The Path to Inclusive Education in Kazakhstan: Barriers to Overcome

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A R T I C L E I N F O	A B S T R A C T

Purpose The article studies the barriers to the effective implementation of inclusive education policy in the educational environment in Kazakhstan and other countries. **Method** The systematic analysis focused on the national legislative framework for inclusive education and the relevant provisions related to the inclusive education introduction in the educational environment. We compared the applied studies on inclusive education made by the countries that have achieved significant results and those just starting to reform their education systems towards inclusiveness.

Findings In most countries under study, the educational environment, mental and value orientations evolve towards inclusive education. However, subjective attitudes to inclusiveness, lack of experience, and insufficient preparation for inclusive education still pose barriers to the transition to an inclusive school environment in all countries. Empirical data shows relevantly small advantages of introducing inclusiveness into the educational environment in developed countries. Some countries have moved forward in an expert discussion on involving all children without exception in the general education process and advanced from political decisions to their practical implementation. **Implications for Research and Practice** The transition to inclusive education takes time and will be successful only when inclusive education becomes an integral part of their professional thinking. School teachers' professional and mental training is the precondition for overcoming the barriers to inclusive education in the educational environment. Such training should begin well before the teacher starts working in an inclusive classroom. Inclusion is most successful when promoted by those who have studied in such classes or received specialized university training with enough time for a traineeship.

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Introduction

Inclusive education system has evolved as an education system that includes students, whoever they are and whatever their abilities or requirements. The system ensures that teaching and curriculum, school buildings, classrooms, and all amenities must be appropriate for all students. No child is excluded in inclusive education, including children with disabilities; hence inclusive education provides opportunities for learning and personal development even to children with special educational needs (SEN). The UN Convention on the Rights of Persons with Disabilities (CRPD) has recognized the right to inclusive education for all persons with disabilities (Equality and Human Rights Commission, 2020), particularly expanding it to children with SEN. Inclusive education is also beneficial for ordinary children by making them more humane, tolerant, and responsive. Today, many countries promote the inclusion of students with SEN in the mainstream school environment by adopting integration and inclusion policies.

Several countries have built up an educational environment that is conducive to evolving inclusive education. Developed countries have spent several decades moving from special education for children with SEN to the concepts of "normalization" and "inclusion" (Sanagi, 2016). Therefore, countries where inclusive education is only being strengthened by law should rely on international experience in inclusive education implementation but consider the national educational system specifics and conditions.

The current study aimed to review the national policies of selected nations that have implemented inclusive education. The study compared the empirical studies on inclusive education carried out in different countries that have achieved significant results and those just starting to reform their education systems towards inclusiveness. Some countries have moved forward in an expert discussion about involving all children without exception in the general education process and advanced from political decisions to practical implementation. However, subjective perceptions and mental and value barriers still hinder the transition to an inclusive school environment. The study findings revealed that an inclusive approach faces challenges and barriers in almost all countries. Booth & Ainscow (2002) had noted, "Learning and participation are hindered when children face 'barriers'; besides the physical and geographic environment, they can be the school organization, culture, and politics, the relationships between children and adults, and the approaches to teaching and learning." In such circumstances, realizing some ideals of inclusive education is a challenge to the teachers' responsibility, professional competence, and enthusiasm.

Inclusive education implementation in regional and remote areas such as Kazakhstani is understudied (Anderson & Boyle, 2015; Francis et al., 2021). There is a dearth of studies on the state of inclusive education in Kazakhstan. Hence, this paper aimed to fill this research gap and study cases with the objective to identify barriers to inclusive education in Kazakhstan and other countries. The following research questions were framed for this study:

1. How does the national policy regarding children's rights for quality education favor the implementation of inclusive education in different countries?
2. Which barriers to inclusive education are considered when introducing children with SEN into the mainstream school environment?
3. How are these barriers identified in the educational system of Kazakhstan?

