

**Exploring Secondary School Teachers' Attitudes Toward Inclusive Education in the
Zhambyl Region in Kazakhstan**

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in

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This letter now confirms that your research project titled: "Exploring Secondary School Teachers' Attitudes Toward Inclusive Education in the Zhambyl Region in Kazakhstan" has been approved by the Graduate School of Education Ethics Committee of Nazarbayev University.

You may proceed with contacting your preferred research site and commencing your participant recruitment strategy.

Yours sincerely,




Tsediso Michael Makoelle




On behalf of:
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Abstract

Exploring Secondary School Teachers' Attitudes Toward Inclusive Education in the Zhambyl Region in Kazakhstan

The study explored secondary school teachers' attitudes toward inclusive education in the Zhambyl region, Kazakhstan. In this study, the research was conducted within a pragmatic paradigm to understand how the environment, expertise, and methods impact how these factors influence secondary school teachers' attitudes toward inclusive education. Three crucial questions were investigated: how teachers conceptualized inclusive education, which teacher-related factors influenced their attitudes toward inclusive education, and how secondary school teachers' attitudes could be improved. For this purpose, sequential mixed-method research was employed. First, the quantitative data was gathered via an online survey; then, the qualitative data was collected via one-on-one interviews.

Nonprobability sampling, particularly snowball sampling, was used to reach the target population of 104 respondents for the survey and five respondents for the Interviews. In building the conceptual framework, literature on factors influencing positive and negative attitudes of teachers was reviewed at international, regional, and local levels. Later, the results obtained were discussed in terms of the conceptual framework. The significant findings revealed that respondents are optimistic about inclusive education. However, in practice, they need help to accommodate all students in their classrooms. Some factors influence teachers' attitudes toward IE (teacher-related factors, the medical concept of inclusion, and a lack of self-efficacy). In order to support teachers, teacher training and collaborative culture should be established, as well as the provision of necessary equipment and resources. The study will help educators cover the education gaps and ensure every student's success during the educational process.

Keywords: inclusive education, attitudes, secondary school teachers.

Аңдатпа

Қазақстанның Жамбыл облысындағы орта мектеп мұғалімдерінің инклюзивті білімге қатынасын зерделеу

Зерттеу жұмысы Қазақстан, Жамбыл облысындағы орта мектеп мұғалімдерінің инклюзивті білімге көзқарасы зерттелді. Бұл зерттеуде қоршаған орта, тәжірибе және әдістер бұл факторлардың орта мектеп мұғалімдерінің инклюзивті білімге деген көзқарасына қалай әсер ететінін түсіну үшін прагматикалық парадигма аясында зерттеу жүргізілді. Үш маңызды сұрақ басшылыққа алынды: мұғалімдер инклюзивті білім беруді қалай тұжырымдайды, мұғалімдерге қатысты қандай факторлар олардың инклюзивті білімге деген көзқарасына әсер етеді және орта мектеп мұғалімдерінің көзқарасын қалай жақсартуға болады. Осы мақсатта аралас әдіспен дәйекті зерттеу қолданылды. Алдымен сандық деректер онлайн сауалнама арқылы жиналды; содан кейін сапалы деректер жеке сұхбат арқылы жиналды. Сауалнамаға қатысу үшін 104 респонденттен және сұхбатқа бес респонденттен тұратын жұмыс тобын қамту үшін ықтималдығы жоқ “Snowball sampling” тәсілі пайдаланылды. Тұжырымдамалық негіз ретінде мұғалімдердің халықаралық, аймақтық және жергілікті деңгейлердегі оң және теріс көзқарастарына әсер ететін факторлар туралы әдебиеттер талданды. Маңызды нәтижелер респонденттердің инклюзивті білімге оптимистік көзқараспен қарайтынын көрсетті. Алайда, іс жүзінде олар барлық оқушыларды өз сыныптарына орналастыру үшін көмекке мұқтаж. Мұғалімдерге қатысты факторлар, медициналық инклюзия тұжырымдамасы және өзіндік тиімділіктің болмауы мұғалімдердің инклюзивті білімге қатынасына әсер етеді. Мұғалімдерге қолдау көрсету үшін мұғалімдердің кәсіби дайындығы мен ынтымақтастық мәдениетін ұйымдастырып, оларды қажетті жабдықтармен және ресурстармен қамтамасыз ету қажет. Зерттеу нәтижелері мұғалімдерге білім берудегі

олқылықтардың орнын толтыруға және әр оқушының оқу процесінде жетістікке жетуіне көмектеседі.

Түйінді сөздер: инклюзивті білім беру, қондырғылар, орта мектеп мұғалімдері.

Аннотация

Изучение отношения учителей школ среднего звена к инклюзивному образованию в Жамбылской области, Казахстан

В данной работе изучалось отношение учителей школ среднего звена к инклюзивному образованию в Жамбылской области, Казахстан. Исследование проводилось в рамках прагматической парадигмы, чтобы понять, как окружающая среда, опыт и методы влияют на то, как данные факторы влияют на отношение учителей школ среднего звена к инклюзивному образованию. Было исследовано три важнейших вопроса: как учителя концептуализируют инклюзивное образование, какие факторы, связанные с учителями, влияют на их отношение к инклюзивному образованию и как можно улучшить отношение учителей средней школы. Для этой цели было использовано последовательный подход смешанного метода. Сначала количественные данные были собраны с помощью онлайн-опроса; затем качественные данные были собраны с помощью тет-а-тет интервью. Чтобы охватить целевую группу из 104 респондентов для опроса и пяти респондентов для интервью, использовалась так называемая нерепрезентативная выборка, в частности выборка "снежного кома". При разработке концептуальной основы была проанализирована литература о факторах, влияющих на позитивное и негативное отношение учителей на международном, региональном и местном уровнях. Позже полученные результаты были проанализированы в рамках данной концептуальной основы. Основные результаты показали, что респонденты положительно относятся к инклюзивному образованию. Однако на практике им нужна помощь, чтобы задействовать всех учащихся в своих классах. Некоторые факторы влияют на отношение учителей к инклюзивному образованию (такие как факторы, касающиеся учителей, медицинская концепция понимания инклюзии и отсутствие чувства

самодостаточности). Для оказания поддержки учителям следует организовать профессиональную подготовку учителей и сотрудничество, а также обеспечить их необходимым оборудованием и ресурсами. Исследование поможет учителям восполнить пробелы в образовании и обеспечить успех каждого учащегося в учебном процессе.

Ключевые слова: инклюзивное образование, отношение, учителя школ среднего звена.

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1. Chapter 1 Introduction

This thesis explores secondary school teachers' attitudes toward inclusive education (IE) in the Zhambyl region in Kazakhstan. Firstly, this chapter presents the background of the study and the problem statement. Then the chapter poses the purpose of the study, followed by the main research question, the sub-questions, and the objectives. Eventually, the significance of the inquiry, its definitions of central concepts, and a thesis outline are introduced.

1.1 Background of the Study

Nations worldwide have militated against inequality, gradually shifting from segregation to inclusion. In 1989, this journey started with the UN Convention on the Rights of the Child. The document ensures the rights of every child. Then it was followed by the UN Declaration on the Rights of Disabled Persons in 1993, guaranteeing fair treatment for disabled persons. Nevertheless, according to UNESCO (1994), all children are exposed to risk. Hence, there is an urgency to prevent the critical situation and provide justice in the classroom. As a result, in 2000, The Dakar Framework for Action introduced the concept of Education for All, which gave special-needs children educational development and social experience (UNESCO, 2000). Subsequently, Kazakhstan has determined its way toward inclusive education. There is a joint effort of different ministries regulating the transition to IE at the legislative level, such as Rights of the Child, Law on Education, Law on Architectural, Town-planning and Construction Activity, Law on Social and Medical Pedagogical Correctional Assistance for Children with Disabilities, and Law on Social Protection of Disabled Persons, enacted in 2002, 2007, 2002, 2001 and 2005 respectively. These activities were followed by the establishment of State Programs for Education and Science Development in 2010, 2011, and 2019.

Nevertheless, Global Education Monitoring Report (UNESCO, UNICEF, the World Bank, and OECD, 2021) states that ministries' attempts are insufficient and are yet to be progressed. According to the National Report (Information-analytical Center of the Ministry of Education and Science of the Republic of Kazakhstan, 2021), activities are planned to enhance inclusive education in Kazakhstan. However, it is stated that 74.9% of mainstream schools created settings for special educational needs children, mainly including elevators, ramps, special equipment in sanitary rooms, handrails, and desks (Information-analytical Center of the Ministry of Education and Science of the Republic of Kazakhstan, 2021). These activities lead to the issue of understanding inclusive education. IE is a process that needs constant development, not to be outdated.

There is a need for more clarity in providing definitions of inclusive education in Kazakhstan. While the National Centre for Research and Practice of Correctional Pedagogy (n.d.) states that inclusive education involves disabled children, refugees, children from rural areas, kandas ((previously oralmans) – returnees to the motherland), - or children from impoverished families, the Law on Education of Kazakhstan states that inclusive education is a process in which all students with special educational needs and individual potential have equal access to education (Kazakhstan, 2007, art. 21-7). The same document reveals the concept of persons with special educational needs – children who undergo permanent or temporary hindrances to acquiring an appropriate level of education and co-curricular education. Moreover, it is stated that special educational conditions include services (medical, social, psychological, and pedagogical), equipment, a safe environment, individual programs, and correctional-developing programs. When these requirements are not fulfilled, students with special educational needs and disabilities cannot obtain the educational program (Kazakhstan, 2007, art. 21-7). However, this interpretation does not fully respond to the international Dakar Framework regarding

social, cultural, ethnic, and economic diversity (Passeka & Somerton, 2022). That is why inclusiveness in Kazakhstan is mainly understood as “special education or defectology” (Makoelle, 2020a, p.3). The term defectology appeared in the era of Vygotsky (20th century) and was seen as a medical model and was defined as “the study of defects,” which means that a physical or mental disease required correction in particular institutions by defectologists (Kozulin & Ginds, 2007, p.333). Since then, the term defectology has remained in Kazakhstan, but nowadays, it refers to medical and social models (Passeka & Somerton, 2022). In order to be included in mainstream schools, students with special educational needs are supported by defectologists (Makoelle, 2020a). Thus, the whole approach is based on eradicating barriers by correcting defects among students.

1.2 Problem Statement

New amendments in the Law of the Republic of Kazakhstan on Inclusive Education aim to support the inclusive education sector (Kazakhstan, 2007, art. 21-7) as the situation in Kazakhstani classrooms could be more optimistic. Even though government encourages those who are impoverished, from the countryside, or with impairments to enter educational institutions (UNESCO, UNICEF, the World Bank, and OECD, 2021) a minority of students with special educational needs are enrolled in educational institutions (in Kazakhstan, only 36 114 SEN out of 100 722) (Information-analytical Center, 2020). The situation could be explained by schools acting based on psychological-medical-pedagogical counseling (PMPC) advice, as Kazakhstan still relies on the medical model to find if a person is acceptable for education (UNESCO, UNICEF, the World Bank, and OECD, 2021). The researchers have noticed a void in student enrollment regarding inclusion in mainstream schools of the Zhambyl region. In the Zhambyl region, 1817 out of 4605 students with special education needs are enrolled in secondary educational institutions (Information-analytical Center, 2020).

Consequently, the researchers wonder whether this might be connected to the teachers' attitudes.

Teachers' attitudes toward inclusive education in school might be vital in providing equal opportunities for all. Little research has been done in Kazakhstan on teachers' attitudes toward IE. For example, the study has investigated how urban and rural teachers in the Pavlodar region mainstream schools see inclusion (Agavelyan et al., 2020). It is highlighted the importance of various factors related to teachers, such as gender, age category, background, level of education, and subject taught, as it might impact teachers' attitudes toward children with special educational needs and their school attendance. It has demonstrated a neutral attitude to inclusion (Agavelyan et al., 2020). A similar study has been managed by Sagandykova (2021) during her study in the Akmola region in Kazakhstan. According to Sagandykova, gender does not influence teachers' attitudes but teaching experience. While northern Kazakhstani educators' perception of IE is positive, if teachers get appropriate inclusive training (Sagandykova, 2020), mainstream teachers in Almaty city expressed a neutral or rather hostile attitude toward inclusion (Yussupova & Issabayev, 2021). Therefore, teachers' attitudes on inclusive education in Kazakhstan have been researched only in the Pavlodar, Akmola, and Almaty regions, thus creating a void in studying teachers' attitudes toward inclusive education in the Zhambyl region and its barriers (if any).

1.3 Purpose of the Study

The purpose of the study is to explore secondary school teachers' attitudes toward inclusive education in the Zhambyl region in Kazakhstan. The research aims to focus on how secondary school teachers conceptualize inclusive education, teacher-related factors, and possible improvement of teachers' attitudes. As a result, the following questions have been developed.

1.4 Research Questions

1.4.1 Main Question:

What are secondary school teachers' attitudes toward inclusive education in the Zhambyl region?

1.4.2 Sub-questions:

The following sub-questions have been posed:

- 1) Which factors related to teachers impact the teachers' attitudes toward IE?
- 2) How do teachers conceptualize inclusive education?
- 3) How can teachers' attitudes toward inclusive education (if necessary) be improved?

1.4.3 Objectives:

The following objectives have been posed:

- 1) To establish if a relationship exists between teacher-related factors and their attitudes toward IE among teachers in the Zhambyl region in Kazakhstan.
- 2) To explore teachers' conception of inclusive education.
- 3) To make recommendations about improving teachers' attitudes toward inclusive education (if necessary).

1.5 Significance of the Study

Exploring teachers' attitudes is important for future researchers as it helps understand the topic. The findings revealed secondary school teachers' attitudes toward inclusive education in the Zhambyl region in Kazakhstan. These results are expected to help understand how teachers' attitudes toward IE could affect the inclusion of all students in the classrooms so that every student feels safe and valued. Teachers might develop professionally, studying new ways and techniques and developing emotional intelligence. Moreover, teachers could facilitate a shift in Kazakhstan's educational field, focusing on all students' capabilities so that no one is missing out.

1.6 Definitions of Main Concepts

Throughout this thesis, several definitions are used. First, the term *inclusive education* ensures “equal access to education for all children” by applying a methodology, which can help create a teaching style, curriculum, and assessment suitable for everyone, including children with special educational needs (Slee, 2019, p.9), identify barriers toward implementing inclusive policy, and eliminate them (Azorín & Ainscow, 2018). In this thesis, *inclusive education* and *inclusion* are used interchangeably to mean inclusive education. Moreover, in this thesis, the abbreviation *IE* refers to *inclusive education* and *SEN* to *students with special educational needs* (students who endure barriers to getting an education (Kazakhstan, 2007, art. 21-7)). Next, the term *teachers* is defined. Generally, according to Collins Online Dictionary (n.d., para. 1), *a teacher* is “a person who teaches, usually as a job at a school or similar institution.” However, this thesis uses the definition of *a secondary school teacher*, which is determined as “a person who teaches at a secondary school” (Collins Online Dictionary, n.d., para. 1). In turn, a secondary school refers to “a school for pupils between the ages of 11 or 12 and 17 or 18” (Collins Online Dictionary, n.d., para.1). Another term used in the thesis defines *teachers’ attitudes*. *Teachers’ attitudes* focus on teachers’ behavior affected by social standards (Fend, 2008, as cited in Hutzler et al., 2019).

1.7 Chapter Outline

The thesis provides the research results on secondary school teachers’ attitudes toward inclusive education in the Zhambyl region in Kazakhstan. This thesis is composed of six chapters. Chapter One provides a comprehensive introduction to the study. The literature review with the conceptual framework is discussed in Chapter Two. Chapter Three of the thesis provides the study’s research methodology, including the research paradigm, research approach, research design, data collection procedure, data analysis

approach, and rigor of the inquiry. Results from data analysis are covered in Chapter Four, followed by the discussions of the findings in Chapter Five. Conclusions, recommendations, limitations, and areas for further research are presented in Chapter Six.

