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## **Preparing 21<sup>st</sup> Century Special Educators: An Overview of Challenges and Opportunities**

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## **Preparing 21st Century Special Educators: An Overview of Challenges and Opportunities**

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*With a wide array of teacher education and preparation programs, it is important that all educators are effectively prepared to meet the needs of all children. This is especially true for students with disabilities whose physical, emotional, and academic needs are ever-changing. This overview provides a brief history of special educator preparation and certification and highlights challenges and opportunities for growth in the field as schools experience greater cultural diversity, increased use of technology, and more access to educator preparation programs.*

The number of children diagnosed with disabilities is increasing. The number of US students with disabilities peaked at 6.03 million during the 2004 – 2005 school year, then declined to 5.67 million during the 2011 – 2012 school year (U.S. Department of Education, 2014). Since 2012, there has been a steady uptick in the number of students identified with disabilities. As of 2014, there were 5.83 million students identified with disabilities (U.S. Department of Education, 2014). Along with this population shift, there have also been changes in how educators support children with disabilities. In particular, they are being asked to meet students' diverse needs related to culture and language and to incorporate technology to enhance learning and prepare students to engage with technology in the real world. In order to keep pace with a rapidly changing society and a diverse school population, special educator preparation programs must equip teachers with cultural competence and technological skills, each of which are critical for meeting the needs of twenty-first century learners.

### **A Brief History of Special Educator Preparation**

Just as its name implies, special education is situated in the larger context of education as a unique subfield focused on educating children with disabilities and special needs. Children who are served by special education services may have physical, cognitive and/or intellectual, and behavioral and/or emotional disorders that impede their ability to be educated without some sort of assistance. Special education classroom practices include providing extra accommodations and alternative modifications on assignments and assessments and varied teaching techniques that are not typically used with nondisabled students (Cook & Schirmer, 2003). Most of this training comes from educator preparation programs at colleges and universities or alternative teacher certification programs. Preservice teachers in special educator preparation programs go through intensive and varied training programs to prepare them to work with unique populations of students. Not only are special educators responsible for teaching academic content, they often must be able to provide individualized instruction to meet a variety of unique learning and physical needs (Urbach et al, 2015).

Special education, as an academic field, is relatively new in the United States and was largely non-existent prior to special education-focused legislation such as the *Education for All*

*Handicapped Children Act* (EAHC, 1975) and *Individuals with Disabilities Education Act* (IDEA, 2004). Prior to these legislations, children with disabilities were typically placed in hospitals, institutions, or specialized schools where they were often treated and/or studied by medical professionals instead of being educated by teachers (Spaulding & Pratt, 2015). EAHC served as the foundational piece of legislation that the United States used to guide future policies and practices related to special education (U.S. Department of Education, 2012). It not only mandated that public schools provide equal access to education for children with disabilities, but it also provided rights for parents of children with disabilities to make decisions about their child's education. Today, IDEA mandates federal, state, and local provisions for ensuring that all children with disabilities have access to a public education that meets their unique needs and that will prepare them for further education, employment, and independent living. Additionally, IDEA outlines the rights of children with disabilities by detailing the types of settings in which they should be educated, describing what makes teachers highly qualified to teach them, and providing guidelines for how their individual educational programs (IEPs) can be produced. Parent's rights are also a central concern of the law, requiring that they are informed about all procedural safeguards available to them, as well as their right to advocate for the needs of their children and ensure they are educated effectively (U.S. Department of Education, 2016).

In the four decades since EAHC, increased attention has been given to teaching children with disabilities in classroom settings that mirror general population teaching and learning. During the latter part of the twentieth century, as a result of provisions within IDEA that required children to be educated in the least restrictive environment (LRE) appropriate for their needs, children with disabilities began to attend special classes within regular schools. Today, children with a variety of mild or severe disabilities, are being taught in mainstream classrooms by both general and special educators (Nind & Wearmouth, 2006; Rix, Hall, Nind, Sheehy, & Wearmouth, 2009; Lindsay, Proulx, Scott, & Thompson, 2014).

### **Training and Certification for Special Educators**

The training and certification of special educators who teach children with disabilities is strictly regulated by IDEA. Not only must special educators meet the standards for being "effective" under the most current set of educational policy (*Every Student Succeeds Act* [ESSA] of 2015), they must also receive specialized training and additional licensure requirements related to teaching children with disabilities (U.S. Department of Education, 2016). Special educator preparation programs are offered across the country in a variety of settings. Some universities offer traditional undergraduate and graduate programs, while others offer alternative distance or hybrid models where students complete their studies partially or completely online (Vernon-Dotson, Floyd, Dukes, & Darling, 2013). No matter the course format, special educators have typically been required to demonstrate competencies in a variety of areas, including: knowledge of disability characteristics, ability to modify and adapt curriculum, ability to implement IEPs, and multiple other practices (Sayeski & Higgins, 2014).