Literature Review

The UNESCO World Declaration on Education (UNESCO, 1994) was a benchmark in recognizing the ideology of inclusive education. This declaration evolved from the UN General Assembly's adoption of the Standard Rules on the Equalization of Opportunities for Persons with Disabilities, appended to resolution 48/96, which fostered equal treatment and full participation of persons with disabilities at all levels including education and employment. Known as Salamanca Statement and Framework for Action on Special Needs Education (UNESCO, 1994), it clearly stated, "The fundamental principle of the inclusive school is that all children should learn together, wherever possible, regardless of any difficulties or differences they may have. Inclusive schools must recognize and respond to the diverse needs of their students, accommodating both different styles and rates of learning and ensuring quality education to all through appropriate curricula, organizational arrangements, teaching strategies, resource use and partnerships with their communities. There should be a continuum of support and services to match the continuum of special needs encountered in every school" (UNESCO,1994). This created a path to bring special needs students in the mainstream, many of whom would not complete their education earlier and were excluded from employment.

Subsequently, in last few decades, the definition of special needs education has been expanded to include children with social disadvantages (on grounds of poverty, ethnic or linguistic minority, and persons displaced) or highly functioning ('gifted') children (UN Special Rapporteur on Disability, 2009). This shifted special needs education from a focus on biological or physiological disabilities to a social model that takes into account all barriers that impede learning. For instance, WHO (2001) adopted International Classification of Functioning (ICF) for persons belonging to disadvantaged groups, thus adding a progressive approach in the rehabilitation of the children with SEN.

Armstrong (2017) observed such progressive initiatives as steps to solve current issues of inclusive education, for which it was necessary to address the fundamental beliefs and behavioral motives and appeal for political support. In other words, inclusive education should ensure that children with disabilities are equipped strongly with work skills so that they can contribute economically and socially to their communities.

Many countries have adopted certain policies favoring inclusive education since it promotes understanding, reduces prejudice and strengthens social integration. The first target of all nations is to review the national legislative framework on inclusive education and revise the relevant provisions for inclusive education implementation in the educational environment. This requires an attitude of non-discrimination, policies in the best interests of children, their protection from violence and abuse, access to health care & rehabilitation, and equal opportunity to live within the community. Policies have been implemented to promote their participation in public life, letting them exercise legal rights, to work and employment and receive good standards of living. Implementing inclusive education in such a manner has inevitably invited criticism and scientific debates about its pros and cons (Florian, 1998).

The current stage of inclusive education development is full of contradictions and challenges. Experts and researchers are engaged in an open professional dialogue and a constructive debate, considering domestic and foreign experiences. In 2015, Kazakhstan

amended the Law on Social Protection of Disabled Persons in the Republic of Kazakhstan, which redefined conceptual approaches to the development of inclusive education in the republic of Kazakhstan. This initiative by the Ministry of Education called inclusive education as a transformative process in the country's education system based on the equal right of quality education for all. The Ministry insisted on the implementation of a personalized pedagogical approach to include persons with SENs, to include children with disabilities, migrants and refugees, ethnic Kazakh returnees, national minorities and children in vulnerable social situations.

However, legislative support for inclusive education implementation gained momentum only after the promulgation of the Law on Inclusive Education, *Nur-Sultan,* on June 26, 2021, which required all educational institutions with students with special needs to adapt inclusive educational programs to all students. The new law mandated all educational institutions in the country to take into account individual capabilities of all students and make efforts to prevent discrimination and bring flexibility of educational programs for children with special needs (Rollan & Somerton, 2021; Makoelle & Burmistrova, 2021). The new law also specified to provide psychological and pedagogical support services to children with SENs, which included adapting the curricula to meet the needs of adapted children with special needs, their individual development.

Method

- *Research design*

This systematic literature review covered articles published in 2010-2021 and available at onlinelibrary.wiley.com that considers various aspects of the implementation of inclusive education and the study of barriers in the school environment. In the 2010s, various countries began to actively promote inclusive education when reforming educational systems based on UNICEF recommendations. Articles published in Wiley-Blackwell journals are generally considered high-quality publications by education researchers. The keywords used were "inclusive education." The subject area was refined to "research on implementing inclusive education in the school environment." Only such papers were included that covered inclusive education studies in various countries and described legislative and political support for the implementation of inclusive education. Such articles were excluded that focused on health disabilities, including derangements. As a result, 43 journal articles were included in the final systematic review; 20 of them described empirical studies and analytical reviews examining the barriers to inclusive education in the educational environment of different countries (Table 1). Since Wiley-Blackwell publications lacked articles on Kazakhstan, a special issue of NUGSE Research in Education by Nazarbayev University (NUGSE, 2018) was included, which contained case studies on various aspects of inclusive education implementation in Kazakhstan. Searching for empirical data for Kazakhstan was complicated by an actual lack of published research results. Therefore, in some cases, we relied on the information obtained when visiting the inclusive education schools in Karaganda and Almaty, where we collected primary data on teaching and methodological resources used by Kazakhstani teachers.

