lee & Ritchotte, 2018).

The Problem: A Need for Teacher Training Across Settings

The federal IDEA mandate (2004) ensures that students with disabilities have free and appropriate public education. The U.S. Supreme Court, in its decision in Endrew F. v. Douglas County School District, suggested that an "appropriate" education "must offer an 'individualized education program' reasonably calculated to enable a child to make progress appropriate in light of the child's circumstances" (*Endrew F. v. Douglas*, 2017, p. 2). Although states retain the right to make educational decisions, federal mandates establish precedence that guide them. However, there is little state-level legislation addressing 2e learners (Nielsen Pereira, Knotts, & Link Roberts, 2015).

The National Association for Gifted Children and the Council for Exceptional Children have developed teacher preparation standards for gifted and talented education. The Council for Exceptional Children (2015) has also issued professional preparation standards for special educators. Many states also have professional preparation standards for educators. For example, the California Commission on Teacher Credentialing (2017) developed teacher performance expectations for general and special education: developing special educators are accountable to both sets of performance expectations, but general educators are accountable only to the general education standards. Because "the two exceptionalities are often addressed separately in educational settings" (Assouline & Whiteman, 2011), general education with enhancement and supports, or dual differentiation, is often the most appropriate placement for 2e students (Gould, Staff, & Theiss, 2012; Yssel, Adams, Clarke, & Jones, 2015). However, 2e students often receive no explicit mentions in general education or special education teacher preparation standards. There are also inconsistencies in legislation that supports preservice and in-service teacher preparation for these students (Nielsen Pereira, et

al., 2015).

Because teachers are not often trained across specialty areas, they frequently do not recognize the unique profiles of 2e students and so do not make appropriate referrals. Bianco and Leech (2010) studied the effects of teacher preparation and disability labels on gifted referrals and found that all teachers (gifted, general, and special education) were far less willing to refer students with a disability label to gifted programs; special education teachers were the least likely to do so. The idea that a student can be gifted and also have a disability seems contradictory to many teachers (Baldwin, 1999). In addition, because the social and emotional needs of 2e students are unique and complex, most teachers are not adequately prepared to support them in this area (Baldwin, Omdal & Pereles, 2015) or to make referrals for additional social and emotional support.

Teaching this population requires school psychologists and general, gifted, and special education preservice teachers to receive ongoing specialized training on the characteristics and instructional needs of 2e students and on their comprehensive assessment and identification (Assouline & Whitman, 2011; Baldwin, et al., 2015; Foley-Nicpon, et al., 2013; National Association for Gifted Children, 2013). Inadequate teacher training is one factor in the under-identification of 2e students (Johnson, Karnes, & Carr, 1997; Silverman, 2003). All educational professionals should consider the parents' and 2e students' perceptions and educational experiences when reshaping preservice and in-service and teacher education to meet the needs of these students (Foley-Nicpon, et al., 2013).

Purpose

The purpose of this study was to understand the perceptions of parents, teachers, and twice-exceptional students and to examine their advice for the professional development of teachers who support 2e students. Though the professional literature on assessment and instructional practices that benefit 2e students is growing, little empirical research has included the views of key stakeholders specifically on preservice and in-service professional development (Willard-Holt, Weber, Morrison, & Horgan, 2013). Their experience could lend a valuable perspective to the field of teacher education.

Positionality

Qualitative inquiry is based on interpretations, so primary investigators and authors should reveal any positionality that may influence their understanding (Creswell, 2013). I was a classroom teacher for 28 years before becoming a full-time teacher preparation faculty member in a higher education setting. As a classroom teacher, I primarily worked in general education, but I spent several years in special education and was eventually assigned to gifted classrooms because of my experience with highly engaged parents. My district supported my receiving training in gifted education, which complemented my special education training, experiences, and passion for educational equity. I was committed to meeting the needs of all students. The situation gave me a unique perspective as a hybrid teacher—one who was passionate about and qualified to teach both gifted and special education students. Parents began requesting their children be placed in my 8th-grade ELA classes, especially children who were known to be "quirky" or who had known disabilities, such as profound hearing impairment, cerebral palsy, emotional disturbance, or autism spectrum disorder (ASD). I welcomed these students and was properly prepared to help them. Now I work in teacher preparation at an independent liberal arts college and see opportunities to re-envision teacher education to include support for 2e students.

Methodology

My research question was this: What are the perceptions of parents, teachers, administrators, and adults who have experience with or as twice-exceptional students?

This was a phenomenological study in which I sought to understand the perspectives of key stakeholders on the educational experiences of 2e students. Qualitative retrospective interviews were used to understand participants' experiences and their suggestions for future educators. Retrospective interviews are a reflexive exercise that can contribute substantially to one's understanding of processes of change in educational practice by presenting a "living theory" (Whitehead & McNiff, 2014).

Before beginning this study, I obtained approval from the

affiliated institutional review board. The retrospective interviews were conducted with one participant at a time, either face-to-face for approximately 60 minutes, or via email, with the participant replying to and expanding on the initial questions; participants chose which type of interview they preferred. Data were collected over a six-month period. The interviews followed a phenomenological approach, beginning with predetermined open-ended questions that only loosely guided the conversation in order to allow other questions to emerge as a result of the sharing. The face-to-face interviews were audio-recorded for later professional transcription. These transcripts and the email interviews were then analyzed and coded for common themes and salient insights on 2e learners that could be considered in teacher education. The transcripts and the themes that emerged from them were then shared with the participants for member checking in order to improve their accuracy, credibility, and validity (Creswell & Miller, 2000). The data and interpretations were revised when participants provided clarifications of their ideas.

Participants

Participants were identified using nominative, purposeful sampling for maximum variation in roles. Potential participants were identified using professional and personal contacts and through a social media community for parents, professionals, and people who self-identify as 2e. A total of seven participants were found, all of whom continued through the duration of the study: two self-identified 2e students who are now adults, four parents of 2e children, and one teacher. One of the parents also spoke from her experience as a pediatrician who assists 2e children.

Findings

The retrospective qualitative interviews suggested that 2e students appreciate neurodiversity. This term was first used by Judy Singer to characterize neurological differences as positive and important, analogously to biodiversity (Singer, 1998). However, the participants reported that they feel misunderstood and marginalized and had had troubling experiences in school. Their stories illustrated the complexity of 2e students but also

confirmed that support for 2e students is a critical issue in teacher education across the specialty areas of general, gifted, and special education. Participants also gave specific advice to be considered for teacher education programs.

Appreciation for Neurodiversity

One theme that emerged from the interviews was an appreciation for neurodiversity, and the unique strengths and challenges each person has. However, participants repeatedly affirmed their perception that there is a problem in education, specifically in teacher education regarding 2e students. The participants spoke about the asynchronous development of 2e children and the strengths these individuals often have. They also addressed schools' concern for 2e students and their parents, and described the 2e population as under-identified, unsupported, and inadequately educated in most schools.

Participants described the positive attributes of 2e students and the benefits of their condition through a strength-based lens. Helen, a parent, said, "These students are very bright and talented. They are creative thinkers who do not always think in the conventional, linear way that most teachers expect." Rhonda, speaking from a dual lens as a parent of a 2e child and a pediatrician who assists 2e children, explained, "They are usually really fun because they are so creative. They look at the world a little differently and have interesting points of view or solutions to problems." Rhonda shared the appreciation she and teachers have for her 2e son:

> He has an advanced big-picture view of the world, which makes discussions with him at home really fun. The teachers say that he is one of the best discussants no matter the subject. They look to him often to hold the discussion together and move it forward in class. Interestingly, in some classes he says he purposely takes the opposite point of view than what he believes in because it makes him think more.

Beth was pleased with some of her son's teachers. "The best experiences have been when educators have been open about viewing our son's differences. They have enjoyed the challenge

our son presents and have made him feel comfortable to be the person he is." Janay, the long-time teacher, said, "Each child has his own sensitivities, excitabilities, strengths, thoughts, personality, and learning journey."

Affirmation of the Problem in Education

Though the participants celebrated differences in 2e individuals, they also described the problems those differences created in schools. Emphasizing the seriousness of these problems, a parent of two 2e children said that as a society, we are "losing beautiful minds" because our educational system isn't supporting these unique learners. Some participants described specific examples, such as Tamika's school experience as a 2e student:

> We are misunderstood, and our ways of learning aren't often recognized and/or acknowledged. When a child is isolated—in my case, the "carrel," or [being] sent to the hallway for distracting others by not paying attention—not only is the opportunity to learn being jeopardized, but the social implications are heartbreaking. Kids aren't ever going to be friends with that weird girl who has to sit in a box!

All the participants discussed teachers' lack of awareness and under-identification of 2e students. Paul, a student, described his struggles through adulthood. He talked about the variety of advanced degrees he had earned, most recently in law, but he said that he still struggles to keep jobs despite his success in academia and on tests such as the bar exam. He recalled his school years as filled with the feeling of being marginalized and unsupported despite his easy success: "I was incessantly told I was a gifted but that I had attitude problems. That I was lazy. When I was 40, I figured out I had Asperger's. I was 40." For Paul, recognizing as an adult that he was 2e provided him with some understanding, and he believes he would have benefitted from earlier identification and support in school.

Rhonda, a parent, implicated the teachers' lack of awareness in the problems faced by 2e students:

> These kids are anomalies. Few general educators are aware of 2es or…think that they are real people. Many general education teachers really don't have much background in

> learning disorders and disabilities. Some of them seem to think that this is a "special education problem" and "I'm not trained for 'special education'" so I can't really help.

Teresa, a parent, echoed this sentiment strongly: "Many of the signs of his 2e status had been there all along—and none of his teachers had ever recognized it or recommended him for screening." Beth, another parent, described the irony in her son's situation: "The public school told us he did not qualify for any services because his academics were at grade level (even though he had anxiety, word-finding deficits, and dysgraphia). We had a teacher who told us her job was to make him see he was not as smart as he thinks he is." This was in second grade. The problems became severe as he continued not receiving the support he needed: "At this point (age 11) he was frequently talking about suicide as a 'way out' of his problems at school."

Complex Learning Profiles

Participants' stories illustrated the complex and specialized learning profiles of 2e students. Paul described himself as "a long-time unemployed lawyer with multiple advanced degrees." He said, "I could get an A in a class without learning anything, but I had no idea how to interact with others. I still don't. Teachers need to look behind the grades." Janay, a lifelong classroom teacher, explained her perspective: "The majority of the 2e students were kinesthetic learners, as well as moving talkers. They had to have meaningful experiences to understand the concepts and ideas." She felt the students had to 'live' the curriculum through simulations and integrated thematic learning. Beth discussed her son's unique learning style and its implications for his daily schedule: "In pre-kindergarten, with some of his disabilities (ADHD, fine motor difficulties, speech deficits) … he was reading and comprehending chapter books and doing math computations that were far above age level." In second grade her son underwent educational testing, and his vast asynchrony was documented (from the 99th percentile to the 9th percentile). Since then he has learned to be in class with students who are two years older than him or in college (in English), one year older (in math), or the same age, and with special education students (in PE and

speech). Rhonda described the complexity another way: "The 2e's are curiosities to the general ed teachers and even counselors."

A Need for Advocacy and Collaboration

The participants declared that there was a strong need for collaboration and advocacy in schools from parents, teachers, and administrators. They were all willing to talk about their experiences with 2e, which may have influenced their perspectives, but their stories clearly illustrated the problems, along with the need for and benefits of collaboration and advocacy. Discussing her son, Beth said,

> I have worked with all of his teachers, schools, and consulting professionals. I have also read as much as possible and consulted with other parents and professionals. This has almost been a full-time job (with me not going back to work due to his needs).

Rhonda's comments also made clear the need for advocacy and collaboration among parents of 2e children and schools:

> We, as parents, had to drive the entire process at all stages, and there has been little that the administrators have done to help us anticipate the needs, especially around transitions. For example, I didn't realize that I would need to know about foreign language and college transitioning in the sixth grade, because the decisions we were making during junior high registration in sixth grade were going to, and have, made a difference for him for his high school classes and anticipation of college applications. We have had administrators who did not offer help, even when asked, because I did not use educational terms (like accommodations and modifications) and had not put it into a formal letter (but had put it into a formal email). Parents do not speak 'edu-speak' and forcing them to, even to get their child evaluated, is an injustice. Parents have to be very savvy—educate themselves so they are effective advocates for their children.

Advice to Teachers: A Shared Responsibility

As a former classroom educator who now works in teacher education, I asked participants about teacher training specifically,

and encouraged them to give advice to teachers and teacher educators. The participants universally stated the need for specialized teacher training. Many suggested that teachers, counselors, and administrators in all specialty areas needed to be aware of the profile of 2e students.

