

## Examining the Perspectives of Elementary Education Teachers Prepared Through Traditional and Dual License Programs

**Kelly A. Swindlehurst, Ph.D.**

Plymouth State University

**Colby T. Kervick, Ed.D**

**Katharine G. Shepherd, Ed.D**

University of Vermont

Preparing classroom teachers to work with students with diverse learning needs is a challenge that has been well documented by the literature. Earning a dual license in general and special education has been posited as one possible solution to this challenge. This paper reports on a qualitative study that examined the differences between dually licensed and traditionally prepared educators with regards to their self-efficacy and ideas about inclusion. Findings suggest that teachers who earn a dual license in general education and special education may have a stronger sense of self-efficacy as well as a stronger skill set for working with students with disabilities and other types of difference.

*Keywords:* teacher education, dual license, inclusion, special education

Since 2000, the percentage of students with disabilities who spend 80% or more of their time in the general education setting has increased. In 2013, more than 60% of students with disabilities spent 80% or more of their day in the general education setting, as compared to 43% in 2000 (U.S. Department of Education, 2015). Furthermore, 95% of students with disabilities were educated in the general education setting for at least part of the school day. Thus, a greater volume of students with diverse needs are spending more learning time in the general education environment where teachers may or may

not be adequately prepared to meet their needs. The influx of students with disabilities into general education environments requires teachers who not only have a basic understanding of the different types of disabilities, but also know how to differentiate instruction, support IEP goals, and collaborate with related service professionals (Harvey, Yssel, Bauserman, & Merbler, 2010).

Complicating this idea further is the continual change in the scope of classroom teachers' jobs. With the national push for the implementation of Multi-tiered Systems of Supports (MTSS) teachers are

increasingly being expected to be able to identify students who struggle in core academic areas and collaborate with professionals to provide evidence-based interventions and monitor progress (Sindelar, Adams, & Leko 2014). Further, with the increased implementation of MTSS, the adoption of co-teaching and the focus on achievement, the roles of general and special educators have become more fluid and less distinct over time (McCray, Butler, & Bettini, 2014).

In the last thirty years, a number of federal and professional initiatives have sought to better prepare both general education and special education teachers (Kleinhammer-Tramill, 2003; Kleinhammer-Tramill, Tramill & Brace, 2010; Stayton & McCollum, 2002). Federal education laws, including IDEA 2004 and Every Student Succeeds Act (ESSA, 2015), include language that require both general and special educators to use research-based instruction and interventions with all students. Moreover, the general movement towards more rigorous and consistent academic standards aimed at ensuring college and career readiness- including the Common Core Standards- have resulted in increased levels of accountability for both general and special education teachers with respect to ensuring the success of all students (Leko et al., 2015). Both general and special educators must demonstrate proficiency with respect to general teaching standards such as those articulated by the Council of Chief State School Officers (CCSSO) through its Interstate Teacher Assessment and Support Consortium (InTASC) (CCSSO, 2011), as well as standards articulated by professional organizations (such as those articulated by the Council for Exceptional Children) and state licensure requirements (Authors et al., 2016).

### **Challenges for Educator Preparation**

Despite these attempts to hold general and special education teachers more accountable to the needs of increasing numbers of students with disabilities, many of our nation's teachers are not adequately prepared to meet the needs of all students in their classrooms (Cochran-Smith & Dudley-Marling, 2012). Kozleski, Yu, Satter, Francis, and Haines (2015) suggest that achieving the goal of inclusion is complex, requiring a focus on teachers' development of skills and dispositions towards students with disabilities. Along with preparing preservice teachers for the wide array of instructional settings they might see in the field (Gehrke, Cocchiarella, Harris, & Puckett, 2014), research points to the role that teachers' attitudes and beliefs play in effective implementation of inclusive practice (McLeskey, Waldron, & Redd, 2014; Shogren; McCart, Lyon, & Sailor, 2015). Research indicates that a lack of teacher training as well as teacher attitudes about inclusion may influence placement decisions for students (Kurth, Morningstar, & Kozleski, 2014). Importantly, researchers have found that while teachers generally have positive ideas about inclusion, they feel unprepared to operationalize it in classroom settings (Fuchs, 2010). Several studies have found that in order for inclusion to be effectively implemented in schools, teachers must be highly trained, ready and willing to collaborate, and possess a belief that all students can achieve (Gehrke et al., 2014; McLeskey et al., 2014; Shogren et al., 2015).

### **The Importance of Self-Efficacy**

A related issue is the role that self-efficacy plays in the lives of teachers. Anita Woolfolk defined the concept of teacher self-efficacy as "their perceptions about

their own capabilities to foster students' learning through engagement" (Shaughnessy, 2004, p. 154) noting that self-efficacy "has proved to be an important teacher characteristic often correlated with positive student and teacher outcomes" (p. 154). Teachers who have a strong sense of self-efficacy tend to set high goals and to persist in trying alternative strategies when initial approaches appear unsuccessful (Shaughnessy, 2004). Studies also suggest that additional experience and knowledge builds confidence and beliefs about abilities (Bandura, 1993; Caprara, Barbaranelli, Steca & Malone, 2006; Guskey, 1988), and that higher self-efficacy among teachers is associated with student achievement and inclusionary practice (Caprara et al.; Chu, 2013; Gao, 2011; Tschannen-Moran & Hoy, 2007). Clearly, educator preparation programs need to consider the relationship between pre-service preparation and the development of teachers' skills and sense of self-efficacy.

### **The Promise of Dual Licensure**

Dual licensure programs are those that provide pre-service teachers with both a general education and a special education license. States often use different terms to signify earning a license in general education and special education (i.e. dual certification, dual endorsement). In this paper we use the term *dual license* to mean earning a license in both general education and special education. Previous studies of dual licensure and inclusion have focused on several different topics. Several studies have explored the incorporation of special education into general education programs (Blanton & Pugach, 2011; Hardman, 2009). Other research has explored the development of model teacher education programs (Fullerton, Ruben, McBride, & Bert, 2011; Villa, Thousand, & Chappie,

1996). Research has also explored teacher perceptions about inclusion of students with disabilities (McCray & McHatton, 2011). These studies provide a window into the potential for dual licensure programs to improve educator preparation practices; however, little is known or understood about the differences between dually licensed and traditionally prepared teachers once they enter the teaching profession and whether or not dually licensed teachers feel more prepared and/or confident in implementing inclusive practices or meeting the needs of all learners in their classrooms. As suggested by Sleeter (2014), there is a need to conduct studies that link theories and ideas with actual teacher training and practice.

