

Empowering Inclusion: A Study of Pre-Service Teachers' Proposals for Enhancing Initial Teacher Education in Kazakhstan

Gulmira Tussupbekova¹, Daniel Hernández-Torrano¹, Janet Helmer¹

¹ Graduate School of Education, Nazarbayev University, Kazakhstan

HOW TO CITE:

Tussupbekova, G.,
Hernández-Torrano, D.,
& Helmer, J. (2024).
Empowering Inclusion: A Study
of Pre-Service Teachers' Proposals
for Enhancing Initial Teacher
Education in Kazakhstan.
*International Journal
of Special Education*, 39(2), 158-168.

CORRESPONDING AUTHOR:

Gulmira Tussupbekova;
gulmira.tussupbekova@nu.edu.kz

DOI:

<https://doi.org/10.52291/ijse.2024.39.29>

ABSTRACT:

This study investigates pre-service teachers' perspectives and suggestions for enhancing current Initial Teacher Education (ITE). Utilizing semi-structured interviews with twelve participants from four universities in Kazakhstan, the study uncovers the critical role of ITE programs in preparing teachers for inclusive education. Key findings reveal the need for more extensive practical experience, closer collaborations between universities and schools, and enhancement of teaching strategies for inclusive education. The study concludes with recommendations for policy reforms to strengthen inclusive education by supporting pre-service teachers through mentorship, early field placements, and practical training on inclusive teaching strategies.

COPYRIGHT STATEMENT:

Copyright: © 2022 Authors.
Open access publication under
the terms and conditions
of the Creative Commons
Attribution (CC BY)
license (<http://creativecommons.org/licenses/by/4.0/>).

Keywords: Pre-Service Teachers; Inclusion; Students with SEN, ITE Programs

INTRODUCTION

High-quality educators play a critical role in ensuring the effectiveness of an education system of high calibre (Brooks, 2021). Initial teacher education (ITE) shapes teachers' beliefs and significantly influences the transformation of future teachers' perspectives and misconceptions (Portoles & Marti, 2018). As Miesera and Gebhardt (2018) noted, in-service teachers experience challenges in inclusive education settings; thus, they must be prepared to work in inclusive classrooms well in advance. ITE for inclusion has been recognised as an essential part of the successful implementation of inclusive education (Avramidis & Norwich, 2002; Forlin, 2010; Mintz, 2022; Winter, 2006). There is consistent evidence that pre-service teacher education has a positive impact on developing and instilling beliefs, knowledge, skills, and attitudes towards diversity, child rights, and social justice that facilitate the implementation of inclusive education in school contexts (Campbell et al., 2003; Forlin, 2010; Rouse, 2008; Sharma et al., 2008; Zagona et al., 2017).

This study aimed to explore pre-service teachers' perspectives and suggestions for enhancing current ITE programs to better equip them for inclusive settings. This research has the potential to inform policy reforms directed at expanding inclusive education environments within mainstream schools in Kazakhstan, assessing their prevalence, and aligning them with the current curriculum. The primary research question guiding this study was: *How could the Initial Teacher Education programs better prepare pre-service teachers to teach in an inclusive classroom from their perspectives?* This question explored pre-service teachers' reflections and feedback on their obtained knowledge and experiences throughout their studies in relation to their preparation to work in an inclusive classroom.

LITERATURE REVIEW

Pre-Service Teachers' Beliefs

Future teachers' initial beliefs about teaching and education, which are based on their knowledge obtained throughout the ITE process, are likely to influence their "professional practices" (Portoles & Marti, 2018, p. 4). As Muchmore (2001) points out, teacher beliefs do not "exist in a vacuum ... they are formulated and are held by particular people in a particular context" (p. 90). Moreover, several studies show that pre-service teachers' beliefs may remain unchanged after finishing their initial training (Abasifar & Fotovania, 2015; Friesen & Cuning,

2020; Karavas & Drossu, 2010; Peacock, 2001). Studies highlighted the deep-seated nature of beliefs, which could be attributed to the strong influence of personal educational experiences and the short duration of teacher training programs in effecting substantial belief changes (Abasifar & Fotovatnia, 2015; Friesen & Cuning, 2020; Karavas & Drossu, 2010; Peacock, 2001).

Extensive literature explores teachers' beliefs and perceptions regarding inclusion in mainstream schools, revealing that their awareness significantly shapes their views on creating inclusive environments (Avramidis & Norwich, 2002; Braunsteiner & Mariano-Lapidus, 2021; Negash, 2019; Winter, 2006). Beacham and Rouse (2012) suggest that inclusive teacher education can better prepare educators. Florian (2013) advocates instilling pre-service teachers with social justice, care, and equity values. Similarly, Lee et al. (2017) emphasize the influence of university programs on shaping future classroom practices. Yet, both pre-service and in-service teachers often lack confidence and readiness for inclusive teaching (Domović, 2006; Forlin, 2012). Domović et al. (2017) stress the need for pre-service teachers to understand behaviorist approaches to developmental difficulties to boost confidence in inclusive classrooms. Other studies raised similar concerns, highlighting the importance of educators gaining more knowledge about diverse student needs (Finke et al., 2009; McSheehan et al., 2006; Zagona et al., 2017).

