

ENHANCING THE SKILLS OF SPECIAL EDUCATION TEACHERS: A SCOPING REVIEW OF PROFESSIONAL DEVELOPMENT APPROACHES

Haris Memisevic, Inga Biscevic

University of Sarajevo, Faculty of Educational Sciences

ABSTRACT

As the field of special education continually evolves, special education teachers must stay current with emerging trends and engage in ongoing professional development. The present review aims to synthesize existing research on the professional development of special education teachers. A search was conducted using the Web of Science and Scopus databases to locate relevant articles. In total, 63 articles satisfied the inclusion requirements for this review. We identified several important topics related to the professional development of special education teachers, including inclusive education, assistive technologies collaboration with other professionals, and instructional methods. The findings from this review have the potential to guide the design and implementation of tailored professional development programs and inform policy decisions related to the ongoing education of special education teachers.

Keywords: special education, professional development, scoping review

INTRODUCTION

Professional development (PD) is essential for individuals in all professions, including education. Teacher PD is essential to efforts to improve the school system (Borko, 2004). Despite the inherent challenges in defining PD due to its multifaceted nature, PD remains a critical component in enhancing students' educational outcomes and overall success (Sancar et al., 2021). As the educational landscape undergoes rapid transformations due to technological advancements and digitalization, teachers must swiftly adapt to these changing environments (Evans, 2014). Consequently, teachers need to engage in continuous learning and professional development to effectively support their students and address their diverse needs in an ever-evolving context.

PD holds particular significance for the field of special education. Given the unique challenges and complexities associated with teaching students with diverse needs, it is essential that special education teachers engage in ongoing learning and skill enhancement. Apart from the typical responsibilities and functions of general educators, special educators must also be equipped to handle distinctive pedagogical requirements, behavior management challenges, and specific content knowledge demands (Bettini et al., 2015).

Teachers possess three distinct types of competencies: professional competencies, which demonstrate a teacher's theoretical knowledge; psycho-pedagogical competencies, which relate to a teacher's ability to understand their students and build positive interpersonal relationships with them; and methodological competencies,

which encompass a teacher's capacity to effectively convey didactic content through instructional methods (Blândul & Bradea, 2017a). Firstly, professional competencies are a cornerstone of effective special education teaching. These competencies encompass the theoretical knowledge that enables teachers to understand and apply evidence-based practices, instructional strategies, and educational policies relevant to special education. By continually improving their professional competencies, teachers can stay abreast of the latest research and best practices in the field, ensuring their instructional approaches align with current educational standards and methodologies. Secondly, psycho-pedagogical competencies play a vital role in special education. These competencies involve the ability to understand students with diverse needs, including their cognitive, emotional, and behavioral profiles. Special education teachers must possess a deep understanding of their students' strengths, challenges, and individual learning styles in order to appropriately support students with disabilities (Mujkanovic et al., 2017). Furthermore, building positive interpersonal relationships with students is crucial for creating a supportive and inclusive learning environment. Ongoing professional development provides opportunities for teachers to enhance their psycho-pedagogical competencies, enabling them to develop rapport, empathy, and effective communication skills that foster meaningful connections with their students. Lastly, methodological competencies encompass the capacity to effectively convey didactic content through instructional methods. Special education teachers need to adapt and tailor their instructional approaches to meet the individualized needs of their students. This includes employing diverse teaching strategies, using assistive technologies, and implementing individualized education plans (IEPs) effectively. By continuously improving their methodological competencies through professional development, special education teachers can enhance their instructional practices and optimize learning outcomes for their students.

It is essential that all these competencies are continually improved and form an integral part of teachers' ongoing professional development. By actively engaging in PD activities that target these competencies, special education teachers can refine their knowledge, skills, and practices, ensuring that they are equipped to provide high-quality education and support to students with diverse needs (Blândul & Bradea, 2017b).

In addition to these professional competencies, special education teachers need to develop strategies to help them alleviate stress stemming from their professional duties. Generally, the teaching profession suffers from higher levels of stress in comparison with other professions (Iriarte Redín & Erro-Garcés, 2020). Mental health issues such as depression, anxiety, and stress levels were especially prevalent in teachers during the pandemics of COVID-19 (Kovac et al., 2021). In fact, stress has been identified as

a major factor in special educators high attrition levels (Gersten et al., 2001). Thus, PD should also be aimed at addressing and mitigating the impact of these stressors. One of the main avenues for combatting stress is through increasing special educators' professional competencies. By investing in their professional growth and well-being, teachers can enhance their resilience and acquire strategies to cope with the heightened demands of their profession.