### **Rationale for Current Study**

In this article, we summarize the results of a study conducted with novice teachers who had experienced either a dual licensure or traditional educator preparation program. Despite a growing body of research on teacher education and inclusion, as well as an increased focus nationally on preparing teachers to work with diverse learners, few published studies have explored the impact of earning a dual license in general education and special education on teacher's self-efficacy and beliefs about inclusion. In addition, few studies have explored potential differences on these dimensions for dually licensed teachers and their traditionally prepared counterparts. Given the need to study potential connections among these dimensions and to identify their potential impact for educator preparation programs, we designed an exploratory study aimed at identifying pre-service and new teachers' perceptions of self-efficacy and skills with respect to inclusionary practices in relation to their chosen areas of licensure (i.e.,

either elementary education or dual licensure in elementary and special education. Using qualitative methods, this study sought to answer two primary research questions:

- How do both pre-service and new, dually-licensed teachers perceive their sense of skills and self-efficacy to meet the needs of students with a full range of disabilities in their classrooms? As compared to traditionally prepared teachers?
- How do dually-licensed pre-service and new teachers understand their skills and beliefs about inclusion? As compared to traditionally prepared teachers?

### Methods

#### Context

The study was conducted at a medium-sized research university in the Northeast. At this university, all pre-service teachers seeking a license in elementary education complete general education requirements as well as five general education methods courses, one diversity course, one special education course, two semesters of field practicum experience, and a semester of student teaching. The pre-service teachers seeking a dual license complete those same courses with four additional courses in special education

Table 1

#### *Interview Guide for Current Teachers*

- 
- Can you tell me a little bit about your first year(s) of teaching and how it is going?
  - Tell me about the most exciting part of your teaching career so far.
  - Tell me a little bit about your biggest struggle so far as a teacher
  - Were there aspects about your teacher preparation that were particularly effective with regards to inclusion?
  - Tell me about how students with disabilities (or other kinds of difference) are included in your classroom
  - Tell me about a time when you worked with a student with significant needs

methods, and an additional, half-time internship in special education.

#### Data Collection

Interviews and focus groups were conducted with four distinct groups of teachers: pre-service teachers seeking elementary education licensure (hereafter referred to as pre-service EE), pre-service teachers seeking licensure in both elementary education and special education (pre-service DL), current teachers who held an elementary education license (EE teachers), and current teachers who were dually licensed in elementary and special education (DL teachers). All of the dually licensed teachers had classroom teaching experience. Questions focused on participants' ideas and practices regarding inclusion, their perceived competencies with respect to working with students with disabilities, and specific examples of times they have worked with students with disabilities. Questions also asked participants to reflect on their teacher preparation and aspects they found most valuable in relation to teaching students with disabilities. The questions sought to elicit responses on dimensions typically associated with self-efficacy (e.g., perceived competence and confidence). The interview guide is available below in table 1.

- 
- Tell me about a time when you felt unprepared to meet the needs of a student in your class
  - Was there a time when you felt nervous or anxious about teaching or other aspects of your job?
  - How would you define inclusion?
  - What ideas or practices from your preparation do you find yourself drawing on most often?
  - Are there specific things you wish you had known when you started teaching?
  - If you were asked to give advice to the teacher preparation programs, what would it be?
- 

Participants were selected through purposeful sampling. Program coordinators for elementary education and special education provided names and places of employment for recent graduates. Current student teachers were identified through student teaching supervisors at the university. Each individual graduate was sent an email explaining the study and inviting them to participate. The letter included contact information and invited participants to call or email if they were interested in participating in the study. From the twenty-six total names obtained, seven teachers -- four who had received a dual license and three who had earned an elementary education license-- consented to be a part of the study and completed interviews (4 current DL teachers and 3 current EE teachers). Additionally, two focus groups were conducted: one with pre-service DL teachers, and one with pre-service EE teachers.

#### **Data Analysis**

Transcripts from the interviews and focus groups as well as documents from the programs were coded and analyzed using the data analysis software program ATLAS.ti (2011). A qualitative thematic approach (Coffey & Atkinson, 1996; Patton, 2002) was

used to analyze the codes and develop primary themes.

The coding process involved two overlapping stages, the creating of codes and the analysis of data using the coding structure. Miles, Huberman & Saldana (2013) describe two methods for creating codes: deductive and inductive. Deductive coding involves creating a start list of codes. Using the hypothesis and research questions as well as the literature, a start list of codes was developed for the analysis. Throughout the data collection process, the coding scheme was revised to include new information or concepts that emerged. Additionally, after reading each transcript through, the coding scheme was revised through the process of inductive coding. Inductive coding provided a way to allow new ideas to emerge from data collection and prevented the urge to “force-fit the data into preexisting codes” (p. 81). In the second stage, even as codes were being added and deleted to fit the data, the code list was reexamined and grouped into a hierarchical thematic structure. This was done by looking for patterns and clustering related data and codes together (Miles et al.; Patton, 2001). By clustering and grouping the coded data and looking for

emerging patterns, several overarching themes surfaced. Condensing the data into themes enabled a higher-order level of analysis, turning actions or ideas into generalizable patterns that help to explain the phenomenon of teacher education as it relates to teacher self-efficacy and beliefs. Condensing of codes into themes also aided in the thematic analysis described below. Once the thematic structure was created, transcripts and documents were re-analyzed, organizing data into the thematic structure where appropriate. Additionally, several steps were taken to ensure the trustworthiness of the data. These included the use of field memos and triangulation. Triangulation included the analysis of program materials for both the special education and the elementary education programs.

During analysis, the themes that emerged during the coding phase were examined for all cases and groups of cases. By exploring not only the meaning within each case, but also the ideas that were occurring across all cases, it was possible to strengthen the explanation of the impact of pre-service teacher preparation on teacher identity. From this process, three primary themes emerged: (a) building a sense of self-efficacy, (b) feeling prepared to be a teacher for all, and (c) embracing inclusive practices.

### Findings

#### Building a Sense of Self-Efficacy

Participants' sense of self-efficacy in relation to working with students with disabilities were expressed clearly and differed with respect to their preparation and licensure. A common thread around a lack of self-efficacy, particularly in planning and executing lessons and collaborating with building professionals, emerged among the pre-service and current EE

teachers. Several spoke about struggling to manage the paraprofessionals in their classrooms. Katy, a pre-service EE teacher, described how sometimes, she did not feel confident enough to work with the student in her classroom with intensive needs who required a one-on-one paraeducator. When she tried to approach the student, the paraeducator told her "I'll just take care of him" and so Katy just walked away. In general, the pre-service EE teachers were hesitant about their emerging roles and expressed a lack of confidence in their ability to teach students with disabilities.

Current EE teachers also struggled with their sense of self-efficacy, especially around their ability to differentiate instruction in ways that accommodated the needs of all learners. Marie talked at length about the desire to be taken seriously by her colleagues. She commented that "it was really hard not to be taken seriously, for my ideas. My colleagues would say things like 'Oh you learned that from student teaching.' It was really hard because I wanted to be respected." Current EE teachers reported feeling worried about being taken seriously and about a lesson going *wrong*. They wanted things in their classrooms to go the way they were supposed to and struggled when they did not.