Preparing Pre-Service Teachers for Inclusive Education

Most countries worldwide offer ITE programs for inclusion that combine subject-matter courses (content knowledge), teaching skills (pedagogical knowledge), and practical school experiences. However, ITE programs can take several forms depending on the concentration of knowledge vs practical skills, structural organization, content, its focus on general, special, or inclusive education, practical allocation, and duration (Musset, 2010).

ITE programs for inclusion have been classified by considering their emphasis on general, special, or inclusive education. Stayton and McCollum (2002) determined three models of ITE programs for inclusion. First, the infusion model focuses on the coverage of several courses in special education so that the general education teachers will have some extent of knowledge to work with students with SEN. However, according to some research evidence, more than adding one or two special education courses is needed to adequately prepare future general education teachers to work in an inclusive setting

(Blanton & Pugach, 2011; Gettinger et al., 1999; Stayton & McCollum, 2002). Particularly, focusing on differences among students leads to risks of learner marginalization in a class and to an assumption that only a particular group of teachers need to know about the diverse characteristics of SEN to meet learners' individual needs (EASNIE, 2022). Second, the collaborative teaching model proposes that the majority of the teaching courses are jointly taken by both general education and special education teachers in the same classroom (Stayton & McCollum, 2002). Third, the unified model integrates general education and special education curricula into one single curriculum. The combination of professional teaching programs for general and special education has facilitated the shared responsibility of meeting the needs of students with SEN among future teachers and has shown positive results (Stayton & McCollum, 2002). The European Agency for Development in Special Needs Education and Inclusive Education (EASNIE, 2022) also stresses the importance of offering ITE programs that focus on normalizing differences and viewing "diversity as an opportunity for all", where future teachers share responsibility, thus being competent to teach all learners (p. 12).

The context: ITE for Inclusion in Kazakhstan

In Kazakhstan, there is a traditional and sequential model for teacher education. In this system, aspiring teachers often complete their ITE programs in higher education institutions (HEIs) before beginning their careers. The Kazakhstani ITE system has a sequential approach to program structure, with pre-service teachers moving through a number of educational phases or levels. Typically, they begin with a bachelor's degree program in education, which equips them with the theoretical knowledge and pedagogical abilities they need to succeed. They might continue their study in a master's program in education after finishing the bachelor's program to advance their knowledge and specialization. Following the initiatives to promote inclusive education in Kazakhstan, a core "Inclusive Education" course was also incorporated into all ITE programs in 2016 (Nogaibayeva et al., 2017). This course is integrated with the volume of two credits, which is 1.6% of all theoretical education credits during the whole ITE period. National policymakers argue that this volume should be enough to gain theoretical knowledge on inclusion. However, it is unclear whether this is sufficient for gaining practical skills in teaching methods and approaches for teaching students with SEN (Nogaibayeva et al., 2017). Hence, it has been recommended that the inclusive education monitoring authority renew

the content of educational programs in compliance with the requirements of the modern labor market, which includes preparing professionals who can work with diverse categories of students with SEN. Moreover, there is agreement that there is a need to improve the teaching methods in Pedagogical Colleges and HEIs and increase the hours of practical classes and internships (Nogaibayeva et al., 2017).

METHODS

Participants and Procedure

Individual semi-structured interviews were conducted with twelve pre-service teachers from four different universities across Kazakhstan to explore their perspectives on how ITE programs could better prepare future teachers to work in an inclusive environment (Cohen et al., 2018; Creswell & Creswell, 2023). The selection of participants was purposeful, considering factors like their field of study and academic year, with an emphasis on including final-year students due to their experiences in classrooms (Cohen et al., 2018; Tashakkori et al., 2021). The number of participants was determined based on sufficiency and saturation principles, aiming to comprehensively represent the population and continue data collection until no novel perspectives were revealed (Cohen et al., 2018; Leavy, 2022).

Ethical considerations of research and its procedures act, in fact, as a guarantee and protection of the study participants and researchers. That is why overcoming potential risks that might have appeared for the study participants was an essential part of the research process. Namely, the various aspects of vulnerability had been taken into consideration first-hand. Moreover, the provision of the opportunity to withdraw at any stage of research was an essential part of respecting the autonomy of the study participant, as well as keeping the data confidential and anonymous. Ethical approval was gained by the Graduate School of Education Institutional Research Ethics Committee at Nazarbayev University. This paper presents findings from a PhD study titled "Initial Teacher Preparation for Inclusive Education in Kazakhstan: Pre-Service Teachers' Beliefs About Students with SEN and Their Inclusion in Mainstream Classrooms."

The first step was obtaining access to the site through the potential gatekeepers, in the case of this study, through the university administration. For this reason, an official letter and/or email with detailed information about the study, including Consent Forms and Information Sheets, were sent to the gatekeepers to collect data from HEIs.

