Chapter 2
Addressing Neurodiversity Within Educator Preparation

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ABSTRACT

In recent years, the educational landscape has evolved to encompass a diverse range of students with unique learning profiles, including those with Autism Spectrum Disorders (ASD) and other forms of neurodiversity, such as attention deficit hyperactivity disorder (ADHD), learning disabilities (LD), and Tourette's Syndrome. As the field of special education continues to advance, the demand for highly qualified professionals who possess the knowledge, skills, and sensitivity to effectively support these students has grown exponentially. This chapter delves into the essential methods and learning frameworks that educator preparation programs can employ to equip future professionals with the expertise needed to meet the diverse needs of neurodiverse students.

INTRODUCTION

In recent years, the educational landscape has evolved to encompass a diverse range of students with unique learning profiles, including those with Autism Spectrum Disorders (ASD) and other forms of neurodiversity such as attention deficit hyperactivity disorder (ADHD), learning disabilities (LD), and Tourette's Syndrome (National Center for Education Statistics [NCES], 2023). As the field of special education continues to advance, the demand for highly qualified professionals who possess the knowledge, skills, and sensitivity to effectively support these students has grown exponentially (Balderaz &

Rosenblatt, 2016; Bureau of Labor Statistics, 2022; Lee, 2018). This chapter delves into the essential methods and learning frameworks that educator preparation programs can employ to equip future professionals with the expertise needed to meet the diverse needs of neurodiverse students.

The rapid rise in the prevalence of ASD and neurodiversity within educational settings underscores the critical role that educators play in fostering inclusive, empowering and effective learning environments (IDEA, 2004; Rentschler et al., 2022). To meet this pressing need, educator preparation programs must adopt innovative and evidence-based approaches that bridge theory with practice, empower educators with practical strategies, and cultivate a deep understanding of neurodiverse students' strengths and challenges.

Throughout this chapter, we will explore the multi-faceted methods and learning framework that lay the foundation for a comprehensive educator preparation program. This framework integrates the latest research in neurodiversity, best practices in special education, and the transformative principles of inclusive education. By blending theory, experiential learning, and collaboration, future professionals will be empowered to address the intricate needs of students with ASD and other forms of neurodiversity.

We will begin by exploring the concept of neurodiversity, shedding light on the inherent strengths and challenges of individuals across the spectrum. This understanding forms the cornerstone of the learning framework, emphasizing the value of recognizing and celebrating individual differences. Educator preparation programs must equip current and future professionals with evidence-based strategies that will align with the unique needs of neurodiverse students. Therefore, the next section will delve into research-driven practices that have proven effective in learning, communication, socialization and independence. A central tenet of the learning framework is the incorporation of Universal Design for Learning (UDL), which provides a blueprint for creating adaptable and inclusive classrooms. In the third section of the chapter, we will explore the principles of UDL and its application in catering to the diverse learning styles and needs of neurodiverse students. Finally, in the last section of the chapter, we offer our recommendations for educator preparation programs and reiterate the importance of using instruction to eliminate barriers for neurodiverse student populations.

As we delve into the methods and learning framework outlined in this chapter, educators will gain the tools they need to cultivate inclusive classrooms that celebrate neurodiversity, unlock potential, and pave the way for students with ASD and other forms of neurodiversity to thrive academically, socially, and personally. By adopting these transformative approaches, educator preparation programs will play a pivotal role in shaping a more equitable and enriching educational landscape for all students.

Background

The term neurodiversity encompasses a group of individuals with neurological-based conditions, such as autism spectrum disorder (ASD), attention deficit hyperactivity disorder (ADHD), learning disabilities (LD), and/or Tourette's Syndrome and refers to the ways in which these individuals interact with the world around them (Armstrong, 2013). The concept of neurodiversity emerged as a paradigm shift in the understanding and perception of neurological variations within the human population. Rooted in the framework of diversity and inclusion, neurodiversity challenges the traditional medical model that pathologizes conditions such as ASD, ADHD, dyslexia and other brain-based disabilities. Instead of viewing these conditions solely as disorders or deficits, neurodiversity emphasizes the natural variation in brain function and cognitive processing (Smagorinsky, 2020).

The term "neurodiversity" was coined by Australian social scientist Judy Singer in the late 1990's. It gained prominence and widespread recognition through the works of individuals like autism advocate

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