2. Chapter 2 Literature Review

2.1 Introduction

The chapter aims to introduce the literature review that explored secondary school teachers' attitudes toward inclusive education in the Zhambyl region. This section is subdivided into five. First, it provides background information on the concepts of inclusive education and attitudes and teachers' attitudes. Next, the chapter discusses the conceptual framework, which is the fundamental aspect of the thesis. Teacher-related factors influencing teachers' attitudes toward inclusive education from international perspectives, regional and local ones are also indicated. The last part highlights a short outline of the chapter.

2.2 Conceptualizing Inclusive Education

A considerable amount of literature has been published on inclusive education. These studies emphasize children's rights, strengthened by the Salamanca Statement and Framework for Action on Special Needs Education, which sees inclusive education as a process, values every child's uniqueness, and responds to everyone's needs (UNESCO, 1994). From that point, in the global arena, inclusive education is oriented toward eradicating injustice and discrimination (Hernández-Torrano et al., 2020), promoting democracy, global citizenship, and lifelong learning for all (Haug, 2017). However, due to the vast notions declared in the Salamanca Statement, the concept of IE is perceived in various ways (Hernández-Torrano et al., 2020). First, inclusive education is usually associated with education for students with special educational needs who require extra assistance (Somerton et al., 2020) and children with disabilities (Schuelka, 2018). Haug (2017) stated that this idea belongs to the narrow definition, which appeared to replace integration in the educational system. Inclusion features are related to the work with children with disabilities and marginalized groups and focus only on special needs

education, which does not erase problems with discrimination. Such narrowing of the problem leads to labeling students, which, in turn, results in poor self-esteem, which poses a danger to students' behavior, mood, and academic performance (Lauchlan & Boyle, 2020). As reported by UNESCO, this puts all diverse children in danger (UNESCO, 2000, as cited in Haug, 2017). The international concept of Education for All has been introduced to prevent the crisis and bring classroom equity. It has been done by accommodating the diverse needs of students who may relate not only to children with disabilities but also to various vulnerable groups such as refugees, migrants, or street children, which brings us to the broader concept. Consequently, *inclusive education* is defined as education for all children regardless of age, gender, ethnic origin, abilities, giftedness, and disabilities (Mahat, 2008). It means that inclusion is the opportunity to be oneself, to be valued and respected, to be accepted by both teachers and classmates, to be a part of a community, to be happy, and to communicate with peers (Goodall, 2020).

According to Makoelle and Burmistrova (2021), inclusive education is where teachers meet every student's needs to address barriers to learners' performance. In other words, inclusive education is fruitful praxis that engages every learner (Rapp & Granados, 2021). Numerous obstacles could hinder the implementation of inclusive education: gender, material prosperity, social status, language, or cultural background. For this reason, inclusive education would be regarded as a process where curricula, quality teaching techniques and approaches, and assessments are altered (Makoelle & Burmistrova, 2021). Generally, the perception of inclusive education depends on state and regional levels. Although Kazakhstan, for example, ensures the right to education for all students with special educational needs bringing equal access to learning (Rollan & Somerton, 2021), the school system, which is now provided, often features inclusive education as integration (Helmer et al., 2020). This phenomenon could be stemmed from the fact that Kazakhstan

inherited a segregated society model, which is currently being reconstructed. Thus, some educational institutions in Kazakhstan maintain life-long learning and promote equity in their classrooms using differentiation and individual approaches by critically reflecting and evaluating their praxis (Makoelle, 2020).

Considering that research is conducted in the southern region of Kazakhstan (the Zhambyl region), there is a synthesis of concepts of inclusive education. In this context, inclusive education depicts two definitions. First, inclusive education is “an educational methodology” directed at all children (including children with special educational needs) (Slee, 2019, p.9). Teachers should adopt and use techniques and approaches regarding individual needs, assessment, and curriculum so that everyone can succeed. Secondly, inclusive education is a continual process aimed at determining and eradicating obstacles toward inclusive education (Azorín & Ainscow, 2018), as the fundamentals of inclusive education are justice, equality, and equity.

2.3 Defining the Concept of Attitude and Teachers’ Attitudes

In order to explore teachers’ attitudes toward inclusive education, the term *attitude* is to be defined. Before focusing on the attitude concept in the educational sector, it is crucial to have a broad concept. Allport proposed the definition of attitude in 1935, which stated that acquired through experience, a psychological state of readiness affects an individual’s reaction to everything he is involved with (as cited in Jain, 2014). That notion was supposed to show the ability to behave in return for actions. According to Cambridge Online Dictionary (n.d., para. 1), attitude is “a feeling or opinion about something or someone or a way of behaving caused by this.” In this sense, this definition shows that a person’s demeanor reflects one’s beliefs, demonstrating how biased attitude is and its significant role in estimation, as attitude is influenced by either spontaneous feelings or deliberate evaluation (Cate et al., 2018).

More specifically, Fend (2008) stated that teachers' attitudes are "guiding actions," concentrating on teachers' demeanor (as cited in Hutzler et al., 2019, p.251), which is influenced by society and its norms and might be adopted as personal norms as well. Given everything mentioned, one may suppose that attitude plays a crucial role as teachers may build prejudice toward students, which also influences learning.

2.4 Conceptual Framework

The conceptual framework (combining three perspectives: international, regional, and local) is built on teachers' attitudes which might be positive and negative. One of the aspects is that teachers' general attitudes toward IE are positive until they get real experience with students with emotional, behavioral, and learning difficulties in their classrooms (Jury et al., 2021). Yussupova and Issabayev (2021) also expressed the idea that teachers hold favorable views toward inclusive education, yet, when it comes to actual practice, they do not maintain IE. Agavelyan et al. (2020) said that attitude toward IE is positive until teachers face work with students with disabilities. Avramidis and Norwich (2002) stated that teachers' attitudes toward inclusion are generally positive while specifying that inclusion (working with SEN) varies from neutral to negative. This phenomenon could be justified because teachers hold their personal beliefs and prejudice toward certain types of impairments. It can include both religious aspects and historical aspects. A fascinating example of Bhutan is that a positive attitude is stipulated by religious belief, thinking that working with SEN adds points to karma (Dorji et al., 2021). This fact affirms that a system of beliefs enacts the formation of attitudes (Sharma et al., 2014).

In contrast, teachers in Ghana consider any form of disability as a "form of punishment and curses from the gods for sins committed by the person with the disability or a relative" (Butakor et al., 2020, p. 1247). This belief in divinity affects teachers'

negative attitudes toward inclusion. Similarly, “teachers in Uzbekistan generally hold a negative attitude toward SEN” (Nam, 2021, p. 174), which is explained by the post-soviet legacy and its legacy in special education institutions (Iarskaia-Smirnova & Goriainova, 2021; Nam, 2021). Another example is that teachers see autism spectrum disorder as the most difficult to deal with, followed by cognitive disorder. At the same time, they detect students with motor impairment as a less problematic group (Jury et al., 2021). Such stereotypical attitudes make a certain group of students (e.g., students with autism spectrum disorder) excluded from mainstream schools, as teaching learners with more severe disabilities precipitates more work than those with mild impairments (Saloviita, 2019). It means that teachers ought to modify their teaching strategy, which produces an additional workload for teachers. It includes spending more time on preparing and accommodating curriculum, lesson plans, and assessments, which, in turn, may lead to a negative attitude toward inclusive education (Monteiro et al., 2018). Nevertheless, these attitudes might change if teachers gain confidence in dealing with students with special needs (Avramidis & Norwich, 2002). It is confirmed by Oralkanova (2014), who reported a lack of confidence among teachers who work in the inclusive education field (as cited in Orynbassarova, 2017). If teachers’ competence to implement inclusive education is at a low level, it is to say that there may be a lack of practice/experience or a lack of knowledge. Alshimbayeva (2016) reported that the problem of expertise in theoretical, methodological, and practical fields also exists among teachers (as cited in Orynbassarova, 2017). Thus, it can be said that confidence in how to deal with SEN enacts forming attitudes toward IE, while the absence of a compulsory academic course in the Kazakhstani tertiary educational system and poor teacher training impact teachers’ belief in themselves in a more negative way (Orynbassarova, 2017). The negative attitude toward IE is also maintained by educators’ knowledge gap regarding inclusion and the lack of professional

development needed to work with students with special needs (Orynassarova, 2017; Rollan, 2021; Yussupova & Issabayev, 2021).). The fear of teaching SEN comes from the lack of knowledge. Firstly, it is necessary to identify the students' specialties to alter teaching materials. Furthermore, adapting the necessary teaching resources requires knowledge and skills in inclusive education. Cooc (2019) reported that "training related to specific disabilities and providing appropriate accommodations" is essential for teachers' positive attitudes (p.29). Thus, teachers with further knowledge may set a suitable environment for their students considering learning diversity. Hence, professional development (PD) might be acquired through formal and informal training (Cooc, 2019). Formal training is provided through courses and workshops, while informal – through collaboration. Collaboration among school teachers is essential for catering to children with disabilities. Sharing concerns and practices enables teachers to understand better how to handle SEN in educational settings so that they will succeed. In addition, collaboration helps to reflect on the perception of inclusion and how IE is practiced (Makoelle, 2014). It is stated that the collaboration process leads to a change that might show positive attitudes toward IE. That is why collaboration among educators may aid in understanding that they are not the only ones who feel the same way. Furthermore, for inclusive education to thrive, teachers must use the inclusive methodology in practice (Jenson, 2018). By inclusive methodology, we mean that teachers use a learner-centered approach, be flexible and responsive to students' needs, and adjust resources to succeed in the classroom (Kaplan & Lewis, 2013). So, PD impacts teachers' attitudes more positively, increasing the confidence level and resulting in a high self-efficacy level among teachers (Saloviita, 2020; Urton et al., 2014; Yada et al., 2018). Such interaction helps utilize inequality, as self-efficacy is a "strong positive belief that people have the capacity and skills to achieve goals" (Harris, n.d., para 8). In addition, teachers' attitudes are influenced by the under-

equipment of schools. It means that teachers do not have access to the necessary resources, such as transport, school facilities, and classroom tools, to accommodate students with disabilities despite their initial positive attitudes toward inclusion (Sharma et al., 2018). Moreover, the lack of adequate size staff is one of the most common factors in inclusive education, as teachers cannot cover all students' needs (Ghouri et al., 2010). It means there are insufficient special teachers, consultants, or medical staff in mainstream schools. Finally, Agavelyan et al. (2020) stated that teachers' background is essential in identifying attitudes toward IE. In their research, due to patience, teachers from the countryside have more positive views toward IE than their urban counterparts (Agavelyan et al., 2020).

It can be concluded that all the factors mentioned above influence the formation of teachers' attitudes either positively or negatively.

2.5 Teacher-Related Factors Influencing Teachers' Attitudes Toward Inclusive Education

Various factors that might influence teachers' attitudes are needed to explore, as teachers play an essential role in altering the perception of inclusive education. Attitudes, in turn, may be affected by internal or external factors called teacher-related factors (Jenson, 2018). Many published studies (Avramamidis & Norwich, 2002; Engelbrecht et al., 2015; Forlin & Chambers, 2011) describe common teacher-related factors: gender, age, experience, teaching subject, and educational background (as cited in Sandhu, 2017). Thus, this subsection considers teacher-related factors from international, regional, and local perspectives.

2.5.1 *International Perspective*

In order to describe teacher-related factors influencing teachers' attitudes toward inclusive education, research from the following countries, Australia, Slovenia, Finland,

and Ghana, has been considered. The countries have been chosen because they have expertise in IE.

Generally, according to Avramamidis et al. (2000), female teachers express more positivity toward inclusion rather than males, while, according to Ahmmed et al. (2014), younger professionals are inconsiderably more optimistic than older ones (as cited in Saloviita, 2020). Research conducted in Ghana by Butakor et al. (2020) confirmed the theory of Avramamidis et al. (2000) and Saloviita (2020) that men and older teachers hold pessimistic attitudes toward IE, which could be explained by the fact that women generally possess the maternal drive and the elderly experience a shortage of practice or experience. However, Saloviita (2020) stated that in Finland, teachers' attitudes toward inclusive education have not been affected by teacher-related factors such as gender and age, even though female teachers, as well as a young generation of teachers, are somewhat more positive toward inclusion than males and older ones. It could be explained that inclusion is a recent development, and novice teachers have had the course regarding inclusive education as a part of their programs (Yada et al., 2018). Moreover, it is stated that experience does impact Australian teachers' attitudes. The more teacher practice, the less positive attitudes they hold, which is explained by a clear understanding of what awaits them in the future (Costello & Boyle, 2013). However, it has been reported that even though teachers in Slovenia have had an experience, their attitudes turned more negative after that (Štemberger & Kiswarday, 2017). It proves that experience is one factor that influences teachers' attitudes.

According to the authors, Štemberger and Kiswarday (2017), there is an exigence to encourage and empower teachers who first work with SEN to accommodate it successfully and painlessly. Moreover, a significant discrepancy in teachers' attitudes toward IE in Finland lies in the taught area. For example, special-education teachers are into inclusion,

while the classroom and subject teachers prefer focusing on their area of teaching (Saloviita, 2020).

The most common factors influencing teachers' attitudes at the international level are gender, age, experience, and teaching subject. Females and special educators are more favorable than their male counterparts and subject teachers. Also, the more teachers experience, the less optimistic they are toward inclusion. Unfortunately, the information about educational background has not been found at the international level.

2.5.2 *Regional Perspective*

This subchapter discusses teacher-related factors that can impact teachers' attitudes toward inclusion from a regional perspective. Such countries as Turkey, Pakistan, Kyrgyzstan, and Bhutan are considered as they are located in Asia. Turkey is included in this part of the thesis as a significant territory in Western Asia.

In Pakistan, the research shows that gender is one of the factors in the Pakistani context toward "efficacy beliefs towards inclusion" (Sharma et al., 2014, p.11). Men are more positive rather than women. A similar pattern has been revealed in Bhutan, where gender influences teachers' attitudes toward inclusion. Dorji et al. (2021) have found that men favor IE more than females. This idea is supported by Rakap and Kaczmarek (2010), who also stated that Turkish male teachers have somewhat more positive attitudes toward IE. It might be explained by the fact that many women work with SEN rather than males and know what to expect from this field (Dorji et al., 2021).

Moreover, in Turkey, positive attitudes toward inclusion have been held by both the least experienced and the most experienced educators, which leads to the fact that the more experience educators have, the more positive views toward IE they have (Rakap & Kaczmarek, 2010). They also stated that middle-aged teachers hold negative views compared with the previous age groups, as novice teachers have been specially trained at

educational institutions while older ones have more experience working with students. It is a pity that more information should be given regarding teacher-related factors in Kyrgyzstan. Nevertheless, it is noted that various levels of education do not impact teachers' attitudes, as teachers with different educational backgrounds know little about inclusion, leading to negative attitudes (Chzhen, 2016).

Thus, at the regional level, men hold more positive attitudes toward inclusive education. Also, younger and older educators favor inclusion more than middle-aged teachers. In turn, more experience among teachers leads to more positive views. It does not matter what level of education teachers have, as it is negative due to the need for more awareness about inclusion. Information regarding the taught subject has yet to be found.

2.5.3 Local Perspective

This subsection concentrates on teacher-related factors in different regions in Kazakhstan. Inclusive education is relatively new in the republic, so few resources must be available.

Interestingly, in the research held in the Pavlodar region, it has been revealed that gender is one of the components forming attitudes. According to Agavelyan et al. (2020), men are more favorable than women, which is explained by the fact that men are primarily teachers of physical education concerned with children's well-being. In contrast, in the Akmola region in North Kazakhstan, Sagandykova (2020) stated that gender does not influence teachers' attitudes toward inclusion. The factors, which influence it, are age and experience. The older teachers (over 55) have more positive attitudes toward IE. It can be explained that the older teachers are, the more experienced they are. That is why educators with experience are more favorable toward IE.