Afterward, signed personal consent forms were obtained from the study participants during the semi-structured interview phase.

Data Analysis

This study employed an inductive approach to qualitative data analysis, where themes and conclusions were derived directly from the data (Teddlie & Tashakkori, 2009; Tashakkori et al., 2021). The analysis process was iterative, with the researcher continually revisiting both data collection and analysis stages (Teddlie & Tashakkori, 2009; Tashakkori et al., 2021), incorporating notes, thoughts, and memos taken immediately after interviews as valuable data (Cohen et al., 2018; Tashakkori et al., 2021). The goal was to progress from description to explanation, generating informative insights (Cohen et al., 2018; Tashakkori et al., 2021). The analysis involved several steps: reading, selecting relevant data, coding, identifying patterns, and categorizing similarities and differences. Saldana's (2009) coding process consisted of three stages: initial coding, advanced coding, and reflection. Initial coding included seven subcategories "Grammatical, Elemental, Affective, Literary and Language, Exploratory, Procedural, and Theming of the Data" (Saldana, 2009, p. 45), while advanced coding required further analytical depth to classify and synthesize data. Reflection and synthesis concluded the analysis, organizing identified items for interpretation.

FINDINGS

The study participants expressed a range of suggestions for improving their ITE programs to better to prepare them for the inclusion of students with SEN. The suggestions include (i) providing more in-depth pedagogical knowledge in methodological training and teaching approaches in inclusive classrooms; (ii) developing a mentoring culture between pre-service and in-service teachers; (iii) adjusting school placement terms by providing a hands-on experience through developing partnerships with mainstream schools.

The Inclusive Education Module in ITE Programs

The majority of research participants encountered inclusive education through a single module in their ITE curriculum, typically during their third year for one semester. Concerns were raised about their preparedness for inclusive settings due to the limited exposure. The module generally runs for one term, providing only basic principles of inclusive education, which participants

felt was insufficient for adequate preparation: "*Not much time is dedicated to this course, but it is still kind of a topical issue, and that is why we go through this discipline*" (P8). The study also noted variations in how universities approached the module; some used traditional lectures, while others offered a broader view, including reforms in Kazakhstan:

In general, we have learned what inclusive education is, its importance, and its impact on society. We also looked at the problems in some schools and how ready Kazakhstan is to introduce inclusive education. Looking at the answers now, we can say that by 2025 Kazakhstan will be able to implement inclusive education fully. (P12)

They also highlighted that the concept of inclusion and including children with SEN was mainly referred to as including children with diverse forms of disability: "*We are taking the discipline of inclusive education now, and this is about special needs, the disabilities*" (P8).

Participants acknowledged that the learning they obtained was overly theoretical, superficial, and shallow and that their inclusive education courses were insufficient for practical aspects of inclusion: "*We learn about inclusion only by knowing the terms and discussing them among ourselves*" (P4). Many participants voiced concerns about their pedagogical competence and perceived capacity to teach in inclusive classrooms. These worries stemmed from their awareness of potential knowledge gaps and constraints on their capacity to meet the different requirements of students with a range of abilities and learning styles in an inclusive educational setting: "*We seem to lack knowledge on teaching methods, working with children with SEN, giving them the right direction, and explaining the lesson to them*" (P4). As a suggestion, pre-service teachers voiced their eagerness to have more courses on teaching methods and approaches in inclusive classrooms: "*In general, I think there should be courses that teach us how to work with children with SEN. Because possessing knowledge and teaching are two different things*" (P12). The study participants expressed their willingness to gain knowledge and skills from their teachers/faculty members and practicing professionals, including psychologists who would support them based on their expertise: "*We only knew the terms and discussed them among ourselves... For example, I would like to work with a psychologist who will tell us more about working with children with SEN and using particular methods in education*" (P4).

Despite these limitations, the study participants recognized the advantages of including such a module within their ITE curriculum. The program assisted them in expanding their understanding of inclusion and in devel-

oping favorable opinions of students with SEN enrolled in regular classrooms. They also acknowledged the significance of treating children with SEN equitably and the necessity of a diverse society to meet their unique requirements and capacities:

I understood that it is not about disability but about special needs and abilities. And the need to treat them equally, ... my attitude to look at them as an average, healthy, average person was formed. (P4)

Mentorship

Several respondents have underlined the importance of having a school mentor while on their teaching practicums who could provide some support: *“From the first lessons, I think there should be a specialist who will have to guide and give direction” (P11)*. They noted that mentors played a crucial role during their internships. Respondents suggested that mentoring could also be taken in the form of seminars, guest lectures, and conferences: *“The wisdom of experienced teachers, such as interviews or seminars, in my opinion, conferences, could be beneficial for us” (P5)*. The presence of mentors and the opportunity to learn from experienced teachers would not only assist pre-service teachers in overcoming immediate challenges but also foster a culture of continuous professional development. Regular interaction with mentors would help them build a solid foundation for their teaching careers, enhancing their knowledge, skills, and confidence. Moreover, the ongoing support from mentors in their future workplaces would ensure that they remain motivated and equipped to handle the evolving demands of the education sector. Mentorship, through direct guidance and structured learning opportunities, would significantly contribute to their success as educators and their ongoing professional growth.