Tamika, a student, emphasized that teacher training "is crucial to prevent years of unnecessary trauma caused by being punished for not learning the same ways as the majority." Beth's perspective as a parent led her to support increased training: "For teachers to be aware—at least until more teachers gain awareness—is one of the struggles these students and their families go through to get the educational system to work for them." Teresa said, "It's crucial for all teachers to be trained to, at the very least, identify 2e students. There should be teachers who are trained specifically to support 2e students—for the sake of professionalism and out of compliance with IDEA." Janay, who had been a classroom teacher for more than 40 years, said,

> [Teachers] need to take courses that help them understand the dual exceptionalities. There has to be availability to the "regular" teachers to take these courses as part of their program as well because every one of them is going to teach a special needs child [or] children in every year of their teaching experience. Teachers need to be focused on their strengths and not their weaknesses. Their gifted areas need to be recognized so that they can shine in their strong areas.

Beth expected teachers to be challenged. She suggested,

> Teachers need to be able to see the whole student—the high academics as well as the disabilities—and realize that this asynchrony can very much affect the student as well as his [or] her academics. Teachers need to know that there are students who will perform extremely well academically (or are capable of high-level performance) but who also have disabilities (some severe). Teachers need to be challenged about thinking of students [who] fall into multiple labels. Teachers are somewhat trained in gifted kids (or at least the need for differentiated instruction with high-level kids), and they are trained in special education

> (kids [who] need academic and social supports to receive education). Teachers need to be challenged into thinking about all of these qualities occurring in a specific student. Teachers need to be aware that "twice-exceptional" does not mean "high performer with just one disability," but that many twice-exceptional [students] have multiple exceptionalities.

Rhonda was hopeful, emphasizing the amount of knowledge teachers already have:

> [Teachers] know a huge amount about the differences in kids and how to try to motivate and teach a variety of kids. Plus they want to help kids to learn and usually are very curious themselves and want to improve as … professionals. They could … with a little effort and additional in-service/mentoring/support etc. learn a little bit more about the learning disabilities and gifted and talented [students] and how they can adapt and stretch what most of them are already doing to help some of these kids.

Recommendations for Teacher Education

Teacher education programs in independent colleges are particularly well situated to integrate practices for ensuring that future and current teachers are equipped to support 2e students. National organizations have long called for general education teacher preparation programs to collaborate across disciplines so that all educators have effective understandings of special education students (Blanton, Pugach, & Florian, 2011; Sharpe & Hawes, 2003). However, this study showed that there remain opportunities to integrate knowledge of and strategies for 2e students into teacher education. In light of current market trends in enrollment, which demand that independent liberal arts colleges remain competitive and relevant, these colleges are striving to differentiate themselves by developing decisive "brands" (Baker & Baldwin, 2015). Independent liberal arts teacher education programs are empowered to respond and have the opportunity to more effectively prepare teachers for 2e students.

As a current faculty member in a teacher education program at an independent liberal arts college, I suggest several actions

that can be taken in this direction. General and special education teacher preparation programs need to do the following:

1. Build capacity in teacher education faculties, encourage faculty members to consider their deep beliefs (Smith & Edelen-Smith, 2002) and hire people with proven experience in general and special education. Engage faculty members in broadening their own understandings of 2e students so that they will be equipped to identify gaps in preparation programs and start critical dialogues across credential areas.
2. Collaborate to develop course content across credential areas that supports an appreciation of neurodiversity, explores the complexity and social–emotional learning needs of 2e students, and promotes a strengths-based approach to them (Baum, Schader, & Hebert, 2014).
3. Include specialized training that ensures knowledge of Individualized Education Plans (IEPs), referral protocols, and the continuum of placement options, and that integrates dual differentiation, Universal Design for Learning, co-teaching techniques, and specific strategies for all educators to use with 2e students.
4. Develop strategic partnerships with K–12 schools and create fieldwork experiences to increase awareness of the 2e population and understand how these students are served in schools.
5. Design ongoing in-service professional development programs that respond to the evolving understanding of 2e students in schools.

Conclusion

Although twice-exceptionality is complex and unique, 2e stakeholders, including students, parents, and a lifelong teacher, described their experiences with or as 2e students to lend insights to teachers and teacher educators. The common themes that emerged from this study add to the body of research on twice-exceptionality. The stakeholders discussed an appreciation for neurodiversity (Armstrong, 2012) yet acknowledged that there is a problem in schools for 2e students (Foley-Nicpon, et al., 2013;

Reis, Baum, & Burke, 2014). 2e students have complex learning profiles (Lee & Ritchotte, 2018) that require advocacy and collaboration (Dare & Nowicki, 2015; Lee & Ritchotte, 2018; Nielsen Pereira, et al., 2015) between parents and school teams. Teachers can benefit from the development of specialized instruction in their own education programs to help them understand, identify, and support twice-exceptional students (Baldwin, Baum et al., 2015; Bianco & Leech, 2010; Brownell et al., 2009; Lee & Ritchotte, 2018; Nielsen Pereira et al., 2015; Rowan & Townend, 2016; Tirri, 2017). The stakeholders in this study urged teacher educators to develop explicit preservice and in-service training that equips teachers to identify, refer, and support 2e students effectively in all educational settings, including general, gifted, and special education (Foley-Nicpon, et al., 2013).

A limitation of this study was that it had only seven participants: self-identified 2e students and parents and one teacher of all types of students. These participants may tend to share stronger views on this matter and may also not be a representative sample of 2e stakeholder voices. However, the themes they brought up were consistent with the current literature on twice-exceptionality and teacher education. The participants gave a powerful voice to the field of teacher education. Future studies could address the specific nature of the specialized training that is needed in teacher education.

These participants supported the development of high-quality preservice and in-service teacher education curriculum. When teachers are well equipped, students' lives are improved. Janay expressed this well: "My students began to smile and sing and hum and enjoy school once their needs were being met."

References

Armstrong, T. (2012). *Neurodiversity in the classroom: Strength-based strategies to help students with special needs succeed in school and life*. Alexandria: Association for Supervision & Curriculum Development.

Assouline, S., & Whiteman, C. (2011). Twice-exceptionality: Implications for school psychologists in the post-IDEA 2004 era. *Journal of Applied Psychology, 27*, 380–402.

Baker, V., & Baldwin, R. (2015). A case study of liberal arts colleges in the 21st century: Understanding organizational change and evolution in higher education. *Innovative Higher Education, 40*(3), 247–61.

Baldwin, A. (1999). Learning disability: The mysterious mask; The USA perspective. In A. Baldwin, *The many faces of giftedness* (pp. 103–34). Belmont: Wadsworth.

Baldwin, L., Baum, S., Pereles, D., & Hughes, C. (2015). Twice-exceptional learners: The journey toward a shared vision. *Gifted Child Today*, 206–14.

Baldwin, L., Omdal, S., & Pereles, D. (2015). Beyond stereotypes: Understanding, recognizing, and working with twice-exceptional learners. *Teaching Exceptional Children, 47*(4), 216–25.

Baum, S., Schader, R., & Hebert, T. (2014). Through a different lens: Reflecting on a strengths-based, talent-focused approach for twice-exceptional learners. *Gifted Child Quarterly, 58*(4), 311–27.

Bianco, M., & Leech, N. L. (2010). Twice-exceptional learners: Effects of teacher preparation and disability labels on gifted referrals. *Teacher Education and Special Education, 33*(4), 319–34.

Blanton, L., Pugach, M., Florian, L. (2011). Preparing general education teachers to improve outcomes for students with disabilities. Retrieved from aacte.org.

Brownell, M., Bishop, A., Gersten, R., Klinger, J., Penfield, R., Dimino, J., Sindelar, P. (2009). The role of domain expertise in beginning special education teacher quality. *Exceptional Children, 75*(4), 391–411.

California Commission on Teacher Credentialing. (2017). *Education specialist teaching and other related services credential program standards*. Retrieved from https://www.ctc.ca.gov/docs/default-source/educator-prep/standards/special-education-standards-2014-pdf.pdf?sfvrsn=8e2ef6ac_6

Council for Exceptional Children. (2015). *What every special educator must know: Professional ethics and standards*. Retrieved from https://www.cec.sped.org/Standards/Special-Educator-Professional-Preparation-Standards

Creswell, J. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Thousand Oaks: Sage.

Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice, 39*(3), 124–30.

Dare, L., & Nowicki, E. A. (2015). Twice-exceptionality: Parents' perspectives on 2e identification. *Roeper Review, 37*(4), 208–18.

Endrew F. v. Douglas County School District, 15-827 (10th Cir. March 22, 2017). Retrieved from http://www.scotusblog.com/case-files/cases/endrew-f-v-douglas-county-school-district/

Foley-Nicpon, M., Assouline, S. G., & Colangelo, N. (2013). Twice exceptional learners: Who needs to know what? *Gifted Child Quarterly*, 169–80.

Gould, J., Staff, L., & Theiss, H. (2012). The right fit for Henry. *Educational Leadership, 69*(5), 71–73.

Johnson, L., Karnes, M., & Carr, V. (1997). Providing services to children with gifts and disabilites (2nd ed.). In N. Colangelo & G. Davis (Eds.), *Handbook of gifted education* (pp. 516–27). Needham Heights: Allyn & Bacon.

Lee, C., & Ritchotte, J. (2018). Seeing and supporting twice-exceptional learners. *Educational Forum, 82*(1), 68–84.

Musgrove, M. (2013, December 20). *Laws & Guidance OSEP Policy Letters*. Retrieved from http://www2.ed.gov/policy/speced/guid/idea/memosdcltrs/13-008520r-sc-delisle-twice-exceptional.pdf

Musgrove, M. (2015, April 17). *Laws and Guidance OSEP Memo or Dear Colleague Letter*. Retrieved from http://www2.ed.gov/policy/speced/guid/idea/memosdcltrs/041715gilmantwiceevceptional2q2015.pdf

National Association for Gifted Children. (2013). *Ensuring gifted children with disabilities receive appropriate services: Call for comprehensive assessment*. Retrieved from http://www.nagc.org/sites/default/files/Position%20Statement/Ensuring%20Gifted%20Children%20with%20Disabilities%20Receive%20Appropriate%20Services.pdf

National Education Association. (2006). *The twice-exceptional dilemma*. Retrieved from http://www.nea.org/assets/docs/

twiceexceptional.pdf

Nielsen Pereira, J., Knotts, D., & Link Roberts, J. (2015). Current status of twice-exceptional students: A look at legislation and policy in the United States. *Gifted and Talented International, 30*(1–2), 122–34.

Reis, S., Baum, S., & Burke, E. (2014). An operational definition of twice-exceptional learners: Implications and applications. *Gifted Child Quarterly, 58*(3), 217–30.

Rowan, L., & Townend, G. (2016). Early career teachers' beliefs about their professional preparedness to teach: Implications for the professional development of teachers working with gifted and twice-exceptional students. *Cogent Education, 3*.

Sharpe, M., & Hawes, M. (2003). *Collaboration between general collaboration and special education: Making it work*. National Center on Secondary Education and Transition. Retrieved from ncset.org

Silverman, L. (2003). Gifted children with learning disabilities. In N. Colangelo & G. Davis (Eds.), *Handbook of gifted education* (3rd ed., pp. 533–43). Needham Heights: Allyn & Bacon.

Singer, J. (1998). *Odd people in: The birth of community amongst people on the autism spectrum; A personal exploration of a new social movement based on neurological diversity.* Sydney.

Smith, D., Robb, S., West, J., & Tyler, N. (2010). The changing education landscape: How special education leadership preparation can make a difference for teachers and their students with disabilities. *Teacher Education and Special Education, 33*(1), 25-43.

Smith, G., & Edelen-Smith, P. (2002). The nature of the people. *Remedial & Special Education, 23*(6), 335–48.

Tirri, K. (2017). Teacher education is the key to changing the identification and teaching of the gifted. *Roeper Review, 39*(3), 210–12.

U.S. Department of Education. (2013, December 20). *Letter to Dr. Jim Delisle.* Retrieved from https://sites.ed.gov/idea/files/idea/policy/speced/guid/idea/memosdcltrs/13-008520r-sc-delisle-twiceexceptional.pdf

U.S. Department of Education (2015, April 17). *Memorandum*.

Retrieved from https://www2.ed.gov/policy/speced/guid/idea/memosdcltrs/041715osepmemo15-082q2015.pdf

Whitehead, J., & McNiff, J. (2014). *Action research: Living theory*. Los Angeles: Sage.

Whitmore, J. (1981). Gifted children with handicapping conditions: A new frontier. *Exceptional Children, 48*(2), 106–14.

Willard-Holt, C., Weber, J., Morrison, K. L., & Horgan, J. (2013). Twice-exceptional learners' perspectives on effective strategies for learning. *Gifted Child Quarterly, 57*(4), 247–67.