Conversely, in Astana city (Nur-Sultan city as cited in Bukayeva, 2020), age and working experience do not play a role in identifying factors affecting attitudes toward IE,

which means that despite their age category and experience, teachers hold favorable views toward inclusion (Bukayeva, 2020). Moreover, according to Yussupova and Issabayev (2021), subject teachers express negative attitudes as they are afraid that “non-SEN children may be left without attention and not acquire the necessary skills” (p.83). Special education teachers hold the same view as mainstream schools are understaffed and underequipped (Makhmudayeva, 2016).

Generally, in Kazakhstan, such factors as age, gender, and experience are controversial as they might and might not influence teachers’ attitudes. Although there is no difference in what subject educators teach, subject teachers express negative attitudes toward inclusive education as well as special education teachers. Literature about teachers’ educational levels has not been located.

2.6 Conclusion

The chapter has outlined the relevant literature studied for the researcher’s thesis. First, the concept of inclusive education has been provided. After that, the terms “attitude” and “teachers’ attitudes” are defined. The following subsection of the chapter has highlighted the conceptual framework adopted in the thesis, which includes international, regional, and local perspectives. The last part has been dedicated to the factors influencing teachers’ attitudes toward IE. The factors have also been described from international, regional, and local perspectives.

3. Chapter 3 Research Methodology

3.1 Introduction

The chapter aims to introduce the research methodology used to explore secondary school teachers' attitudes toward inclusive education in the Zhambyl region in Kazakhstan. First, the chapter gives background information on the research paradigm. Then, this chapter discusses the specific methods by which the research approach and design have been conducted. The chapter further highlights the data collection procedure followed by data analysis. Finally, such issues as trustworthiness, reliability, and validity are covered in the chapter.

3.2 Research Paradigm

In this study, pragmatism was adopted as a research paradigm. Pragmatism is about how to solve problems practically and sensibly, not how to focus on theory (Oxford Online Dictionary, n.d.). Its underlying assumption is that experience is the foundation for knowledge (Kaushik & Walsh, 2019). The central idea of this paradigm centers around tackling real problems in reality while using integrated methods. In this study, pragmatism helped to explore teachers' backgrounds, knowledge, and practice regarding inclusive education. This paradigm aided in discussing teachers' experiences and how they affected teachers' attitudes toward inclusive education.

3.3 Research Approach

A *research approach* is a process that indicates steps to conduct research (Creswell, 2014). First, the research method was chosen. The research design incorporated a sequential explanatory mixed methods design, resulting in a two-phase project (Creswell, 2014). This approach was suitable for the study as the initial quantitative data collection method included diverse participants. In contrast, the qualitative interview-based study aided in interpreting and describing quantitative data (Creswell, 2014). The first phase of

the sequential explanatory mixed methods design collected quantitative data, followed by the second, which employed a qualitative approach. It means that quantitative data was first collected to explore teachers' general attitudes toward inclusive education and teacher-related factors to see the pattern. Next, the qualitative phase identified teachers' attitudes toward inclusive education in the Zhambyl region and how teachers' attitudes toward inclusive education (if necessary) could be improved.

3.4 Research Instruments

This study used two main instruments: a survey and an interview. A survey is a numeric inquiry of attitudes conducted by asking people questions (Cambridge Online Dictionary, n.d.). Conversely, a one-on-one interview is a direct talk in which the researcher asks questions about the topic (Cambridge Online Dictionary, n.d.). While a survey was used for the quantitative analysis, one-on-one interviews were employed for the qualitative analysis. In the first part of the research, the QUALTRIX survey was designed in Kazakh, Russian, and English to include the whole population. The survey consisted of three parts. The first part presented information about the researcher, the topic, and the aim of the study. It also contained a consent form guaranteeing the anonymity of the responses, allowing participants to decide whether to participate in the survey. If they gave their consent to participate, they moved to the second section of the survey, which consisted of multiple-choice questions of a demographic nature. It embraced general information about the participants without indicating their names, such as gender, age range, qualification, and background information. The last part of the survey consisted of a six-point Likert Scale questionnaire of eighteen items. The Likert Scale was chosen as the respondents could show "a degree of agreement and disagreement with a variety of statements about some attitudes," which was the aim of the study (Taherdoost, 2019, p.3). This questionnaire was modified to the context of the research settings and used

Multidimensional Attitudes Toward Inclusive Education Scale (MATIES) (Mahat, 2008). MATIES consisted of eighteen questions. The researcher chose this scale to see a complete picture of teachers' attitudes toward inclusive education.

Each question was measured using a six-point Likert-type scale categorizing as the following: "strongly agree," "agree," "somewhat agree," "somewhat disagree," "disagree," and "strongly disagree" (Mahat, 2008). MATIES survey was originally in English; that is why the survey was translated into Kazakh and Russian. The scale has not been commonly used among educators. Only several of them (Mahat, 2008; Noreen et al., 2019; Pennock, 2021) have adopted the scale in their inquiries. That is why the author, Mahat (2008), permitted using the MATIE scale (See Appendix 1). According to Mahat (2008), the MATIES has been created to fully measure affective, cognitive, and behavioral aspects of teachers' attitudes toward inclusive education, addressing such issues as curriculum, social and physical aspects. The scale helps better understand the teachers' attitudes toward IE. In the second part of the study, qualitative data was gathered via one-on-one interviews. The interviews were conducted in two languages: Russian and English. The nature of the interviews was semi-structural, as the author asked respondents to clarify or specify some information. The interviews took 30 – 40 minutes to conduct in an environment comfortable for the respondents. Participation in interviews was rewarded with a bar of chocolate and a cup of coffee/tea for the interviews due to the low budget of the researcher. The qualitative period of the study was used to gain a thorough understanding of the quantitative findings, detect teachers' attitudes toward inclusive education, conceptualize it, and make recommendations about how teachers' attitudes toward inclusive education could be improved. In general, the usage of all data collection instruments guaranteed anonymity.

3.5 Data collection procedure

Before collecting data, several types of permissions were gathered (Creswell, 2014). First, the researcher completed The Collaborative Intuitional Training Initiative (CITI) Program Certificate in order to be able to conduct the study with human beings. Next, the researcher got ethics confirmation from the Nazarbayev University Research Ethics Committee of the School of Education.

After that, the researcher started the procedure of data collection. For the quantitative part of the study, nonprobability sampling was employed as the researcher wanted to conduct a voluntary study investigating a large group of secondary school teachers (Creswell, 2014). Namely, snowball sampling was chosen as it was difficult for the researcher to reach the target population (secondary school teachers in the Zhambyl region). The researcher developed the QUALTRIX survey, then sent a link via “WhatsApp” messenger and Instagram social media to the teachers in the Zhambyl region that the researcher knew in terms of scope (the researcher is an acting secondary school teacher). It happened to cover the city and rural secondary school teachers. Afterward, the researcher asked acquaintances to distribute the link among their colleagues. The researcher monitored the number of responses in the QUALTRIX platform until the minimum sample size (100 people) was reached (Louangrath, 2017). Generally, it took around three weeks to reach 117 responses. Then, the researcher closed the survey forms in the QUALTRIX platform and exported the data in .sav format. This format was chosen as the author used International Business Machines Statistical Package for the Social Sciences (IBM SPSS Statistics) (version 29) tool for further analysis. The SPSS analysis package was employed for two reasons. The first one was that, according to Muijs (2004), SPSS is the program commonly used among educators containing all necessary tools for the analysis. Secondly, the researcher was familiar with the usage of the program as a part of

the educational plan. The next step was combining the data from Kazakh and Russian into English. Then, the input was transferred into the IBM SPSS Statistics and coded. From that point, the analysis of the data started.

Regarding the qualitative study, snowball sampling was applied to access subjects with the target characteristics (secondary school teachers). This sampling was suitable as the researcher recruited participants among the researcher's acquaintances (Naderifar et al., 2017). To conduct the qualitative phase of the study, the researcher sent the known teachers a recruitment flyer explaining the study's nature and calling to participate in the interview and asked them to distribute it among their colleagues. The message was sent via "WhatsApp" messenger and Instagram social media. Five volunteers who responded to the message were hired. Afterward, the researcher set a suitable time and place for each respondent. It took around a month to conduct interviews due to the busy schedule of teachers (the end of December, which was the end of the term). Before interviews, the consent forms were distributed, and respondents signed them, confirming that the interviewees understood that they could withdraw from participation in the research at any time, and the researcher guaranteed anonymity. Interviews were recorded on the mobile phone of the researcher, which had a password. Later, the recordings were transcribed both manually (Russian language) and with the help of the online tool Descript (English language).

3.6 Data analysis

After collecting data, data analysis was followed according to two phases of the research method. The first part of the research was quantitative, which attempted to partially answer the main question of what secondary school teachers' attitudes toward inclusive education in the Zhambyl region were, and the first sub-question of which teacher-related factors influenced the teachers' attitudes toward IE. That is why the

following hypotheses were posed regarding the first sub-question. The null hypothesis stated that there was no relationship between teacher-related factors and their attitudes toward IE among teachers in the Zhambyl region in Kazakhstan. The alternative hypothesis said that teacher-related factors influenced teachers' attitudes toward IE in the Zhambyl region in Kazakhstan.

H_0 = There was no relationship between teachers' attitudes toward IE and their gender.

H_1 = There was a relationship between teachers' attitudes toward IE and their gender.

H_0 = There was no relationship between teachers' attitudes toward IE and their age.

H_1 = There was a relationship between teachers' attitudes toward IE and their age.

H_0 = There was no relationship between teachers' attitudes toward IE and the subject they taught.

H_1 = There was a relationship between teachers' attitudes toward IE and the subject they taught.

H_0 = There was no relationship between teachers' attitudes toward IE and their work experience.

H_1 = There was a relationship between teachers' attitudes toward IE and their work experience.

H_0 = There was no relationship between teachers' attitudes toward IE and their educational level.

H_1 = There was a relationship between teachers' attitudes toward IE and their educational level.

The study had dependent variables (teachers' attitudes toward IE) and independent ones (teacher-related factors such as gender, subject, and educational background).

Quantitative data was analyzed through IBM Statistical Package for the Social Sciences (SPSS) software, using coding. Firstly, the demographic results were analyzed. After that, descriptive statistics with a frequency distribution were applied to explore secondary school teachers' attitudes toward IE. The next step was to test the hypothesis and compare the means of dependent variables between the two groups. For this purpose, a series of crosstabulations, including chi-square tests, were implemented (Muijs, 2004).

The second part of the research was qualitative in the form of interviews. This type of research was used mainly to determine how teachers conceptualize inclusive education and how teachers' attitudes toward inclusive education (if necessary) can be improved. While interviewing, all the respondents were accredited with pseudonyms to ensure anonymity.

The qualitative data were recorded, transcribed, cleaned, and then stored on the researcher's laptop, secured by a password. After that, the researcher started a cycle of inductive coding. This type of coding is where the researcher manually studies the collected data to develop codes (Chandra & Shang, 2019). The process of coding was cyclical, consisting of four cycles. As the first step of coding, in vivo coding was used "to maintain the participants' language" (Leavy, 2017, p.151). It was done so that the uniqueness of their ideas remained. While coding, the researcher made notes using the color-coding technique. After that, the researcher employed first-order coding, where the codes were closely revised and merged into broader themes adopting the typing-in-margins technique. The next step was to group similar codes. After this coding round, five themes emerged in the form of an extended collocation and a whole sentence with a larger meaning (Creswell, 2014). During this work, the researcher created memo writing as a

bridge between coding and interpretation (Leavy, 2017). When the process was over, the researcher was ready to interpret and analyze the input.

Both types of data helped respond to both the main and sub-questions of this study, aiming to explore secondary school teachers' attitudes toward IE in the Zhambyl region in Kazakhstan.

3.7 Trustworthiness, Reliability, and Validity

Rigor has been one of the main components of the study. As the thesis adopted a mixed method design, trustworthiness, reliability, and validity were indicated. One of the points for trustworthiness has been "between-method triangulation" (Fusch et al., 2018, p.24). Implementing both methods justified discovered data and gave a broader understanding of the research topic. Moreover, the instrument used in the research needed to be validated. The study adopted the Multidimensional Attitudes Toward Inclusive Education Scale (MATIES). According to the author of the MATIE scale, Mahat (2008), the Cronbach scale coefficient has varied between 0.77 (cognitive aspect), 0.78 (affective), and 0.91 (behavioral), which has considered reliable and valid, as the average Cronbach score has been 0.70. One-on-one interviews were conducted in a comfortable area for respondents without peripheral distractions, thus ensuring confidentiality. During interviews, the researcher recorded the procedure and made related notes for further thorough analysis. The transcripts of the interviews were returned to the respective respondents for validation. The member-checking technique was applied to the qualitative part of the study.

3.8 Conclusion

The chapter has discussed the methodology and subsequent actions implemented to explore secondary school teachers' attitudes toward IE. First, the research paradigm has been stated. Then, the chapter provides information about the study's qualitative and

quantitative methods. Next, the chapter discusses the research procedure, indicating the viable population and the chosen tools for the study. After that, the chapter describes how the data is analyzed, followed by a paragraph about the research's trustworthiness, reliability, and validity. In the next chapter, findings from the research will be discussed.

4. Chapter 4 Results

4.1 Introduction

The chapter presents the data collected during the explanatory mixed-method design study to explore secondary school teachers' attitudes toward inclusive education in the Zhambyl region in Kazakhstan and its analysis. This chapter comprises four main sub-chapters covering the study's quantitative and qualitative results. The first sub-section is demographic results, followed by descriptive statistics of secondary school teachers' attitudes toward inclusive education in the Zhambyl region, Kazakhstan. Then, the results obtained from the analysis of the MATIE Scale via a series of crosstabulations, including chi-square tests, answer one of the subsidiary questions about which teacher-related factors influence the teachers' attitudes toward IE. After that, the results collected from the qualitative part (semi-structural interviews) are presented. This sub-section reports teachers' conception of inclusive education and recommendations for improving teachers' attitudes toward inclusive education. Finally, a summary of the main results is given.

The quantitative research method was employed as the first part of the study. Data was gathered through the online survey using snowball sampling. Overall, 117 secondary school teachers got the survey. 13 responses out of 117 were eliminated since six participants did not consent to participate, and the other seven completed only the demographic part (part 1). The rest 104 respondents completely accomplished the survey. Thus, the response rate constituted 89%. Five teachers participated in semi-structural interviews for the next part of the qualitative research. During recruitment, they expressed willingness to participate in further study.

4.2 Demographic Results

One hundred four secondary school teachers of art (2.9%), music (1.9%), Physical Education (PE) (8.7%), Computer Science (4.8%), science (biology (3.8%), chemistry

(1.9%), and physics/robotics (6.7%), mathematics (11.5%), and languages (Kazakh, Russian, and English with 3.8%, 11.5%, and 42.3% respectively) gave complete responses for the survey. The results of the demographic characteristics of the respondents are shown in Table 1.

Table 1

Demographic Characteristics of Respondents

Grouping variables		N	%
Gender	Female	71	68.3%
	Male	33	31.7%
Age Category	Below 25	40	38.5%
	26-39 years	47	45.2%
	40-57 years	13	12.5%
	Over 57 years	4	3.8%
Taught Subject	Art	3	2.9%
	Biology	4	3.8%
	Chemistry	2	1.9%
	Computer Science	5	4.8%
	English language	44	42.3%
	Kazakh language/Kazakh literature	4	3.8%
	Mathematics	12	11.5%
	Music	2	1.9%
	Physical Education	9	8.7%
	Physics/ Robotics	7	6.7%
	Russian language/Russian literature	12	11.5%
Years of	0-2 years	14	13.5%

Experience	3-5 years	21	20.2%
	6-10 years	30	28.9%
	11-15 years	20	19.2%
	16-20 years	12	11.5%
	21+ years	7	6.7%
Level of Education	Bachelor's Degree	52	50 %
	Master's Degree	34	32.7%
	Specialist Degree	17	16.3%
	Doctor's Degree	1	1%

Table 1 shows that more females ($n=71$) than males ($n=33$) participated in the survey. The gathered data is similar to the World Bank Study statistics. It is stated that in secondary education in Kazakhstan, there are more female teachers (76%) than male teachers (24%) (World Bank, 2020).