In contrast, the current DL teachers expressed a high level of self-efficacy, even from the beginning of their time as teachers. Beth, a DL teacher shared that she has to:

Expect the unexpected and all that stuff I'm not going to be able to know. I've been looking at all the curriculum I'll be teaching all summer. . . . I understand the lessons and stuff. That's what happens when you get a job, you know. They picked you. They know you can do

so you have to do it. I felt really confident.

Similarly, Julia described her sense of self-efficacy as being related to:

My confidence in my teaching abilities. I felt really prepared to deal with a wide range of students. I saw a whole range of kids in my student teaching, more so than others and I felt prepared for that after my student teaching.

### **Feeling Prepared to Be a Teacher for All**

As indicated in the last quote, participants' sense of self-efficacy tended to be linked to their beliefs about the degree to which they were adequately prepared at the pre-service level to address all students' needs. Nearly all the pre-service and current EE teachers talked at length about their need for additional preparation at the pre-service level. In contrast, the pre-service DL spoke at length about the number of misconceptions their EE counterparts had, specifically in regard to what a student who receives special education services looks like.

The pre-service EE teachers all spoke about specific experiences or knowledge they wished they had received before going into their field practicum and student teaching experiences. Ally shared that she wished she had known:

How do you get kids on IEPs, and how do you write letters to doctors and these sorts of things, like talking to the psychiatrist after school? I am sure it is not something that every teacher has to do every year, but at some point that is going to be a need and we will figure it out.

Katy expressed that she wished that she had learned how to "talk to administration [about disability and services]."

Overall, the pre-service EE teachers reported having limited experiences working with students with disabilities. One pre-service EE teacher explained that although she had worked with students on 504 plans during her field practicum experiences, it was not until she began her student teaching experience that she worked with students on IEPs. Another student, Ally, shared that she felt less prepared to work with students with disabilities than she had expected, noting, "I had one semester where I worked with a few students who were ELL and two who were special ed, in addition to ELL. . . ." Lindsay described a similar experience working with a student who was deaf, noting that "seeing the difficulties of being with those students . . . and it was so hard and I had to wear the little mobile mic." In general, the pre-service EE teachers in this study had somewhat limited understandings of, and experiences with disability in the classroom context, and tended to see the students with disabilities in terms of the challenges they presented.

The pre-service DL teachers also expressed that many of their EE peers had misconceptions about students with disabilities that might be corrected with additional preparation in special education content and field experiences. Chrissy explained that "I definitely think that sometimes people think that special ed is that one student with CP [cerebral palsy]." Karen, pre-service DL, told of a similar misconception, "I used to think that-that special ed was a class full of kids who couldn't function at all on their own." A pre-service DL commented that for EE students who completed only one special education course, "you don't get the sense that it is your responsibility for the class and that you can just push them onto the

special educator, which is exactly what we want to avoid.”

During focus groups, pre-service DL teachers discussed the number of students with disabilities they had worked with so far in their careers, as well as their relationships to the paraeducators in the classroom who worked with specific students with intensive needs. Josie reported that in her second-grade classroom, “I have seven ELLs and seven IEPs and a 504, there are only 22 kids, so that is like all of them. . . .” When asked what it was like to work with students with disabilities, Chrissy responded “Amazing.” The current DL teachers shared stories about advocating for students with disabilities to ensure that the needs of those students were met. Jessica’s experience included learning how to negotiate the often competing worlds of general and special education. She explained that her role involved “having to be a politician to make everyone happy in order to make the kids successful. You have to kind of figure out what their goals or their needs are to meet them.” The current DL teachers were able to think critically about disability in the classroom context as well as the services and supports that students needed to be successful.

### **Embracing Inclusive Practices**

Given the nature of the study, it was not surprising that meeting the needs of diverse learners was a key theme that arose in all discussions. However, while pre-service EE teachers and current EE teachers talked at length in terms of the categories students fell into and making sure students were “in the right place,” pre-service and current DL teachers talked more holistically about strategies to meet the needs of all learners.

**Differentiation.** Several of the pre-service and current EE teachers spoke about differentiation. Katy talked specifically about how the diverse needs of the learners in her classroom impacted her own student teaching experience:

There was just so many things that I had to differentiate for all the students and [I give credit] to my teacher who spent more of her time helping those students than to help me. I’m glad that she was there to help them, but it was hard and it took away from my learning, but I watched her, so I learned from watching her instead of doing myself -- part beneficial, part not.

Marie, a current EE shared, “that was something that I could use more practice with. Differentiation. In manageable ways that do not all take you six hours when you get home.”

In contrast, the pre-service DL teachers talked at length about inclusion, sharing stories and trading practices with one another. Megan shared:

At the beginning of the year, most of my special ed services were pulled out and then they’ve been transitioning to pull [push] in and it is so much better, and the kids and I like it a lot better. And it’s hard because it is like ‘why is he leaving,’ and then you have to explain.

Josie talked about differentiation being automatic:

We were talking in Sarah’s class and for the first time she mentioned to the whole class, ‘oh by the way, you are going to need to have at least one lesson where you are documenting an accommodation for students’ and they like talked about it for a really long time and they didn’t know how to do that and didn’t think that was something you needed to do and I was just ‘oh, I didn’t

know that was something that was optional,' I had just been doing that since the beginning.

**Behavior.** Another area of concern for some pre-service and current teachers related to dealing with challenging student behavior in the classroom. Here, too, differences emerged with respect to the degree to which EE and DL pre-service and current teachers felt prepared to deal with students exhibiting social, emotional, and behavioral challenges. A number of the pre-service EE teachers expressed fears related to specific student behaviors they were nervous about as well as situations they did not want to find themselves in as student teachers. Lindsay was concerned about "really violent and aggressive [behavior], the extremes" while Katy was nervous about "blurting out, screaming, dancing, just behavior with students this year is definitely wild." Joseph, a current EE teacher, spoke specifically about additional training he thought would be helpful:

Sometimes behavior pieces which are interesting to talk about a little bit more. Like creating situations and be able to talk it out through a class, what would you do in this situation? Not that there's a right answer, just here's this weird, weird random situation which you may run into and just like brainstorming ideas with each other. I think that would be something important.

The pre-service EE teachers' ideas about student behavior related largely to things they were afraid of or things they did not feel equipped to handle.

In contrast, each of the pre-service DL teachers shared at least one story about working with a student with significant behavior needs and how they were able to meet the needs of that student. Karen

shared a story about a student who was very verbal:

I have one student and he talks a lot, a lot, he has an opinion about everything that could ever go on. I told him he couldn't stab his classmates with pencils and he said "You know what, Miss Karen? You are so rude!" I was like, "Ethan, you have to come here," and he did this to me (gives me the finger), but I'm having a really, really great experience and I love it, and I love both of them and I couldn't be happier.

The pre-service DL teachers gained more experience in supporting students with a range of needs and when confronted with unexpected behavior were able to express more confidence in their ability to respond.

**Student ownership and collaboration.** The notion of who is responsible for the education of students with disabilities and other diverse needs also emerged as a key difference among the EE and DL teachers. The DL teachers noted that, as a result of their training, they truly believed they were responsible for the learning of all the students in their classrooms regardless of disability. In contrast, the pre-service EE teachers spoke about wanting students to get access to services or supports that were outside the general education setting.