Yssel, N., Adams, C., Clarke, L., & Jones, R. (2015). Applying an RTI model for students with learning disabilities who are gifted. *Teaching Exceptional Children, 46*(3), 42–52.

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The Emergence of Self-Determination in Young Adults with Intellectual Disability Participating in Project SEARCH

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Abstract

Obstacles encountered by young adults with intellectual disability (ID) during the transition from high school to post-school employment have great potential to limit an individual's opportunity and/or capacity for self-determination with regard to employment. This qualitative study examines the challenges to self-determination experienced by a group of nine interns with ID during a one-year Project SEARCH internship program in a Kentucky distribution center. Through field observations, interviews, photographs, goal-reporting, and administration of the *AIR Self-Determination Scale*, challenges to self-determination were identified. These included challenges related to communication; social competence in the workplace; work skill development; emotional regulation; and seeing oneself outside of the current work experience. Workplace interactions, experiences, instructional strategies, and individualized supports were implemented collaboratively among interns, supervisors, co-workers, instructor, and employment specialist during the program year. As a result, interns demonstrated positive growth and development in the characteristics of self-determined people related to the identified challenges.

Keywords: transition, intellectual disability, self-determination

The Emergence of Self-Determination in Young Adults with Intellectual Disability Participating in Project SEARCH

Historically, young adults with intellectual disability (ID) have met with significant obstacles when transitioning from high school education services to post-school employment. The obstacles encountered range broadly but can include difficulty receiving adequately supported job training for skill development, accessing long-term employment supports, maintaining reliable transportation, and experiencing preconceived ideas or attitudes about competence for work (Gormley, 2015; Daston, Riehle, & Rutkowski, 2012). In turn, these obstacles have limited an individual's capacity and opportunity to self-determine (Mithaug, 2005). Recognizing the pervasiveness of these obstacles, a Kentucky public school district (KPSD) identified the need for improved support services for high school students with ID and development of teacher capacity to support the transition from school to employment. The KPSD implemented a Project SEARCH employment training site at a local distribution center. This study presents an examination of factors contributing to growth in an individual's self-determination through an exploration of instruction and experiences (Strater, 2017).

Project SEARCH is an international program that provides a one-year, full-immersion work experience for young adults with ID who are in their last year of eligibility for high school services. Program participation provides a fully inclusive work experience through a collaborative effort among a local business, education agency, vocational rehabilitation agency (VR), and job-coaching service provider that effectively creates linkages with service providers and connections for individuals in the local community. Curriculum includes instruction in daily and independent living skills, social competence, self-determination, and employability. Students receive instruction on-site at a host business through a combination of classroom instruction and internships. A supported employment service agency works alongside the student interns to provide job training, development, and placement services at the completion of the program (Rutkowski, Daston,

Van Kuiken, & Riehle, 2006). From 2014-2017, Project SEARCH has consistently maintained a 70%-75% employment rate for the over 2,000 individuals with disabilities served each year (Project SEARCH, 2018) compared to the 35% employment rate attributed to those with disabilities in the general population (Kraus, Lauer, Coleman & Houtenville, 2018).

The need for school districts to implement programs like Project SEARCH has grown out of the Individuals with Disabilities Education Act (IDEA) in 1997 and reauthorization (2004) that requires transition planning in high school as a portion of an Individualized Education Plan (IEP) every year starting at age 16 or younger if necessary. Wehmeyer (2011) expressed that effective transition planning models are strengths-based and promote self-determination. Furthermore, the interventions implemented to promote desired work and living outcomes should be geared toward enhancing personal capacity and modifying the contexts in which people function. This requires a significant shift away from programs designed to provide services to individuals based upon characteristics associated with their disability toward providing customized supports for a person within an environment of his/her own choosing.

Project SEARCH seeks to support this shift by providing educational experiences that include instruction in social competence, skills for independent living, academics, employability, and career and technical training that are taught in multiple settings in the classroom, community, and workplace (Rutkowski et al., 2006). By providing employment supports and opportunity to practice, the Project SEARCH model assists individuals with ID in working toward improvement in the ability to set and act on goals related to employment. Interventions and accommodations to promote these post-school outcomes are specifically geared toward improving personal capacity for employment and modifying work environments to suit the needs of the individual. Fundamental to its design, Project SEARCH provides individualized supports on-site at a local business to provide an avenue for building on an individual's strengths and helping him/her grow in capacities needed to support self-determination with regard to employment (Rutkowski et al., 2006).

In considering the many aspects of self-determined people, it is evident that a variety of environmental and personal factors can influence an individual's opportunity or capacity to be self-determined (Lee et al., 2012). "People who are self-determined self-initiate and self-regulate action to solve problems, make decisions, and set goals that impact their lives" (Shogren, Wehmeyer, Burke, & Palmer, 2017, p. 2). Wehmeyer (2007) defined self-determined behavior as "acting as the primary causal agent in one's life and making choices and decisions regarding one's quality of life free from undue external influence or interference" (p. 3). Shogren et al. (2017) affirm the notion of causal agency and describe several essential characteristics of self-determined people in terms of: 1) volitional action, inclusive of autonomy and self-initiation; 2) agentic action, inclusive of self-regulation, self-direction, and pathways thinking; and 3) action-control beliefs, inclusive of psychological empowerment, self-realization, and control expectancy. The purpose of this study was to explore factors with the potential to influence causal agency, identify instructional supports, and examine outcomes.

Over the last 25 years, the use of models for instruction and curricula to promote the characteristics of self-determination have proved effective for developing self-determination skills (Burke et al., 2018; Lee et al., 2012; Martin et al., 2003; Wolman, Campeau, DuBois, Mithaug, & Stolarski, 1994). Self-determination skills are constantly being taught, learned, applied, and adapted across all settings in which an individual engages (Martin, Mithaug, Husch, Oliphint, & Frazier, 2002). Improvement in self-determination develops within learning environments that encourage, nurture, and support self-determination values, thinking, and behavior (Sitlington, Clark, & Kolstoe, 2000). Furthermore, engagement in quality learning experiences and environments during high school can positively impact an individual's development of self-determination skills (Solberg, Howard, Gresham, Phelps, & Carter, 2012).

While the Project SEARCH curriculum is not explicitly focused on instructional models for self-determination, by the integrated nature of the program, it lends itself to quality, incidental opportunities for instruction and growth supporting

the essential characteristics of self-determined people. Interns have opportunities to communicate with coworkers and supervisors, independently solve work-related problems, advocate for their own needs, set and work toward performance goals, self-regulate for pace and production, and work toward independence (Strater, 2017). Because of this, the following research question has been addressed:

How do experiences, interactions, and supports encountered during Project SEARCH contribute to growth in an individual's capacity and opportunity to self-determine?

Literature Review

Because of the bleak employment outlook for individuals with ID, it is necessary to examine strategies and factors that are linked to improved employment and independent living outcomes for individuals with ID. Over time, research has confirmed that self-determination has been linked to positive academic and adult outcomes for individuals with and without disabilities (Shogren, Wehmeyer, Palmer, Rifenbark, & Little, 2015; Lee et al., 2012; Martin et al., 2003).

Numerous group and single-subject studies (Burke et al., 2018; Powers, et al., 2001; Wehmeyer, Palmer, Agran, Mithaug, & Martin, 2000; Cross, Cooke, Wood & Test, 1999; Ezell, Klein, & Ezell-Powell, 1999; Fullerton & Coyne, 1999; Lehmann, Bassett, Sands, Spencer & Gliner, 1999; Hoffman & Field, 1995; Abery & Rudrud, 1995; and Browning & Nave, 1993) indicate that direct teaching using classroom or training curricula for instruction in various self-determination skills resulted in improvement in one or more of the following skills: choice-making, planning, decision-making, problem-solving, self-regulation, goal-setting and attainment, and self-advocacy.

Algozzine, Browder, Karvonen, Test, and Wood (2001) conducted a meta-analysis of 22 studies on self-determination interventions that further demonstrated that self-determination can be taught and learned through use of specific strategies. The most common strategies appearing throughout the analysis included individual involvement in transition planning, Individualized Education Program (IEP) development, direct

instruction in self-determination, and person-centered planning. A subsequent meta-analysis of 34 studies on the effectiveness of such interventions to promote self-determination indicated a need for analysis of goal attainment on transition-related goals in an inclusive setting (Hagiwara, Shogren, & Leko, 2017).

Furthermore, use of self-determination curricula has been linked to improved self-determination skills for individuals with disabilities. *The Self-Determined Learning Model of Instruction (SDLMI)* is a model of instruction designed to help students become causal agents in their own lives (Shogren, et al., 2017). The focus of the model is to persistently regulate problem solving in order to meet life goals, and implementation has consistently had positive impact on the development of self-determination in individuals with disabilities (Wehmeyer, et al., 2000).

Hendricks and Wehman (2009), as well as Stewart, Gorter, and Freeman (2013), further described several themes emerging from research linked to improving outcomes for individuals with disabilities. These themes included instruction for building skill capacity among youth with disabilities for life skills, self-advocacy, and social interaction; community experiences that provide a person with social interactions and opportunities to build skills for future adult life; and personal and environmental factors working together to influence development and independence.

Method

This sequential exploratory study employed constructivist grounded theory to analyze qualitative data collected from a variety of sources during the Project SEARCH year. Data sources included: 1) pre/post-test survey and open response data collected using the *American Institute for Research (AIR) Self-Determination Scale*; 2) photographs taken by the interns at the beginning and end of the internship; 3) transcription of pre/post intern interviews; and 4) field observation notes. Nine student interns, their parents, an employment specialist, and program instructor participated in this eight-month study. The interns, selected by committee from Kentucky public school district students with ID who applied for Project SEARCH during the 2015–2016 school year, had completed at least four years of high

school and ranged in age from 18–20 years of age (Strater, 2017). The interns could be classified as having a moderate or severe ID which, according to the IDEA eligibility criteria, indicates that the participants experienced significant sub-average intellectual functioning concurrent with deficits in adaptive behavior manifested during the developmental period (United States Department of Education, 2004).

Wang and Burris (1994) developed photovoice to empower communities of people to influence policies that affected them. It is a method by which people can identify, characterize, and grow their community through photography. Photovoice has three main goals: (1) to enable people to show their community's strengths and concerns, (2) to promote dialogue about important issues through discussion around photographs, and (3) to influence policy (Wang and Burris, 1997). By inviting the interns to take photographs of their experiences during Project SEARCH and encouraging them to select photographs to place in a journal, use of photovoice became an opportunity for the interns to document their own experiences while in the program. The interns then participated in one-on-one interviews at the beginning and end of the program using photograph journals.

The *AIR Self-Determination Scale* is based on Mithaug's work in self-determined learning theory and focuses on how individuals manage challenges and opportunities to gain what they want and need (Shogren et al., 2008). Each scale has two sections: ratings and open response. The ratings were used to provide information on perception of an individual's capacity and opportunity to self-determine, and the open response provided an opportunity for all participants to describe goals on which the intern was working. Weekly field notes collected from August 2015 through February 2016 extended the body of data available for analysis. Activities conducted during field visits included observations and informal interviews with teachers, employment specialists, supervisors, parents, co-workers, and interns (Strater, 2017).

The varied data collection methods established a rich base of data over the course of the program year. While interview is the typical tool used by grounded theorists for gathering data

(Charmaz, 2014), information from rating scales, informal conversations, and observations in the classroom and during job rotations provided support and informed what was established through the interview process. The images collected through photovoice became the visual support for conversation about the experience. Goals written by all participants provided insight into challenges and growth experienced by the interns. Content of intern goals and the goals of the parents, instructor, and employment specialist were examined for alignment, similarity, and difference. Field notes provided insight into daily interactions and supports as well as an opportunity to see, in action, what was evidenced in photographs, interviews, and open response.

Constructivist grounded theory provided a structure for coding and data analysis to work toward a general theory regarding self-determination and the interaction of the interns with the supports in place through Project SEARCH (Creswell, 2009). This design method adopts Glaser and Strauss's (1967) approach of induction, constant comparison, emergence, and open-endedness while keeping in mind that the researcher's perspective and interactions are an inherent part of the research (Charmaz, 2014). The process employed the following steps: 1) conduct data collection and analysis simultaneously; 2) analyze actions and processes rather than themes and structure through coding; 3) use constant comparison; 4) draw on all forms of data to create new conceptual categories; 5) use systematic data analysis to develop analytic categories; 6) emphasize construction of a theory; 7) take part in theoretical sampling; 8) search for variation in categories or processes; and 9) work toward developing a category rather than covering a specific topic (Charmaz, 2014).