Despite these stringent requirements, special educators continue to face challenges as they enter the profession (Mastropieri, 2001). This suggests preparation programs are not fulfilling their responsibility to equip teachers to work with children with special needs. This, in part, may stem from missing components within educator programs. Attempts to remedy this, have yielded two popular and emerging practices among scholars in the field: culturally responsive teaching and technology integration. Cultivating special educator expertise in these

two areas, will allow special educators to develop a deep understanding of their students and their individual needs and enhance their ability to make use of technological resources to innovate in their instruction (Benedict, Brownell, Park, Bettini, & Lauterbach, 2014). These practices have gained increased attention as special educators keep pace with the ever-evolving needs of children with disabilities while developing and maintaining the skills and competencies required for twenty-first century teaching and learning. To this end, teacher preparation programs carry the onus of ensuring that their curriculum and training philosophies are pedagogically rigorous, practical for an advancing society, and culturally relevant.

### **The Case for Cultural Responsive Special Educators**

In 2014, the overall number of ethnic minority students (i.e. Latino, African-American, and Asian) surpassed the number of non-Hispanic white students, indicating a shift in the United States towards schools reflecting a minority-majority population change (National Center for Education Statistics, Common Core of Data [CCD], 2013; Education Week, 2014). In order to meet the cultural needs of this diversifying student population, Gay (2002) proposed culturally responsive teaching, “a comprehensive endeavor that is engendered in all dimensions of the educational enterprise, including diagnosing students’ needs, curriculum content, counseling and guidance, instructional strategies, and performance assessment” (p. 619). When educators are culturally responsive, they are aware of, and capable of, responding to the ways in which cultural patterns influence the ecology of the classroom. Culturally responsive educators are also adept at making connections between the home or community culture and school culture for students and their families (Pewewardy & Hammer, 2003).

Within the special education field, research has also called for pedagogical practices to be responsive to students’ culture, language, and disability. Garcia and Ortiz (2006) suggested that culturally responsive special educators can play a significant role in creating classroom conditions that support students in these areas by providing specialized services, collaborating with families, and implementing culturally appropriate interventions for struggling learners. As an advocate for cultural competency, Conroy (2012) found that when special educators work with the parents and families of children with disabilities, parents and families are better able to navigate the special education process. More importantly, learning can be enriched for children in special education classes when their teachers exercise socially and linguistically meaningful instruction (Shealey, McHatton, Alvarez, & Wilson, 2011). As a consequence, scholars have suggested that with enriched, culturally relevant teaching and learning comes increased student achievement and a decrease in labeling students with disabilities as “at-risk” (Orosco & Klingner, 2009; Villegas & Lucas, 2002).

The increasingly diverse student population has implications for all educators; however, special educators are uniquely impacted by this growth, since children from culturally and linguistically diverse backgrounds are disproportionately represented in special education classes and/or under-served in general education classes (Sullivan, 2011). Children from culturally and linguistically diverse backgrounds are also more vulnerable to being educated in schools that lack resources (e.g. personnel with skillsets and materials) to adequately educate students with disabilities (Russel et al., 2006).

Numerous scholars have suggested that special education teacher preparation programs should seek to help teachers develop the types of cultural skills necessary to support diverse students (Johnson & McIntosh, 2009; Oyler, 2011; Prater, Wilder, & Dyches, 2008). Such skills

for teachers include the ability to acknowledge students' lives and experiences, identify their own socially conditioned attitudes that may contribute to deficit-based thinking regarding their students' abilities, and build interpersonal relationship skills to communicate and collaborate with parents and families (Harmon, Kasa-Hendrickson, & Neal, 2009). Students can benefit from being taught by teachers who have a better understanding of how to build and leverage their relationships, are experts in their content area(s), and who have sufficient knowledge of individual student needs to provide a rich educational experience.

### **Barriers and Opportunities for Cultural Competency**

Despite the need for special educators to possess multicultural and social-cultural skills, special education preparation programs are not always positioned to effectively develop these competencies for a variety of reasons. These include a lack of faculty with an interest, background, or adequate training in multicultural special education (McCray & Garcia, 2002), as well as limited practical experience in increasing content-based skills and attending to the unique needs of the special needs student (Brownell, Ross, Colon, & McCallum, 2005). McCray and Garcia (2002) concluded that race, ethnicity, culture, and language have not been established as legitimate areas of study in the special education knowledge base, due to the lack of studies with participants from diverse populations. They also argued that the lack of research is a result of the limited number of researchers and scholars who identify as multicultural and/or bilingual educators, who are interested in driving a multicultural special education research agenda, and/or who are involved in the preparation of special educators (McCray & Garcia, 2002). Brownell et al. (2005) highlighted the lack of research on special education teacher preparation and created a framework to analyze and evaluate special educator training programs. From their analysis, they concluded that focusing on inclusion and cultural diversity were important features of special educator preparation programs; however, there was little to no focus on teaching cultural skills or providing opportunities for pre-service teachers to practice these skills in the field.

Irvine (2012) suggested that the ways schools, colleges, and departments of education are organized contribute to the limited conversations across teacher education programs about best practices for training teachers to use multicultural practices in special education settings. As a solution, Irvine (2012) proposed making structural and organizational changes to special educator training programs, such as enrolling more students of color and creating new forms of professional development, to add more culturally competent special educators to the field. These findings, among others, present a unique opportunity for special educator preparation programs to reexamine—from social-cultural and multicultural perspectives—both their mindsets and practices related to training pre-service teachers to meet the needs of diverse learners.