Most respondents (45.2%, $n=47$) comprised 26-39-year-old teachers, while only four belonged to the category over 57 years (3.8%). Over one-third of the population (38.5%, $n=40$) constituted the youngest age category (below 25). The remaining 12.5% reported about the respondents aged 40 to 57 ($n=13$). Thus, the data gathered during the survey correlates to the statistics in Kazakhstani schools, where a significant part of teachers belong to the 30 – 49 age category, and the percentage of teachers over 50 years old has decreased by 2.5% (National Report, 2022).

Regarding the years of experience, over a third of respondents ($n=35$) were novice teachers having 0-2 years of experience ($n=14$) and 3-5 years ($n=21$), with 13.5% and 20.2%, respectively. The proportion of secondary school teachers with experience from 6 to 10 years old was 28.9% ($n=30$), followed by 11-15-year-old experience (19.2%, $n=20$).

Twelve teachers reported that their experience constituted 16 to 20 years (11.5%), while 6.7% ($n=7$) had more than 21 years of teaching practice. The National Report (2022) states that the percentage of teachers having 6-10 years of experience is similar (28%) to our findings, as well as the ratio of young specialists with 0-5 years of practice (32.5%).

It is evident from Table 1 that only one respondent held a doctoral degree (1%), while half of the population indicated a bachelor's degree ($n=52$), which was the highest level of education among participants, followed by the holders of master's degree (32.7%, $n=34$). Seventeen respondents indicated that they had a specialist degree (16.3%, $n=17$). According to the National Report (2022), over a quarter of teachers in Kazakhstan has a master's degree (37.9%).

4.3 Descriptive Statistics of Secondary School Teachers' Attitudes Toward IE

To explore secondary school teachers' attitudes toward inclusive education MATIE Scale, consisting of 18 items, was partially modified to fit the context of the research area. MATIE Scale is a Likert-type scale comprising six points without a neutral response. The nature of the items implies a reverse response continuum starting from positive to negative (1 – Strongly Agree; 2 – Agree; 3 – Somewhat Agree; 4 – Somewhat Disagree; 5 – Disagree; 6 – Strongly Disagree) (Mahat, 2008). Furthermore, Mahat (2008) reported that some items in the scale were reversed (1, 3, 4, 13, 14, 15, 16, 17, and 18) to reduce response bias. For this reason, reverse coding was not done. In the researcher's context setting, Cronbach's alpha (α) was applied to test the scale's reliability. The test measured the internal consistency of 18 items which compiled $\alpha = .89$ (0.71 for the cognitive aspect, 0.88 for affective, and 0.80 for behavioral). The scale was found reliable since the rule of thumb by Muijs (2004a) stated that $\alpha \geq 0.70$ is acceptable.

After that, descriptive statistics analysis was employed to identify secondary school teachers' attitudes toward IE. Eighteen items in the form of a Likert-scale survey building

secondary school teachers' attitudes (adjusted MATIES) were studied, where 1 – Strongly Agree and 6 – Strongly Disagree. Thus, the Likert scale was considered as interval one, providing the following range: 1.00 - 1.82 for a strong agreement, 1.83 –2.66 for an agreement, 2.67– 3.50 for an agreement at some extent, while from 3.51 to 4.32 meant disagree at some extent, from 4.33 to 5.16 meant disagree, and from 5.17 to 6.00 strongly disagree. The results are tabulated below in Table 2 regarding mean and standard deviation.

Table 2

Descriptive Statistics of Items Characterizing Secondary School Teachers' Attitudes Toward IE

Items characterizing teachers attitudes toward IE	Mean	Std. Deviation
1. I believe that an inclusive school is one that permits academic progression of all students regardless of their ability.	2.68	1.28
2. I believe that students with a disability should be taught in special education schools.	3.47	1.34
3. I believe that inclusion facilitates socially appropriate behaviour amongst all students.	3.15	1.31
4. I believe that any student can learn in the regular curriculum of the school if the curriculum is adapted to meet their individual needs.	3.03	1.44
5. I believe that students with a disability should be segregated because it is too expensive to modify the physical environment of the school.	3.93	1.53

6. I believe that low-performing students should leave the school so that they do not experience rejection in the regular school.	4.10	1.49
7. I get frustrated when I have difficulty communicating with students with problem behaviour.	3.37	1.60
8. I get upset when less-abled students cannot keep up with the day-to-day curriculum in my classroom.	3.42	1.61
9. I get irritated when I cannot understand students' behaviour.	3.64	1.71
10. I am uncomfortable including more-abled students in a regular classroom with less-abled students.	3.80	1.57
11. I am disconcerted that gifted students are included in the regular classroom.	3.93	1.48
12. I get frustrated when I have to adapt the curriculum to meet the individual needs of all students.	3.87	1.42
13. I am willing to encourage ALL students to participate in all activities in the regular classroom.	3.12	1.60
14. I am willing to adapt the curriculum to meet the individual needs of all students regardless of their ability.	3.36	1.59
15. I am willing to include students with a deviant behavior in the regular classroom with the necessary support.	5.30	.72
16. I am willing to modify the physical environment to include students with a disability in the regular classroom.	5.47	.65

17. I am willing to adapt my communication techniques to ensure that all students with an emotional and behavioural disorder can be successfully included in the regular classroom.	3.16	1.64
18. I am willing to adapt the formative assessment of individual students in order for inclusive education to take place.	3.41	1.65

Note: 1 – Strongly Agree; 2 – Agree; 3 – Somewhat Agree; 4 – Somewhat Disagree; 5 – Disagree; 6 – Strongly Disagree

It is seen from Table 2 that none of the population expressed agreement or strong agreement with the provided items. Nevertheless, secondary school teachers expressed to some extent positive attitudes toward inclusive education on most of the questions in the survey: “I believe that an inclusive school is one that permits academic progression of all students regardless of their ability” ($M = 2.68, SD = 1.28$), “I believe that any student can learn in the regular curriculum of the school if the curriculum is adapted to meet their individual needs” ($M = 3.03, SD = 1.44$), “I am willing to encourage ALL students to participate in all activities in the regular classroom” ($M = 3.12, SD = 1.60$), “I believe that inclusion facilitates socially appropriate behaviour amongst all students” ($M = 3.15, SD = 1.31$), “I am willing to adapt my communication techniques to ensure that all students with an emotional and behavioural disorder can be successfully included in the regular classroom” ($M = 3.16, SD = 1.64$), “I am willing to adapt the curriculum to meet the individual needs of all students regardless of their ability” ($M = 3.36, SD = 1.59$), “I am willing to adapt the formative assessment of individual students in order for inclusive education to take place” ($M = 3.41, SD = 1.65$), and “I get upset when less-abled students cannot keep up with the day-to-day curriculum in my classroom” ($M = 3.42, SD = 1.61$).

In addition, teachers did not agree to the following statements: “I get irritated when I cannot understand students’ behavior” ($M = 3.64, SD = 1.71$), “I am uncomfortable including more-abled students in a regular classroom with less-abled students” ($M = 3.80, SD = 1.57$), and “I get frustrated when I have to adapt the curriculum to meet the individual needs of all students” ($M = 3.87, SD = 1.42$), proving rather positive attitudes toward IE. It is noticeable that responses for such items as “I am disconcerted that gifted students are included in the regular classroom” and “I believe that students with a disability should be segregated because it is too expensive to modify the physical environment of the school” gained more disagree responses. ($M = 3.93, SD = 1.48$ and $M = 3.93, SD = 1.53$, respectively) thus presenting moderately positive attitudes toward IE. Interestingly, many teachers disagreed that low-performing students should leave school, so they do not experience rejection in the regular school ($M = 4.10, SD = 1.49$), revealing relatively positive attitudes toward IE.

However, a considerable number of respondents ($M = 5.47, SD = .653$ and $M = 5.30, SD = .72$) indicated strong disagreement toward the following items: “I am willing to include students with a deviant behavior in the regular classroom with the necessary support” and “I am willing to modify the physical environment to include students with a disability in the regular classroom,” respectively. Another part of the participants admitted that they got frustrated when they had difficulty communicating with students with problem behavior ($M = 3.37, SD = 1.60$), indicating negative attitudes. Moreover, some teachers partially agreed that students with a disability should be taught in special education schools ($M = 3.47, SD = 1.34$).

Thus, most secondary school teachers’ attitudes toward IE could be somewhat favorable.

4.4 Teacher-Related Factors Influencing the Teachers' Attitudes Toward IE.

A series of crosstabulations, including chi-square tests, were applied to define the relationship between secondary school teachers' attitudes toward IE and teacher-related factors. There are five teacher-related factors such as gender, age category, years of experience, subject taught, and level of education. Before the tests, the overall mean of the Likert scale was calculated. Then, this scale variable was recoded into a nominal one to answer the sub-question about teacher-related factors influencing secondary school teachers' attitudes toward IE, where 1.00 – 3.50 referred to a positive attitude and 3.51 and higher – to a negative one. After these activities, the hypothesis of whether there was a relationship between teachers' attitudes toward IE and their gender was first tested. The relationship between these variables was significant, $X^2(1, N = 104) = 7.38, p = .007$. The value of the phi-coefficient was .27 (<.30), which showed a modest effect size. Since the p-value was less than the alpha level ($p < 0.5$), we rejected the null hypothesis. Thus, males were more likely to express negative attitudes toward inclusive education than females, while women's responses were almost equally distributed between positive and negative attitudes (see Table 3).

Table 3

Secondary School Teachers' Attitudes and Gender Crosstabulation

		Gender				Total	
		Female		Male			
		N	%	N	%	N	%
Attitudes	Positive	35	49,3%	7	21,2%	42	40,4%
	Negative	36	50,7%	26	78,8%	62	59,6%
Total		71	100,0%	33	100,0%	104	100,0%

Then, the chi-square test was performed to determine whether there was a relationship between teachers' attitudes toward IE and their age. The proportions varied modestly (phi-coefficient = .30) by age category, $X^2(3, N = 104) = 9.55, p = .023$. It is seen from table 4 that most teachers at the age of 26 – 39 years expressed a negative attitude toward inclusive education (74.5%), while teachers aged 40 – 57 and over 57 showed a positive attitude with 61.5% and 75%, respectively. The most interesting finding was that teachers under 25 revealed equal attitudes toward IE: 47.5% for a positive attitude and 52.5% for a negative one.

Table 4

Secondary School Teachers' Attitudes and Age Crosstabulation

	Age Category								Total	
	Below 25		26-39 years		40-57 years		Over 57 years			
	N	%	N	%	N	%	N	%	N	%
Positive	23	48,9%	8	20,0%	8	61,5%	3	75,0%	42	40,4%
Negative	24	51,1%	32	80,0%	5	38,5%	1	25,0%	62	59,6%
Total	47	100,0%	40	100,0%	13	100,0%	4	100,0%	104	100,0%

The next step was to check the hypothesis regarding teachers' attitudes and taught subjects. Various subjects were categorized into three categories based on their nature (Languages, Science, and the Arts (music, art, and PE). The analysis revealed a modest discrepancy (phi-coefficient = .45) in responses among secondary school teachers in terms of taught subject $X^2(2), N = 104) = 20.81, p = .001$. While most language teachers responded positively (56.7%), the Arts teachers presented mainly negatively (57.1%). Moreover, it can be noted that science teachers showed strongly negative attitudes toward inclusive education (93.3%) (See Table 5).

Positive	9	64,3	2	9,5	10	33,3	10	50,0	7	58,3	4	57,1	42	40,4
Negative	5	35,7	19	90,5	20	66,7	10	50,0	5	41,7	3	42,9	62	59,6
Total	14	100	21	100	30	100	20	100	12	100	7	100	104	100

The final chi-square test was done to check if there was a significance between teachers' attitudes and their level of education. It was revealed that there was no significant relationship between these variables, $X^2 = (3, N = 104) = 2.34, p = .505$. It meant that the level of education did not influence teachers' attitudes.

Thus, regarding the first four teacher-related factors (gender, age, taught subject, and years of experience), we rejected the null hypothesis as the p-value was less than the alpha level ($p < 0.5$). Nevertheless, we failed to reject the null hypothesis testing the relationship between teachers' attitudes and their level of education. In other words, almost all teacher-related factors did influence teachers' attitudes toward IE except educational level.

4.5 The Results of the Interviews

When the quantitative data analysis was finished, the researcher turned to the second part of the study – quantitative data analysis. The researcher, using snowball sampling, recruited five teachers from different schools in the Zhambyl region who desired to participate in the semi-structural interviews. It appeared that four females and one male participated in the interviews. It should be noted that four respondents were English teachers from different schools in the Zhambyl region, while Respondent 5 was a music teacher in the same region. From Table 7, it could be seen that the respondents belonged to similar age categories but had different levels of education.

Table 7*Interview Respondents' Demographic Data*

	Respondent 1	Respondent 2	Respondent 3	Respondent 4	Respondent 5
Gender	Female	Female	Female	Female	Male
Age	29 y.o	33 y.o.	38 y.o.	39 y.o.	34 y.o.
Taught Subject	English	English	English	English	Music
Level of Education	Bachelor's degree	Master's degree	Master's degree	Specialist's degree	Bachelor's degree

The qualitative part of the study was conducted to explore teachers' conceptions of inclusive education and to make recommendations for improving teachers' attitudes toward inclusive education. For that purpose, the researcher categorized the coded data into five main themes, which could help reach the study's aims. The first theme was The Concept of IE; the second one was how Respondents Define Students; the third theme – Methods Employed by Teachers; and the fourth theme – Factors Affecting Attitudes to IE, were used to provide the complete picture of the concept of IE. The fifth one, Recommendations About How Teachers' Attitudes Toward IE Can Be Improved, was derived.

4.5.1 The Concept of Inclusive Education

Three Respondents identified inclusive education employing a medical approach to inclusiveness focusing on their disabilities. Respondent 1 claimed that “inclusion is an extensive term in its understanding, including a vast number of cases or issues that belonged to the physical needs of learners and finishing with mental treatment for them.” Respondents 4 and 5 suggested a similar definition identifying IE as “a way of teaching

when different impairments, disorders, and learning abilities were accepted and taken into consideration” and “it [IE] was a job with disabled children: normal healthy students and disabled students in one classroom and a teacher worked with all of them,” respectively. However, two Respondents initially understood IE as “having an opportunity, an equal opportunity for all students” (Respondent 2) and “education for all, whatever gender, nationality, social status, and physical and mental abilities” (Respondent 3), thus, employing the UNESCO model of IE. Despite the knowledge of the global definition of inclusiveness, Respondents 2 and 3 narrowed their responses to the medical model in the process of explanation. Respondent 2 clarified that inclusive education covered “equal opportunity for all students even for those who were disabled, who could not see, who could not move, who could not hear,” while Respondent 3 pointed out that inclusion was “a chance for disabled students to develop their strengths, normally communicate with different children, and adapt to real-life conditions.” So, all respondents proposed that inclusive education was based on disabilities and endeavors with disabled students, even though some Respondents (2 and 3) were aware of the universal concept of IE.

4.5.2 How Respondents Define Students

To extend the Respondents’ understanding of the concept of IE, the researcher determined the theme of the Respondents’ definition of students. Respondents 1, 3, and 4 established common of characterizing students, such as health conditions and academic performance. Respondents 1 and 3 labeled students based on their academic performance as “more abled students (“otlichnik” (A level student or outstanding student)), less abled students (“trochnik” (C level student or low-performing student)), and those who are in the middle (“udarnik” (B level student)).” While Respondent 1 mentioned mental retardation (“Those students who were not very fast in their psychological roles or students

who had some health issues.”), Respondent 3 reported “issues with eyesight or hearing.” In addition, Respondent 1 mentioned:

If they [students] have deviant behavior and who are not very fast in their psychological roles or students who have some health issues: psychological or mental, these guys should not study with those who are able, like normal, ordinary students.

Respondent 4 revealed that “only those [students] who met these [clear medical reference and high level of academic performance] requirements should be enrolled in educational institutions.” Nevertheless, Respondent 2 followed the global definition but proposed that students with severe illnesses study at special schools for their benefit:

We will never have the same students, the best or the worst students in terms of knowledge. Most of them [SEN] can be taught in the mainstream classroom. But some disabilities require special needs, like a special staff. So, some of them must be taught in special organizations because of specific illnesses.