School Placements

Equally important to note is that most study participants highlighted the significant role of the practicum at schools. They emphasized that integrating internships with theoretical courses would greatly enhance their professional capacities by providing essential hands-on experience. One participant shared:

When we were taught courses, we only had theoretical knowledge. Then, we went to practice; we faced some challenges. We did not know how or what to do. And if only we had practised right after the theoretical course, I think we would have achieved better results. It would be better to have not only theoretical knowledge but also practice. (P4)

The participants brought attention to the gaps in their preparation that resulted from the disconnect between studying theory and putting it into practice in actual classrooms. They felt they could close these gaps more successfully if there were practicum opportunities right after each academic course. With this method, individuals could practise what they had learnt in a safe setting, get feedback, and hone their abilities before taking on the challenges of teaching in the real world. Additionally, regular internships during pre-service teacher preparation would allow them to gradually develop their competence and confidence. They would get better at managing difficult situations in the classroom, putting inclusive education ideas into practice, and adjusting to the various needs of their students. A completer and more useful grasp of teaching approaches would be ensured by this ongoing cycle of practice and learning.

Participants in this study expressed their concerns regarding their ability to work in inclusive settings due to their limited field experience in teaching children with SEN. Only a few have had personal experience either studying or working with children with SEN. However, about half of the participants have learned about inclusion during their courses on Inclusive Education during their ITE. For instance, P8 says: *“I have volunteered and worked as an animator at a school of volunteers, where I played the role of a Snegurochka (Snow Maiden) for children with disabilities”*. Similarly, P4 noted that she encountered some challenges during her internship at school, as it was the first time, she had an opportunity to teach a student with SEN in a mainstream school:

There was a student in the class who had special educational needs. I did not know that at first. When I finished the lesson and worked with all the children, only that girl was different and did not want to be included ... I started thinking about that, as this student's perception was quite different. She understood a little later than the other children. I realised that I was considering only one level of students during the lesson. I ignored that child. That experience made a big impression on me. (P4)

As illustrated above, only one of the pre-service teachers has had the experience of working with a child with SEN during her internship at a school. However, most of the study participants have not had a chance yet to work in inclusive classrooms and interact with children with SEN. Moreover, their internship experiences seem to be diverse and vary across years of study, universities, and majors. The regulations and processes of the universities and internship placement locations, the accessibility of resources and assistance, and the knowledge of the super-

vising lecturers and mentors are likely some of the contributing elements to this. The pre-service teacher's particular degree may also affect their internship experience.

Pre-service teachers majoring in special education (speech therapists and defectologists) have had the experience of interacting with and teaching students with SEN, whereas, as has been highlighted above, a significant number of participants have not had any experience of teaching in an inclusive setting throughout their four years of studies at their respected higher educational institutions.

Also, some of the participants expressed that the current amount of practical training was insufficient to build their confidence in classroom settings: *"I think we should have placed more emphasis on practical training in some of our courses"* (P2). Extended practicum hours would help them improve their teaching abilities and obtain a deeper comprehension of classroom dynamics. With practical experience, they would be able to put their theoretical knowledge to use in real-world scenarios, get helpful criticism, and modify their teaching methods accordingly. More competence and preparation would result from this iterative process of instruction, reflection, and improvement.

DISCUSSION

This study identified three key areas that pre-service teachers felt would significantly improve their preparation for inclusive classrooms: (i) expanding targeted training on inclusive teaching practices to better address diverse learning needs, (ii) offering school placements earlier in their training to build practical experience with inclusion, and (iii) providing structured mentorship from experienced educators to support skill development. Pre-service teachers also offered suggestions for strengthening ITE programs, emphasizing that these changes could greatly enhance their confidence and competence in inclusive teaching.

Enhancement of Inclusive Education Programs within ITE

There is agreement among the research community that teacher training courses on inclusion and teaching approaches in inclusive classrooms help guide and prepare pre-service teachers for future work (Mintz, 2022; Negash, 2019; OECD, 2023; Sharma & Nuttal, 2016; Symeonidou, 2022; Vandervieren & Struyf, 2021). The findings in this study revealed that pre-service teachers would like to have more education in (i) the diversity or different learning characteristics of students with SEN and (ii) teaching strategies to meet the needs of students with SEN.

This finding resonates with previous research by Kepens et al. (2019), highlighting the inadequate preparation of pre-service teachers in addressing diversity. Mintz (2022) also notes that HEIs often neglect to provide comprehensive knowledge on various needs categories and effective approaches to meeting students' learning barriers. There is an ongoing debate between "propositional" and "critical or sociological" perspectives on inclusive education (Mintz, 2022, p. 3), with suggestions for ITE programs to focus on fostering a holistic understanding of diversity among learners.