Results

The coding process followed initial, focused, and theoretical phases. During the initial phase, the principal investigator coded for action and process, which required the use of gerunds and action words to summarize and name the data collected from photographs, interviews, *AIR Self-Determination Scale* open response, and field notes (Charmaz, 2014). Use of line-by-line coding provided the base for the later emergence of theoretical

categories through the constant comparison method. The initial coding phase resulted in hundreds of individual codes that could be compared, contrasted, grouped, and synthesized. Throughout the coding process, memo-writing played a central role in constructing theoretical categories, serving as an intermediate step between coding and writing by prompting comparisons and analyses of the data early in the research process (Charmaz, 2014).

A variety of factors with the potential to influence self-determination emerged through the initial coding process. A challenge to self-determination was defined by its potential bearing on the essential characteristics of a self-determined person, which in turn influences an individual's capacity and/or opportunity to take action to solve problems, make decisions, and set goals (Shogren et al., 2017). During initial interviews, open response from the *AIR Self-Determination Scale*, and field observations, challenges related to communication; the ability to see oneself outside of the current work experience; emotional regulation; social interaction; work ethic; positive outlook on work; physical management of job tasks; and independence emerged through codes appearing at least once across three or more interns.

For the next step in the analysis, the principal investigator utilized focused coding to develop new descriptive codes by incorporating many of the initial codes. This step of the process required comparing, sorting, and synthesizing individual codes into more inclusive categories (Charmaz, 2014). Through this process, specific challenges, interactions, and supports experienced across interns could be preliminarily identified and described. A description of process began to emerge; however, focused codes still contained a wide range of ideas that needed to be examined for pervasiveness and relationship.

Focused coding allowed the manifestation of factors potentially influencing self-determination to be consolidated into five main categories: challenges related to 1) communication; 2) independence in acquisition of certain job tasks; 3) difficulty seeing oneself outside of the current work experience; 4) emotional regulation; and 5) social interactions in the workplace.

Table 1
Frequency of codes related to the manifestation of challenges to self-determination.

Identified Challenges	Number of interns experiencing challenge	Number of codes assigned to challenges in initial interviews and field notes
Communication	9	170
Work skill development	9	38
Social interaction	6	42
Emotional regulation	4	45
Seeing oneself outside of current experience	4	16

Furthermore, coding of field observation data showed that interns participated in four categories of instructional strategies and supports related to the various challenges to self-determination. Table 2 summarizes strategies in each of the following categories: 1) instructor mediated supports, meaning that the learning experience was led by an instructor and participated in by the intern; 2) intern-instructor mediated supports, which are described as supports that were led equally by the instructor and intern; 3) coworker mediated supports, which imply support and instruction led by a coworker; and 4) co-intern mediated supports, which are supports that were led by the other interns.

Table 2
Levels of support and interaction.

Instructor mediated	Task analysis, explicit instruction, performance feedback, positive reinforcement, modeling, pre-correction, over-correction, prompting, visual supports, corrective feedback, guided practice
Intern-instructor mediated	Goal-setting, guided practice, self-assessment
Coworker mediated	Modeling, corrective feedback, positive reinforcement
Co-intern mediated	Re-teaching, modeling, positive reinforcement, prompting, peer-led feedback

Among all interactions and supports indicated, a weekly goal-setting strategy used by the interns, instructor, and employment specialist was the most returned to instructional strategy noted during weekly field observations. Led by the intern and instructor equally, use of this strategy resulted with each intern crafting a short-term goal and articulating strategies supportive of meeting the goal. Interns engaged in daily self-assessment of work toward the goal and adjusted their approach based on the results of the assessment. Goals were documented by the instructor on index cards, placed in front of the interns on the classroom work table, and referenced throughout the week. Of the 41 goals set by the interns in conjunction with the instructor, 22% referenced skills unique to working in a distribution center. The remaining 78% of goals referenced employability skills that could be transferable to other work settings.

Theoretical coding provided the opportunity to integrate focused codes, demonstrate relationships between substantive codes, create form, and add precision and clarity (Charmaz, 2014). What emerged was evidence of a process defined in four robust categories of data addressing the research question: 1) the discovery of challenges to opportunity and capacity for self-determination; 2) manifestation of the identified challenges in the workplace; 3) identification of experiences, interactions, and supports connected to the challenges; and 4) evidence of growth in opportunity and capacity to self-determine. Furthermore, theoretical sampling provided an opportunity to strengthen and saturate the conceptual categories (Charmaz, 2014) through a process of developing and asking intern-specific interview questions during the final interviews. This process offered a unique opportunity to analyze intern perceptions of their experiences during the Project SEARCH year.

Evidence of Growth

The path through Project SEARCH was different for each intern, which makes defining the scope of skill development difficult to quantify. However, the combination of data sources provided evidence that the interns demonstrated or experienced observable change regarding their identified challenges to

self-determination. The interns held to their individual strengths throughout the year while broadening and deepening the abilities needed to engage in causal agency with regard to employment. When asked during the final interview, "What does having a job mean to you?" themes of pride and independence permeated intern responses, indicating themes of psychological empowerment and self-realization (Shogren et al., 2017).

Table 3
What working and having a job means to me.

Attitudes and accomplishments	Things I can aquire or do	Other
• I can be proud that I have a job • Well, uh, it was hard • Special • Awesome • I can work hard • Get the job done • I work full-time • Work full-time • Doing what you need to do • Do everything you want to do with the money—full-time money • Great job • I'm so smart	• Well, I'll get stuff • Money • Work • I can have my first paycheck • Earn money • A car • Buy my food • Buy gas for my moped • Clothes • Make a lot of money • Live in a house • Have a car and vehicle • Live on my own • Get married • Personal life • Have a lot of money	• Be polite • Be respectful • Be good to each other • You've got to take care of your customers and everything • You're done for the rest of the day • Stay out of my business

Furthermore, evidence of a four-step learning process emerged during the data analysis: 1) upon entering Project SEARCH, the interns possessed individual learning, communication, and behavioral strengths in addition to factors that had the potential to limit self-determination with regard to employment; 2) the factors were informally identified and prioritized by the instructor, then specifically addressed through experiences, interactions, and collaborative instructional strategies implemented by the instructor, employment specialist, supervisors, coworkers, and interns; 3) the interns progressed toward self-awareness of individual challenges to self-determination, and through their

efforts in planning and utilizing strategies, they developed a sense of pride in their individual progress; and 4) the interns demonstrated or experienced observable change regarding the identified challenges to self-determination (Strater, 2017).

Alignment of stakeholder goals from the *AIR Self-Determination Scale*. From the initial administration of the *AIR Self-Determination Scale*, all interns reported goals directly related to obtaining long-term employment or for which having employment would make the goal attainable. The instructor and employment specialist reported work- and soft-skill development goals addressing what they saw as barriers to employment for the interns. Parents focused primarily on independence in the home and developing fulfilling interests. Initial parent-composed goals included few references to intern capacity or opportunity for employment.

In the final administration, intern goals remained stable in content; however, the goals reported by the parents, instructor, and employment specialist aligned much more closely with intern-identified goals, focusing on independence with transportation, obtaining employment, and other soft skill development. Goal alignment between parents and interns indicates a shift in parent perspective on intern capacity and opportunity to seek employment.

For example, the language used in one final open response composed by a parent demonstrated a shift from intern dependence on others for goal achievement to active independence in completing the steps needed to achieve an outcome. In the initial goal, the parent communicated that her son wanted to install a radio on his moped and had selected one to purchase. He was then waiting for a family friend to complete the installation. In the final goal, the parent wrote about all of the steps the intern was taking to independently achieve full-time employment, including completion of routines to prepare for the work day, commitment to being a dependable employee, and communicating with his employer (Strater, 2017).

Evidence from final interviews. The principal investigator analyzed final interviews for information connected to intern strengths as well as to the challenges to self-determination

discovered during the initial phase of data collection. Compared to the initial interviews, the final interviews were characterized by significantly fewer prompts from the interviewer to elicit information. Differences observed from initial to final interview included increased use of workplace vocabulary; longer length of utterance; increased responses directly related to the question asked; articulation of strategies for work, emotional regulation, and social interactions; and further-developed descriptions of work skills and responsibilities.

For example, during the initial interview, one intern frequently used the phrase "I don't know" in response to direct questions. The instructor identified this as a communication challenge to be addressed through support and interaction because of the impact "I don't know" has on a supervisor's perception of the intern's knowledge and understanding of job responsibilities. In her initial interview, the phrase appeared 28 times. After instruction in communication over the course of the year, the phrase appeared only 9 times in the final interview (Strater, 2017).

Another example indicating a significant area of growth occurred among the four interns who experienced challenges with emotional regulation. One intern, who had demonstrated difficulty regulating his reactions when something unexpected occurred in his immediate environment and when transitioning between departments during the work day, had participated in individualized instruction supporting the development of additional emotional regulation strategies. When asked during the final interview about how he regulated during unexpected events and transitions, he was able to articulate several strategies that he had adopted including: putting his hands in his pockets; walking slowly during transitions; "catching" his breath; and using replacement phrases like "oh, man" or "oh, dang it" when something unexpected occurred.

Coding of field observations indicated supports, interactions, and skill development related to all areas of identified challenge; coding of final interviews saturated each category with intern perspective and self-assessment of skill development related to the areas of challenge. Tables 4 and 5 show evidence of growth collected during final interviews above the baseline established

during initial interviews and field observations, indicating growth in autonomy, self-direction, self-regulation, and self-realization (Shogren et. al, 2017).

Table 4
Evidence of skill development organized by intern.

Identified Challenges	Number of interns experiencing challenge	Number of interns with codes demonstrating skill development related to identified challenge
Communication	9	9
Work skill development	9	9
Social interaction	6	6
Emotional regulation	4	4
Seeing oneself outside of current experience	4	4

Table 5
Evidence of skill development organized by code.

Identified Challenges	Number of codes assigned to challenges in initial interviews and field notes	Number of codes assigned to skill development from baseline in final interview
Communication	170	28
Work skill development	38	70
Social interaction	42	23
Emotional regulation	45	4
Seeing oneself outside of current experience	16	12

Limitations

This study is focused on nine students in a large Kentucky public school district. It is not intended to be generalized beyond the students participating in the study or to any other community agencies serving adults and youth with mild to severe ID. The challenges to self-determination discovered among this particular group of interns and the instructional strategies used by this instructor may not be representative of other Project SEARCH sites currently in operation based on differences across individuals and differences in instructional style.

Implications for Practice

Ward (2005) states, "Self-determination is...an interplay between the individual and society: individuals with disabilities must have the abilities (capacities) and opportunities to be self-determined. Society must give individuals with disabilities the skills, opportunities, and support to do so" (p. 111). We have the moral obligation to correct systematic suppression and unfair treatment of those with unequal opportunity to self-determine (Mithaug, 2005). Improvement in self-determination develops within learning environments that encourage, nurture, and support self-determination values, thinking, and behavior (Sitlington, et al., 2000), and the Project SEARCH model establishes a quality educational setting for the encouragement and nurturing of skills needed to improve independence in thinking, doing, and adjusting.

The Project SEARCH model provides a framework for working toward equalization of opportunity for individuals with ID. Implementers must work tirelessly toward intentionality and continuous improvement of instruction in order to maximize individual outcomes. Focus on opportunity for intern engagement within the work setting should be a driving force behind the development of supports, instruction, and experiences during the Project SEARCH year (Strater, 2017). Using the essential characteristics of self-determined people defined by Shogren et al. (2017) as a guide for prioritizing needed instructional interactions and supports, specific recommendations for practice include:

1. Upon entering Project SEARCH, interns should be observed for the purpose of determining individual learning, communication, social, and behavioral strengths as well as characteristics that have the potential to limit causal agency;
2. Challenges to self-determination should be identified and prioritized, then intentionally addressed systematically, repeatedly, and consistently through inclusive experiences and interactions, evidence-based practices in development of self-determination, and collaborative instructional strategies implemented by the instructor, employment specialist, coworkers, and interns;

3. Intern effort toward planning and utilizing strategies to address factors with the potential to limit self-determination should be encouraged; and
4. Observable change regarding their individual prioritized goals should be documented.

Secondary education institutions are uniquely positioned to provide supports, interactions, and experiences accessible through the Project SEARCH model (Strater, 2017).

Operating under the IDEA and in collaboration with community agencies, public school districts have access to financial and personnel resources to offer experiences inclusive of contextual, natural, and social supports, which can have a positive impact on self-determination within the changing expectations of the real-world environment (Hughes et al., 1997). In order for development of self-determination to occur at a high level, secondary teachers of students with disabilities must be prepared for discerning individual challenges to self-determination and implementing effective, evidence-based instructional strategies. They must take full advantage of the opportunity for practice across multiple inclusive settings and continually assess the effectiveness of incidental learning experiences in support of self-determination.