Interestingly, regardless of its significance, not much scientific attention has been devoted to the topic of professional development of special education teachers (Nic Aindriú et al., 2023). This dearth of research undermines our understanding of the specific needs and challenges faced by special educators and limits the development of effective strategies to support their professional growth. It is imperative to prioritize PD in special education literature as a means to address and alleviate these stressors. The limited research on this topic indicates that there is a lack of evidence-based practices and guidelines specifically tailored to the PD needs of special educators. As a result, educators and administrators may struggle to identify and implement the most effective strategies for supporting special education teachers in their continuous professional growth.

Given this gap in scientific literature, the goal of the present study is to review available literature on the topic of PD of special education teachers.

METHOD

To identify relevant articles on the topic of professional development for special educators, a thorough search was conducted across renowned scientific databases including Web of Science and Scopus. The search terms used encompassed variations such as "special educators," "special education," and "special education teachers" in conjunction with "professional development." After a comprehensive search, a total of 23 articles were identified, and a meticulous content analysis was conducted based on the abstracts of these articles. The inclusion criteria for this review was that it was a research article including original scientific articles, brief reports, case studies, case reports, and review articles. We did not extract data from Editorials, Commentaries, Letters to Editor, Book Reviews, and Corrections. We extracted the following information for each article: (1) Journal's name, (2) Title of the article, and (3) Abstract. Similar procedure was used for content analysis of articles published in autism journals (Memisevic & Djipa, 2022) and in the exploration of parental experiences in raising children with autism (Celebic & Memisevic, 2023).

DISCUSSION

The goal of the present study was to examine the most frequent topics in professional development of special educators. Interestingly, the most frequently identified topic was inclusive education. The reason for this might lie in the fact that the teachers still feel a sense of incompetency in providing educational and behavioral support to student with disabilities in regular schools (Memisevic et al., 2021). Some reviewed studies have examined teachers' perception regarding professional development in the area of inclusive education (Ng'andu, 2023). In that study teachers held positive perceptions regarding professional development and have stated that they need the most support on how to teach students in inclusive education and in adapting teaching materials to the students' needs. Another study from Ireland explored the working lives of teachers who support students with special educational needs (O'Gorman & Drudy, 2010). The authors of that study stressed the importance of taking new approaches to inclusive education in Ireland in order to create a truly inclusive education system. Inclusive education is a process and educational systems around the world are trying to identify the best model. Reaching the ideal of inclusive education is particularly hard in developing countries due to the absence of support services, inadequate school training programs, and lack of funding (Eleweke & Rodda, 2002). Obviously, the topic of inclusive education will remain a topic of great professional interest to all stakeholders involved in education in the future period as well. Next identified topic in relation to professional development was related to assistive technology. People with disabilities have the right to affordable assistive technology and it should be not only national but international responsibility (Borg et al., 2011). Most of the studies including the terms "assistive technologies (AT)" were survey studies examining the attitudes and knowledge of special education teachers and teachers about AT (Alkahtani, 2013; Alsolami, 2022; Flanagan et al., 2013). In line with the results of these studies, special education teachers expressed their willingness to learn more about AT and to incorporate it into their daily activities. Some studies have indicated that special education teachers lack sufficient knowledge and skills in utilizing assistive technology (Blossom Cygnet et al., 2019). Findings have revealed a need for training programs to enhance their overall proficiency in implementing assistive technology effectively during instruction for students with disabilities. Studies have also stressed the need for cooperation of scholars from learning sciences, educational technology, and special education in order to produce better educational opportunities for students with developmental disabilities (Stahl et al., 2006).