Respondent 5 had a similar idea: “all students were different; all students could not be the same and not be good at everything.” The most exciting idea of Respondent 5 was that “students should be happy at school.” Thus, most Respondents evaluated students from the point of health, and academic performance, except Respondent 5 emphasized the idea of all students’ happiness.

4.5.3 *Methods Employed by Teachers*

All teachers were asked questions regarding the methods used in their lessons which they regarded as inclusive. All Respondents reported differentiation of various types. For example, Respondent 1 used “challenging exercises so they [students] can perceive double content and it would not be boring for them [students] to study with the other guys,” as well as Respondents 3 and 4 during the differentiation process of “mostly addressed more able students” and “gave various interesting tasks,” respectively. Moreover, Respondent 4 involved a parent in drawing attention “to his [student’s] health.” Respondent 2 used differentiation “to pair out less abled students with more abled ones.”

In addition, the very same Respondent employed scaffolding “to explain the same contents” and adjusted formative assessment. Respondent 2 noted, “In terms of outcomes, some students might prepare a presentation, write a short paragraph, or draw a picture. And this is one of the ways of differentiation”. Respondent 5 adopted differentiation on interests, “giving students the freedom to choose their favorite genre/music and tasks that were enjoyable for them to fulfill.” Furthermore, Respondent 5 posed as a caring figure, “listening to them [students], their problems, and concerns. I heard every student and helped them to figure them [problems/concerns] out”. One of the most interesting revelations was that Respondent 5 “did not follow standardized summative assessments for the unit (SAU) in various forms which could be exciting for them to fulfill.”

Thus, all respondents used differentiation but of various types. Respondents 2 and 3 had their focal points on more able students and Respondents 4 and 5 used engaging tasks to attract students’ attention. Respondent 4 involved a parent, while Respondent 5 took the psychologist role. Also, Respondent 5, as a teacher of a minor subject, developed SAU based on interests and abilities.

4.5.4 Factors Affecting Attitudes to IE

Four out of five teachers mentioned the lack of knowledge and the lack of training for teachers as factors affecting the implementation of inclusive education. Respondent 1 did not know “how to act in case of emergency and how to treat them [SEN] correctly.” The same teacher stated:

When teachers know, they could pick up the right words, and the right tone of their speaking so there could not be a trigger to evoke the disease or make them burst. As a teacher, I have a fear of not fulfilling my mission to teach students. Also, it [IE] is never discussed openly at school or university.

Respondent 4 revealed the exact information of “little information about inclusive education, where administration only talked about it but did not explain what it was as all the students were expected to have results above standard.” Respondents 3 and 5 admitted

that they did not know what it was. While respondent 5 stated that he had not heard about IE and thought that it was a job with disabled students (“I literally did not know how to work with them [students with disabilities], how to react if students had some issues in the lesson.”), Respondent 2 did not understand how it worked and the benefits all the participants had. Also, Respondent 2 stated there was no training for teachers who could “become eager to work with all students.” Another hindrance to implementing IE mentioned by most teachers was a lack of school equipment. Respondent 2 stressed that “they did not have equipment and opportunities for inclusive education and classrooms were not equipped with desks designed for handicapped students,” as well as Respondent 3. Respondent 4 noticed “there was enough equipment and staff to teach students with disabilities, which would be difficult to cover their special needs.” Also, Respondent 5 noted the lack of facilities as follows:

Generally, the school is not equipped well (no ramps, lifts, or special equipment for a wheelchair). Also, we do not have good equipment to listen to songs/music in the lesson. I have to bring my own speakers every time I have classes and need to listen to something. Smart boards are only in several classrooms, which are usually visited by a committee, so it makes it enable to watch a musical or video clip. A medical office is not equipped as well.

Respondent 5 also referred to the lack of special teachers, consultants, and special medical staff as a barrier to IE.

Moreover, three out of five teachers suggested that the curricula were not designed for teaching students with special needs (Respondents 2, 4, and 5). Respondent 4 stated, “there were no exact topics or units in the curriculum to help learners with disabilities or impairments to feel accepted in their community.” It is noted that the curricula were standardized, and everyone should have had similar outcomes (Respondent 5). 80% of respondents suggested that particular prejudice could be a barrier to implementing inclusive education (Respondents 2, 3, 4, and 5). Respondent 2 stated that:

Teachers, students, and parents were not open-minded. They [students] might laugh at these children [SEN] and children might be cruel toward each other. There could be bullying among children toward those children [students with disabilities]. Teachers might ignore them [students with disabilities].

Respondent 4 expressed a similar concern: “teachers and students with their parents could look down at children with disabilities, they could be bullied, or they could be left aside even being in the same classroom.” Respondent 3 added that there was a worry that such attitudes could “make these kids [students with disabilities] feel worse than if they studied at special institutions, to make them feel different in a negative connotation.”

Respondent 5 also reckoned as follows:

Inclusive education might be criticized by a general audience and parents of healthy students might be against the fact that their children studied in the same classroom as disabled ones. Also, invalids (handicapped people) might be bullied by healthy students.

Students themselves might become factors affecting teachers’ attitudes toward IE. Thus, Respondent 1 argued that “students who were mentally unhealthy could distract normal students from studying or threaten their well-being and successful development inside the school.” Respondent 4 agreed with the former and included, “they [SEN] could affect the atmosphere in the classroom and cause extra stress in case they had different problems with health, such as convulsive syndrome.” Moreover, there was a concern by Respondent 3 as follows:

We should include [into factors affecting teachers’ attitudes to IE] unwillingness of more able students to study together with disabled learners, bullying and other types of pressure, the additional workload for teachers, higher level of stress, consequently, lower level of teaching and academic results.

Apart from the extra workload for teachers, Respondent 4 noticed that such work was time- and energy-consuming and required much patience, which “is impossible for many educators.”

Such attitudes might arise from a society’s fixed mindset (Respondents 3, 4, and 5). Respondents presented that society was not ready for inclusive education (“their minds and

their mentality should fit the changes” (Respondent 2)). As Respondent 5 mentioned, “people resisted changes.” Also, the region itself posed a barrier as it was not ready to host people with special needs (“When the region was ready, we could start talking about inclusive education”) (Respondent 3). So, there were main factors affecting teachers’ attitudes toward IE that teachers mentioned, such as a lack of knowledge, a lack of training, the mentality of the society, and not equipped schools, which could be not only suitable for students with disabilities but also for all students (supplying with boards, smartboards, and speakers).

4.5.5 Recommendations About How Teachers’ Attitudes Toward IE Can Be Improved

Teachers gave recommendations to improve attitudes toward IE. All Respondents suggested organizing teachers’ training programs. First, all respondents suggested that for all teachers, it should be explained in detail what inclusive education was. There was a stereotypical impression regarding working with disabled students (Respondent 1). While Respondent 2 suggested “focusing more on research: reading articles, handbooks, or guidelines about that [IE], learning about methodology regarding inclusive education” and participating in “programs, seminars, or workshops,” Respondent 3 offered to organize “a compulsory teaching program at higher institutions so that it could give future teachers an insight into what inclusive education was.” Respondent 4, like Respondent 2, indicated the need to participate in courses or seminars about inclusive education and methods. Also, Respondent 4 proposed to have “real examples of how to implement inclusion.” Moreover, Respondent 1 indicated the importance of getting medical training (first-aid treatment), methodological recommendations, and practical tips:

Teachers should be trained in case of emergency. Teachers should be aware of how to help these students [students with disabilities] if they have attacks like a heart attack or panic attack. So, I think that teachers who are working with the SEN students should be trained specifically in very narrow fields so they can help in case of emergency. If I were trained, if I were aware, there would be no problem

teaching them. Also, some methodological recommendations and practical tips should be given.

Respondent 5 agreed with Respondent 1 about the necessity of general medical training and methods for inclusive education. One of the most interesting suggestions was made by Respondent 5 to revise the standardized educational system so that there were different expected outcomes. Another recommendation was proposed by Respondent 3, which was to set up mental check-ups for teachers to see whether teachers were mentally suitable. Respondent 2 was the one who offered the most ideas. It is proposed to develop teachers' flexibility by allowing students to use various ways to acquire knowledge:

Teachers should be more resilient, and they need to try to meet all students' needs. And we know that specifically less abled students need support from the teachers. But sometimes less abled students are more inspired and motivated by their peers and they can learn more from their peers than from their teachers. It means that we, teachers, need to give students opportunities to learn in various ways.

Another significant suggestion was discussing with other teachers and sharing their inclusiveness knowledge. Thus, collaboration might help to understand what IE is and how to apply it. Consequently, collaboration would lead to increased "awareness of those children [SEN] among parents and citizens of Kazakhstan towards inclusive education," as Respondent 2 reported. Furthermore, there should be parents' involvement together with the work with psychologists:

Parents need to build a good relationship with the school community as they know more about their children, about their needs. They should be involved in participating in the lessons and giving extra information about children's health, they might consult with specialists regarding their health. For example, psychologists. They might help teachers how to communicate with that kind of student [SEN] so that teachers understand what kind of activities should be used.

Thus, the principal teachers' recommendations were training of various types, a collaboration between teachers, teachers and parents, and parents and society, as well as revising the standardization of the educational process.

Overall, the results of the qualitative phase of the study showed that teachers mostly conceptualized IE as working with students with disabilities (medical approach), which could pose difficulties both for teachers (extra workload) and for students (bullying, labeling, and pressure). Regarding recommendations, teachers offered to organize training and collaboration to overcome their fears.

To conclude, a combination of the quantitative and qualitative phases of the study revealed that teachers at first were positive (survey results) toward inclusion until they reflected on their practices and defined students (interview results). Secondary school teachers needed more time to be ready to be a part of inclusive education. It was stated that students with severe disabilities should study at special schools. They also indicated the factors affecting teachers' attitudes toward inclusive education and what could be done to improve them. Hence, it could be concluded that teachers were favorable toward the idea of inclusive education, while in practice, there were not willing to do it.

4.6 Conclusion

Chapter four indicates the data collection results (online survey and semi-structural interviews). The main research questions, as well as sub-questions, have been responded to. The discussion of these results is introduced in the next chapter.

5. Chapter 5 Discussions

5.1 Introduction

This chapter discusses the results provided in the previous chapter. First, the purpose of the study and the research questions are restated, followed by a summary of the results. Then, a discussion of the results is presented. Every finding is illustrated concerning the observed literature and research questions. Finally, the summary of this chapter is stated.

5.2 Re-stating the Purpose of the Study in Relation to Research Questions

This research explored secondary school teachers' attitudes toward inclusive education in the Zhambyl region, Kazakhstan. To do that, it was necessary to identify which teacher-related factors influenced the teachers' attitudes toward IE as well as how teachers conceptualized inclusive education, and how teachers' attitudes toward inclusive education could be improved.

5.3 Summary of the Results

A combination of quantitative and qualitative results shows that respondents initially are more favorable toward inclusive education during the survey than during in-depth interviews. Thus, teachers possess positive attitudes toward the idea of inclusion while, in practice, they are not ready to support students with special needs in their classrooms (some should be segregated in special schools), indicating factors affecting attitudes toward IE. Until they are erased, teachers are cautious toward IE. Moreover, there are three key findings related to the sub-questions and a mixture of the quantitative and qualitative stages of the study. First, it is revealed that teacher-related factors such as age, gender, years of experience, and the taught subject impact teachers' attitudes (apart from the level of education). The second finding demonstrates that secondary school teachers

conceptualize inclusive education regarding impairments and disabilities. Third, there are recommendations given to improve teachers' attitudes.

5.4 Discussion of the Results

The discussion of the results is arranged in the following way. Qualitative findings about factors affecting teachers' attitudes toward IE are considered in connection to the conceptual framework. After that, the quantitative findings regarding teacher-related factors influencing teachers' attitudes are stated. The next sub-chapter is built on the qualitative data regarding the concept of inclusive education, followed by recommendations given by teachers to improve attitudes toward IE.

5.4.1 Discussion of Conceptual Framework

The conceptual framework is connected to this study's main question, which is what secondary school teachers' attitudes toward inclusive education in the Zhambyl region are. This subchapter employs findings from both quantitative (Descriptive Statistics of Secondary School Teachers' Attitudes Toward IE) and qualitative parts of the study (Factors Affecting Attitudes to IE Theme). The first finding is that most respondents hold positive views toward inclusive education. However, teachers are not ready to implement it in their classrooms, and they rather separate some students into special organizations. This result represents the statement of Yussupova and Issabayev (2021) that "even though most of the teachers responded positively about their viewpoint, they did not show their support for including all students with SEN into mainstream schools" (p.82) and, as a result, students with disabilities ought to be selected paying attention to their disabilities and capabilities to study. It is also consistent with the results of Agavelyan et al. (2020), who stated that despite positive attitudes, teachers are "critical of the idea of inclusion" (p.16), especially regarding developing an individual curriculum and working with students with severe disorders. The finding further supports this idea that curricula are not designed for

the work with SEN. This finding also reveals that teachers in the Zhambyl region are unwilling to have an extra workload, as it is time and energy-consuming. Such beliefs lead to a negative attitude toward IE (Monteiro et al., 2018). This might be explained by the idea that teachers generally express positive attitudes toward IE until they are involved in real-life communication with SEN (Avramidis & Norwich, 2002; Jury et al., 2021). The finding reports that teachers are unaware of how to deal with students with special needs and what benefits inclusion might bring. It aligns with the statement of Avramidis and Norwich (2002) that teachers should be certain about how to cover special needs.

Teachers' views might be affected by factors revealed during the study. First, the research shows that prejudice, which arises from a mentality or fixed mindset, neglects students with disabilities. This result demonstrates research that stereotypes cause exclusion for students with disabilities (Butakor et al., 2020; Nam, 2021; Saloviita, 2019). In contrast, Sharma et al. (2014) and Dorji et al. (2021) presented that teachers' beliefs lead to positive attitudes toward SEN. Furthermore, one more finding indicates that the region [the Zhambyl region] is not ready to accommodate inclusion. Even though there is no direct literature stating the unpreparedness of the site, Agavelyan et al. (2020) stated that teachers' backgrounds are important when indicating attitudes toward IE. It can be explained that the Zhambyl region consists of cities and villages. While teachers from rural areas have more positive attitudes, urban citizens are more negative (Agavelyan et al., 2020). Next, it is interesting that all teachers indicate a lack of knowledge and a lack of training as the main factors toward negative attitudes (Cooc, 2019; Orynassarova, 2017; Rollan, 2021; Yussupova & Issabayev, 2021). Our findings highlight that it should be general knowledge about inclusion and the type of disability and related professional development, including workshops, courses, and seminars. It is stated that collaboration (an informal form of professional development) might influence the positive attitude

toward IE (Cooc, 2019; Makoelle, 2014). However, our finding reveals a lack of collaboration among teachers and other stakeholders. The interpretation of this finding is that through collaboration, teachers share their fears and concerns regarding inclusive education as well as share methods they use to teach students with special needs, which, in turn, affects teachers' attitudes in a more positive way, which is linked to the statement of Makoelle (2014) that collaboration alters the perception of IE into a more positive way. Also, we obtain evidence that teachers partially imply inclusive methodology in their classroom using scaffolding, different types of differentiation, and alterations of formative and summative assessments for the unit. This applies to the literature of Jenson (2018) and Kaplan and Lewis (2013), which states that teachers' attitudes depend on their ability to accommodate teaching materials for students' needs. Another factor affecting attitudes revealed during the study is a lack of equipment, not only specialized but also classroom tools such as boards and speakers. It aligns with the statement of Sharma et.al (2018) that the absence of basic equipment influences teachers' positive attitudes toward SEN. Moreover, during the study, it has been admitted that a lack of staff represented not only by special teachers and consultants but also by medical staff hinders a positive attitude toward IE. Ghouri et al. (2010) pointed out that without a proper size of staff, it is impossible to respond to students' needs which leads to a negative attitude toward inclusion.