Mintz (2022) argues that limited knowledge about the diverse characteristics of students with SEN, typically derived from psychology, hinders their academic and social development. Moreover, the *'Profile for Inclusive Teacher Professional Learning'* underscores the importance of teachers' awareness of diverse perspectives and intersections, advocating for interdisciplinary dialogue on diversity issues, implementation of universal design models, sign language skills, and awareness of various forms of discrimination (EASNIE, 2022).

Pre-service teachers revealed the need for enhanced training in teaching methods for inclusive classrooms, citing inadequate preparation in the current curriculum. They advocate for additional coursework on inclusive teaching methods and express apprehension about their readiness for inclusive environments. This echoes previous research indicating pre-service teachers' feelings of unpreparedness for inclusive settings. Hemmings and Woodcock (2011) highlight the importance of observing best practices, while the European Agency for Development in Special Needs Education and Inclusive Education (EASNIE, 2022) stresses the universality of learning processes, suggesting a gap between belief in inclusion and practical implementation.

The study highlights the need for a more comprehensive approach to inclusive education in Kazakhstan's teacher education programs, which currently focus primarily on theory rather than practical strategies. While the inclusion course integrated into the third year of pre-service teachers' studies shows promising signs of fostering positive beliefs about inclusion, its direct influence remains uncertain within the study's scope.

School Placement and Support in Early Career Stages

Research evidence suggests the relevance of school placements in the professional development of future teachers as these provide opportunities for pre-service teachers to immerse themselves in practical experiences during their

ITE, which will enhance teachers' teaching practices and beliefs (Hemmings & Woodcock, 2011; OECD, 2019b; Øen & Krumsvik, 2022). According to the qualitative findings, pre-service teachers have school placement experiences. During their first and second year of studies, pre-service teachers usually have a short-term placement experience that lasts approximately two weeks and provides them with an opportunity to observe in-service teachers', i.e., the classroom practices of their mentors. During their final years (third and fourth year), pre-service teachers receive hands-on experience working in classrooms with students in mainstream schools for a month under the guidance of their mentors. However, there were three areas in which participants were not satisfied with these school experiences: (i) the short duration of the placement experiences, (ii) lack of exposure to IE contexts and experiences, and (iii) the support available during placements.

Participants voiced dissatisfaction with the brevity of placement experiences, citing inadequate school hours, which restricted hands-on teaching exposure. They advocated for more structured and extended school placements, ranging from two to four weeks, within university curricula. Such programs should provide clear guidelines and support services to aid pre-service teachers during internships. Some universities lack structured teacher training programs, resulting in limited resources and guidance for pre-service teachers. Ciampa and Gallagher (2018) assert that increased classroom experience boosts self-efficacy in addressing diverse student needs. Woodcock et al. (2012) support this, stating short placements do not significantly impact pre-service teachers' self-efficacy. Hence, there is a call for longer internship hours in schools (O'Neill, 2016). Teachers are urged to pursue continuous professional development to enhance inclusive practices (EASNIE, 2022; OECD, 2019b). However, pre-service teachers often lack depth in inclusive education, special needs, and disability understanding. Further experience and training are deemed necessary to improve their grasp of inclusive education (Duhan & Devarakonda, 2018).

Furthermore, the study participants expressed dissatisfaction regarding their exposure to inclusive education contexts. It was found that pre-service teachers had limited access to inclusive classrooms or students with SEN. Many participants highlighted a lack of experience working with students with SEN during their school internship period. This presents various possibilities and challenges for pre-service teachers depending on their degree and internship focus. These findings align with De Boer et al.'s

(2010; 2011; 2012) research, indicating that teachers' experiences in inclusive settings positively influence their attitudes toward inclusion. Similarly, Song et al. (2019) conclude that pre-service teachers with experience working with children with SEN tend to be more positive and confident in implementing inclusive education. Limited internship hours or placements, resulting in restricted access to teaching in inclusive settings, negatively affect their self-efficacy beliefs (Pantić & Florian, 2015). This is consistent with previous research, which identified teaching experience with students with SEN as the strongest predictor of teacher self-efficacy (Malinen et al., 2013). The findings also revealed that pre-service teachers majoring in special education in Kazakhstan typically intern in special education facilities, while those in general education intern in mainstream classrooms. Availability of internship positions may vary annually based on factors like the number of aspiring instructors and location accessibility. Consequently, pre-service teachers may have varied internship experiences depending on the year they intern. Moreover, the majority of mainstream schools in Kazakhstan still do not offer inclusion, limiting future teachers' opportunities to experience working in inclusive environments during their placements. A previous study by Florian & Spratt (2013) confirms that pre-service teachers' engagement with inclusive practices often varies based on their degree specialization and internship experiences. This variability contributes to inconsistent levels of preparedness across teacher education programs, creating both opportunities and challenges in fostering inclusive teaching skills (Florian & Spratt, 2013).