Pre-service EE teachers wanted their students-- especially those with behavior challenges who were falling behind or detracting from the rest of the class to get access to outside services and supports. The pre-service EE teachers' ideas about students and student services tended to relate to what they felt like other people should be doing to support students. Katy related a story about working with a student with behavior challenges and her frustration that she was alone in this effort.

“I’m like ‘you haven’t met this kid, you don’t know this child, you are not there with him.’” She felt strongly that her efforts needed to be supported by a special educator or other support staff person.

For pre-service and current DL teachers, the idea of shared responsibility for students was related to their willingness to engage in problem solving about specific students rather than to simply pass them on to other professionals or to refer them for additional services. DL teachers knew who the experts were in their buildings and how to access them.

A similar contrast was evident between the current DL and current EE teachers. Beth, a DL teacher, shared:

Not just seeing those students as belonging to someone else or the other students are taking up space. Or having those accommodations are somebody else’s responsibility. I don’t think the special educator should be the sole person to think of all the ways that the student can be accommodated and work within the classroom.

The results demonstrate a difference between DL and EE teachers with regards to knowledge, ability and confidence for working with diverse populations.

## Discussion

### Improving Teacher Preparation

The findings of this study suggest that the participants in this study benefitted from the additional coursework and field experiences within their dual license program and that the additional experience led to an enriched skill set and improved self-efficacy. Pre-service teachers who participate in additional training designed to help them meet the needs of diverse learners not only have a wider array of skills and tools, but they also have an increased

sense of self-efficacy, greater confidence, and less fear of working with students with disabilities. These characteristics emerged among pre-service and current DL teachers. In contrast, pre-service and current EE students had less coursework and a smaller number of experiences with students with disabilities and reported having a weaker sense of self-efficacy and fewer skills in working with students with disabilities.

These findings are similar to findings reported in other studies which found that earning a dual license can result in improved skills and dispositions regarding working with students with disabilities (Fullerton et al., 2011). Relatedly, previous research has suggested that teachers attitudes and beliefs play a role in inclusive practice implementation (McLeskey, Waldron, & Redd, 2014; Shogren, McCart, Lyon, & Sailor, 2015). In many ways, this is not a surprising finding, given that the increased amount of time and coursework experienced by those prepared in dual license programs would seem likely to result in enhanced skills and dispositions. This study also relates to previous research which suggests that while teachers have positive feelings about inclusion, they generally feel unprepared to operationalize it (Fuchs, 2010) and that teachers need to have a wide range of skills, including the ability to support IEP goals (Harvey, Yssel, Bauserman, & Merbler, 2010) and provide evidence based interventions (Sindelar, Adams, & Leko, 2014). That said, the study extends those from previous research through its inclusion of both pre-service and current teachers earning elementary education and dual licensure in special and general education. While previous studies have linked self-efficacy and teacher performance, and additional special education training with improved skills and

dispositions regarding students with disabilities, few studies have focused on the differences between current teachers who have a dual license and those who have a traditional license (Gehrke et al., 2014; Kleinhammer-Tramill, 2003; Kurth et al., 2014; Shaughnessy, 2004).

Moreover, the current study points to a need to bring more attention to the affective elements of teacher education. Previous research suggests both that more mastery experiences lead to an increase in self-efficacy (Bandura, 1977), and that more experiences and training around students with disabilities leads to greater skill and less fear (Yellin et al., 2003). Therefore, while it is unsurprising that those who were pursuing the dual license had more confidence and less fear, these important factors may need to be highlighted in the design and delivery of educator preparation programs aiming to prepare future teachers for the demands of an increasingly diverse population of PK-12 students. Educator preparation programs and professional standards tend to prioritize skill development over the development of dispositions, and while the need for skill acquisition goes without question, there may also be a need to pay more attention to preservice teacher candidates' underlying beliefs about students with disabilities and their levels of confidence and fear in relation to students with disabilities.

In addition, the study suggests that increased self-efficacy and skills may lead to a greater willingness to problem solve and engage with students with disabilities. The DL teachers in this study believed that all students could learn and were deeply concerned with helping all students access their education, whereas those who earned a traditional license were more likely to see

a student with disabilities in terms of how that student impacted either the experience of the teacher or the experience of the other students in the class. The greater skill on the part of the dually-licensed teachers as indicated by the interviews and focus groups was also reflected in the examples provided by pre-service and current DL teachers regarding how they interacted, strategized and advocated for students with disabilities. This increased engagement and willingness to teach has the potential to lead to increased academic outcomes for students with disabilities and also connects back to the literature demonstrating that teachers who persist are more likely to have students who succeed (Shaughnessy, 2004).

### **Limitations**

The study's limitations include its scope and focus on the perspectives of novice teachers from a medium-sized Northeastern university about their teacher preparation in relationship to meeting the needs of children with disabilities. The findings are bound within the small sample of pre-service and current teachers who participated in the study and, therefore may not be fully generalizable to the broader population of teacher candidates. Examining different teacher preparation programs across multiple states, particularly those who have undertaken a different approach to dual licensure might reveal different results. Further, the fact that students from this institution have a choice to pursue elementary education licensure or dual certification means that those choosing dual licensure may enter the program with additional experiences and more positive beliefs about students with disabilities. This creates a form of selection bias that warrants consideration in the interpretation of findings.

### **Future Research**

Moving forward, it will be important to examine who is choosing to earn a dual license and why, and what we can learn about those pre-service teachers that can help us to better prepare all pre-service teachers. The participants in this study opted to complete additional training in special education. Future research might involve learning more about these types of pre-service teachers and why they were motivated to pursue dual licensure. This may help teacher educators, policy makers, and administrators understand how to create pathways for other types of pre-service teachers to have additional experiences in special education. Thus helping to achieve Sleeter's (2014) suggestion about the need for additional research that connects theory to practice. Relatedly, because of the differing roles and expectations of classroom teachers and special educators, we need to further examine the impact of roles on preservice teacher candidates' understandings and expectations. More research is needed that investigates the impact of dual license teacher preparation on teacher self-efficacy and the ability of teachers to meet the needs of all learners. Finally, given the limited nature of the interaction between the researcher and the participants, future research might make use of multiple interviews or focus groups over the course of a school year.

### **Implications for Policy and Practice**

Study results point to several potential implications for policy and practice. First, there is a need to explore whether additional coursework and field experiences for all pre-service teachers, particularly field experiences and coursework that relate to working with diverse populations may lead to greater

self-efficacy around meeting the needs of all learners. By providing additional coursework and field experiences, teacher education programs may be able to positively impact these affective elements of teacher preparation and teachers' dispositions towards working with students with disabilities.