- *Research procedure*

A pool of articles was selected based on any of the two criteria: (1) research on qualitative shifts in the national inclusive education policy over the previous decade promoting real inclusiveness; (2) an empirical study in the educational environment or a deep analysis of the barriers preventing an efficient implementation of the inclusiveness. Studies focusing on inclusive education development without empirical measurements or those considering inclusive education as the subject of education reform without analysis of implementation issues were excluded. Analytical studies included only those discussing the impact of barriers in the national context on introducing and implementing a full-fledged inclusive education.

The following inclusion criteria were adopted for the selection of articles for review: articles published in English; must be published between 2010 to 2021; national context must have been adopted; quantitative/qualitative research method; and analytical review. Selected literature was analyzed using NVivo software. The principles of thematic analysis were discussed, and the coding scheme was established to study the barriers to inclusive education implementation in the educational environment, as presented in Table 1.

Table 1

Coding of Articles on Inclusive Education (IE) included in the Review

Authors/ Year	National Context	Empirical Method	Learning Subject
1. Schwab et al., (2017)	Austria-Germany	Quantitative, survey N1 (Austria) – 519 N2 (Germany) - 765	Previous experience in IE
2. Shah et al., (2016)	India, Ahmedabad	Quantitative, survey N560	Teachers' needs and challenges
3. Sanagi (2016)	Japan	Quantitative, survey N138	Normalization
4. Ahmmed et al., (2012)	Bangladesh	Quantitative, survey N738	Teachers' attitudes towards IE
5. Forlin (2010)	Hong Kong	Exploratory study	Curriculum change Class management Interagency cooperation
6. Tchintcharauli & Javakhishvili (2017)	Georgia	Qualitative, In-depth Interview N10 inclusive experts	Legislative analysis IE implementation policy issues
7. Song (2016)	Japan Korea	Quantitative, survey N1 (Japan) 191 N2 (Korea) 102	Teachers' self-efficacy, attitudes towards inclusive classrooms, professionalism
8. Alnahdi et al., (2019)	Saudi Arabia, Finland	Quantitative, survey N1 (Saudi Arabia) 306 N2 (Finland) 186	Country education policy context attitudes towards IE
9. De Luis (2016)	Spain	Analytical review	Legislation, legal frameworks on IE

Authors/ Year	National Context	Empirical Method	Learning Subject
10. Yada & Savolainen (2019)	Japan Finnish	Quantitative, survey N1 (Japan) 359 N2 (Finnish) 872	Teachers' perception, self-efficacy, and sociocultural context
11. Francis et al., (2021)	Mexico	Qualitative, 35 Interviews with school professionals 4 Focus groups	Policy and practice of intervention in IE Professional development of teachers
12. Bhatnagar & Das (2014)	New Deli, India	Quantitative, survey N470	Teachers' attitudes towards inclusion
13. Civitillo et al., (2016)	Netherlands	Quantitative, survey N139 pre-service teachers	Barriers and factors contributing to the implementation of inclusive practices
14. Emam (2016)	Oman	Qualitative, Focus groups interviews with 25 school leaders	Legislation and policy Teacher training, professional development
15. Futaba (2016)	Japan	Qualitative survey	Corporate culture and support for IE in a mainstream class
16. Faragher et al., (2021)	Singapore Indonesia Philippines China	Analytical review of cases	Political analysis of the national context
17. Anderson & Boyle (2015)	Australia	Analytical review	Identification of barriers
18. Sharma & Das (2015)	India	Analysis of key challenges in IE	National policies, programs, legislation, and IE practical issues
19. Waitoller & Thorius (2015)	USA	Analytical review	IE policy and practice
20. Tristani & Bassett-Gunter (2020)	USA Australia	Systematic and analytical review	Teacher training interventions

Results/Findings

1. How does the national policy regarding children's rights for quality education favor the implementation of inclusive education in different countries?