Furthermore, liberal arts teacher education programs are situated to take an expanded role in the preparation of teachers for the tasks of transition education. Turning a critical eye to the contexts in which individuals with ID live, learn, and work should fully inform the way in which educators prepare to enter the field. Strauss (1968) once said, "Liberal education consists in listening to still and small voices" (p. 25). Practicum experiences focused on student voice and the impact of individual self-determination on post-secondary education, employment, and living opportunities in the local community for individuals with ID should move to the forefront, or at the very least expand, the transition practicum experiences required of in-training teachers. It is not enough to understand effective transition planning in the abstract. Experiencing Project SEARCH and other inclusive transition programs has the potential to promote a great sense of urgency toward inclusive transition education practices and support of instruction in the development of self-determination.

References

Abery, B. & Rudrud, L. (1995). Evaluating a multicomponent program for enhancing the self-determination of youth with disabilities. *Intervention in School & Clinic, 30*(3), 170-179.

Algozzine, B., Browder, D., Karvonen, M., Test, D., & Wood, W. (2001). Effective interventions to promote self-determination for individuals with disabilities. *Review of Educational Research, Summer 2001 71*(2), 219-277.

Browning, P., & Nave, G. (1993). Teaching social problem solving to learners with mild disabilities. *Education & Training in Mental Retardation, 28*(4), 309-317.

Burke, K. M., Raley, S. K., Shogren, K. A., Hagiwara, M., Mumbardó-Adam, C., Uyanik, H., & Behrens, S. (2018). A meta-analysis of interventions to promote self-determination for students with disabilities. *Remedial and Special Education*. doi: 10.1177/0741932518802274

Charmaz, K. (2014). *Constructing grounded theory*. London: Sage.

Creswell, J. W. (2009). *Research design qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications.

Cross, T., Cooke, N. L., Wood, W. M., & Test, D. W. (1999). Comparison of the effects of MAPS and ChoiceMaker on student self-determination skills. *Education and Training in Mental Retardation and Developmental Disabilities*, 34(4), 499-510. Retrieved from https://www.researchgate.net/publication/279595007_Comparison_of_the_effects_of_MAPS_and_ChoiceMaker_on_student_self-determination_skills

Daston, M., Riehle, J. E., & Rutkowski, S. (2012). *High school transition that works!: Lessons learned from Project SEARCH*. Baltimore: Paul H. Brookes Publishing Company.

Ezell, D., Klein, C. E., & Ezell-Powell, S. (1999). Empowering students with mental retardation through portfolio assessment: A tool for fostering self-determination skills. *Education and Training in Mental Retardation and Developmental Disabilities, 34*(4), 453-463.

Fullerton, A., & Coyne, P. (1999). Developing skills and concepts for self-determination in young adults with autism. *Focus on Autism & Other Developmental Disabilities, 14*(1), 42.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory*. Chicago: Aldine.

Gormley, M. E. (2015). Workplace stigma toward employees with intellectual disability: A descriptive study. *Journal of Vocational Rehabilitation*, vol. 43, no. 3, pp. 249-258.

Hagiwara, M., Shogren, K., & Leko, M. (2017). Reviewing research on the self-determined learning model of instruction: Mapping the terrain and charting a course to promote adoption and use. *Advances in Neurodevelopmental Disorders, 1*(1), 3-13. doi:10.1007/s41252-017-0007-7

Hendricks, D. R., & Wehman, P. (2009). Transition from school to adulthood for youth with autism spectrum disorders: Review and recommendations. *Focus on Autism and Other Developmental Disabilities, 24*(2), 77-88. doi:10.1177/1088357608329827

Hoffman, A., & Field, S. (1995). Promoting self-determination through effective curriculum development. (cover story). *Intervention in School & Clinic, 30*(3), 134.

Hughes, C., Eisenman, L. T., Bogseon, H., Kim, T. H., Killian, D. T., & Scott, S. V. (1997). Transition from secondary special education to adult life: A review and analysis of empirical measures. *Education and Training in Mental Retardation and Developmental Disabilities, 32*(2), 85-104.

Kraus, L., Lauer, E., Coleman, R., and Houtenville, A. (2018). 2017 Disability Statistics Annual Report. Durham, NH: University of New Hampshire.

Lee, Y., Wehmeyer, M. L., Palmer, S. Williams-Diehm, K., Davies, D., & Stock, S. E. (2012). Examining individual and instruction-related predictors of the self-determination of students with disabilities multiple regression analyses. *Remedial and Special Education, 33*(3). 150-161. doi:10.1177/0741922510392053

Lehmann, J. P., Bassett, D. S., Sands, D. J., Spencer, K., & Gliner, J. A. (1999). Research translated into practices for increasing student involvement in transition-related activities. *Career Development for Exceptional Individuals, 22*(1), 3-19.

Martin, J. E., Mithaug, D. E., Cox, P., Peterson, L.Y., Van Dycke, J. L., & Cash, M. E. (2003). Increasing self-determination:

Teaching students to plan, work, evaluate, and adjust. *Council for Exceptional Children, 69*(4), 431-447.

Martin, J. E., Mithaug, D. E., Husch, J. V., Oliphint, J. H., & Frazier, E. S. (2002). *Self-directed employment: A handbook for teachers and employment specialists*. Baltimore: P. H. Brookes Pub.

Mithaug, D. E. (2005). Invited commentary: On persistent pursuits of self-interest. *Research and Practice for Persons with Severe Disabilities, 30*(3), 163-167.

Powers, L. E., Turner, A., Westwood, D., Matuszewski, J., Wilson, R., & Phillips, A. (2001). Take charge for the future: A controlled field-test of a model to promote student involvement in transition planning. *Career Development for Exceptional Individuals, 24*(1), 89-104. doi:10.1177/088572880102400107

Project SEARCH (2018). Outcome Summary. Retrieved May 16, 2019, from https://www.projectsearch.us/outcome-summary/

Rutkowski, S., Daston, D., Van Kuiken, D. & Riehle, E. (2006). Project SEARCH: A demand-side model of high school transition. *Journal of Vocational Rehabilitation, 25*, 85-96.

Shogren, K. A., Wehmeyer, M. L., Burke, K. M., & Palmer, S. B. (2017). The Self-Determination Learning Model of Instruction: Teacher's Guide. Lawrence, KS: Kansas University Center on Developmental Disabilities.

Shogren, K. A., Wehmeyer, M. L., Palemer, S. B., Rifenbark, G. G., & Little, T. D. (2015). Relationships between self-determination and postschool outcomes for youth with disabilities. *The Journal of Special Education, 48*, 256-267. doi:10.1177/0022466913489733

Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Little, T. D., Garner, N., & Lawrence, M. (2008). Understanding the construct of self-determination: Examining the relationship between the Arc's Self-Determination Scale and the American Institutes for Research Self-Determination Scale. *Assessment for Effective Interventions, 33*(2), 94-107. doi: 10.1177/1534508407311395

Sitlington, P. L., Clark, G. M., & Kolstoe, O. P. (2000). *Transition education and services for adolescents with disabilities*. Boston: Allyn and Bacon.

Solberg, V. S., Howard, K. A. S., Gresham, S. L., Phelps, L. A., & Carter, E. W. (2012). Quality learning experiences, self-determination, and academic success: A path analytic study among youth with disabilities. *Career Development and Transition for Exceptional Individuals, 35*, 85-96. doi: 10.1177/2165143412439887

Stewart, D., Willem Gorter, J., & Freeman, M. (2013). Transitions to adulthood for youth with disabilities: Emerging themes for practice and research. *Prevention Researcher, 20*(2), 3-6.

Strater, K. (2017). *Post high school transition to work: An examination of self-determination in young adults with intellectual disabilities participating in Project SEARCH* (Order No. AAI10157874). Available from PsycINFO. (1918850498; 2017-05709-263). Retrieved from https://search.proquest.com/docview/1918850498?accountid=9844

Strauss, L. (1968). *Liberalism: Ancient and modern*. Ithaca, NY: Cornell University Press.

United States Department of Education (2004). Regulations: Part 300 A 300.8 c 6. *IDEA 2004: Building the Legacy.* Retrieved fromhttp://idea.ed.gov/explore/view/p/%2Croot%2Cregs%2C300%2CA%2C300%252E8%2Cc%2C

Wang, C., & Burris, M. A. (1997). Photovoice: Concept, methodology, and use for participatory needs assessment. *Health Education & Behavior, 24*(3), 369-387. https://doi.org/10.1177/109019819702400309

Wang, C., & Burris, M. A. (1994). Empowerment through photo novella: Portraits of participation. *Health Education & Behavior, 21*(2), 171-186. doi:10.1177/109019819402100204

Ward, M. J. (2005). A historical perspective of self-determination in special education: Accomplishments and challenges. *Research and Practice for Persons with Severe Disabilities, 30*(3), 108-112.

Wehmeyer, M. L. (2011). What is next for the transition and employment supports movement? *Journal of Vocational Rehabilitation, 35*(3), 153-156.

Wehmeyer, M. L., & Field, S. L. (2007). *Self-determination: Instructional and assessment strategies*. Thousand Oaks, CA: Corwin Press, a Sage Publication.

Wehmeyer, M. L., Palmer, S. B., Agran, M., Mithaug, D. E., & Martin, J. E. (2000). Promoting causal agency: The self-determined learning model of instruction. *Exceptional Children, (66)*4, 439-453.

Wehmeyer, M. L., Shogren, K. A., Palmer, S. B., Williams-Diehm, K. L., & Little, T. D. (2012). The impact of the Self-Determined Learning Model of Instruction on student self-determination. *Exceptional Children (78)*2, 135-153.

Wolman, J. M., Campeau, P. L., DuBois, P. A., Mithaug, D. E., & Stolarski, V. S. (1994). *American Institute for Research (AIR) self-determination scale and user guide*. Retrieved from University of Oklahoma, Zarrow Center for Learning and Achievement website: http://www.ou.edu/education/centers-and-partnerships/zarrow/self-determination-assessment-tools/air-self-determination-assessment.html

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The Effect of Faculty Professional Beliefs About the edTPA on Program Change and Student Performance

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Abstract

The edTPA Teacher Performance Assessment was recently implemented at a regional public university to replace the previous paper-and-pencil evaluation of candidates' teaching effectiveness. To determine the teacher educators' professional beliefs toward using the edTPA as an assessment of readiness to teach, semi-structured interviews were conducted with 17 full-time teacher educators from 11 content areas after 2 full implementations of the edTPA. Qualitative findings consisted of themes related to both positive and negative professional beliefs toward the edTPA as an assessment instrument, as well as positive professional beliefs resulting in curriculum and program revisions. Quantitative findings regarding faculty professional beliefs affecting candidate scores on the edTPA showed no significant association. The most significant finding of this study was that faculty had more positive than negative professional beliefs toward the edTPA implementation.

Keywords: edTPA, teacher performance assessment, faculty beliefs, education policy

Davis, Wash, Armstrong, Glover and Ming

The Effect of Faculty Professional Beliefs About the edTPA on Program Change and Student Performance

Introduction

As the country looks to educator preparation programs (EPPs) to improve the nation's teaching force, teacher educators must be able to objectively document candidates' teaching effectiveness and how these candidates impact PK-12 student learning. While EPPs continue to create innovative programs to teach future teachers "state of the art" methods of delivering content to students, the concern for teacher performance has followed the national standards movement to hold educators and schools accountable for student achievement (Ledwell & Oyler, 2016). Providing extensive assessment of teacher performance and success is a natural "next step" in the process (Rink, 2013). In the past, assessments for the certification of teachers have mostly been valid and reliable paper-and-pencil tests, but they are not good indicators of practical, "hands-on" teaching performance with students (Stecher, 2010). "Advocates of performance assessment argue that the fixed set of responses in multiple-choice tests (and their cousins, true-false tests and matching texts) are inauthentic" (Stecher, 2010, pg. 2). Performance-based teaching assessments, such as the education Teacher Performance Assessment (edTPA), provide extensive video analysis of teaching and self-reflection. As EPPs move toward an accountability-based model of preparing teachers, many programs are turning to performance-based assessments to evaluate their candidates. Although shifting the paradigm within EPPs to a performance-based measure is a slow response to the call by the National Research Council back in 2001 in their publication, *Knowing What Students Know: The Science and Design of Educational Assessment*, it is evident with 41 states consisting of 906 EPPs now implementing the edTPA that the pendulum has shifted (AACTE, 2019).

Our study is located in South Carolina, which does not currently mandate the edTPA as the licensure assessment of candidates (it is currently one of three options). The voluntary shift to the edTPA by our college is somewhat of a reaction to policy

implementation in our neighboring states of North Carolina, Tennessee, and Georgia, all of which have adopted some level of edTPA implementation. Many of our graduates become teachers in those three states. Our college faculty made the decision to use the edTPA for candidate assessment in 2013, and to gradually implement it through: 1) a piloting phase with the middle level and physical education programs, 2) a local evaluation scoring phase in which mentor teachers and teacher educators scored their own students' folios, and then 3) the "higher stakes" national scoring phase through the Pearson online portal system.