Next topic was related to the term *general and special educators (teachers)*. Recognizing the significance of collaboration between general and special education in enhancing educational opportunities for students with disabilities, it has been widely acknowledged that all teachers should be equipped to handle this aspect of their

work. However, the optimal approach for preparing teachers in this regard remains an unresolved issue (Blanton & Pugach, 2007). The development of collaboration skills requires a considerable amount of time due to various potential barriers that can hinder successful teamwork. As a result, teacher preparation programs bear the responsibility of adequately preparing both general and special education teachers for effective collaboration. This preparation should prioritize strategies aimed at minimizing potential barriers and promoting positive outcomes for students with disabilities. To better cater to the growth of teacher candidates, an initial step involves gaining an understanding of their perspectives on collaboration (Da Fonte & Barton-Arwood, 2017). Some professional development activities were aimed at preparing teachers to teach within Response To Intervention (RTI) framework (Ikuta et al., 2020) or by using Multi-Tiered System of Supports (MTSS) to prevent bullying among students with disabilities (Robinson et al., 2023). It is evident that general and special education teachers need to come up with better models of collaboration to improve educational opportunities. The most important role in this process is up to the universities who teach prospective general teachers and special education teachers. This brings us to the next most frequent topic, that of partnership between schools and universities. Most studies examined the experience of partnership between university offering special education programs and schools (Prater & Sileo, 2002). The activities that were identified as efficient in increasing future teachers' competencies involve: improving educators' understanding and use of evidence-based practices, capturing practitioners' professional wisdom, and changing practice through instructional coaching (Maheady et al., 2016). Another strategy is related to the professional development and it is concluded that the best approach is for the universities to run professional development (Causton-Theoharis et al., 2010). Besides topics aimed at professional development at the elementary-school level, some studies examined professional development practices at preschool level, or what is better known as early intervention. In the past ten years, early intervention/early childhood special education (EI/ECSE) has become a central service for infants and preschool children with disabilities, along with their families (Odom & Wolery, 2003). Early intervention refers to the provision of services and assistance to newborns, infants, and their families in cases where the child is experiencing or is at risk of developmental delays, disabilities, or health conditions that can affect their typical development and learning. Effective early intervention programs recognize the importance of involving parents, as a child's development predominantly takes place within the family setting. Parents are regarded as equal members of the early intervention team, actively engaging in decision-making processes concerning the provision of accessible early intervention services (Ibrahimovic & Licina, 2021).

Some studies have emphasized the importance of establishing a mental model that connects effective in-service training with competent interventionists, service delivery, and child and family outcomes (Bruder et al., 2009). A mental model, which is a

value-based assumption guiding actions, plays a vital role in any learning organization. State systems should consider in-service training for providers as a compulsory element of early childhood intervention systems and allocate appropriate funding. By integrating in-service training into service delivery, it becomes an integral part of achieving positive outcomes for children and families in early intervention and preschool special education. Examples of system changes initiated by the development of a mental model can be found in the field, and this practice should be expanded to include the establishment of statewide in-service training models that are funded components of early intervention and preschool special education service delivery systems.

CONCLUSION

The professional development of special educators is of paramount importance in ensuring quality education and inclusive practices for students with disabilities. Special educators play a crucial role in supporting the unique needs of these students and promoting their academic, social, and emotional development. Continuous professional development equips special educators with the necessary knowledge, skills, and strategies to effectively address the diverse needs of their students and create inclusive learning environments. First and foremost, professional development empowers special educators with updated knowledge and research-based practices. The field of special education is constantly evolving, with new research, methodologies, and interventions being developed. Ongoing professional development allows special educators to stay abreast of these advancements and adapt their instructional strategies accordingly. Furthermore, professional development fosters collaboration and interdisciplinary teamwork. Special educators often work in multidisciplinary teams, comprising professionals from various disciplines, such as speech therapists, occupational therapists, psychologists, and general education teachers. Through professional development opportunities, special educators can learn effective collaboration strategies, communication techniques, and how to leverage the expertise of other professionals. Collaborative efforts facilitate a holistic and coordinated approach to supporting students with disabilities, leading to more comprehensive and integrated services. In conclusion, the professional development of special educators is vital for ensuring high-quality education and inclusive practices for students with disabilities. Through continuous learning, special educators can acquire updated knowledge, research-based practices, and collaborative skills. They can effectively implement inclusive pedagogy, meet the diverse needs of their students, and foster a culture of reflective practice. By investing in the professional development of special educators, we are investing in the future of inclusive education, where all students can thrive and reach their full potential.