Generally, teachers in the Zhambyl region hold positive attitudes toward inclusive education until they think in-depth about its implementation. It means there are factors, such as teachers' personal beliefs and prejudice, area of living, a lack of knowledge and training, a lack of equipment and staff, and standardized curricula, which affect teachers' attitudes toward IE. If these factors are covered, teachers gain more confidence and favor inclusive education. Confidence leads to self-efficacy, which means having positive beliefs (Harris, n.d.; Saloviita, 2020; Urton et al., 2014; Yada et al., 2018).

5.4.2 Discussion of Teacher-related Factors Affecting Teachers' Attitudes

This subsection discusses the results regarding teacher-related factors influencing teachers' attitudes which is the answer to the first subsidiary question in the study with the same name. This subchapter uses data from the quantitative stage of the study (Teacher-related factors influencing the teachers' attitudes toward IE). The first teacher-related factor is gender. The study reveals that male teachers hold negative views toward inclusion. These findings have been revealed while conducting the quantitative part of the study during a series of crosstabulations, including chi-square tests.

Regarding female teachers' attitudes, it is revealed that women maintain both positive and negative attitudes in parity. This finding aligns with the results of Ahmmed et al. (2014) (as cited in Saloviita, 2020), Avramamidis et al. (2000), and Butakor et al. (2020) who state that men do not have a natural impulse for caring, while women do. However, in Western Asia, men are more favorable toward inclusive education than women (Agavelyan et al., 2020; Dorji et al., 2021; Rakap & Kaczmarek, 2010; Sharma et al., 2014). While Dorji et al. (2021) mentioned that in these countries, teachers are primarily women and men do not know what it is like working with students with special needs, Agavelyan et al. (2020) commented that in Kazakhstan, male teachers are PE teachers who care about students' welfare. Moreover, there is an opinion that gender does not affect teachers' attitudes toward inclusive education (Sagandykova, 2020; Saloviita, 2020).

The next factor relating to teachers is age. In this thesis, the author has divided age categories from the chapter Results into three categories: young teachers (under 25), middle-aged teachers (26 – 39 years old), and older teachers (40 +). The result shows that young teachers are almost equally positive and negative toward inclusive education. This finding partially correlates with Saloviita's report (2020), where young educators are

somewhat positive toward IE. Yada et al. (2018) explained that inclusion is a new branch of education. The course is incorporated into their curriculum, while Štemberger and Kiswarday (2017) stated that young teachers need positive reinforcement for positive attitudes. If there is no encouragement, attitudes turn negative. It is also partially consistent with Ahmmed et al.'s (2014) finding that younger professionals hold positive views (as cited in Saloviita, 2020).

Moreover, it is found that older teachers hold positive attitudes toward inclusive education. This finding is confirmed by Sagandykova's (2020) result, which stated that older teachers have had more practice than the younger generation. However, several scientists (Avramamidis et al., 2000; Butakor et al., 2020; Saloviita, 2020) claimed that older teachers have negative attitudes toward IE due to their lack of experience. Regarding middle-aged teachers, the finding uncovers that this category of educators holds negative attitudes toward IE. Rakap and Kaczmarek (2010) mentioned this result, explaining that young teachers are newly trained, and older teachers have more practice. Another research admits there is no correlation between age and its effect on teachers' attitudes. Bukayeva (2020) stated that educators have positive views despite their age.

The third factor relates to the subject that teachers teach. It is stated that teachers' attitudes depend on the subject they lecture on. This finding shows that language teachers (Kazakh, Russian, and English) hold positive attitudes, while the Arts and science teachers express negative ones toward inclusive education. This result aligns with the ideas of Saloviita (2020), who claim that attitudes differ depending on the taught subjects. However, the same author revealed that subject teachers want to concentrate only on their subjects, thus showing negative attitudes. The finding is supported by Yussupova and Issabayev (2021), reporting that students with special educational needs are deprived of teachers' attention and do not memorize the necessary content.

Moreover, Saloviita (2020) mentioned that special educators show positive attitudes. However, Makhmudayeva (2016) opposed this idea, stating that mainstream schools lack equipment and staff. Unfortunately, no special education teachers conducted the survey, so no relevant information exists. However, such factors as under-equipment and understaffing have been mentioned by respondents and considered in a discussion of the conceptual framework subchapter.

Another factor associated with teachers is working experience. In order to compare the findings with relevant literature, the author organizes the results as follows: the least experience is regarded from 0 – 2 years, average experience varies from 3 to 13 years, and the most experience – over 14 years. The finding reveals that both the least experienced and the most experienced teachers hold positive attitudes toward inclusive education. This result correlates with the ideas of Rakap and Kaczmarek (2010) and Sagandykova (2020), who claimed that teachers with no experience have been recently trained at educational institutions, while the most experienced ones have gained enough practice and experience to work with students. However, this idea is contradicted, describing that the more experienced teachers become, the less favorable their attitudes may turn as teachers realize the hard work they need to fulfill (Costello & Boyle, 2013; Štemberger & Kiswarday, 2017).

Furthermore, the finding shows that teachers with a medium amount of experience express mainly negative attitudes, which can be connected to the finding by Rakap and Kaczmarek (2010). They stated that teachers with average experience do not have fresh knowledge as novice teachers (they might not get knowledge regarding IE) and need more expertise. Another point of view states that experience does not affect teachers' attitudes, as educators hold positive views despite their experience (Bukayeva, 2020).

Finally, the level of education is the last factor relating to teachers. The finding indicates that the level of education does not affect teachers' attitudes. It correlates to Chzhen's (2016) statement, which reported that despite educational background, teachers lack knowledge about inclusive education. This ignorance leads to negative attitudes. Any other relevant literature to support the finding has not been detected.

It can be concluded that gender is a factor that fluctuates depending on the demographic data of the area, country, or region. In the Zhambyl region, more female secondary education teachers than their male counterparts (World Bank, 2020). Thus, gender is not a reliable factor that affects teachers' attitudes. In addition, the educational background does not influence teachers' attitudes. However, the taught subject is vital in building teachers' attitudes. It might be explained that language teachers may vary their techniques in teaching students with special needs, while science subjects require precision and rigor, and the Arts teachers might be concerned with maintaining safety measures in the classroom with students with special needs. Also, it can be noted that special educators favor inclusion as they are experts in their fields. The only thing that might fear them is not having appropriate facilities and a team.

Moreover, accompanying age category factors (university training and practice) affect teachers' attitudes. Thus, age is a factor that influences teachers' attitudes. Regarding teachers' experience, the more experienced educators get, the more knowledgeable they become, which results in positive attitudes. Educators with little experience hold positive views due to the education they get and the enthusiasm they have to work with students. Educators with average experience are against inclusion as they are under-educated and under-experienced.

5.4.3 Discussion of the Concept of Inclusive Education

This subchapter responds to the second subsidiary question of how teachers conceptualize inclusive education. This subchapter will include a discussion of the findings of the qualitative part of the study concerning the literature. Three themes derived from the qualitative study (The Concept of Inclusive Education, How Respondents Define Students, and Methods Employed by Teachers) are used to conceptualize inclusive education. The first finding is that the concept of inclusive education is extensive. Hernández-Torrano et al. (2020) supported the idea that inclusive education is comprehended in various ways. The finding obtained during the study reveals that inclusive education is defined as problems connected to physical and mental health. It means that inclusion is seen in working with disabled students and students with various impairments, disorders, and learning abilities in one environment. This statement is aligned with the narrow definition of inclusive education, which is to work with students with disabilities who need extra care and vulnerable students (Haug, 2017; Schuelka, 2018; Somerton et al., 2020). Also, Haug (2017) and Helmer et al. (2020) mentioned that such work looks like integration (which is usually perceived as inclusion). At the same time, the finding reveals not only narrowing the definition and labeling by disabilities but also giving students labels based on their learning abilities. This result correlates with the finding by Lauchlan and Boyle (2020), stating that labeling is the reason for low self-esteem which negatively affects students' demeanor and study achievements. However, two respondents out of five referred to the global concept of IE, which includes equal opportunities, focus on strength, modifications for success, and adaptations for real-life learning. This finding is partially aligned with the international concept of inclusion, which includes education for all despite their gender, age, abilities, disabilities, ethnicity, and giftedness, aimed to eliminate barriers (Azorín &

Ainscow, 2018; Mahat, 2008; Rollan & Somerton, 2021; UNESCO, 1994; UNESCO, 2000).

Another finding shows that inclusion means valuing diversity and assuring students' happiness in mainstream schools. This idea moderately relates to Goodall's statement that it is necessary for students to be unique, valued, and happy (Goodall, 2020). It means that teachers try to cover students' needs, thus, eliminating hindrances to students' achievements (Makoelle & Burmistrova, 2021). To do that, teachers see inclusive education as implementing various approaches, such as differentiation, challenging and exciting tasks, scaffolding, and alterations of summative assessments in the classroom. While Rapp and Granados (2021) confirmed that IE is an exercise that includes every learner in the process of education, Makoelle and Burmistrova (2021) partly supported the finding stating that inclusion is a process including not only SAU adaptations but also curricula and teaching methods. Also, Makoelle (2020b) claimed that differentiation and individual approaches build equity in the classroom. Another finding reveals that inclusive education is an individual approach to responding to students' needs. Respondents involve parents and take the role of psychologists to understand their students better and try to help them succeed. This finding relates to Slee's (2019) statement that IE is an educational methodology that helps respond to all students' needs.

Considering everything, we can conclude that inclusive education in the Zhambyl region mostly correlates with disabilities, disorders, impairments, and labels, which refers to the medical model of inclusion (UNESCO, UNICEF, the World Bank, and OECD, 2021). However, in practice, teachers see inclusive education as a methodology applying various techniques and individual approaches to respond to students' needs, including all students in educational barriers, and make them feel happy at school.

5.4.4 Discussion of Recommendations for Improving Teachers' Attitudes Toward

Inclusive Education

This subchapter responds to the third subsidiary question of improving teachers' attitudes toward inclusive education. It discusses recommendations for improving teachers' attitudes toward inclusive education in relation to the literature. The theme (Recommendations for Improving Teachers' Attitudes Toward Inclusive Education) is derived from the data from the qualitative part of the study.

The main finding shows the necessity of diverse training programs. First, teachers recommend implementing obligatory teaching programs at universities so young educators can work with students with special needs. Orynassarova (2017) reported that teachers hold negative attitudes toward inclusive education due to the deficiency of such programs. Moreover, educators state the need to have PD courses and medical training to know how to deal with SEN. This idea aligns with Orynassarova's (2017) statement that a low level of teacher training also leads to negative attitudes toward inclusion. Cooc (2019) added that awareness of specific disabilities teaches educators how to adjust materials for their students' needs.

Regarding professional development, several scientists noted that it develops self-efficacy, which is crucial for implementing inclusive education (Saloviita, 2020; Urton et al., 2014; Yada et al., 2018). The next recommendation is to collaborate. The finding reveals a need for collaboration between teachers and parents, psychologists, and the area's general population. Such interactions allow knowing more about inclusion, various specialties of SEN, and health issues, which help to accommodate learning materials and find necessary approaches. Makoelle (2014) confirmed that collaboration leads to deep analysis of own practice and reinterpretation of inclusive education. Finally, revision of the standardized program is recommended. Even though educators try to respond to students'

needs by accommodating materials and approaches, the educational system is standardized and expects the same outcomes from every student. This aligns with the ideas of Slee (2019) and Makoelle (2020a), who mentioned the necessity of individual adjustment of programs and individual approaches. It can be understood that there is an urgency to accommodate educational programs to the needs of students.

Thus, three main recommendations are teacher training, collaboration, and the opportunity to adjust the educational program. As a result, teachers learn and implement techniques and methods necessary for inclusive education to bloom.

5.5 Conclusion

This chapter contains the speculations of the findings regarding the literature. The subchapters are built to answer the main and subsidiary questions. The next chapter will contain a conclusion, limitations, and recommendations for further study.

6. Chapter 6 Conclusions

6.1 Introduction

Chapter 6 of this thesis outlines the study, starting with a restatement of the purpose and objectives. This is followed by a summary of significant findings, which leads to an exploration of recommendations and limitations. Ultimately, future research directions are mentioned to explore further areas of interest.

6.2 Restating the Purpose of the Study and its Objectives

The study aimed to explore secondary school teachers' attitudes toward inclusive education in the Zhambyl region. For that purpose, two-phase research was carried out among secondary school teachers of the Zhambyl region. In the first stage, we identified teachers' general attitudes toward inclusive education and the impact of factors related to teachers on it. After that, in the second stage, the concept of inclusive education was established, followed by recommendations to improve teachers' attitudes toward inclusive education. The gathered information addresses the central question of exploring secondary school teachers' attitudes.

6.3 Summary of the Major Findings

In the Zhambyl region, secondary school teachers initially hold positive attitudes toward inclusive education. However, this positivity can be weakened by various factors related to their personal beliefs, lack of knowledge, and training, inappropriate resources, and standardized curricula. However, when these challenges are addressed, teachers gain confidence and become more favorable toward inclusive education. The increase in self-efficacy, characterized as teachers' beliefs in their abilities to cover all students' needs, can be connected to attitude alteration. This self-efficacy can help teachers overcome initial doubts or fears and fully embrace inclusive education.

Moreover, gender does not seem to impact teachers' attitudes significantly since there are more female secondary education teachers than males. Additionally, the educational background does not impact teachers' attitudes, but the subject they teach plays an essential role. For instance, language teachers may use different techniques to teach students with special needs than science teachers who require precision and rigor. Furthermore, special educators are more likely to favor inclusion because they are experts in their field, and what worries them is the lack of proper facilities and support. Age is another factor that influences teachers' attitudes toward inclusive education. More experienced teachers tend to have a more positive attitude towards inclusive education since they have gained more knowledge and skills. In contrast, educators with little experience hold positive views because of their enthusiasm and the education they receive. However, teachers with average experience may be against inclusive education because they need more training and experience to handle students with diverse needs effectively. It is interesting to note that there needs to be more consistency between inclusive education conceptual understanding in the Zhambyl region and its practical implementation.

Inclusive education has long been approached from a medical perspective, where disabilities, disorders, and impairments are categorized first before addressing individual students' needs. However, educators are now implementing a more practical and inclusive approach to accommodate all students regardless of their labels or diagnostic categories. This progressive shift aligns with the recent push for greater emphasis on creating socially responsive learning environments.

The shift towards a social model of inclusion finds expression in the individualized approaches teachers in the Zhambyl region implements in their practice. Teachers recommend teacher training, collaboration, and flexibility to adjust educational programs to promote inclusive education. Providing educators with relevant skills and knowledge to

support diverse learners through training on teaching strategies, accommodations, and modifications would enhance their ability to respond to different needs. Facilitating sharing of knowledge and resources amongst educators is critical in supporting an inclusive model. Fostering a collaborative environment among educators, parents, community members, and psychologists is an essential aspect of ensuring that diverse learners thrive in academic settings. Sharing ideas and practices during regular meetings can gain valuable knowledge regarding best practices catered toward individualized learning strategies. Adjustment of the educational program could be essential to ensure that the needs of diverse learners are met. This could include adapting the curriculum, providing additional support, or offering alternative methods of summative assessments to ensure that all students have the opportunity to succeed.

6.4 Recommendations

There are several recommendations based on the conclusions drawn from the study, which are intended for policymakers and school leaders in the Zhambyl region.

The first recommendation for school administration is to promote collaboration at schools. Collaboration between teachers, administration, legal guardians/parents, and other stakeholders can help to create a supportive and inclusive environment. This can involve regular meetings or professional development opportunities where teachers can share their experiences and learn from each another. Another recommendation is to organize teacher training. Providing teachers with training on inclusive education strategies and techniques can help them develop the skills and knowledge needed to effectively support diverse learners in their classrooms.

Regarding recommendations for policymakers, it is necessary to grant access to resources. Ensuring schools access the necessary resources and support can create a more inclusive learning environment. This can include technology, equipment, and additional

staff, such as special education teachers. Furthermore, there is a need to revise the standardized curriculum. This can include adapting the curriculum to meet individual learning styles, providing alternative assessment methods, and offering additional support. Providing flexibility in the curriculum can help accommodate the diverse learning needs of students.