In this study, we concentrated on teacher educators at our university and their initial perceptions of, and experience with, the implementation of the edTPA assessment, both during local and national scoring. The specific research questions that guided the researchers were:

1. What were the faculty's positive and/or negative perceptions of implementing the edTPA as a tool for assessing candidate teaching effectiveness in their specific programs?
2. How did the edTPA implementation at our university affect curriculum revision and instruction for preparing candidates within each program?
3. Was there a statistically significant association between faculty professional beliefs toward the edTPA and candidate scores on the edTPA assessment within each program?

Background

Successful teachers are those who know the pedagogical content knowledge (PCK) of their specific content area, or the methods of teaching that are necessary to teach a particular subject area (Park & Oliver, 2008). The edTPA is a content-specific teaching assessment that was created by teacher educators and PK–12 teachers through the Stanford Center for Assessment, Learning, and Equity (SCALE). The edTPA is currently the most frequently used instrument for assessing candidates' teaching effectiveness, with participating sites in 41 states and the District of Columbia (American Association of Colleges for Teacher

Education, 2019). The instrument is based, in part, on the teacher work sample methodology, which has been a commonly used approach to assess teacher performance for many years (Cooner, Stevenson, & Frederiksen, 2011). The edTPA focuses candidates' attention on these critical skills for beginning teachers: (a) planning for student needs, (b) engaging in purposeful reflection on teaching and on instructional data, and (c) evaluating student learning to inform the next steps of instruction. It is designed to ensure that new teachers are ready to teach on day one (Ressler, King, & Nelson, 2017, p. 119).

Benefits of Using the edTPA. The requirements of the edTPA are based on teaching practices that all teacher candidates should develop. SCALE (2013) cites the following advantages in using the edTPA for the assessment of beginning teachers: (a) it aligns with InTASC, Common Core, and the Council for Accreditation of Educator Preparation (CAEP) standards; (b) it was created by teachers and teacher educators from across the country; (c) it is modeled after the National Board for Professional Teaching Standards certification of veteran teachers; (d) it is subject-specific for 27 different teaching fields; (e) it is scored by the profession; and (f) it has been shown to be a valid and reliable assessment of teaching. The edTPA has also been endorsed by the American Association of Colleges for Teacher Education (AACTE), the nation's premier professional association for educator preparation (DeMoss, 2017).

One of the major benefits of the edTPA for teacher education programs is found in the resulting candidate data, which may be used to revise program curricula. The edTPA assessment has the potential to provide educator preparation programs with rich and useful data about areas of strength and weakness in preparing future teachers, possibly leading to program improvement (Darling-Hammond, Newton, & Wei, 2013). The format of the edTPA itself, by using video analysis of teaching and structured reflection, provides a model for candidates to use in their beginning years of teaching. Teacher educators in previous research have described the edTPA as a helpful formative assessment of program curriculum that is also very educative for the candidates (Ledwell & Oyler, 2016). DeMoss (2017) affirmed that

video-based reflection on real teaching experiences, planning with student needs in mind, assessment of students' thinking and learning, and engaging students to promote deep thinking are also positive aspects of using the edTPA for assessing candidates. Others have acknowledged that the edTPA clearly assesses good teaching and has the potential to be a quality educative assessment (Ressler et al., 2017).

Concerns About Using the edTPA. As with all types of standardized assessments required for granting teacher licensure, there are concerns about the use of the edTPA in evaluating future teachers. Some critics cite that the teacher education curriculum will become too narrow, focusing on teaching to the test (An, 2017). Others say the cost of implementing this type of assessment with limited budgets will be prohibitive. Another concern is whether the shift toward compliance through high-stakes assessment of new teachers will inhibit creativity, higher-order thinking skills, and culturally relevant pedagogy (Sandholtz & Shea, 2012). Uneasy about the time edTPA takes away from practice teaching, faculty often feel that more time is spent on completing the edTPA versus allowing candidates more reflective teaching time (Bacon & Blachman, 2017). Finally, many teacher educators have expressed dismay over their increased workloads in terms of course time allocations and curriculum changes (Ressler et al., 2017). Even though many positive opportunities have been documented in regard to the use of the edTPA assessment of candidates in all content areas, there are also many challenges documented in the literature that have been experienced by teacher educators that need to be explored.

Methodology

Theoretical Framework

The authors implemented the "inquiry as stance" approach as a framework for the study. This study is similar in design to the Columbia Teacher's College edTPA study a few years ago, in which they also utilized an "inquiry as stance" framework to explore the implementation of the edTPA at their university (Ledwell & Oyler, 2016). This framework—inquiry as stance—was coined in the late 1990s by Cochran-Smith and Lytle (1999)

and encompasses the practice that "inquiry is more than the sum of its parts" (Dana, 2015, pg. 164), capturing "the ways we stand, the ways we see, and lenses we see through" (Cochran-Smith & Lytle, pp. 288-289). As teacher educators, we are involved with the day-to-day applications of curriculum, course content, school placements, and supervision of candidates. Despite the researchers being participants in the setting, the data generated represent practice-based knowledge that is deeply contextualized and meaningful (Ravitch, 2014).

Teacher efficacy is a teacher educator's confidence in his/her ability to help candidates learn how to teach effectively. Previous research has shown that teacher efficacy has an effect on performance (Mojavezi & Tamiz, 2012). This prior research would lead one to believe that a teacher educator's negative beliefs about the edTPA assessment would affect their own self-efficacy and the candidates' motivation to perform well on the edTPA assessment. However, it is also possible that there is no association between teacher self-efficacy levels and student academic performance (Ervin Wash, & Mecca, 2010). It may be possible that teacher educators' negative professional beliefs about implementing the edTPA could be overridden by candidates' strong motivation to pass the edTPA as a high-stakes assessment for their licensure. A candidate who is extrinsically motivated looks at the edTPA as something they are required to do in order to receive the reward of licensure, and therefore, their motivation to learn is determined or affected by the modeled behavior of their teacher educators. Did teacher educators' positive or negative professional beliefs have an effect on candidates' performance on the edTPA? This study analyzes practitioner experience and knowledge from our setting to answer this question.

Participants and Data Collection

This study involved a multiple case study approach with both qualitative and quantitative data collection and analysis to better understand the EPP faculty's professional beliefs toward the edTPA after an initial local scoring implementation, and a subsequent national scoring implementation. Qualitative data were collected over a one-year period (two consecutive spring

semesters), and then compared quantitatively with program mean scores on the edTPA. The authors developed initial research questions about teacher educators' professional beliefs concerning the edTPA, but two other research questions emerged as data collection proceeded. These questions explored how program curricula changed and how EPP faculty beliefs affected candidate performance on the edTPA. The continuing process of changing research questions during the research process is an essential part of exploring the professional beliefs of others (Agee, 2009).

Prospective participants at our university were full-time teacher educators who were required to meet one of three criteria: 1) teaching a methods course or other program course that implements the edTPA, 2) supervising interns who went through the edTPA process in either Internship I (fall only) or Internship II (mostly spring) of the year-long internship, or 3) serving as a program director for one of the teacher education program areas. The participants who were interviewed after the first phase of local evaluation scoring totaled 17 teacher educators (N = 15 females, 2 males; 14 European American, 3 African American) in 11 program areas (art, dance, early childhood, elementary, math, middle level, music, physical education, secondary science, secondary social studies, and special education) within our university. The participants who were interviewed after the second phase of national scoring totaled 14 teacher educators from 11 programs (N = 14 females, 0 males; 11 European Americans, 3 African American); one participant was no longer involved with the edTPA and two participants left the university.

The primary method of data collection was the face-to-face semi-structured interview. The interviews were conducted with programs, but some programs consisted of only one faculty member due to program size.. The interview questions included a combination of 2 demographic questions and 11 questions about curriculum and internships (see Appendix A). Each interviewer was given the charge to use follow-up questions to further explore and probe the participants' responses to ensure depth and clarification. The interviews ranged from 20–60 minutes in length, and were audio-recorded and transcribed verbatim by a paid transcriber.

Data Analysis

Analysis of the qualitative data (transcribed interviews) proceeded in several rounds, as follows: 1) reading and rereading of interview transcripts to consider emerging themes and patterns; 2) coding of data according to key themes/patterns found, and 3) data analysis by looking at the frequencies in responses to the interview questions and their variations between participants. To answer the first two research questions, the researchers began with "topical coding," or categorizing common ideas among participants about the edTPA, and then proceeded to "analytic coding," based on whether the teacher educators had positive or negative comments about the implementation of the edTPA (Richards & Morse, 2013). Positive and negative codes were used for analysis because previous research studies revealed that most teacher educators using the edTPA had more negative impressions than positive impressions about its implementation (An, 2017; Bacon & Blachman, 2017; DeMoss, 2017; Ressler et al., 2017).

Quantitative analysis was used to support the interpretation of the associations between professional beliefs to determine if they influence candidates' scores on the edTPA. To answer the third research question, a Pearson product-moment r correlation was computed to assess the association between teacher educators' positive and/or negative professional beliefs and their candidates' mean scores on the edTPA. Given that all variables are continuous and the research questions seek to determine associations between two variables, bivariate correlations using the Pearson r correlation are appropriate (Bertani et al., 2018). Cohen's standard was used to evaluate the value of the correlation coefficient, in which 0.10 to 0.29 represents a weak association, 0.30 to 0.49 represents a moderate association, and 0.50 or larger represents a strong association (Statistics Solutions, 2013).

Findings

In this section, the qualitative findings are included to answer the first two research questions about: 1) teacher educators' positive and negative professional beliefs about the effectiveness of the edTPA implementation in their content-specific programs, and 2) their impressions about how the edTPA has specifically

affected their programs' instruction and curriculum revisions. The qualitative findings may be categorized into these conceptual themes: 1) the overall edTPA effectiveness, 2) the positive edTPA components of video and reflection, academic language, and improved faculty teaching practice, and 3) the negative edTPA aspects such as a lack of focus on class management, no required pre-post testing, and faculty workload and stress. An integrated theme also emerged from the interview data about the teacher educators' positive impressions of how the edTPA had affected their curriculum and instruction.

The quantitative findings are also summarized in this section to answer the last research question about whether there is an association between the teacher educators' positive and/or negative professional beliefs and their candidates' edTPA scores in their content-specific programs. This research question emerged from the interview data, as some of the participants had the assumption that they may have negatively affected their candidates' scores by their own negative professional beliefs. Therefore, the authors have attempted to verify the assumptions of these participants. The main quantitative findings for this research question were: (a) there was little to no association between teacher educators' beliefs and their candidates' scores on the edTPA after both local and national scoring, and (b) the teacher educators had more positive than negative professional beliefs about the edTPA as a performance assessment.

Overall edTPA Effectiveness

Ten of the 11 programs interviewed (91%) after the local scoring phase, and 11 of 11 (100%) after the national scoring phase stated specific positive professional beliefs about the edTPA as an assessment of good teaching practices. The program-level impact was expressed in terms of preparedness, good teaching principles, and high expectations of teaching performance. One teacher educator stated, "The bottom line is: the edTPA is more student-centered than intern-centered, and they are better prepared now than four years ago." Others made statements about the higher order practice that edTPA requires: "I do feel like it is accomplishing 'raising the bar.' It is forcing them to bring together all

of the best practices we have been talking about, and it's making them really try and do their best teaching." Many of the participants stated they thought the edTPA would help their candidates become better teachers when they entered the field because it would help them see a bigger picture of their practice: "We have to remember this isn't just about edTPA, it's also to get them to be good teachers. I do try to stress to my candidates that this is just a tool and we are helping [them] through the logistics."

Positive Professional Beliefs Toward the edTPA

The participants who were supportive of the edTPA as an educative instrument viewed it as: (a) having strong aspects that are not found in paper-and-pencil assessments of teacher effectiveness, (b) providing meaningful data to improve their curricula and programs, and (c) assisting teacher education faculty to improve their own teaching. All of the participants cited at least one component (planning, instruction, assessment, teaching analysis, video, reflection, academic language, content-specific nature) of the edTPA instrument as being a strong aspect of developing teaching effectiveness. However, the teacher educators were the most vocal about viewing these teaching aspects as three strengths of the edTPA instrument: (a) the authentic video documentation of teaching, (b) the constant reflection that leads to an analysis of teaching, and (c) the inclusion and definition of academic language.

Video and reflection components. Regarding the filming of teaching, 7 of 11 programs (64%) after local scoring, and 8 of 11 (73%) after national scoring, mentioned that the video component was the most authentic and valuable aspect of the edTPA process. As noted by one participant, "Because some of our [candidates] will watch a video and they will see all those things they missed and because they have to go back to that video over and over again, they notice some of the [other teaching aspects]." In regard to teaching reflection, 9 of the 11 programs (82%) after both scoring phases indicated the value of their candidates' edTPA reflections. An especially helpful aspect was the candidate's ability to use reflective data to improve their teaching: "They are more reflective because they have stronger data to talk about. I

can say that has helped them be more reflective, be more intentional about their reflections" (Davis & Armstrong, 2018).