Second, there is a need for additional discussion within higher education programs around what skills and competencies related to the education of students with disabilities are needed by all future teachers. This study and others (Gao, 2011; Leko et al., 2015) affirm the need to ensure that all future teachers engage in high quality coursework and clinical experiences to be prepared to meet the needs of all learners, including those with disabilities. Federal legislation, professional organizations, and accrediting bodies underscore this need, as do many educator preparation programs that have undergone changes in recent years to increase the amount of disability-focused coursework and clinical experiences required of both general and special education teachers. The challenge remains to articulate a consistent approach to preparation that ensures all novice teachers are fully prepared to teach all students and potentially to consider the merits of requiring dual licensure for all future teachers. This is particularly important as many states are now moving towards requiring dual licensure for all teachers.

Finally, there is a need to further explore what attracts students to the pathway of dual licensure. As discussed previously, at this university dual licensure was an optional path for students to pursue. Moving forward, it will be important to understand what motivates students to seek a dual license. In order to

further improve teacher training, it is vital that we understand who is choosing to earn this type of degree and why. This understanding will help us with exploring ways to create pathways for other students to have more experiences working with diverse learners.

Participants were selected through purposeful sampling. Program coordinators for elementary education and special education provided names and places of employment for recent graduates. Current student teachers were identified through student teaching supervisors at the university. Each individual graduate was sent an email explaining the study and inviting them to participate. The letter included contact information and invited participants to call or email if they were interested in participating in the study. From the twenty-six total names obtained, seven teachers -- four who had received a dual license and three who had earned an elementary education license-- consented to be a part of the study and completed interviews (4 current DL teachers and 3 current EE teachers). Additionally, two focus groups were conducted: one with pre-service DL teachers, and one with pre-service EE teachers.

### **Data Analysis**

Transcripts from the interviews and focus groups as well as documents from the programs were coded and analyzed using the data analysis software program ATLAS.ti (2011). A qualitative thematic approach (Coffey & Atkinson, 1996; Patton, 2002) was used to analyze the codes and develop primary themes.

The coding process involved two overlapping stages, the creating of codes and the analysis of data using the coding structure. Miles, Huberman & Saldana (2013) describe two methods for creating

codes: deductive and inductive. Deductive coding involves creating a start list of codes. Using the hypothesis and research questions as well as the literature, a start list of codes was developed for the analysis. Throughout the data collection process, the coding scheme was revised to include new information or concepts that emerged. Additionally, after reading each transcript through, the coding scheme was revised through the process of inductive coding. Inductive coding provided a way to allow new ideas to emerge from data collection and prevented the urge to "force-fit the data into preexisting codes" (p. 81). In the second stage, even as codes were being added and deleted to fit the data, the code list was reexamined and grouped into a hierarchical thematic structure. This was done by looking for patterns and clustering related data and codes together (Miles et al.; Patton, 2001). By clustering and grouping the coded data and looking for emerging patterns, several overarching themes surfaced. Condensing the data into themes enabled a higher-order level of analysis, turning actions or ideas into generalizable patterns that help to explain the phenomenon of teacher education as it relates to teacher self-efficacy and beliefs. Condensing of codes into themes also aided in the thematic analysis described below. Once the thematic structure was created, transcripts and documents were re-analyzed, organizing data into the thematic structure where appropriate. Additionally, several steps were taken to ensure the trustworthiness of the data. These included the use of field memos and triangulation. Triangulation included the analysis of program materials for both the special education and the elementary education programs.

During analysis, the themes that emerged during the coding phase were examined for all cases and groups of cases. By exploring not only the meaning within each case, but also the ideas that were occurring across all cases, it was possible to strengthen the explanation of the impact of pre-service teacher preparation on teacher identity. From this process, three primary themes emerged: (a) building a sense of self-efficacy, (b) feeling prepared to be a teacher for all, and (c) embracing inclusive practices.

### Findings

#### Building a Sense of Self-Efficacy

Participants' sense of self-efficacy in relation to working with students with disabilities were expressed clearly and differed with respect to their preparation and licensure. A common thread around a lack of self-efficacy, particularly in planning and executing lessons and collaborating with building professionals, emerged among the pre-service and current EE teachers. Several spoke about struggling to manage the paraprofessionals in their classrooms. Katy, a pre-service EE teacher, described how sometimes, she did not feel confident enough to work with the student in her classroom with intensive needs who required a one-on-one paraeducator. When she tried to approach the student, the paraeducator told her "I'll just take care of him" and so Katy just walked away. In general, the pre-service EE teachers were hesitant about their emerging roles and expressed a lack of confidence in their ability to teach students with disabilities.

Current EE teachers also struggled with their sense of self-efficacy, especially around their ability to differentiate instruction in ways that accommodated the needs of all learners. Marie talked at length about the desire to be taken seriously by

her colleagues. She commented that "it was really hard not to be taken seriously, for my ideas. . . My colleagues would say things like 'Oh you learned that from student teaching.' It was really hard because I wanted to be respected." Current EE teachers reported feeling worried about being taken seriously and about a lesson going *wrong*. They wanted things in their classrooms to go the way they were supposed to and struggled when they did not.

In contrast, the current DL teachers expressed a high level of self-efficacy, even from the beginning of their time as teachers. Beth, a DL teacher shared that she has to:

Expect the unexpected and all that stuff I'm not going to be able to know. I've been looking at all the curriculum I'll be teaching all summer. . . . I understand the lessons and stuff. That's what happens when you get a job, you know. They picked you. They know you can do so you have to do it. I felt really confident.

Similarly, Julia described her sense of self-efficacy as being related to:

My confidence in my teaching abilities. I felt really prepared to deal with a wide range of students. I saw a whole range of kids in my student teaching, more so than others and I felt prepared for that after my student teaching.

#### Feeling Prepared to Be a Teacher for All

As indicated in the last quote, participants' sense of self-efficacy tended to be linked to their beliefs about the degree to which they were adequately prepared at the pre-service level to address all students' needs. Nearly all the pre-service and current EE teachers talked at length about their need for additional preparation at the pre-service level. In contrast, the pre-

service DL spoke at length about the number of misconceptions their EE counterparts had, specifically in regard to what a student who receives special education services looks like.

The pre-service EE teachers all spoke about specific experiences or knowledge they wished they had received before going into their field practicum and student teaching experiences. Ally shared that she wished she had known:

How do you get kids on IEPs, and how do you write letters to doctors and these sorts of things, like talking to the psychiatrist after school? I am sure it is not something that every teacher has to do every year, but at some point that is going to be a need and we will figure it out.

Katy expressed that she wished that she had learned how to “talk to administration [about disability and services].”

Overall, the pre-service EE teachers reported having limited experiences working with students with disabilities. One pre-service EE teacher explained that although she had worked with students on 504 plans during her field practicum experiences, it was not until she began her student teaching experience that she worked with students on IEPs. Another student, Ally, shared that she felt less prepared to work with students with disabilities than she had expected, noting, “I had one semester where I worked with a few students who were ELL and two who were special ed, in addition to ELL. . .” Lindsay described a similar experience working with a student who was deaf, noting that “seeing the difficulties of being with those students . . . and it was so hard and I had to wear the little mobile mic.” In general, the pre-service EE teachers in this

study had somewhat limited understandings of, and experiences with disability in the classroom context, and tended to see the students with disabilities in terms of the challenges they presented.