An inclusive learning environment that meets the requirements of every student can be created with the help of policymakers and administrators implementing these recommendations.

6.5 Limitations

There are several limitations existed within this study that should be considered. First, the researchers used a small sample size in both study phases. However, it is essential to note that time has limited the ability to include a larger sample. While 104 teachers are allowable, it may only represent some secondary school teachers in the Zhambyl region, which could impact the generalizability of the findings. Moreover, primarily English teachers were interviewed during the second phase of the research (interviews). The findings may not generalize to teachers of other subjects. English teachers hold different perspectives and experiences than those teaching other subjects, which could limit the findings. Additionally, the study did not explore the perspectives of special education teachers, who may have provided valuable insights into the challenges and opportunities for inclusive education in the Zhambyl region.

6.6 Areas for Future Research

Further research in inclusive education in the Zhambyl region should consider the study's limitations. First, a larger sample size with an expanded range of participants, including students, parents, and special education teachers, would provide a deeper understanding of potential challenges and opportunities to promote inclusive education in

Kazakhstan. Increasing sample sizes could also increase the reliability and generalizability of results. It is essential to comprehend educators' perspectives about inclusive educational practices for creating an inclusive society. Cultural influences play a significant role in making individuals who they are, particularly when forming and implementing opinions about such topics as inclusion in schools. Therefore, further analysis should investigate how cultural aspects affect educators' thoughts and behaviors related to inclusive education.

6.7 Conclusion

The sixth chapter summarizes the findings and discussion chapters while acknowledging limitations. As a result, recommendations for the stakeholders and areas for further study have been stated.

Overall, the study provides data on teachers' attitudes toward inclusive education in the Zhambyl region, emphasizing the importance of addressing factors that impact inclusive education practices. The study aims to improve students' opportunities for success and development within a more inclusive education system and society.

References

- Agavelyan, R., Aubakirova, S., Zhomartova, A., Burdina E. (2020). Teachers' Attitudes towards Inclusive Education in Kazakhstan. *Integration of Education*, 24(1), 8-19.
<https://doi.org/10.15507/1991-9468.098.024.202001.008-019>
- Avramidis, E. & Norwich, B. (2002). "Teachers' Attitudes Towards Integration / Inclusion: A Review of the Literature." *European Journal of Special Needs Education*, 17, 129–147. <http://doi.org/10.1080/08856250210129056>
- Azorín, C. & Ainscow, M. (2018). Guiding schools on their journey towards inclusion, *International Journal of Inclusive Education*, 1-19,
<https://doi.org/10.1080/13603116.2018.1450900>
- Bukayeva, M. (2020). *Attitudes of kindergarten teachers towards inclusion of the children with special educational needs in Nur-Sultan*. [Master's dissertation, Nazarbayev University Graduate School of Education]. NU Repository.
<https://nur.nu.edu.kz/bitstream/handle/123456789/4881/ATTITUDES%20OF%20KINDERGARTEN%20TEACHERS.pdf?sequence=4&isAllowed=y>
- Butakor, P. & Ampadu, E. & Suleiman, S. (2018). Analysis of Ghanaian teachers' attitudes toward inclusive education. *International Journal of Inclusive Education*, 24, 1-16. <https://doi.org/10.1080/13603116.2018.1512661>
- Cambridge (n.d.). Attitude. In Dictionary.Cambridge.org online dictionary. Retrieved June 20, 2022, from <https://dictionary.cambridge.org/dictionary/english/attitude>
- Cate, I., Markova, M., Krischler, M., & Krolak-Schwerdt, S. (2018). Promoting Inclusive Education: The Role of Teachers' Competence and Attitudes. *Insights into Learning Disabilities*, 15(1), 49-63.

- Chandra, Y. & Shang, L. (2019). Inductive Coding. Y.Chandra & L. Shang, *Qualitative Research Using R: A Systematic Approach* (pp.91-106). Springer.
https://doi.org/10.1007/978-981-13-3170-1_8
- Chzhen, I. (2016). Podgotovka Pedagogov Shkol I Doshkolnykh Uchrezhdeniy K Rabote V Inklyuzivnoy Obrazovatelnoy Srede V Ramkakh Proekta “Doshkolnoe Obrazovaniye V Kyrgyzskoy Respublike” [Preparation Of School Teachers And Preschool Institutions To Work In An Inclusive Educational Environment Within The Framework Project "Preschool Education In Kyrgyz Republic"]. *Vestnik KRSU*, 16(8), 154 – 158.
- Collins (n.d.). Secondary School. In Collins Online Dictionary. com. Retrieved March, 1, 2023, from <https://www.collinsdictionary.com/dictionary/english/secondary-school>
- Collins (n.d.). Teacher. In Collins Online Dictionary. com. Retrieved May 18, 2022, from <https://www.collinsdictionary.com/dictionary/english/teacher>
- Cooc, N. (2019). Teaching students with special needs: International trends in school capacity and the need for teacher professional development. *Teaching and Teacher Education*, 83, 27 – 41. <https://doi.org/10.1016/j.tate.2019.03.021>
- Costello, S. & Boyle, C. (2013). Pre-service Secondary Teachers’ Attitudes Towards Inclusive Education. *Australian Journal of Teacher Education*, 38 (4), <https://doi.org/10.14221/ajte.2013v38n4.8>
- Creswell, J. W. (2014). Mixed Methods Design. *Research design: Qualitative, quantitative, and mixed methods approaches*. Pearson education, Sage publications,.4th edition. University of Nebraska- Lincoln.
- Dorji, R., Bailey, J., Paterson D., Graham, L. & Miller, J. (2021). Bhutanese teachers’ attitudes towards inclusive education, *International Journal of Inclusive Education*, 25(5), 545-564. <https://doi.org/10.1080/13603116.2018.1563645>

- Engelbrecht, P., Nel, M., Nel, N., & Tlale, L. (2015). Enacting understanding of inclusion in complex contexts: Classroom practices of South African teachers. *South African Journal of Education*, 35. <https://doi.org/10.15700/saje.v35n3a1074>
- Forlin, C. & Chambers, D. (2011). Teacher preparation for inclusive education: Increasing knowledge but raising concerns. *Asia-Pacific Journal of Teacher Education*, 39, 17-32. <https://doi.org/10.1080/1359866X.2010.540850>
- Fusch, P., Fusch, G. & Ness, L. (2018). Denzin's Paradigm Shift: Revisiting Triangulation in Qualitative Research. *Journal of Social Change*, 10. <https://doi.org/10.5590/JOSC.2018.10.1.02>
- Ghouri, A., Abrar, N. & Baloch, A. (2010). Attitude of Secondary Schools' Principals & Teachers Toward Inclusive Education: Evidence from Karachi, Pakistan. *European Journal of Social Sciences*, 15(4). https://www.researchgate.net/profile/Arsalan-Ghouri-2/publication/255698585_Attitude_of_Secondary_Schools'_Principles_Teachers_Toward_Inclusive_Education_Evidence_from_Karachi_Pakistan/links/571fb10508aefa64889a8173/Attitude-of-Secondary-Schools-Principles-Teachers-Toward-Inclusive-Education-Evidence-from-Karachi-Pakistan.pdf
- Goodall, C. (2020). Inclusion is a feeling, not a place: a qualitative study exploring autistic young people's conceptualizations of inclusion. *International Journal of Inclusive Education*, 24(12), 1285-1310. <https://doi.org/10.1080/13603116.2018.1523475>
- Harris, N. (n.d.). *Confidence versus Self-efficacy*. La Trobe University Webpage. <https://www.latrobe.edu.au/nest/confidence-versus-self-efficacy/>
- Haug, P. (2017). Understanding Inclusive Education: Ideas and Reality. *Scandinavian Journal of Disability*, 19(3), 206-217. <https://doi.org/10.1080/15017419.2016.1224778>

- Helmer, J., Kasa, R., Somerton, M., Makoelle, T. & Hernández-Torrano, D. (2020).
Planting The Seeds For Inclusive Education: One Resource Centre At A Time.
International Journal of Inclusive Education, 1 -17.
<https://doi.org/10.1080/13603116.2020.1864791>
- Hernández-Torrano, D., Somerton, M., and Helmer, J. (2020). Mapping Research on
Inclusive Education Since Salamanca Statement: a Bibliometric Review of the
Literature Over 25 Years. *International Journal of Inclusive Education*, 1–20.
<https://doi.org/10.1080/13603116.2020.1747555>
- Hutzler, Y., Meier, S., Reuker, S. & Zitomer, M. (2019). Attitudes and self-efficacy of
physical education teachers toward inclusion of children with disabilities: a
narrative review of international literature. *Physical Education and Sport
Pedagogy*, 24(3), 249-266. <https://doi.org/10.1080/17408989.2019.1571183>
- Iarskaia-Smirnova, E. & Goriainova, A. (2021). Inclusive Education in Today's Russia:
Room for Manoeuvre, *Europe-Asia Studies*, 74(3), 426 – 448.
<https://doi.org/10.1080/09668136.2021.1918062>
- Information-analytical Center (2020). Natsionalnyi Sbornik: Statistika Sistem
Obrazovaniya Respubliki Kazakhstan [National Compendium: Education System
Statistics of the Republic of Kazakhstan].
- Information-analytical Center of the Ministry of Education and Science of the Republic of
Kazakhstan (2021). *The National Report on the State and Development of the
Education System of the Republic of Kazakhstan (short version as of 2020)*.
- Jain, V. (2014). 3D Model of Attitude. *International Journal of Advanced Research in
Management and Social Sciences*, 3(3), 1-12.
- Jenson, K. (2018). A Global Perspective on Teacher Attitudes towards Inclusion:
Literature Review.

- Jury, M., Perrin, A., Rohmer O., & Desombre, C. (2021). Attitudes Toward Inclusive Education: An Exploration of the Interaction Between Teachers' Status and Students' Type of Disability Within the French Context. *Frontiers in Education*, 6. <https://doi.org/10.3389/feduc.2021.655356>
- Kaplan, I. & Lewis, I. (2013). Promoting Inclusive Teacher Education Methodology. Advocacy Guide 5: Methodology. Retrieved from https://teachertaskforce.org/sites/default/files/migrate_default_content_files/methodology_1.pdf
- Kaushik, V., & Walsh, C. A. (2019). Pragmatism as a Research Paradigm and Its Implications for Social Work Research. *Social Sciences*, 8, 1-17. <https://doi.org/10.3390/socsci8090255>
- Kazakhstan (2007). "The Law on Education". *Ministry of Education and Science*. https://online.zakon.kz/document/?doc_id=30118747
- Kozulin, A., & Gindis, B. (2007). Sociocultural theory and education of children with special needs: From defectology to remedial pedagogy. *The Cambridge companion to Vygotsky*, 332-362.
- Krischler, M. & Cate, I. (2020). Inclusive education in Luxembourg: implicit and explicit attitudes toward inclusion and students with special educational needs, *International Journal of Inclusive Education*, 24(6), 597-615. <https://doi.org/10.1080/13603116.2018.1474954>
- Lauchlan, F. & Boyle, C. (2020). Labeling and Inclusive Education. *In Oxford Research Encyclopedia of Education*. Ed. Umesh Sharma. New York: Oxford University Press. <https://doi.org/10.1093/acrefore/9780190264093.013.1021>
- Lautenbach, F., & Antoniewicz, F. (2018). Ambivalent implicit attitudes towards inclusion in preservice PE teachers: The need for assessing both implicit and explicit

- attitudes towards inclusion. *Teaching and Teacher Education*, 72, 24–32.
<https://doi.org/10.1016/j.tate.2018.01.003>
- Leavy, P. (2017). *Research Design: Quantitative, Qualitative, Mixed Methods, Arts-Based, and Community-Based Participatory Research Approaches*. The Guilford Press.
<https://doi.org/10.1111/fcsr.12276>
- Louangrath, P. (2017). Minimum Sample Size Method Based on Survey Scales. *International Journal of Research & Methodology in Social Science*, 3(3), 44 - 52.
<https://doi.org/10.5281/zenodo.1322593>
- Lüke, T., & Grosche, M. (2017). Implicitly measuring attitudes towards inclusive education: a new attitude test based on single-target implicit associations. *European Journal of Special Needs Education*, 33, 1–10.
<https://doi.org/10.6084/m9.figshare.4595284>
- Mahat, M. (2008). The development of a psychometrically-sound instrument to measure teachers' multidimensional attitudes toward inclusive education. *International Journal of Special Education*, 23(1), 82-92.
- Makhmudayeva, S. (2016). Secondary school ESL teachers' attitudes, understandings and concerns about implementation of inclusive education in Kazakhstan [Master's dissertation, Charles University Department of Special Education]. CU Digital Repository. <https://dspace.cuni.cz/handle/20.500.11956/1714>
- Makoelle, T. (2014). Changing Teacher Beliefs and Attitudes towards Inclusion in South Africa: Lessons from Collaborative Action Research. *Journal of Social Sciences*, 38(2), 125-134. <https://doi.org/10.1080/09718923.2014.11893242>
- Makoelle, T. (2020a). Language, Terminology, and Inclusive Education: A Case of Kazakhstani Transition to Inclusion. *Sage Open* 10(1).
<https://doi.org/10.1177/2158244020902089>

- Makoelle, T. (2020b). Schools' Transition Toward Inclusive Education in Post-Soviet Countries: Selected Cases in Kazakhstan. *Sage Open* 10(2).
<https://doi.org/10.1177/2158244020926586>
- Makoelle, T. & Burmistrova, V. (2021). Teacher education and inclusive education in Kazakhstan, *International Journal of Inclusive Education*.
<https://doi.org/10.1080/13603116.2021.1889048>
- Monteiro, E., Kuok, A., Correia, A., Forlin, Ch. & Teixeira, V. (2018). Perceived efficacy of teachers in Macao and their alacrity to engage with inclusive education. *International Journal of Inclusive Education*, 23(1), 93-108.
<https://doi.org/10.1080/13603116.2018.1514762>
- Muijs, D. (2004a). Introduction to SPSS and the dataset. D. Muijs, *Doing quantitative research in education using SPSS* (pp. 85-90). Thousand Oaks, CA: Sage
- Muijs, D. (2004b). Experimental and quasi-experimental research designs. D. Muijs, *Doing quantitative research in education using SPSS* (pp. 13-33). Thousand Oaks, CA: Sage
- Naderifar, M., Goli, H. & Ghaljaei, F. (2017). Snowball Sampling: A Purposeful Method of Sampling in Qualitative Research. *Strides in Development of Medical Education*, 14(3), 1 – 6. <https://doi.org/10.5812/sdme.67670>
- Nam, G. (2021). *Inclusive education for children and young people with disabilities in Uzbekistan: The perspectives and experiences of key players*. [Thesis, Doctor of Philosophy (Ph.D.), The University of Waikato].
<https://hdl.handle.net/10289/14106>
- National Centre for Research and Practice of Correctional Pedagogy, (n.d.). Normativno-pravovaya baza specialnogo i inkluzivnogo obrazovaniya [Regulatory and