The inclusive education concept has evolved internationally over time. Successful and effective inclusion requires systematic support in the length of time all over the country in combination with other factors (Schwab et al., 2017). Many countries are at different stages of progress in this direction, and they are all making great strides. For example,

- **Finland:** The Comprehensive Schools Act 1983 adopted in Finland prohibits exempting students from compulsory education. Little by little, the schools and classes for children with SEN were located in or near local mainstream schools so that children with SEN could attend regular classes (Moberg et al., 2019; Yada & Savolainen, 2019). Today, Finland pays more attention to equality in learning than equity in participation, meaning that participation is not enough anymore (Naukkarinen, 2010).

- **Austria:** A general decree of the Ministry of Education of Austria of 1986 allowed students with physical or sensory disabilities to attend mainstream schools (Buchner & Proyer, 2020).

- **Spain:** According to the Social Inclusion Act of 1982, special education in Spain is provided within the mainstream system on a transitional basis, continuously, or within auxiliary systems (De Luis, 2016).

- **Netherlands:** In the 2010s, the Netherlands was among the OECD countries with the fewest numbers of students with SEN educated in mainstream schools. Yet, the opportunities and educational needs of children are critical. Therefore, the new Law "Appropriate Education" of 2014 on inclusive education focuses not on the disability or obstacles but on the opportunities provided to a child. The new law is the most demanding for mainstream schools as they now have to take care.

- **Australia:** Australia has encouraged teaching children with disabilities in mainstream schools since the 1980s. The 2005 Education Standards for People with Disabilities ensure access to education and participation in education for students with disabilities on the same basis as other students (Anderson & Boyle, 2015).

- **Canada:** Canada has adopted a wide range of politics regarding inclusive education. Though the Council of Education Ministers of Canada implies quality education for all students, education remains the province's business (Sider et al., 2021). Thus, in New Brunswick, Canada, the last special primary classes were closed in 1984. The New Brunswick policy on inclusive education states that separate programs and classes should not occur (UNESCO, 2020).

- **Republic of Korea:** The Republic of Korea has been focusing on inclusive education since the 1990s. As of 2014, 70.4% of students with SEN study in mainstream schools (Song, 2016).

- **Japan:** In Japan, "resource rooms" (tsukyu) have been arranged to support children with SEN since 1993. The Education Law of Japan was partially amended in 2007 to regulate the provision of education to children with SEN in special classrooms and regular schools. Each school was encouraged to establish a support system for students with SEN in regular classrooms (Moberg et al., 2019). However, teachers accustomed to associating inclusive education with resource rooms and individual learning oppose a homogeneous group environment (Sanagi, 2016).

- **PRC:** In 1987, China had, for the first time, announced the concept of "Ordinary Classroom Teaching" (OCT). Subsequently, OCT was developed as a key approach to providing special education in response to the international trend toward inclusive education and the domestic need to serve many children with disabilities (Deng & Zhu, 2016).

Hong Kong (HKSAR) has been reforming its educational system to increase the number of resource classes for students with SEN in mainstream schools since the 1970s. However, as in many other countries, the teachers in Hong Kong still note a lack of professional training on inclusive education for children with SEN (Forlin, 2010).

- **USA:** The U.S. Education for Persons with Disabilities Act (PL94-142) of 1975 requires all federally funded schools to serve students with special needs and provide fair and equal access to education (Waitoller & Thorius, 2015; Thomazet, 2009).

- **Georgia:** The movement toward inclusion in Georgia started in 2006. inclusive education remains a mandatory component of public policy. Still, the lack of a monitoring system as an effective means of moving toward greater inclusion in the education system slows down the process of correcting gaps in policy and its implementation (Tchintcharauli and Javakhishvili, 2017).

- **Republic of Kazakhstan:** In Kazakhstan, the development of inclusive education was included in the 2007-2009 Action Plan for social, medical, and pedagogical support of children with disabilities. In 2011, the Law of the RK, "on Education" (Article 1, Clause 21-3), was amended to include the inclusive education concept. However, legislative progress has been made only recently. Despite the existing inclusive education practices and the experience of providing special education, Kazakhstan will have to fully overcome the barriers to achieving the inclusive education goals.

2. Which barriers to inclusive education are considered when introducing children with SEN into the mainstream school environment?