The pre-service DL teachers also expressed that many of their EE peers had misconceptions about students with disabilities that might be corrected with additional preparation in special education content and field experiences. Chrissy explained that “I definitely think that sometimes people think that special ed is that one student with CP [cerebral palsy].” Karen, pre-service DL, told of a similar misconception, “I used to think that-that special ed was a class full of kids who couldn’t function at all on their own.” A pre-service DL commented that for EE students who completed only one special education course, “you don’t get the sense that it is your responsibility for the class and that you can just push them onto the special educator, which is exactly what we want to avoid.”

During focus groups, pre-service DL teachers discussed the number of students with disabilities they had worked with so far in their careers, as well as their relationships to the paraeducators in the classroom who worked with specific students with intensive needs. Josie reported that in her second-grade classroom, “I have seven ELLs and seven IEPs and a 504, there are only 22 kids, so that is like all of them. . . .” When asked what it was like to work with students with disabilities, Chrissy responded “Amazing.” The current DL teachers shared stories about advocating for students with disabilities to ensure that the needs of those students were met. Jessica’s experience included learning how to negotiate the often competing worlds of

general and special education. She explained that her role involved “having to be a politician to make everyone happy in order to make the kids successful. You have to kind of figure out what their goals or their needs are to meet them.” The current DL teachers were able to think critically about disability in the classroom context as well as the services and supports that students needed to be successful.

### **Embracing Inclusive Practices**

Given the nature of the study, it was not surprising that meeting the needs of diverse learners was a key theme that arose in all discussions. However, while pre-service EE teachers and current EE teachers talked at length in terms of the categories students fell into and making sure students were “in the right place,” pre-service and current DL teachers talked more holistically about strategies to meet the needs of all learners.

**Differentiation.** Several of the pre-service and current EE teachers spoke about differentiation. Katy talked specifically about how the diverse needs of the learners in her classroom impacted her own student teaching experience:

There was just so many things that I had to differentiate for all the students and [I give credit] to my teacher who spent more of her time helping those students than to help me. I’m glad that she was there to help them, but it was hard and it took away from my learning, but I watched her, so I learned from watching her instead of doing myself -- part beneficial, part not.

Marie, a current EE shared, “that was something that I could use more practice with. Differentiation. In manageable ways that do not all take you six hours when you get home.”

In contrast, the pre-service DL teachers talked at length about inclusion, sharing stories and trading practices with one another. Megan shared:

At the beginning of the year, most of my special ed services were pulled out and then they’ve been transitioning to pull [push] in and it is so much better, and the kids and I like it a lot better. And it’s hard because it is like ‘why is he leaving,’ and then you have to explain.

Josie talked about differentiation being automatic:

We were talking in Sarah’s class and for the first time she mentioned to the whole class, ‘oh by the way, you are going to need to have at least one lesson where you are documenting an accommodation for students’ and they like talked about it for a really long time and they didn’t know how to do that and didn’t think that was something you needed to do and I was just ‘oh, I didn’t know that was something that was optional,’ I had just been doing that since the beginning.

**Behavior.** Another area of concern for some pre-service and current teachers related to dealing with challenging student behavior in the classroom. Here, too, differences emerged with respect to the degree to which EE and DL pre-service and current teachers felt prepared to deal with students exhibiting social, emotional, and behavioral challenges. A number of the pre-service EE teachers expressed fears related to specific student behaviors they were nervous about as well as situations they did not want to find themselves in as student teachers. Lindsay was concerned about “really violent and aggressive [behavior], the extremes” while Katy was nervous about “blurting out, screaming, dancing, just behavior with students this

year is definitely wild.” Joseph, a current EE teacher, spoke specifically about additional training he thought would be helpful:

Sometimes behavior pieces which are interesting to talk about a little bit more. Like creating situations and be able to talk it out through a class, what would you do in this situation? Not that there’s a right answer, just here’s this weird, weird random situation which you may run into and just like brainstorming ideas with each other. I think that would be something important.

The pre-service EE teachers’ ideas about student behavior related largely to things they were afraid of or things they did not feel equipped to handle.

In contrast, each of the pre-service DL teachers shared at least one story about working with a student with significant behavior needs and how they were able to meet the needs of that student. Karen shared a story about a student who was very verbal:

I have one student and he talks a lot, a lot, he has an opinion about everything that could ever go on. I told him he couldn’t stab his classmates with pencils and he said “You know what, Miss Karen? You are so rude!” I was like, “Ethan, you have to come here,” and he did this to me (gives me the finger), but I’m having a really, really great experience and I love it, and I love both of them and I couldn’t be happier.

The pre-service DL teachers gained more experience in supporting students with a range of needs and when confronted with unexpected behavior were able to express more confidence in their ability to respond.

**Student ownership and collaboration.** The notion of who is responsible for the education of students

with disabilities and other diverse needs also emerged as a key difference among the EE and DL teachers. The DL teachers noted that, as a result of their training, they truly believed they were responsible for the learning of all the students in their classrooms regardless of disability. In contrast, the pre-service EE teachers spoke about wanting students to get access to services or supports that were outside the general education setting.

Pre-service EE teachers wanted their students-- especially those with behavior challenges who were falling behind or detracting from the rest of the class to get access to outside services and supports. The pre-service EE teachers’ ideas about students and student services tended to relate to what they felt like other people should be doing to support students. Katy related a story about working with a student with behavior challenges and her frustration that she was alone in this effort. “I’m like ‘you haven’t met this kid, you don’t know this child, you are not there with him.’” She felt strongly that her efforts needed to be supported by a special educator or other support staff person.

For pre-service and current DL teachers, the idea of shared responsibility for students was related to their willingness to engage in problem solving about specific students rather than to simply pass them on to other professionals or to refer them for additional services. DL teachers knew who the experts were in their buildings and how to access them.

A similar contrast was evident between the current DL and current EE teachers. Beth, a DL teacher, shared:

Not just seeing those students as belonging to someone else or the other students are taking up space. Or having those accommodations are somebody

else's responsibility. I don't think the special educator should be the sole person to think of all the ways that the student can be accommodated and work within the classroom.

The results demonstrate a difference between DL and EE teachers with regards to knowledge, ability and confidence for working with diverse populations.

### Discussion

#### Improving Teacher Preparation

The findings of this study suggest that the participants in this study benefitted from the additional coursework and field experiences within their dual license program and that the additional experience led to an enriched skill set and improved self-efficacy. Pre-service teachers who participate in additional training designed to help them meet the needs of diverse learners not only have a wider array of skills and tools, but they also have an increased sense of self-efficacy, greater confidence, and less fear of working with students with disabilities. These characteristics emerged among pre-service and current DL teachers. In contrast, pre-service and current EE students had less coursework and a smaller number of experiences with students with disabilities and reported having a weaker sense of self-efficacy and fewer skills in working with students with disabilities.