REFERENCES

1. Alkahtani, K. (2013). Teachers' knowledge and use of assistive technology for students with special educational needs. *Journal of Studies in Education, 3*(2), 65-86.
2. Alsolami, A. S. (2022). Teachers of Special Education and Assistive Technology: Teachers' Perceptions of Knowledge, Competencies and Professional Development. *SAGE Open, 12*(1), 21582440221079900. <https://doi.org/10.1177/21582440221079900>
3. Bettini, E., Kimerling, J., Park, Y., & Murphy, K. M. (2015). Responsibilities and Instructional Time: Relationships Identified by Teachers in Self-Contained Classes for Students With Emotional and Behavioral Disabilities. *Preventing School Failure: Alternative Education for Children and Youth, 59*(3), 121-128. <https://doi.org/10.1080/1045988X.2013.859561>
4. Blândul, V. C., & Bradea, A. (2017a). Developing psychopedagogical and methodical competences in special/inclusive education teachers. *Problems of Education in the 21st Century, 75*(4), 335.
5. Blândul, V. C., & Bradea, A. (2017b). Developing psychopedagogical and methodical competences in special/inclusive education teachers. *Problems of Education in the 21st Century, 75*(4), 335-344.
6. Blanton, L. P., & Pugach, M. C. (2007). Collaborative programs in general and special teacher education. *Council of Chief State School Officers, Washington, DC*.
7. Blossom Cygnet, A., Silamboli, S., Kanmani, S., Sujathamalini, J., & Gunasekaran, K. (2019). Knowledge, skills and professional development of special education teachers to handle assistive technology for students with disabilities. *International Journal of Advanced Science and Technology, 28*(15), 218-224.
8. Borg, J., Larsson, S., & Östergren, P. O. (2011). The right to assistive technology: for whom, for what, and by whom? *Disability & Society, 26*(2), 151-167. <https://doi.org/10.1080/09687599.2011.543862>
9. Borko, H. (2004). Professional Development and Teacher Learning: Mapping the Terrain. *Educational Researcher, 33*(8), 3-15. <https://doi.org/10.3102/0013189x033008003>
10. Bruder, M. B., Mogro-Wilson, C., Stayton, V. D., & Dietrich, S. L. (2009). The National Status of In-Service Professional Development Systems for Early Intervention and Early Childhood Special Education Practitioners. *Infants & Young Children, 22*(1), 13-20. <https://doi.org/10.1097/01.IYC.0000343333.49775.f8>
11. Causton-Theoharis, J., Theoharis, G., Bull, T., Cosier, M., & Dempf-Aldrich, K. (2010). Schools of Promise: A School District—University Partnership Centered on Inclusive School Reform. *Remedial and Special Education, 32*(3), 192-205. <https://doi.org/10.1177/0741932510366163>

12. Celebic, E., & Memisevic, H. (2023). Exploring the parental experiences in the media: A qualitative analysis of articles written by parents of children with autism in Bosnia and Herzegovina. *Journal of Health and Rehabilitation Sciences*, 2(1), 1-9.
13. Da Fonte, M. A., & Barton-Arwood, S. M. (2017). Collaboration of General and Special Education Teachers: Perspectives and Strategies. *Intervention in School and Clinic*, 53(2), 99-106. <https://doi.org/10.1177/1053451217693370>
14. Eleweke, C. J., & Rodda, M. (2002). The challenge of enhancing inclusive education in developing countries. *International Journal of Inclusive Education*, 6(2), 113-126. <https://doi.org/10.1080/13603110110067190>
15. Evans, L. (2014). Leadership for professional development and learning: enhancing our understanding of how teachers develop. *Cambridge Journal of Education*, 44(2), 179-198. <https://doi.org/10.1080/0305764X.2013.860083>
16. Flanagan, S., Bouck, E. C., & Richardson, J. (2013). Middle School Special Education Teachers' Perceptions and Use of Assistive Technology in Literacy Instruction. *Assistive Technology*, 25(1), 24-30. <https://doi.org/10.1080/10400435.2012.682697>
17. Gersten, R., Keating, T., Yovanoff, P., & Harniss, M. K. (2001). Working in Special Education: Factors that Enhance Special Educators' Intent to Stay. *Exceptional Children*, 67(4), 549-567. <https://doi.org/10.1177/001440290106700408>
18. Ibrahimović, N., & Ličina, A. (2021). Program Rane Intervencije- Stavovi Roditelja Djece s Teškoćama u Razvoju. *Multidisciplinarni pristupi u Edukaciji i Rehabilitaciji*, 3(3), 273-282. <https://doi.org/10.59519/mper3022>
19. Ikuta, S., Ishitobi, R., Nemoto, F., Urushihata, C., Yamaguchi, K., & Nakui, H. (2020). Accessibility and Diversity in Education: Breakthroughs in Research and Practice. In: IGI Global.
20. Iriarte Redín, C., & Erro-Garcés, A. (2020). Stress in teaching professionals across Europe. *International Journal of Educational Research*, 103, 101623. <https://doi.org/https://doi.org/10.1016/j.ijer.2020.101623>
21. Kovac, F., Memisevic, H., & Svraka, E. (2021). Mental Health of Teachers in Bosnia and Herzegovina in the Time of COVID-19 Pandemics. *Mater Sociomed*, 33(4), 257-261. <https://doi.org/10.5455/msm.2021.33.257-261>
22. Maheady, L., Magiera, K., & Simmons, R. (2016). Building and Sustaining School-University Partnerships in Rural Settings: One Approach for Improving Special Education Service Delivery. *Rural Special Education Quarterly*, 35(2), 33-40. <https://doi.org/10.1177/875687051603500205>
23. Memisevic, H., Dizdarevic, A., Mujezinovic, A., & Djordjevic, M. (2021). Factors affecting teachers' attitudes towards inclusion of students with autism spectrum disorder in Bosnia and Herzegovina. *International Journal of Inclusive Education*, 1-17. <https://doi.org/10.1080/13603116.2021.1991489>