Academic language component. Academic language is the verbal and written language used in specific content areas to engage students in learning the content (SCALE, 2018). Academic language is the thread that connects the planning, instruction, and assessment tasks of the edTPA. Eight of the 11 programs (73%) after local scoring, and 7 of 11 programs (64%) after national scoring, specifically cited the importance of their candidates learning about and teaching academic language in their lessons. One teacher educator spoke about the content-specific nature of academic language, and the need to have candidates exposed to the concept of academic language early in their programs: "We added academic language to the introductory and [other] classes to make sure academic language was reviewed in every year of the program. The [candidates] discovered that the cognitive content of physical education IS the academic language of physical education."

Faculty teaching practice. Nine of the 11 programs (82%) after local scoring and 10 of 11 (91%) after national scoring mentioned that the edTPA had improved their own teaching practice in some manner. It was a professional goal for these faculty members to model the best practices of the edTPA for their own candidates. Two of the teacher educators interviewed pointed out, "The edTPA has been helpful to me because it has helped me to improve my own teaching. I have to model edTPA principles – contextual factors to know my students better and using data to inform my own teaching..." and, "I do think that because we have moved to edTPA, I have done a better job of teaching [my candidates] and recognizing that they did not know how to analyze data and make assessment driven instruction." There seems to be considerable evidence from the teacher educators at our university that participating in a performance assessment process results in positive changes in the teacher educators' own practice.

Negative Professional Beliefs Toward the edTPA

Even though the teacher educators in our EPP were supportive of the edTPA as a positive tool for assessing our candidates'

teaching, there were also those who were critical of the edTPA as an instrument, and the additional faculty workload that resulted from its implementation. All of the participants cited at least one component of the edTPA instrument as a weakness, and they felt these weaknesses need to be improved to make the instrument an even more valid measure of teaching effectiveness. There were also reservations expressed about the edTPA's ability to fairly measure some of the attributes. This section will elaborate on our findings about our teacher educators' negative impressions of the edTPA as a candidate culminating assessment.

Class management component. Overall, 7 of the 11 programs (64%) after the local scoring phase, and 4 of the 11 programs (36%) after the national scoring phase, expressed some concern over a lack of emphasis on class management within the edTPA. All of these programs were in the PK–12 content areas (physical education, dance, music, theater, art, etc.), likely because the teaching context in these areas is different from a general education classroom. Even though there is an edTPA rubric focusing on a positive learning environment, one critical aspect of a new teacher's practice is being able to handle class management and student behavior issues. One teacher educator noted, "I don't know that [the edTPA] really addresses the classroom environment so much. The overall environment, and teaching that part of it. Some of that comes from experience." Another teacher educator stated, "It also misses classroom management, which includes both the organization of the [learning] tasks as well as student behavior management." Another PK–12 teacher educator remarked,

> One of the hardest things for them is classroom management initially, so they have to manage those 40 students. It's like, "Oh, I don't know if I could do that," and we are asking them to do that and they are just learning.

These three teacher educators went on to discuss the value of making classes safe physically and emotionally, as the edTPA requires. However, they were perplexed that explicit accountability for class management is assumed, and not required, by the edTPA instrument.

Pre-post testing component. In regard to the important

practice of pre-testing to determine students' prior knowledge and experience with the content, 9 of 11 (82%) programs after local scoring, and 6 of the 11 programs (55%) after national scoring, noted the lack of a required pre-post test in the edTPA portfolio was an important omission from the assessment. Candidates are asked to analyze student learning as individuals and as part of a class, but Task 3 does not specifically state to use a pre-post test. In some content areas, the analysis of student learning must be done in more than just the cognitive domain. One teacher educator noted,

> I think one thing that it overlooks is the pre and post assessment idea, providing data about where your students are before and plan instruction to teach where they are and then showing growth at the end from the pre to post. It doesn't do that.

Faculty workload. Six of 11 programs (55%) after local scoring, and 7 of 11 programs (64%) after national scoring, reported that the impact of the edTPA implementation on faculty workloads and class time allocations was substantial, and for the most part, not compensated. One teacher educator remarked about the increased workload, "My two sections of [methods] took three times the amount of work and workload and grading and prep and everything else." In regard to the initial attempts at edTPA implementation, a participant noted, "We were all in shock. Basically, we didn't know what truck had hit us. We just said 'alright, we don't have a choice in this, we've got to get it done.' I was just totally freaked out by it." Teacher educators at our institution attended edTPA conferences and workshops, and they trained to be local scorers, which all took professional time outside of the work place to accomplish. In addition, teacher educators were asked to become local scorers to familiarize themselves with the edTPA; several mentor teachers in all content areas, and all teacher educators and administrators were trained by the edTPA pilot faculty to be local scorers.

Faculty stress. Eight of the 11 programs (73%) after local scoring, and 9 of the 11 programs (82%) after national scoring, specifically stated that the edTPA implementation had caused professional and personal stress. The stress was a result

of experiencing change and wanting their candidates and their programs to do well on the edTPA assessment, even though it was not yet consequential by state requirements. One participant expressed frustration with not having time to have a personal life, "I think decisions are made without a lot of considerations for what faculty are actually experiencing and the stress it creates in faculty. Seriously, I have no life. So many times, literally that's what I do all weekend every weekend." The weaknesses of the edTPA as an instrument, as well as increased faculty workloads, have all contributed to a negative impression of the edTPA as an assessment by the study's participants.

Curriculum and Program Change

To answer the second research question about how the edTPA implementation affected curriculum revision and instruction within each program, all 11 EPP programs (100%) after both local and national scoring, mentioned the value of the curriculum changes they made in the areas of: (a) adding or changing a seminar course with the internship, (b) revising the lesson plan format for their programs, or (c) revising their content-specific methods courses. All EPP programs backward-mapped their curricula specifically to address the edTPA implementation, which improved communication between faculty in programs: "It has forced the issue of talking about some curricular alignment… and getting deeper on some curriculum matters. We were better able to talk about the steps to get there." Not only was it important for faculty to talk about the program changes, but it was important to them to base those decisions on their candidate data from the edTPA, which also modeled one of edTPA's best practices: "I would say that the [curriculum] changes came from looking at the interns' edTPA data. We scored very low on Task 3 for most semesters, so our faculty decided to infuse more about assessment in all of the program courses." Another teacher educator emphasized the practice of backward-mapping the principles and processes of the edTPA into her program's curriculum, "We've definitely done program mapping, kind of backwards from senior year. We've redeveloped all of our methods courses. Our assignments now have the [academic] language embedded. We actually added two

new courses solely based on edTPA." The extensive program change done by the faculty as a result of program assessment data represented one of the effective teaching practices within the edTPA assessment instrument. The interpretation of edTPA results to inform our program revisions was also a crucial step for program accreditation.

Professional Beliefs and Candidate Scores

To address the third research question, the quantitative data in Tables 1 and 2 were used to determine if there was an association between the teacher educators' professional beliefs and the candidate scores on the edTPA. Having reviewed the raw comment data garnered from the interviews with faculty using a simple correlation, there was no association found between positive beliefs and program mean scores after the local evaluation scoring phase ($r = -.323$, $n = 11$, $p = .333$) and after the national evaluation scoring phase ($r = -.073$, $n = 10$, $p = .841$); these results are not significant at $p < .05$. Therefore, neither faculty positive or negative professional beliefs toward the edTPA appear to directly impact the student outcomes on this key performance assessment.

Table 1
Relation of Teacher Educators' Positive Beliefs and Candidates' Local edTPA Scores

Program Area	Program edTPA (Mean Score)	Sample (N)	Positive Beliefs (Raw Score)	Negative Beliefs (Raw Score)
ARTE	53.20	N=10	28	14
SPED	53.18	N=24	13	5
ELEM	53.08	N=34	20	18
SCIE	52.38	N=4	24	7
MATH	52.00	N=4	24	14
DANC	50.50	N=6	15	16
SCST	48.80	N=5	16	11
ECED	48.46	N=41	20	24
MUSC	46.30	N=10	17	10
MLED	45.71	N=14	54	21
PETE	43.78	N=9	23	8
All Programs	49.44	N=161	254	148

Table 2
Relation of Teacher Educators' Positive Beliefs and Candidates' National edTPA Scores

Program Area	Program edTPA (Mean Score)	Sample (N)	Positive Beliefs (Raw Score)	Negative Beliefs (Raw Score)
SPED	48.21	N=24	23	13
ELEM	48.21	N=28	50	45
MUSC	47.00	N=10	32	28
DANC	47.00	N=1	16	21
ARTE	46.78	N=9	22	19
SCST	45.40	N=5	26	17
ECED	45.21	N=38	18	27
MLED	43.50	N=16	48	21
PETE	42.86	N=9	36	17
MATH	42.20	N=5	23	21
SCIE	------	N=0	34	13
All Programs	45.64	N=145	328	242

Note. The SCIE program had no graduating candidates during this semester of national scoring.

To illustrate this lack of association between teacher educators' professional beliefs and the candidate scores on edTPA, in national scoring, the elementary (ELEM) program had the highest positive (50) and negative comments (45), but also had the highest national score mean (48.21). Therefore, the negative beliefs of ELEM faculty did not appear to impact student outcomes. The dance (DANC) program had the least amount of positive comments (16), but had the third highest overall national score mean (47) out of the 10 programs. This, too, appears to uphold the absence of a correlation between both positive and negative professional beliefs toward the edTPA impacting student performance.

In reviewing local scoring, there are similar results as found in the national scoring. The art (ARTE) program had the highest overall local mean score (53.2), but only the third highest number of positive comments (28) out of 11 programs. In contrast, the special education (SPED) program has the least amount of both positive (13) and negative (5) comments, but had the second

highest overall local mean out of 11 programs. Local scoring results appear to yield the same null hypothesis as the national scoring data.

Some of the interviews revealed that the faculty, particularly those in the two largest programs, were concerned about how their negative beliefs about the edTPA implementation might affect their students' scores. One program faculty member expressed it like this:

> [Our faculty] asked each other how much of the edTPA stress is because we stress? So we made a conscientious effort to be calm about edTPA. It did not make a difference. The [candidates] were still highly stressed. Whether they were stressed or not, our language was much more focused on bringing that anxiety level down.

In summary, even though the teacher education faculty were very aware of the possibility that their negative beliefs toward the edTPA might affect their students, in this particular study, neither positive or negative perceptions of program faculty toward the edTPA appeared to impede or directly influence overall candidate scores on the edTPA.

Discussion

The purpose of this study was to share with others what our teacher education programs learned from the implementation of the edTPA as an assessment for teacher preparedness. The three research questions that guided the researchers were about: 1) teacher educators' initial positive or negative professional beliefs, 2) how the edTPA implementation at our university affected curriculum revision and instruction, and 3) whether there was an association found between faculty professional beliefs toward the edTPA and candidate edTPA scores. Our study reveals substantial answers to the research questions, but these findings also create some additional questions for further research. Percentage ranges provided in this section reflect response percentages over two different interview periods, one interview period following local scoring and the other interview period after national scoring.

In answer to the first research question, the participants in this study had many positive professional beliefs about the edTPA as

an assessment instrument overall. In addition, they were specifically positive about the use of video, the extensive reflection, the teaching of academic language, and the helpful effect on faculty teaching practice. In this study, 64%-73% of the teacher educators mentioned the positive contribution that the video analysis made to analyzing candidates' teaching effectiveness. Previous edTPA research has also found that both faculty and candidates see the video recording of teaching as the most authentic piece of the edTPA (Darling-Hammond et al., 2013; Sato, 2014). The reflection aspect was seen by 82% (both interview periods) of the participants as a positive experience. Consistent with results reported by Meuwissen and Choppin (2015), the teacher educators affirmed that candidates writing reflectively and analytically about their teaching helped them to connect their pedagogy to student learning outcomes, and to discuss the implications of their teaching for different kinds of learners. In regard to academic language, 64%-73% of the participants believed that the teaching of academic language was particularly beneficial. They thought candidates should learn how to plan and teach the content-specific academic language within their lessons. (Darling-Hammond et al., 2013). An unexpected finding from this study was that 72%-91% of the teacher educators admitted that going through the process of implementing the edTPA resulted in an improvement in their own teaching. The ability to learn from one's own practice is considered an essential part of effective teaching (An, 2017; Sandholtz & Shea, 2012).