### **The Case for Technologically Trained Special Educators**

Given the steady surge in technological innovations in society and in education, it is also important for special education teachers to have the ability to leverage new technologies to assist students with disabilities with their academic learning and life skills outside of the classroom. This can often be a difficult task, as teachers struggle to keep pace with continuous innovation in

the technology field (Van Laarhoven & Condemann, 2011). Technological tools have long been a part of special education in the form of assistive technology (AT) devices used for multiple tasks such as completing academic work to facilitating communication for non-verbal students (Ghaleb, 2014). AT is the most commonly referenced type of technology used in special education, and consists of any item, piece of equipment, or system that is used to increase, maintain, or improve the capabilities of individuals with disabilities (e.g. voice recognition programs, screen readers, and screen enlargement applications). Special educators are required to have an understanding of the various types of AT, be able to use that understanding to effectively select the appropriate technologies for their students, and support students in using the technology (U.S. Department of Education, 2012).

Today's special educators are entering classrooms that are becoming increasingly high-tech and are being asked to engage with a variety of technological tools beyond standard AT devices. Although most special education teachers receive some training on the use of assistive technology, these technologies change over time and new tools for innovation in the classroom are always emerging. Adaptable hardware, sophisticated text-to-speech communication programs, and software programs that meet a variety of academic needs, such as durable tablets or digital textbooks, are now used by special educators to better serve students with disabilities. With the change in classrooms, should come the change in educator preparation programs to ensure that teachers have the skills to capitalize on the benefits of leveraging technology to support their students with disabilities.

Technology can be instrumental in helping children with disabilities access and interact with academic information as well as communicate with others; however, teacher training institutions have faced challenges providing adequate pre-service training on technology, which has resulted in a lack of technology being meaningfully integrated and used by children with disabilities in school settings (Edyburn, 2005; Judge & Simms, 2009; Michaels & Mc-Dermott, 2003). It is for this reason, special education scholars are highlighting the need for additional training in the area of technology (Edyburn, 2004; Judge, 2001). Cultivating competencies for special educators undoubtedly comes with challenges; however, developing these skills can also lead to a variety of opportunities for offering additional support to all types of learners.

## **Barriers and Opportunities for Technological Competence**

Both assistive technology tools and mainstream technology tools offer creative ways to help students with disabilities learn content, demonstrate understanding, and communicate more effectively (Schaffhauser, 2013). Despite the benefits, effectively using technological tools can be difficult for special educators, especially those who are not properly trained or who are unable to keep up with the fast pace of innovation (O'Brien, Aguinaga, Hines, & Hartsorne, 2011). Research has shown that both preservice teachers and faculty within special educator training programs encounter challenges related to effectively learning and teaching about technology use in special education.

Van Laarhoven and Conderman (2011) conducted a study to examine how special education faculty members integrated assistive technology training into instruction and how special education pre-service teachers viewed their training. They found that pre-service special educators have a strong desire to learn how to use technology; however, Van Laarhoven and Conderman (2011) also expressed the need to feel confident in their abilities and have sufficient opportunities to practice using both assistive technology devices and other types of educational

technology that may be of benefit to their students. While the researchers acknowledged the time and resource constraints necessary for infusing assistive technology training into teacher education programs, they concluded that collaboratively sharing and developing curricular innovations that are cost-effective and research-based can meet the needs of a variety of faculty skill levels in order to best teach teacher candidates (Van Laarhoven & Conderman, 2011).

Nam, Bahn, and Lee (2013) came to similar conclusions with their study, finding that special education teachers cited the need for more training and support in the use of assistive technology to remove the barrier to effective technology implementation in their classrooms. These types of challenges present a unique opportunity for special educator preparation programs to begin innovating how they train their students to leverage technology when working with children with special needs. One such example of technological innovation in special educator preparation comes from Weng (2015), who developed and subsequently trained teachers to use an app evaluation rubric for special education iPad programs. This, along with other emerging technological software and tools, is a response to the call for more specified technology training for special educators.

### Implications

The changing demographics of US schools along with the rapid emergence of new technologies provide opportunities for special educator preparation programs to advance new, relevant, and culturally responsive ways of teaching and learning in special education classrooms. Now is the time for institutions that train special educators to adopt practices that offer intensive courses in cultural competency, create safe spaces for preservice educators to grapple with topics related to culture and diversity in education, and provide opportunities for preservice teachers to demonstrate cultural competence before entering classrooms. Teacher training institutions should also seek to stay abreast of technological innovations in special education and make use of human and financial resources to better prepare and support preservice teacher training. Additionally, more research in the areas of multicultural special education and technology use in special education is needed to drive these changes. Researchers can seize the opportunity to study best practices for teaching teachers new skills as well as the impact that having such skills can have on student achievement. Today's teacher trainers, university administrators, and policy-makers must explore these trends, challenge mindsets, and alter actions to ensure the success of future special educators.

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