24. Memisevic, H., & Djipa, A. (2022). Content Analysis of Abstracts Published in Autism Journals in 2021: The year in Review. *Journal of Autism and Developmental Disorders*. <https://doi.org/10.1007/s10803-022-05751-4>
25. Mujkanovic, E., Mujkanovic, E., Pasalic, A., Biscevic, I., & Memisevic, H. (2017). Quality of Educational Support for Children with Autism Spectrum Disorder in Bosnia and Herzegovina--Perception of Parents and Professionals. *International Electronic Journal of Elementary Education*, 9(4), 829-836.
26. Ng'andu, N. (2023). Exploring teachers' perceptions of Continuing Professional Development for inclusive education: General and special education teachers in Mkushi District, Zambia. *International Journal of Special Education*, 38(1), 145-160.
27. Nic Aindriú, S., Connaughton-Crean, L., Ó Duibhir, P., & Travers, J. (2023). The Design and Content of an Online Continuous Professional Development Course in Special Education for Teachers in Irish Immersion Primary and Post-Primary Schools. *Education Sciences*, 13(3), 281. <https://www.mdpi.com/2227-7102/13/3/281>
28. O'Gorman, E., & Drudy, S. (2010). Addressing the professional development needs of teachers working in the area of special education/inclusion in mainstream schools in Ireland. *Journal of Research in Special Educational Needs*, 10(s1), 157-167. <https://doi.org/https://doi.org/10.1111/j.1471-3802.2010.01161.x>
29. Odom, S. L., & Wolery, M. (2003). A Unified Theory of Practice in Early Intervention/Early Childhood Special Education: Evidence-Based Practices. *The Journal of Special Education*, 37(3), 164-173. <https://doi.org/10.1177/00224669030370030601>
30. Prater, M. A., & Sileo, T. W. (2002). School—University Partnerships in Special Education Field Experiences: A National Descriptive Study. *Remedial and Special Education*, 23(6), 325-335. <https://doi.org/10.1177/07419325020230060301>
31. Robinson, L. E., Clements, G., Drescher, A., El Sheikh, A., Milarsky, T. K., Hanebutt, R., Graves, K., Delgado, A. V., Espelage, D. L., & Rose, C. A. (2023). Developing a Multi-Tiered System of Support-Based Plan for Bullying Prevention Among Students with Disabilities: Perspectives from General and Special Education Teachers During Professional Development. *School Mental Health*. <https://doi.org/10.1007/s12310-023-09589-8>
32. Sancar, R., Atal, D., & Deryakulu, D. (2021). A new framework for teachers' professional development. *Teaching and Teacher Education*, 101, 103305. <https://doi.org/10.1016/j.tate.2021.103305>
33. Stahl, G., Koschmann, T. D., & Suthers, D. D. (2006). *Computer-supported collaborative learning*. Citeseer.