To additionally answer the first research question, the participants in this study discussed their negative professional beliefs about implementing the edTPA. This finding is similar to the edTPA research from the past decade in which most teacher educators have been against the use of the edTPA. Approximately 36%-64% of the teacher educators interviewed for this study had specific negative professional beliefs in regard to a lack of focus on class management. In a study of candidates' impressions of the edTPA in New York, Ressler et al. (2017) discussed the absence of a focus on classroom management in the edTPA: "Another example of the arbitrary defining of good teaching evident in the edTPA is its exclusion of any evaluation of classroom

management" (p. 125). In this study, 55%-82% of the faculty interviewed felt that the lack of a pre-post-test requirement for Task 3 was an oversight of the developers of the edTPA. The EPP faculty perceived the lack of pre-post testing as problematic, particularly because of the need to determine student prior knowledge. "The benefits of exploring the impact on student learning of a pre-study and post-study analysis is no longer possible given the attention that must be devoted to the [other] required edTPA components" (Ressler et al., 2017, p. 131). Also, 55%-64% of the participants referred to an increased faculty workload as a negative aspect of the edTPA. The faculty cited additional workload hours, extra courses taught, and revisions to methods and seminar courses as contributing to the increased faculty workload. In regard to faculty stress, 73%-82% of the teacher educators stated that the logistics of implementing the edTPA were extremely stressful for them. A comment by a social studies researcher parallels these concerns about faculty stress: "Implementing the edTPA has created an environment of stress and confusion in which faculty were stressed, helpless, unhappy" (An, 2017, p. 29).

Data for the second research question on how the edTPA implementation at our university affected curriculum revision and instruction indicated that all 11 programs engaged in collaborative backward-mapping of the curriculum to determine where various edTPA teaching principles would be introduced, as well as redesigning capstone seminar courses. In addition, all programs revised their lesson plan templates to include more sections related to the edTPA (e.g., academic language, student prior knowledge, etc.) and they introduced academic language at earlier stages of the programs. Many teacher educators stated that the edTPA implementation forced programs to discuss alignment of their curricula and courses to better serve the candidates in preparing them to be better teachers as well as navigating the edTPA process. The framework of the edTPA promotes cross-program conversations about curriculum alignment and collaboration (An, 2017). All of the curriculum and program changes were viewed as positive changes to make the programs better in preparing candidates to be able to teach on "Day One."

In regard to the third research question about whether the professional beliefs of the teacher educators affected the edTPA performance of their candidates, there was no significant association found (see Tables 1 and 2). Because previous edTPA research has referred to teacher educators' negative attitudes and resistance toward implementing the edTPA (An, 2017; Bacon & Blachman, 2017; DeMoss, 2017; Sandholtz & Shea, 2012; Sato, 2014), the idea of teacher educators' negative beliefs toward the edTPA adversely affecting their candidates' edTPA performance was a valid theory. We propose that the insignificant results found in regard to teacher educators' beliefs affecting edTPA performance is based on the expectancy theory of motivation. Even though some of the faculty had negative professional beliefs about the edTPA communicated subconsciously to their candidates, the candidates' motivation was to pass the edTPA assessment to achieve licensure. The candidates' motivation to succeed and get the reward of licensure could have overridden the lack of self-efficacy of their program faculty.

The essential finding of our study indicated the teacher educators at our university had more positive than negative professional beliefs of the edTPA as a culminating assessment of readiness to teach (see Tables 1 and 2). This is an important finding because it contradicts most prior research on the edTPA. Previous research confirms the existence of this dichotomy in various forms, but usually with the opposite impressions – more negative impressions than positive impressions (An, 2017; Bacon & Blachman, 2017; DeMoss, 2017; Ressler et al., 2017). One possible explanation for these opposite impressions may be related to the formative context in which the edTPA was implemented in our setting versus the high-stakes, stressful environment created at universities where the edTPA was required by states for licensure. Because our university was voluntarily engaged in implementing the edTPA over a six-year period, it is likely the context played a role in the positive impressions by the faculty. As found during a study about the edTPA implementation at Teachers College, Columbia University in New York (Ledwell & Oyler, 2016), a high-stakes testing environment and a quick timeline motivated curriculum change in their programs, but

it prompted mostly negative faculty impressions of the edTPA (Bacon & Blachman, 2017).

Limitations and Further Research

The limitations of this study should be acknowledged, as the context is one of a regional public university which may not represent other university populations. Our process of studying faculty reactions to the edTPA was narrow, but many of our findings could be transferrable to other institutions who are also trying to navigate the implementation of the edTPA. Also, because the edTPA was phased in over time at our institution voluntarily, and it was not a "high-stakes" assessment at the time of the interviews, our findings and their implications may not be the same as in institutions where the edTPA is extremely "high stakes" and state-mandated.

This study sought to determine and define teacher educators' professional beliefs about implementing the edTPA, and how curriculum and program changes are made as a result. Interview data also led us to explore the relationship of teacher educators' professional beliefs and candidate performance on the edTPA assessment. Future research is needed to clarify candidates' impressions of going through the edTPA process, particularly comparing high-stakes contexts to more formative contexts. Because the present study was done during the initial two years of implementation, longitudinal research over time would provide a more complete understanding of the edTPA's effect on programs and candidates. Finally, questions also arise about how edTPA scores correlate with broader measures of teacher performance, particularly observational ratings by supervisors and mentors. Given the conflicting viewpoints and data from previous research and the current study, it is evident that there is a crucial need for more systematic research on the effectiveness of the edTPA in predicting readiness to teach.

References

Agee, J. (2009). Developing qualitative research questions: A reflective process. *International Journal of Qualitative Studies in Education, 22*(4), 431-447.

American Association of Colleges for Teacher Education [AACTE]. (2019). Participation map. Retrieved from http://edtpa.aacte.org/state-policy

An, S. (2017). Preparing elementary school teachers for social studies instruction in the context of edTPA. *The Journal of Social Studies Research, 41*, 25-35.

Bacon, J., & Blachman, S. (2017). A disability studies in education analysis using student and faculty perspectives of the special education edTPA. In J. H. Carter & H. A. Lochte (Eds.), *Teacher performance assessment and accountability reforms: The impacts of edTPA on teaching and schools* (pp. 157-176). New York: Palgrave MacMillan.

Bertani, A., Di Paola, G., Russo, E., & Tuzzolino, F. (2018). How to describe bivariate data. *Journal of Thoracic Disease, 10*(2), 1133-1137.

Cochran-Smith, M., & Lytle, S. L. (1999). Relationships of knowledge and practice: Teacher learning in communities. *Review of Research in Education, 24*, 249-305.

Cooner, D., Stevenson, C., & Frederiksen, H. (2011). Teacher work sample methodology: Displaying accountability of U.S. teacher program effectiveness. *Journal of Teaching and Learning, 8*(10), 17-28.

Dana, N. (2015). Understanding inquiry as stance: Illustration and analysis of one teacher researcher's work. *LEARNing Landscapes, 8*(2), 161-171.

Darling-Hammond, L., Newton, S. P., & Wei, R. C. (2013). Developing and assessing beginning teacher effectiveness: The potential of teacher performance assessments. *Educational Assessment, Evaluation and Accountability, 25*(3), 179-204.

Davis, K., & Armstrong, A. (2018). Teacher educators' initial impressions of the edTPA: A "love-hate" relationship. *Southeastern Regional Association of Teacher Educators Journal, 27*(2), 18-25.

DeMoss, K. (2017). New York's edTPA: The perfect solution to a wrongly identified problem. In J. H. Carter & H. A. Lochte (Eds.), *Teacher performance assessment and accountability reforms: The impacts of edTPA on teaching and schools* (pp. 25-46). New York: Palgrave MacMillan.

Ervin, B., Wash, P.D., & Mecca, M. E. (2010). A 3-year study of self-regulation in Montessori and non-Montessori classrooms. *Montessori Life, 22*(2), 22-31.

Ledwell, K., & Oyler, C. (2016). Unstandardized responses to a "standardized" test: The edTPA as gatekeeper and curriculum change agent. *Journal of Teacher Education, 67*(2), 120-134.

Meuwissen, K. W., & Choppin, J. M. (2015). Preservice teachers' adaptations to tensions associated with the edTPA during its early implementation in New York and Washington states, *Education Policy Analysis Archives, 23*(103), 1-25.

Mojavezi, A., & Tamiz, M. P. (2012). The impact of teacher self-efficacy on the students' motivation and achievement. *Theory and Practice in Language Studies, 2*(3), 483-491.

National Research Council. (2001). Knowing what students know: The science and design of educational assessment. Washington, DC: National Academies Press.

Park, S., & Oliver, J. S. (2008). Revisiting the conceptualization of pedagogical content knowledge (PCK): PCK as a conceptual tool to understand teachers as professionals. *Research in Science Education, 38*, 261-284.

Ravitch, S. M. (2014). The transformative power of taking an inquiry stance on practice: Practitioner research as narrative and counter-narrative. *Perspectives on Urban Education, 11*(1), 5-10.

Ressler, M. B., King, K. B., & Nelson, H. (2017). Ensuring quality teacher candidates: Does the edTPA answer the call? In J. H. Carter & H. A. Lochte (Eds.), *Teacher performance assessment and accountability reforms: The impacts of edTPA on teaching and schools* (pp. 119-140). New York: Palgrave MacMillan.

Richards, L., & Morse, J. M. (2013). *User's guide to qualitative methods* (3rd ed.). Thousand Oaks, CA: Sage.

Rink, J. E. (2013). Measuring teacher effectiveness in physical education. *Research Quarterly for Exercise and Sport, 84*, 407-418.

Sandholtz, J. H., & Shea, L. M. (2012). Predicting performance: A comparison of university supervisors' predictions and teacher candidates' scores on a teaching performance assessment. *Journal of Teacher Education, 63*(1), 39-50.

Sato, M. (2014). What is the underlying conception of teaching of the edTPA? *Journal of Teacher Education, 65*(5), 421-434.

Stanford Center for Assessment, Learning, and Equity [SCALE]. (2013, November). *2013 edTPA Field Test: Summary Report*. Stanford, CA: Author.

Stanford Center for Assessment, Learning, and Equity [SCALE]. (2018, September). *Educative assessment and meaningful support: 2017 edTPA administrative report*. Stanford, CA: Author.

Statistics Solutions. (2013). *Data analysis plan: Bivariate (Pearson) Correlation* [WWW Document]. Retrieved from: http://www.statisticssolutions.com/academic-solutions/member-resources/member-profile/data-analysis-plan-templates/data-analysis-plan-bivariate-pearson-correlation/

Stecher, B. (2010). Performance Assessment in an Era of Standards-Based Educational Accountability. Stanford, CA: Stanford University, Stanford Center for Opportunity Policy in Education.

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Appendix A
Interview Protocol and Primary Interview Questions

PROTOCOL: Our research team is working to find out how each teacher education program at [our university] is modifying their curricula to implement the mandated edTPA Teacher Performance Assessment. We are seeking to find the connections between what programs value and what the edTPA seems to value. We would also like to hear your thoughts on the pros and cons of both the edTPA and program-level methods of implementing it into the curriculum.

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1. Can you tell me a little bit about your role at our university as a teacher educator? (Probes: Do you supervise interns in the field? How? What types of courses do you teach here?)
2. What kind of work have you done with the edTPA in the past?
3. Has the edTPA helped to improve your candidates' internship teaching experience? If so, how? If not, why not?
4. Has the edTPA helped to improve your students' professionalism? If so, how? If not, why not?
5. How has the edTPA been helpful to teacher education faculty in your program area?

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6. What does the edTPA do a good job of assessing? What does it miss?
7. What, in your opinion, are the limitations of using the edTPA as an assessment tool? (Probe: Is there anything important about teaching that does not seem to be captured by the edTPA?)
8. What coursework changes have been made in your program as a result of your edTPA implementation?
9. What other curriculum-related changes (e.g., scheduling, faculty workload, teaching assignments, supervision procedures, etc.) have been made as a result of the implementation of the edTPA?
10. Were these coursework changes, or other curriculum changes, designed to help interns pass the edTPA, or were they made in response to intern performance on the edTPA?)
11. What did you see interns learning in the process of doing the edTPA? (Probes: Did interns make any discoveries or develop understandings that you felt were productive for them? Did interns make any discoveries or develop understandings that you felt were counterproductive?)
12. We are really interested in how interns' performance on the edTPA compares with their performance on other program-level measures of teacher readiness. Looking at your interns' performance on the edTPA, what jumps out at you? Were there surprises? What confirmations were there? What have you learned? (Probes: Were there any interns who struggled with academics, internships, or professionalism but did well on the edTPA? Were there interns who struggled in one of these areas and also struggled with a section of the edTPA?)
13. Is there anything you want to talk about, related to the implementation of the edTPA in your program, you haven't had a chance to discuss?

Note. Modified from Columbia Teacher's College edTPA study (Ledwell & Oyler, 2016).