Guided Support Through Mentorship

Finally, the participants expressed dissatisfaction with the support and mentoring provided during placements. They emphasized the pivotal role of internship experiences and mentorship from faculty members. Many pre-service teachers felt they lacked adequate support during school internships, with some reporting mentors who were disengaged and left them solely responsible for their classes. Participants recommended fostering a stronger mentoring culture among HEIs and mainstream schools, where experienced teachers can support future colleagues meaningfully. Studies underscore the difficulty in establishing practical cooperation between schools and universities, hindering the integration of pre-service and in-service teachers (Darling-Hammond et al., 2017; Mintz, 2022). Pre-service experiences significantly influence teachers' readiness for inclusive classrooms (Hemmings & Woodcock, 2011). However, guidance from mentors

demonstrating effective teaching practices is crucial for pre-service teachers, as they often lack exposure to inclusive education models (Woodcock et al., 2012). Mentors play a vital role in preparing pre-service teachers for inclusive education, highlighting the need for richer experiences with children with SEN in Kazakhstan's ITE programs (Scarparolo & Subban, 2021).

CONCLUSION

Overall, the findings emphasize that the environment in which pre-service teachers are prepared plays a crucial role in their beliefs about inclusion and their confidence to work in an inclusive classroom. This study highlights three core recommendations for improving the preparation of pre-service teachers for inclusive classrooms: (i) enhancing training on inclusive education (ii) school placements early in their academic programs, and

(iii) providing supportive and impactful mentorship. Participants suggested that ITE programs could be strengthened by increasing practical training in inclusive teaching methods, expanding internship duration, and promoting a meaningful mentorship culture between in-service and pre-service teachers. Implementing these changes would align ITE programs with best practices in inclusive education, equipping future teachers with the skills and confidence needed to support all learners in diverse educational settings.

ACKNOWLEDGEMENT

None

DECLARATION OF INTEREST STATEMENT

The authors reported no potential conflict of interest

FUNDING

None

REFERENCES

- Abasifar, S., & Fotovatnia, Z. (2015). Impact of teacher training course on Iranian EFL teachers' beliefs. *International Journal of Foreign Language Teaching & Research*, 3(9), 63–75.
- Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education*, 17(2), 129-147.
- Beacham, M., & Rouse, M. (2012). Student teachers' attitudes and beliefs about inclusion and inclusive setting. *Journal of Research in Special Educational Needs*, 12(1), 3-11. <https://doi.org/10.1111/j.1471-3802.2010.01194.x>
- 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*, 34(3), 219-234. <https://doi.org/10.1177/0888406411404>
- Braunsteiner, M. L., & Mariano-Lapidus, S. (2021). Using the Index for Inclusion to measure attitudes and perceptions of inclusion in teacher and school building leader candidates in the USA and Austria. *International Journal of Inclusive Education*, 25(13), 1443-1462. <https://doi.org/10.1080/13603116.2017.1396503>
- Brooks, C. (2021). The quality conundrum in initial teacher education. *Teachers and Teaching*, 27(1–4), 131–146. <https://doi.org/10.1080/13540602.2021.1933414>
- Campbell, J., Gilmore, L., & Cuskelly, M. (2003). Changing student teachers' attitudes towards disability and inclusion. *Journal of Intellectual and Developmental Disability*, 28(4), 369-379.
- Ciampa, K., & Gallagher, T. L. (2018). A comparative examination of Canadian and American pre-service teachers' self-efficacy beliefs for literacy instruction. *Reading and Writing*, 31(2), 457-481. <https://doi.org/10.1007/s11145-017-9793-6>
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education (8th ed.)*. Routledge.
- Creswell, J. W., & Creswell, J. D. (2023) *Research Design - Qualitative, Quantitative, and Mixed Methods Approaches*, Sixth Edition. Sage.
- Darling-Hammond, L., Burns, D., Campbell, C., & Hammerness, K. (2017). *Empowered educators: How high-performing systems shape teaching quality around the world*. Hoboken. John Wiley & Sons.
- De Boer, A., Pijl, S. J., & Minnaert, A. (2010). Attitudes of parents towards inclusive education: A review of the literature. *European Journal of Special Needs Education*, 25(2), 165-181. <https://doi.org/10.1080/08856251003658694>