These findings are similar to findings reported in other studies which found that earning a dual license can result in improved skills and dispositions regarding working with students with disabilities (Fullerton et al., 2011). Relatedly, previous research has suggested that teachers attitudes and beliefs play a role in inclusive practice implementation (McLeskey, Waldron, & Redd, 2014; Shogren, McCart, Lyon, & Sailor, 2015). In many ways, this is

not a surprising finding, given that the increased amount of time and coursework experienced by those prepared in dual license programs would seem likely to result in enhanced skills and dispositions. This study also relates to previous research which suggests that while teachers have positive feelings about inclusion, they generally feel unprepared to operationalize it (Fuchs, 2010) and that teachers need to have a wide range of skills, including the ability to support IEP goals (Harvey, Yssel, Bauserman, & Merbler, 2010) and provide evidence based interventions (Sindelar, Adams, & Leko, 2014). That said, the study extends those from previous research through its inclusion of both pre-service and current teachers earning elementary education and dual licensure in special and general education. While previous studies have linked self-efficacy and teacher performance, and additional special education training with improved skills and dispositions regarding students with disabilities, few studies have focused on the differences between current teachers who have a dual license and those who have a traditional license (Gehrke et al., 2014; Kleinhammer-Tramill, 2003; Kurth et al., 2014; Shaughnessy, 2004).

Moreover, the current study points to a need to bring more attention to the affective elements of teacher education. Previous research suggests both that more mastery experiences lead to an increase in self-efficacy (Bandura, 1977), and that more experiences and training around students with disabilities leads to greater skill and less fear (Yellin et al., 2003). Therefore, while it is unsurprising that those who were pursuing the dual license had more confidence and less fear, these important factors may need to be highlighted in the design and delivery of educator preparation

programs aiming to prepare future teachers for the demands of an increasingly diverse population of PK-12 students. Educator preparation programs and professional standards tend to prioritize skill development over the development of dispositions, and while the need for skill acquisition goes without question, there may also be a need to pay more attention to preservice teacher candidates' underlying beliefs about students with disabilities and their levels of confidence and fear in relation to students with disabilities.

In addition, the study suggests that increased self-efficacy and skills may lead to a greater willingness to problem solve and engage with students with disabilities. The DL teachers in this study believed that all students could learn and were deeply concerned with helping all students access their education, whereas those who earned a traditional license were more likely to see a student with disabilities in terms of how that student impacted either the experience of the teacher or the experience of the other students in the class. The greater skill on the part of the dually-licensed teachers as indicated by the interviews and focus groups was also reflected in the examples provided by pre-service and current DL teachers regarding how they interacted, strategized and advocated for students with disabilities. This increased engagement and willingness to teach has the potential to lead to increased academic outcomes for students with disabilities and also connects back to the literature demonstrating that teachers who persist are more likely to have students who succeed (Shaughnessy, 2004).

#### **Limitations**

The study's limitations include its scope and focus on the perspectives of

novice teachers from a medium-sized Northeastern university about their teacher preparation in relationship to meeting the needs of children with disabilities. The findings are bound within the small sample of pre-service and current teachers who participated in the study and, therefore may not be fully generalizable to the broader population of teacher candidates. Examining different teacher preparation programs across multiple states, particularly those who have undertaken a different approach to dual licensure might reveal different results. Further, the fact that students from this institution have a choice to pursue elementary education licensure or dual certification means that those choosing dual licensure may enter the program with additional experiences and more positive beliefs about students with disabilities. This creates a form of selection bias that warrants consideration in the interpretation of findings.

#### **Future Research**

Moving forward, it will be important to examine who is choosing to earn a dual license and why, and what we can learn about those pre-service teachers that can help us to better prepare all pre-service teachers. The participants in this study opted to complete additional training in special education. Future research might involve learning more about these types of pre-service teachers and why they were motivated to pursue dual licensure. This may help teacher educators, policy makers, and administrators understand how to create pathways for other types of pre-service teachers to have additional experiences in special education. Thus helping to achieve Sleeter's (2014) suggestion about the need for additional research that connects theory to practice. Relatedly, because of the differing roles and

expectations of classroom teachers and special educators, we need to further examine the impact of roles on preservice teacher candidates' understandings and expectations. More research is needed that investigates the impact of dual license teacher preparation on teacher self-efficacy and the ability of teachers to meet the needs of all learners. Finally, given the limited nature of the interaction between the researcher and the participants, future research might make use of multiple interviews or focus groups over the course of a school year.

### **Implications for Policy and Practice**

Study results point to several potential implications for policy and practice. First, there is a need to explore whether additional coursework and field experiences for all pre-service teachers, particularly field experiences and coursework that relate to working with diverse populations may lead to greater self-efficacy around meeting the needs of all learners. By providing additional coursework and field experiences, teacher education programs may be able to positively impact these affective elements of teacher preparation and teachers' dispositions towards working with students with disabilities.

Second, there is a need for additional discussion within higher education programs around what skills and competencies related to the education of students with disabilities are needed by all future teachers. This study and others

(Gao, 2011; Leko et al., 2015) affirm the need to ensure that all future teachers engage in high quality coursework and clinical experiences to be prepared to meet the needs of all learners, including those with disabilities. Federal legislation, professional organizations, and accrediting bodies underscore this need, as do many educator preparation programs that have undergone changes in recent years to increase the amount of disability-focused coursework and clinical experiences required of both general and special education teachers. The challenge remains to articulate a consistent approach to preparation that ensures all novice teachers are fully prepared to teach all students and potentially to consider the merits of requiring dual licensure for all future teachers. This is particularly important as many states are now moving towards requiring dual licensure for all teachers.

Finally, there is a need to further explore what attracts students to the pathway of dual licensure. As discussed previously, at this university dual licensure was an optional path for students to pursue. Moving forward, it will be important to understand what motivates students to seek a dual license. In order to further improve teacher training, it is vital that we understand who is choosing to earn this type of degree and why. This understanding will help us with exploring ways to create pathways for other students to have more experiences working with diverse learners.