There are certain common barriers to inclusive education around the world. E.g. empirical research proves that successful inclusion depends on developing and maintaining positive attitudes and enriching educators' knowledge of inclusiveness through training (Pijl, 2010; Naukkarinen, 2010). Educators shall have clear expectations of inclusion (Civitillo et al., 2016). Almost all reviewed studies on the educators' attitudes towards inclusive education find a positive correlation between the experiences of inclusiveness and positive attitudes towards inclusive education, regardless of social and cultural differences (Schwab, et al., 2017; Shah, et al., 2016). Other significant independent variables were the school support for inclusive teaching methods and previous success in teaching students with disabilities (Ahmmed et al., 2012). A lack of experience with inclusiveness among teachers reduces a positive attitude towards inclusive education. E.g., 75% of full-time teachers in the Netherlands supported the inclusion of students with SEN, but less than 50% favored the inclusion of such children in their classes. 75% of a sample of Dutch in-service regular teachers was supportive of the inclusion of SEN students, but when asked about placing those children in their classroom, the percentage dropped below 50% (Civitillo et al., 2016). Variables such as age and experience returned the same picture: teachers were concerned about including students with disabilities in their classes. The

teachers' age and experience of more than ten years did not matter if they had never taught children with SEN (Shah et al., 2016). Teachers' attitudes and expectations toward inclusive education can predict teaching efficacy in inclusive classes (Bhatnagar & Das, 2014).

Stimulating and supporting inclusive processes is hard in many educational contexts, especially at the initial stage (Sandoval et al., 2021). Often discussed barriers include the lack of knowledge, expertise, time, and funds, and sometimes negative attitudes toward diversity (Tchintcharauli & Javakhishvili, 2017; Civitillo et al., 2016); inadequate teacher training activities aimed to promote and improve inclusive education, as well as lack of specially trained teachers (Tristani & Bassett-Gunter, 2020; Faragher et al., 2021; Sharma & Das, 2015); the required value and cultural transformations toward inclusive education. The teachers and school leaders shall advocate these changes, not just be the tools for implementing the inclusive education policy (Emam, 2016). These problems of modern education make the barriers to the successful implementation of national policies for inclusive education.

The perception of inclusive education depends on the national educational system's political, historical, and cultural background. Yada and Savolainen argue that if educating children with SEN supports the success of Finland in PISA tests, it may seem logical that Japan and other countries try to copy the Finnish educational system. However, the situation is not so simple, and inclusive education development shall consider the sociocultural contexts (Yada & Savolainen, 2019). The Western concept of inclusive education might not suit due to the difference between the traditional local culture and the European educational approach to inclusive education (Sharma et al., 2017). Another author from Japan has found that a collectivist culture supports the realization of children's rights and inclusiveness; successful inclusive cooperation between children develops outside adults' intention (Futaba, 2016). Of note, people in highly collective societies usually make a part of strongly cohesive groups (Hofstede et al., 2011). In an Arab-Finnish study, attitudes towards inclusive education were more positive among Finnish teachers than Saudi Arabian teachers. The authors also noted a problem finding culturally neutral tools to measure attitudes toward inclusivity in cross-cultural studies (Alnahdi et al., 2019). However, another joint Austrian and German study (Schwab et al., 2017) assessing the self-efficacy of future inclusive education teachers showed that "the invariance in self-efficacy is not only relevant in countries with different languages and obvious cultural differences, but also in countries that seem very similar regarding their general culture." Korea and Japan's social and cultural realities have a lot in common while they differ from Europe. However, Song (2016) argues that teacher qualifications strongly predict teacher attitudes towards inclusive classrooms among Korean teachers but not among Japanese teachers. In Korea, teacher training in inclusiveness has positively impacted the attitude toward inclusive classes but not their self-efficacy. There are significant differences in the evolution and legal framework of their policies and systems of teacher training in inclusiveness.

This review clarifies that for an inclusive education policy to promote more inclusiveness, all school teachers need to have a positive and supportive attitude towards inclusive education. Students need to interact with each other regardless of their abilities, skills, or backgrounds.

3. *How are these barriers identified in the educational system of Kazakhstan?*

Kazakhstan focuses on inclusive education development, as the whole world does. Legislative progress has been made, but there are still barriers to achieving inclusive education goals. Although the state has prioritized the inclusive education introduction within the education reform, the understanding of inclusive education has not been properly conceptualized (Makoelle, 2018). The strategic documents on inclusive education mention only children with health disabilities (RSU National Scientific and Practical Center for the Development of Special and Inclusive Education, n.d.), while internationally, inclusive education is increasingly seen in a broader sense as a principle to support and welcome diversity among all students (Ainscow, 2020). The existing variety of terms in legislation, pedagogical and legal sciences hinder a unified approach to inclusive education and puts children with SEN in an unequal position compared to children without disabilities who need special education services due to their health status and developmental needs. For example, such terms as "norm-typical," "atypical," and "adaptive educational resources" are used in the pedagogical environment, textbooks, publications, and internal school documents on inclusive education but are not utilized in official inclusive education policy. At the same time, these terms relate only to children with health disabilities.