- De Boer, A., Pijl, S. J., & Minnaert, A. (2011). Regular primary schoolteachers' attitudes towards inclusive education: A review of the literature. *International Journal of Inclusive Education*, 15(3), 331-353. <https://doi.org/10.1080/13603110903030089>
- De Boer, A., Timmerman, M., Pijl, S. J., & Minnaert, A. (2012). The psychometric evaluation of a questionnaire to measure attitudes towards inclusive education. *European Journal of Psychology of Education*, 27, 573-589. <https://doi.org/10.1007/s10212-011-0096-z>
- Domović, V. (2006). "Profesionalne kompetencije studenata nastavničkih fakulteta i predmetnih nastavnika." [The Professional Competences of Student Teachers and in-Service Subject Teachers.] *Metodika – časopis za teoriju i praksu metodika u predškolskom odgoju, školskoj i visokoškolskoj izobrazbi*, 7(12), 43–52.
- Domović, V., Vlasta, V. V., & Bouillet, D. (2017). Student teachers' beliefs about the teacher's role in inclusive education. *European Journal of Special Needs Education*, 32(2), 175-190. <http://dx.doi.org/10.1080/08856257.2016.1194571>
- Duhan, K., & Devarakonda, C. (2018). Teacher trainees' perceptions of inclusion of and its challenges. *Disability, CBR & Inclusive Development*, 29(1), 93-103. <https://doi.org/10.5463/DCID.v29i1.649>
- EASNIE. (2022). *Profile for inclusive teacher professional learning: Including all education professionals in teacher professional learning for inclusion*. (A. De Vroey, A. Lecheval and A. Watkins, eds.). European Agency for Development in Special Needs and Inclusive Education. Odense, Denmark. https://www.european-agency.org/sites/default/files/Profile_for_Inclusive_Teacher_ProfessionalLearning.pdf
- Finke, E. H., Finke, E. H., McNaughton, D. B., & Drager, K. D. (2009). "All children can and should have the opportunity to learn": General education teachers' perspectives on including children with autism spectrum disorder who require AAC. *Augmentative and Alternative Communication*, 25(2), 110-122.
- Florian, L. (2013, March). Preparing teachers to work with everybody: A curricular approach to the reform of teacher education. In *FORUM: For promoting* (pp. 31-19).
- Florian, L., & Spratt, J. (2013). Enacting inclusive education: Teacher perspectives on inclusive practice. *Teaching and Teacher Education*, 29, 169-175.
- Forlin, C. (2010). *Teacher education for inclusion: changing paradigms and innovative approaches*. Routledge.
- Forlin, C. (2012). *Future directions for inclusive teacher education: an international perspective*. Routledge.
- Friesen, D. C., & Cuning, D. (2020). Making explicit pre-service teachers' implicit beliefs about inclusive education. *International Journal of Inclusive Education*, 24(14), 1494–1508. <https://doi.org/10.1080/13603116.2018.1543730>
- Gettinger, M., Callan Stoiber, K., Goetz, D., & Caspe, E. (1999). Competencies and training needs for early childhood inclusion specialists. *Teacher Education and Special Education*, 22(1), 41-54.
- Hemmings, B., & Woodcock, S. (2011). Preservice teachers' views of inclusive education: A content analysis. *Australasian Journal of Special Education*, 35(2), 103-116.
- Karavas, E., & Drossou, M. (2010). How amenable are student teacher beliefs to change? A study of EFL student teacher beliefs before and after teaching practice. In A. Psaltou-Joycey & M. Matheoudakis (Eds.), *Advances in Research on Language Acquisition and Teaching: Selected Papers* (pp. 261–276). Greek Applied Linguistic Association.
- Keppens, K., Consuegra, E., Goossens, M., De Maeyer, S., & Vanderlinde, R. (2019). Measuring pre-service teachers' professional vision of inclusive classrooms: A video-based comparative judgement instrument. *Teaching and Teacher Education*, 78, 1–14. <https://doi.org/10.1016/j.tate.2018.10.007>
- Leavy, P. (2022). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. Guilford Publications.
- Lee, Y., Chen, S., Chang, C., & Yoneda, F. (2017). Multicultural Teacher Education as a Community of Practice: M.Ed./PDS Graduates' Perceptions of Their Preparation to Work with Diverse Students. *The Professional Educator*, 42, 1.
- Malinen, O. P., Savolainen, H., Engelbrecht, P., Xu, J., Nel, M., Nel, N., & Tlale, D. (2013). Exploring teacher self-efficacy for inclusive practices in three diverse countries. *Teaching and Teacher Education*, 33, 34-44. <https://doi.org/10.1016/j.tate.2013.02.004>
- McSheehan, M., Sonnenmeier, R. M., Jorgensen, C. M., & Turner, K. (2006). Beyond communication access: Promoting learning of the general education curriculum by students with significant disabilities. *Topics in Language Disorders*, 26(3), 266-290.
- Miesera, S., & Gebhardt, M. (2018). Inclusive vocational schools in Canada and Germany. A comparison of vocational pre-service teachers' attitudes, self-efficacy and experiences towards inclusive education. *European Journal of Special Needs Education*, 33(5), 707-722. <https://doi.org/10.1080/08856257.2017.1421599>
- Mintz, J. (2022). The role of universities and knowledge in teacher education for inclusion. *International Journal of Inclusive Education*, 28(10), 2172–2182. <https://doi.org/10.1080/13603116.2022.2081877>