### **References**

- Authors. (2016). [Details omitted for peer review].
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28, 117-148.
- Blanton, L. P., & Pugach, M. C. (2011). Using a classification system to probe the

- meaning of dual licensure in general and special education. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children*. doi: 0888406411404569.
- Caprara, G. V., Barbaranelli, C., Steca, P., & Malone, P. S. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of School Psychology, 44*(6), 473–490.
- Chu, S.-Y. (2013). Teacher efficacy beliefs toward serving culturally and linguistically diverse students in special education: Implications of a pilot study. *Education and Urban Society, 45*, 385–410.
- Cochran-Smith, M., & Dudley-Marling, C. (2012). Diversity in teacher education and special education the issues that divide. *Journal of Teacher Education, 63*, 237–244.
- Coffey, A. J., & Atkinson, P. A. (1996). *Making sense of qualitative data: Complementary research strategies (1st ed.)*. Sage Publications, Inc.
- Fuchs, W. W. (2010). Examining teachers' perceived barriers associated with inclusion. *Journal of the Southeastern Regional Association of Teacher Educators, 19*(1), 30–35.
- Fullerton, A., Ruben, B. J., McBride, S., & Bert, S. (2011). Evaluation of a merged secondary and special education program. *Teacher Education Quarterly, 38*(2), 45–60.
- Gao, W. (2011). Enhancing preservice teachers' sense of efficacy and attitudes toward school diversity through preparation: A case study of one US inclusive teacher education program. *International Journal of Special Education, 26*(2), 1–16.
- Gehrke, R. S., Cocchiarella, M., Harris, P., & Puckett, K. (2014). Field Experiences and Perceptions of Inclusion: Varying Contexts, Structures, and Interpretations. *Journal of the International Association of Special Education, 15*, 85–93.
- Guskey, T. R. (1988). Teacher efficacy, self-concept, and attitudes toward the implementation of instructional innovation. *Teaching and Teacher Education, 4*(1), 63–69.
- Hardman, M. L. (2009). Redesigning the preparation of all teachers within the framework of an integrated program model. *Teaching and Teacher Education, 25*(4), 583–587. doi:10.1016/j.tate.2009.02.005
- Harvey, M. W., Yssel, N., Bauserman, A. D., & Merbler, J. B. (2010). Preservice teacher preparation for inclusion an exploration of higher education teacher-training institutions. *Remedial and Special Education, 31*, 24–33.
- Kleinhammer-Tramill, J. (2003). An analysis of federal initiatives to prepare regular educators to serve students with disabilities: Deans' grants, REGI, and beyond. *Teacher Education and Special Education, 26*, 230–245.
- Kleinhammer-Tramill, J., Tramill, J., & Brace, H. (2010). Contexts, funding history, and implications for evaluating the office of special education program's investment in personnel preparation. *The Journal of Special Education, 43*, 195–205. doi:10.1177/002246690831620.1.
- Kozleski, E. B., Yu, T., Satter, A. L., Francis, G. L., & Haines, S. J. (2015). A never ending journey: Inclusive education is a principle of practice, not an end game. *Research and Practice for Persons with*

- Severe Disabilities*, 40, 211–226. doi: 10.1177/1540796915600717.
- Kurth, J. A., Morningstar, M. E., & Kozleski, E. B. (2014). The persistence of highly restrictive special education placements for students with low-incidence disabilities. *Research and Practice for Persons with Severe Disabilities*, 39, 227–239. doi: 10.1177/1540796914555580.
- Leko, M. M., Brownell, M. T., Sindelar, P. T., & Kiely, M. T. (2015). Envisioning the future of special education personnel preparation in a standards-based era. *Exceptional Children*, 82, 25–43. doi: 10.1177/0014402915598782.
- McCray, E. D., Butler, T. W., Bettini, E., McLeskey, J., Waldron, N. L., Spooner, F., & Algozzine, B. (2014). What are the roles of general and special educators in inclusive schools. In J. McLeskey, N. Waldron, F. Spooner & B. Algozzine (Eds.), *Handbook of Effective Inclusive Schools: Research and Practice* (80–106). New York: Routledge.
- McCray, E. D., & McHatton, P. A. (2011). “Less afraid to have them in my classroom”: understanding pre-service general educators’ perceptions about inclusion. *Teacher Education Quarterly*, 38(4), 135–155.
- McLeskey, J., Waldron, N. L., & Redd, L. (2014). A case study of a highly effective, inclusive elementary school. *The Journal of Special Education*, 48, 59–70. DOI: 10.1177/0022466912440455.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: a methods sourcebook*. Thousand Oaks, California: SAGE Publications, Inc.
- Patton, M. Q. (2002). *Qualitative research & evaluation methods (3rd ed.)*. Thousand Oaks, CA: Sage Publications.
- Pugach, M. C., Blanton, L. P., & Correa, V. I. (2011). A historical perspective on the role of collaboration in teacher education reform: Making good on the promise of teaching all students. *Teacher Education and Special Education*, 34, 183–200. doi: 10.1177/0888406411406141.
- Rock, M. L., Spooner, F., Nagro, S., Vasquez, E., Dunn, C., Leko, M., Luckner, J., Bausch, M., Donehower, C., & Jones, J. L. (2016). 21st century change drivers: Considerations for constructing transformative models of special education teacher development. *Teacher Education and Special Education*, 39, 98–120. doi: 10.1177/0888406416640634.
- Shaughnessy, M. F. (2004). An interview with Anita Woolfolk: The educational psychology of teacher efficacy. *Educational Psychology Review*, 16, 153–176.
- Shogren, K. A., McCart, A. B., Lyon, K. J., & Sailor, W. S. (2015). All means all: Building knowledge for inclusive schoolwide transformation. *Research and Practice for Persons with Severe Disabilities*, 40, 173–191. DOI: 10.1177/1540796915586191.
- Sindelar, P. T., Adams, A. J., & Leko, C. D. (2014). How can teacher education improve effective inclusive schools? In J. McLeskey, N. Waldron, F. Spooner & B. Algozzine (Eds.), *Handbook of Effective Inclusive Schools: Research and Practice* (55–66). New York: Routledge.
- Sindelar, P. T., Brownell, M. T., & Billingsley, B. (2010). Special education teacher education research: Current status and future directions. *Teacher Education and Special Education*, 33, 8–24. doi: 10.1177/0888406409358593.

- Sleeter, C. (2014). Toward teacher education research that informs policy. *Educational Researcher, 43*, 146-153. doi: 0013189X14528752.
- Stayton, V. D., & McCollum, J. (2002). Unifying general and special education: What does the research tell us? *Teacher Education and Special Education, 25*, 211–218.
- Tschannen-Moran, M., & Hoy, A. W. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education, 23*(6), 944–956.
- U.S. Department of Education, Office of Special Education Programs. (2015). Thirty-seventh Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, Parts B and C. 2015. (Report No. No. ED-OSE-12-C-0031). Retrieved from: <http://www2.ed.gov/about/reports/annual/osep/2015/parts-b-c/37th-arc-for-idea.pdf>
- Villa, R. A., Thousand, J. S., & Chappie, J. W. (1996). Preparing teachers to support inclusion: Preservice and inservice programs. *Theory into Practice, 35*, 42–50.
- Woolfolk, A. E., Rosoff, B., & Hoy, W. K. (1990). Teachers' sense of efficacy and their beliefs about managing students. *Teaching and Teacher Education, 6*(2), 137–148.
- Yellin, P. G., Yellin, D., Claypool, P. L., Mokhtari, K., Carr, R., Latiker, T., Szabo, S. (2003). I'm not sure I can handle the kids, especially, the, uh, you know special ed kids. *Action in Teacher Education, 25*, 14–19.

#### Authors' Note

---

Research was supported in part by funding from the Jean S. Garvin Research Fellowship at the Center on Disability and Community Inclusion, University of Vermont.