The State Program for the Development of Education in the Republic of Kazakhstan for 2011-2020 urged up to 70% of schools to create conditions for inclusive education; up to 20% were to provide "barrier-free access" for children with disabilities; up to 50% of children with developmental disabilities were to be covered by inclusive education (Turysbekov, 2021). Rollan (2018) argues that, in reality, not every child can get a place in an inclusive class. Government policy to observe "natural proportions" often poses a dilemma for the administration of inclusive institutions, "Should an inclusive school reject students with special needs if there are more than 20% (or whatever percentage is identified according to natural proportions policy) of such students already?". Proper development of inclusive education in Kazakhstan should be led by school leaders who take into account the professional views of the staff and act on behalf of children with SEN. Unfortunately, strict centralization of the national school system hinders the initiative of school administrations and impedes making bottom-up decisions regarding children in need of education in a diverse environment.

Many experts and teachers are forced to join inclusive education not to lose their job. So, they have to take centralized programs of the MES RK in the form of three-month advanced training courses without interrupting their main activities. This situation has been reflected in a conversation with an Assistant Principal of a school we visited:

They go through several stages: from explicit or latent to passive resistance and active acceptance. Experts fear not coping and losing their job; they are afraid of responsibility and taking risks. Post-reform survivors share that they experienced fear for several weeks, but it passed later. Everyone remembers being frightened. No one remembers what exactly they were afraid of, but then the fear has passed.

Another case study tells how a successful experience of teachers, as shown by another case study, helps interact with children with SEN and meet their various out-of-school needs. In that case, a teacher arranged meetings with one of her students after classes and

helped her prepare to enter a university (Saduakas, 2018). This case evidences again that the personal contact of teachers with inclusive classes or children with SEN is crucial in supporting the movement for inclusion.

The need to revise the curriculum for inclusive education (Makoelle, 2020) is often discussed between experts and school teachers who are involved in inclusive education and follow the principle of "creative pedagogy." The cases show that the current methods do not match the original intentions of inclusive education. A well-known case in a Kazakhstani secondary school is often mentioned at meetings on inclusive education. The curriculum requires a child with SEN to use a pen and paper, while the child is more comfortable typing on a keyboard. A teacher cannot allow such an alternative independently since curricula are standardized, and the teacher shall follow them. This situation is consistent with the observations of Johnston and Hayes (2007), who noted that standard modes of operation need to be replaced by new decisions about what should be valued, taught, and expected in such schools.

A lot is to be made to change thinking in order to successfully implement inclusive education in education. Passeka (2018) believes that a collegial leadership model is the best for Kazakhstan. Case studies draw attention to mental and value barriers to inclusive education implementation, such as the low level of approval and concern on the part of parents about joint education of children with SEN in mainstream classes with a generally positive attitude towards inclusive education (Khamidulina, 2018). According to Bush (2007), school administration, teachers, and parents can work together to raise awareness, helping to understand the importance of a holistic approach to teaching students. Discussing problems is very important to develop a collegial attitude toward them and thus establish certain norms of human relations. This might be the core potential of inclusiveness since these norms create the basis for mutual acceptance and cooperation between people who understand and accept their differences for granted.

Thus, the barriers to inclusive education in Kazakhstan include: (1) a "natural proportions" policy that limits places in inclusive classrooms for children with SEN; (2) inadequate training of teachers for inclusive education, accompanied by fear of job loss and inclusion stress; (3) low levels of parental approval and concern about co-education of children with SEN in mainstream classrooms; (4) difficulties in the transition to collective leadership due to the high centralization of the educational system and the lack of autonomy.

Discussion

This study highlights the attitude to children with SEN and the perception of inclusion as a part of teachers' professional activity is necessary for comprehensive inclusion. Empirical evidence from various countries suggests that attitudes towards inclusion are still a problem, even with an excellent legal framework. No political, economic, or social upheavals can justify the absence of a campaign to recognize inclusive education. Such a campaign is needed to change the attitude of teachers, experts, and parents of children in mainstream schools towards children with SEN. Perhaps that is why many of the positive initiatives laid down in the education reform in Kazakhstan remain in their infancy.