- Muchmore, J., A. (2001). The story of 'Anna': a life history study of the literacy beliefs and teaching practices of an urban high school English teacher. *Teacher Education Quarterly*, 28(3), 89–110.
- Musset, P. (2010). *Initial teacher education and continuing training policies in a comparative perspective*. OECD. <https://doi.org/10.1787/5kmbpjh7s47h-en>
- Negash, K. H. (2019). Pre-service teachers' attitude towards the inclusion of students with disabilities. *International Journal of Innovative Research and Development*, 8(12), 271–274. <https://doi.org/10.24940/ijird/2019/v8/i12/DEC19003>
- Nogaibayeva, G., Zhumazhanova, S., & Korotkih, E. (2017). *Framework of monitoring inclusive education in the Republic of Kazakhstan*. Astana: IAC.
- Øen, K., & Johan Krumsvik, R. (2022). Teachers' attitudes to inclusion regarding challenging behaviour. *European Journal of Special Needs Education*, 37(3), 417-431. <https://doi.org/10.1080/08856257.2021.1885178>
- O'Neill, S. C. (2016). Preparing preservice teachers for inclusive classrooms: does completing coursework on managing challenging behaviours increase their classroom management sense of efficacy? *Australasian Journal of Special Education*, 40(2), 117-140. <https://doi.org/10.1017/jse.2015.10>
- OECD. (2019a). *A flying start: improving initial teacher preparation systems*. Organization for Economic Co-operation and Development.
- OECD. (2019b). *TALIS 2018 results (volume I): Teachers and school leaders as lifelong learners*, TALIS. Organization for Economic Co-operation and Development.
- OECD. (2023). *Equity and inclusion in education: Finding strength through diversity*. Organization for Economic Co-operation and Development.
- Pantić, N., & Florian, L. (2015). Developing teachers as agents of inclusion and social justice. *Education Inquiry*, 6(3), 27311.
- Peacock, M. (2001). Preservice ESL teacher' beliefs about second language learning: A longitudinal study. *System*, 29, 177–195.
- Portoles, L., & Marti, O. (2018). Teachers' beliefs about multilingual pedagogies and the role of initial training. *International Journal of Multilingualism*, 3(2), 169-193. <https://doi.org/10.1080/14790718.2018.1515206>
- Rouse, M. (2008). Developing inclusive practice: A role for teachers and teacher education. *Education in the North*, 16(1), 6-13.
- Saldana, J. (2009). *The coding manual for qualitative researchers*. Sage.
- Scarpapolo, G., & Subban, P. (2021). A systematic review of pre-service teachers' self-efficacy beliefs for differentiated instruction. *Teachers and Teaching*, 27(8), 753-766. <https://doi.org/10.1080/13540602.2021.2007371>
- Sharma, U., Forlin, C. & Loreman, T. (2008). Impact of training on pre-service teachers' attitudes and concerns about inclusive education and sentiments about persons with disabilities. *Disability and Society* 23(7), 773-785. <https://doi.org/10.1080/09687590802469271>
- Sharma, U., & Nuttal, A. (2016). The impact of training on pre-service teacher attitudes, concerns, and efficacy towards inclusion. *Asia-Pacific Journal of teacher education*, 44(2), 142-155. <https://doi.org/10.1080/1359866X.2015.1081672>
- Song, J., Sharma, U., & Choi, H. (2019). Impact of teacher education on pre-service regular school teachers' attitudes, intentions, concerns and self-efficacy about inclusive education in South Korea. *Teaching and Teacher Education*, 86, 102901. <https://doi.org/10.1016/j.tate.2019.102901>
- Stayton, V. D., & McCollum, J. (2002). Unifying general and special education: what does the research tell us? *Teacher Education and Special Education*, 25(3), 211-218. <https://doi.org/10.1177/088840640202500302>
- Symeonidou, S. (2022). Teacher education for inclusion and anti-oppressive curriculum development: Innovative approaches informed by disability arts and narratives. *International Journal of Inclusive Education*, (26)7, 659-673. <https://doi.org/10.1080/13603116.2020.1711819>
- Tashakkori A., Johnson, R. B., & Teddlie, C. (Eds.). (2021). *Foundations of mixed methods research; Integrating quantitative and qualitative approaches in the social and behavioral sciences, 2nd ed.* Sage.
- Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Sage.
- Vandervieren, E., & Struyf, E. (2021). Facing social reality together: investigating a pre-service teacher preparation program on inclusive education. *International Journal of Inclusive Education*, 25(13), 1524-1539. <https://doi.org/10.1080/13603116.2019.1625451>
- Winter, E., C. (2006). Preparing new teachers for inclusive schools and classrooms. *Support for Learning*, 21(2), 85-91. <https://doi.org/10.1111/j.1467-9604.2006.00409.x>

- Woodcock, S., Hemmings, B., & Kay, R. (2012). Does study of an inclusive education subject influence pre-service teachers' concerns and self-efficacy about inclusion? *Australian Journal of Teacher Education*, 37(6), 1-11.
- Zagona, A. L., Kurth, J. A., & MacFarland, S. Z. (2017). Teachers' views of their preparation for inclusive education and collaboration. *Teacher Education and Special Education*, 40(3), 163-178. <https://doi.org/10.1177/08884064176929>