An inclusive approach means reforming schools and searching for other pedagogical approaches to teaching rather than adapting students with certain learning difficulties to the existing standard requirements. This is a prerequisite to considering the special needs of all students who might be affected. The research shows that artificial concerns influenced by cultural and mental perceptions of inclusion are disputed though culture is an important component in implementing an inclusive education policy. However, a political will can "destroy" such cultural and mental barriers to inclusive education over time. Here, we have to emphasize the role of school management and staff. Intelligent management can change the attitude, overcome difficulties with perception and find optimal ways to provide teachers and train the new ones who are not driven by the fear of losing their jobs but share this life attitude.

Modern educational systems possess a huge range of methods but still find it difficult to effectively implement the accumulated experience regarding children with SEN. The professional development of teachers is a key issue in the widening practice of inclusion. The countries that have just started implementing inclusive education as a philosophy of justice face a lack of necessary competencies among teachers in inclusive schools or an absence or shortage of teachers experienced in inclusive education.

Though many Western countries have been actively implementing inclusive education over the past decades, the existing mental and value barriers prevent the desired changes in realizing the rights of children with SEN. Such barriers include the attitudes and perceptions of inclusiveness. The perception of teachers that they can influence the learning outcomes of students with SEN is strengthened by providing access to appropriate resources and supporting the inclusive education implementation programs. The availability of teaching and learning resources can make teachers more confident when dealing with students with disabilities.

We also noted a very limited number of studies on curricula, textbooks, and other learning and teaching materials for children with SEN. In some low-income countries, high-quality learning and teaching materials could compensate for the hindering factors such as large classes, poorly trained or unqualified teachers, lack of teaching time, high parental illiteracy rates, and lack of reading material in homes (Smart & Jagannathan, 2018). We consider these factors as additional barriers preventing the successful implementation of inclusive education. Analyzing these factors shall reveal the bottlenecks and obstacles to inclusive education and establish a list of priority targets to be addressed by the education reform in mainstream schools in partnership with interested parties. We are sure the level and quality of data obtained will differ by country.

This research revealed how the national management of education impacts the implementation of the inclusive education policy. However, such implementation is not an easy task. Inclusive education implementation often faces negative attitudes toward people with health disabilities from the teachers and the educational environment. To a large extent, this is due to insufficient professional training and a lack of experience in dealing with inclusiveness.

Conclusion, Recommendations and Implications

Inclusive education can only become a part of the educational environment when integrated into the teachers' professional thinking. Teachers with more positive attitudes and greater knowledge of inclusiveness will likely be more effective in inclusive classrooms. Values of collectivist cultures contribute to accepting differences in inclusive classes by children without adult intervention and achieving education targets. The transition to inclusive education takes time. A reform should follow clear principles. Most international studies on inclusive education examine how the teachers' pedagogical experience, teaching qualifications, training, and previous contacts with persons with disabilities influence their attitude toward inclusive education. A positive attitude and complete acceptance are mostly seen among current or future teachers with a previous experience in inclusion.

The conducted systemic analysis argues for the deeply social nature of inclusive education. This social nature requires complementing an educational system reform with the search and understanding of the higher meaning of inclusiveness by the teacher professional community. This is needed to determine the relationship between the educational policy requirements and practical implementation.

The study puts forward a few recommendations. First and foremost, all ministries and government departments should work towards inclusion. such laws and policies should be introduced that eliminates discrimination based on disabilities. Secondly, all institutions that accommodate children with disabilities should be close down, and the right to inclusive education should be guaranteed to all children with SENs. Thirdly, teachers' training programs should be introduced for inclusive education and testing and assessment should also be modified as per the needs of the children with SENs.

This study had a few limitations. First, this review was limited to articles on inclusive education from the Wiley Online Library with limited keywords. Therefore, this search could be expanded to other databases and with additional keywords, such as "individual educational path for children with SEN" and "adaptive technology in learning." Second, the lack of dynamic longitudinal quantitative measurements gives no chance to assess the extent to which the mental and value views on inclusive education are changing in the world and Kazakhstan. Third, there have been no comparable studies on barriers to inclusive education in Kazakhstan for a well-grounded discussion of the effects of inclusion.

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