- legislative framework for special and inclusive education]. <http://special-edu.kz/normativno-pravovaya%20baza/4/mat001.pdf>
- Orynbassarova, D. (2017). A Comparative Study of Teacher Attitudes Toward Inclusion in Kazakhstan and Turkey: A Literature Review. Eurasian Research Institute for Social and Cultural Studies. <http://eurasian-research.org>
- Oxford (n.d.). Pragmatism. In Dictionary. oxford learners' dictionaries.com online dictionary. Retrieved February 15, 2023, from <https://www.oxfordlearnersdictionaries.com/definition/english/pragmatism?q=pragmatism>
- Passeka Ye., & Somerton M. (2022). Bridging the gap: special educators' perceptions of their professional roles in supporting inclusive education in Kazakhstan. *Disability & Society*. 1-23. <https://doi.org/10.1080/09687599.2022.2160925>
- Rakap, S. & Kaczmarek, L. (2010) Teachers' attitudes towards inclusion in Turkey. *European Journal of Special Needs Education*, 25(1), 59-75. <http://doi.org/10.1080/08856250903450848>
- Rapp, A. & Granados, C. (2021). Understanding inclusive education – a theoretical contribution from system theory and the constructionist perspective. *International Journal of Inclusive Education*. 1-17. <https://doi.org/10.1080/13603116.2021.1946725>
- Rollan, K. (2021). Kazakhstan's Transition to Inclusion: The Journey So Far. In T. M. Makoelle & M. Somerton (Eds.), (2021). *Inclusive Education in a Post-Soviet Context*. (pp. 3-18). Springer Nature.
- Rollan, K. & Somerton, M. (2021). Inclusive education reform in Kazakhstan: civil society activism from the bottom-up. *International Journal of Inclusive Education*, 25(10), 1109-1124. <https://doi.org/10.1080/13603116.2019.1599451>

- Sagandykova, A. (2020). *Exploring Kazakhstani General Education Teachers' Attitudes towards Inclusive Education*. [Master's Thesis, Nazarbayev University].
Nazarbayev University Repository.
- Saloviita, T. (2019). Explaining classroom teachers' attitudes towards inclusive education. *Support for Learning*, 34(4), 433–442. <https://doi.org/10.1111/1467-9604.12277>
- Saloviita, T. (2020). Attitudes of Teachers Towards Inclusive Education in Finland. *Scandinavian Journal of Educational Research*, 64(2), 270-282,
<https://doi.org/10.1080/00313831.2018.1541819>
- Sandhu, R. (2017). A study of attitude of secondary schools teachers towards inclusive education. *Indian Journal of Health and Wellbeing*, 8(6), 422-426
- Schuelka, M. (2018). *Implementing Inclusive Education*. K4D Helpdesk Report. Brighton, UK: Institute of Development Studies. <https://www.gov.uk/dfid-research-outputs/implementing-inclusive-education>
- Sharma, U., Armstrong, A., Merumeru, L., Simi, J. & Yared, H. (2018). Addressing barriers to implementing inclusive education in the Pacific. *International Journal of Inclusive Education*, 23(1), 65 – 78.
<https://doi.org/10.1080/13603116.2018.1514751>
- Sharma, U., Shaukat, S., & Furlonger, B. (2014). Attitudes and self- efficacy of pre-service teachers towards inclusion in Pakistan. *Journal of Special Educational Needs*, 15(2). <https://doi.org/10.1111/1471-3802.12071>
- Slee, R. (2019). *Defining the scope of inclusive education. Think piece prepared for the 2020 Global Education Monitoring Report Inclusion and education 2*.
<https://www.researchgate.net/publication/330741940>
- Somerton, M., Helmer, J., Kasa, R., Hernández-Torrano, D. & Makoelle, T.M. (2021). Defining spaces: resource centres, collaboration, and inclusion in Kazakhstan.

Journal of Educational Change, 22, 315–334. <https://doi.org/10.1007/s10833-020-09384-1>

Štemberger, T. & Kiswarday, V. (2017). Attitude towards inclusive education: the perspective of Slovenian preschool and primary school teachers. *European Journal of Special Needs Education*, 33(1), 47-58.

<https://doi.org/10.1080/08856257.2017.1297573>

Taherdoost, H. (2019). What Is the Best Response Scale for Survey and Questionnaire Design; Review of Different Lengths of Rating Scale / Attitude Scale / Likert Scale. *International Journal of Academic Research in Management*, 1(8), 1 – 10.

<https://ssrn.com/abstract=3588604>

UNESCO (1994). *The Salamanca Statement and Framework for Action on Special Needs Education*. Adopted by the World Conference on Special Needs Education: Access and Quality in Salamanca, Spain.

UNESCO (2000). *Dakar Framework for Action: Education for All. Meeting Our Collective Commitments*. World Forum on Education, Dakar, Senegal, 26-28 April 2000, UNESCO, Paris.

UNESCO, UNICEF, the World Bank, and OECD (2021). *What's Next? Lessons on Education Recovery: Findings from a Survey of Ministries of Education amid the COVID-19 Pandemic*. Paris, New York, Washington D.C.: UNESCO, UNICEF, World Bank.

Urton, K., Wilbert, J., & Hennemann, T. (2014). Attitudes Towards Inclusion and Self-Efficacy of Principals and Teachers. *Learning Disabilities: A Contemporary Journal*, 12(2), 151-168.

World Bank, World Development Indicators. (2020). *Secondary education, teachers (% female) – Kazakhstan*. [Data file].

<https://data.worldbank.org/indicator/SE.SEC.TCHR.FE.ZS?end=2020&locations=KZ&start=2015&view=chart>

Yada A., Tolvanen A., & Savolainen, H. (2018). Teachers' attitudes and self-efficacy on implementing inclusive education in Japan and Finland: A comparative study using multi- group structural equation modelling. *Teaching and Teacher Education*, 75.

<https://doi.org/10.1016/j.tate.2018.07.011>

Yussupova, D. & Issabayev, M. (2021). Attitudes Of Teachers Toward Inclusive Education In Kazakhstan: The Case Of Mainstream Schools In Almaty. *Central Asian Economic Review*, 5, 76-89. <https://doi.org/10.52821/2789-4401-2021-5-76-89>

Appendices

Appendix A

Multidimensional Attitudes Toward Inclusive Education Instrument Permission

Research topic: Exploring secondary school teachers' attitudes toward inclusive education in the Zhambyl region in Kazakhstan



This questionnaire is based on the Multidimensional Attitudes toward Inclusive Education Scale (MATIES) (Mahat, 2008). The permission has been granted from Marian Mahat via personal email. Please see below the screen of the given permission.

Dina Urazbekova <dina.urazbekova@nu.edu.kz>
to marian.mahat ·
Dear Dr. Mahat,

Sep 6, 2022, 9:49 AM

I am Dina Urazbekova, 2nd-year Msc student at Nazarbayev University, Kazakhstan. I am writing a thesis on the topic of teachers' attitudes toward Inclusive Education at intellectual school (Secondary and High School). I believe that the Multidimensional Attitudes Toward Inclusive Education (MATIE) Scale would be useful in my research. That is why I am asking for permission to use the MATIE Scale in my study.

Thank you in advance for your assistance.

Sincerely,

Dina Urazbekova | 2nd year
 | Graduate Student
 | Educational Leadership
 | Graduate School of Education
 | Nazarbayev University
 | Cell ph: +7-701-753-65-56
 | Email: dina.urazbekova@nu.edu.kz
 | Website: nu.edu.kz
 Follow NU: 

CONFIDENTIALITY NOTICE
 This e-mail message and all attached files are intended only for the person to whom it is addressed and may contain information protected by law, and any confidential information. If this e-mail message was sent to the wrong person we warn that any unauthorized use of this e-mail message and attached files is strictly prohibited. If you are not the intended recipient, please destroy all copies of the original message from your computer.

Marian Mahat
to me ·
Dear Dina,

Sep 6, 2022, 10:04 AM

Thanks for your email.

The MATIES survey has been revised for a preschool context (MATPIES), which has been validated in Germany. This may be useful in your study. The MATIES survey is also being revised and updated, so hopefully there will be an updated version in 2022/23.

I am attaching a copy of the original scales (information about scoring discussed within) and journal papers on the development of both scales (information about its psychometric properties discussed within).

There are no specific stipulation regarding the use of the tools. All I ask is that they are appropriately referenced in any publication arising from its use.

Mahat, M. (2008). The development of a psychometrically-sound instrument to measure teachers' multidimensional attitudes toward inclusive education. *International Journal of Special Education*, 23(1), 82-92.

Lohmann, A., Wiedebusch, S., Hensen, G. & Mahat, M. (2016) Multidimensional Attitudes toward Preschool Inclusive Education Scale (MATPIES) – ein Instrument zur Erhebung der Einstellung frühpädagogischer Fachkräfte zu Inklusiver Bildung. *Frühe Bildung*, (2016)5, 198-205.

Best wishes for your research project. I look forward to receive a copy of the results.

Best regards,
Marian

*I may send emails outside of traditional office hours.
 Please respond at a time of your choosing, appropriate to your schedule.*

Dr Marian Mahat | Senior Research Fellow in Learning Environments
 Series Editor [Linking Theory and Practice in Learning Environments](#)
 Series Editor [Surviving and Thriving in Academia](#)

Appendix B
Recruitment Flyer For Survey

Dear Teachers,

My name is Dina Urazbekova, and I'm a graduate student of Nazarbayev University Graduate School of Education in Astana. As part of my Master's degree, I am researching secondary school teachers' attitudes toward inclusive education in the Zhambyl region in Kazakhstan.

This message is an invitation to participate in a quantitative survey of two-phase research on teachers' attitudes toward inclusive education. I've attached an informed consent form to this email. It's essential that you know what you're getting into when you take part in research! It's available in Kazakh, Russian, and English so that you can read it in the language you understand best. You can ask me questions if you'd like to get some answers about the research in your preferred language.

You will spend approximately 20 minutes responding. Your answers will be confidential and will not be published or shared. All data collected will only be used for my master's thesis.

If you agree to help, please follow the link below to enter the survey.

Thank you for your time and contribution.

Best Regards,

Dina Urazbekova,

Appendix C

Survey Protocol

Research topic: Exploring secondary school teachers' attitudes toward inclusive education in the Zhambyl region in Kazakhstan.

You are invited to participate in a research study exploring secondary school teachers' attitudes toward inclusive education in the Zhambyl region in Kazakhstan.

The first phase of the research will require you to fill in the survey questions. The survey questions will be in two sections. The first section aims to identify teacher-related factors which influence secondary school teachers' attitudes toward inclusive education. The second section will focus on teachers' attitudes toward inclusive education.

This study does not impose any risks on your health, reputation, and employment. Anonymity will be provided, and all participants' names will not be identified during the survey.

Dear Survey Participant,

I am an MSc student at Nazarbayev University Graduate School of Education. This survey is part of my master's program where I am exploring secondary school teachers' attitudes toward inclusive education in the Zhambyl region in Kazakhstan.

You are invited to complete the following survey. Your answers will be confidential and will not be published or shared. All data collected will only be used for the purpose of my master's thesis. The approximate time is 20 minutes. If you agree to help, please click on the "Yes" button below to enter the survey. Thank you for your help.

- Yes
- No

Section 1

This part of the survey regards teacher-related factors which influence the teachers' attitudes toward inclusive education.

Question 1

Indicate your gender

- Male
- Female

Question 2

Age category

- Below 25 years
- 26-39 years
- 40-57 years
- Over 57 years

Question 3

Taught subject

- Kazakh language
- Russian language
- English language
- Mathematics
- Physics/ Robotics
- Computer Science
- Biology
- Chemistry
- Art
- Physical Education

- Curators

Question 4

Work experience

- 0-2 years
- 3-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- 21+ years

Question 5

Highest level of education completed:

- Bachelor Degree
- Specialist Degree
- Master Degree
- Doctoral Degree (Doctor of Science or Ph.D)
- Other, please specify _____

Section 2

This part of the survey contains statements to measure teachers' attitudes toward inclusive education. Inclusive education is defined as **education for ALL children regardless their age, gender, ethnic origin, abilities, giftedness, and disabilities.**

Please complete all items of the questionnaire. There are no right or wrong answers. The best answers are those that reflect your true feelings about each statement. Thank you for your time.

After reading each statement, please click the most appropriate response that reflects your personal opinion.

1	2	3	4	5	6
Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree

1.	I believe that an inclusive school is one that permits academic progression of all students regardless of their ability.	1	2	3	4	5	6
2.	I believe that students with a disability should be taught in special education schools.	1	2	3	4	5	6
3.	I believe that inclusion facilitates socially appropriate behaviour amongst all students.	1	2	3	4	5	6
4.	I believe that any student can learn in the regular curriculum of the school if the curriculum is adapted to meet their individual needs.	1	2	3	4	5	6
5.	I believe that students with a disability should be segregated because it is too expensive to modify the physical environment of the school.	1	2	3	4	5	6
6.	I believe that low-performing students should leave the school so that they do not experience rejection in the regular school.	1	2	3	4	5	6
7.	I get frustrated when I have difficulty communicating with students with problem behaviour.	1	2	3	4	5	6
8	I get upset when less-abled students cannot keep up with the day-to-day curriculum in my classroom.	1	2	3	4	5	6

9.	I get irritated when I am unable to understand students' behaviour.	1	2	3	4	5	6
10.	I am uncomfortable including more-abled students in a regular classroom with less-abled students.	1	2	3	4	5	6
11.	I am disconcerted that gifted students are included in the regular classroom.	1	2	3	4	5	6
12.	I get frustrated when I have to adapt the curriculum to meet the individual needs of all students.	1	2	3	4	5	6
13.	I am willing to encourage ALL students to participate in all activities in the regular classroom.	1	2	3	4	5	6
14.	I am willing to adapt the curriculum to meet the individual needs of all students regardless of their ability.	1	2	3	4	5	6
15	I am willing to include students with a deviant behavior in the regular classroom with the necessary support.						
16	I am willing to modify the physical environment to include students with a disability in the regular classroom.	1	2	3	4	5	6
17.	I am willing to adapt my communication techniques to ensure that all students with an emotional and behavioural disorder can be successfully included in the regular classroom.	1	2	3	4	5	6
18.	I am willing to adapt the formative assessment of individual students in order for inclusive education to take place.	1	2	3	4	5	6

Appendix D

Recruitment Flyer for Interview

Dear Teachers!

My name is Dina Urazbekova, and I'm a graduate student of Nazarbayev University Graduate School of Education in Astana. As part of my Master's degree, I am researching the teachers' attitudes toward inclusive education in the Zhambyl region in Kazakhstan.

I'm interested in how teachers conceptualize inclusive education and how teachers' attitudes toward inclusive education (if necessary) can be improved. If you're reading this, you're a secondary school teacher in the Zhambyl region, and I'd like to talk to you!

If you agree to contribute to a diverse and contemporary understanding of inclusive education at our school, please let's communicate further!

This message is an invitation to participate in a qualitative interview with me as part of two-phase research on teachers' attitudes toward inclusive education. I've attached an informed consent form to this email. It's essential that you know what you're getting into when you take part in research! It's available in Kazakh, Russian, and English so that you can read it in the language you understand best. You can ask me questions if you'd like to get some answers about the research in your preferred language.

If you agree to participate, please respond to this message. We'll work out a time, date, and location for your interview, which will be face-to-face at a place of your convenience. You will be given a cup of coffee or tea as a token of appreciation for your participation.

I hope you respond because I'm looking forward to learning from you.

Best Regards,

Dina Urazbekova

Appendix E

Informed Consent Form for Interviews

Research topic: Exploring secondary school teachers' attitudes toward inclusive education in the Zhambyl region in Kazakhstan

Description: You are invited to participate in a research study exploring secondary school teachers' attitudes toward inclusive education in the Zhambyl region in Kazakhstan

The interview will focus on exploring secondary school teachers' attitudes toward inclusive education in the Zhambyl region in Kazakhstan. This study does not impose any risks on your health, reputation and employment. Anonymity will be provided, and all participants' names will not be identified during the study.

You will be asked to answer some interview questions. The conversation is going to be audio recorded with your permission. The decision to participate in this study is entirely voluntary. You may refuse to take part in the study at any time. You have the right not to answer some questions that make you feel uncomfortable or withdraw completely from the interview at any point during the process. You have the right to request not to use any of your interview material during this study.

Time involvement: Your participation in interview will take approximately 40 - 60 minutes

Risks and benefits: There is a minimal risk of the study as there is a guarantee of anonymity. The benefit for you in the study is that you will have an opportunity to reflect on your teaching practice regarding inclusive education and give a general pattern of inclusive education at your workplace. Moreover, the results of the future study will be beneficial for future researchers inquiring inclusive education

Participant's rights: If you have read this form and have decided to participate in this project, please understand your participation is voluntary and you have the right to

withdraw your consent or discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled. The alternative is not to participate. You have the right to refuse to answer particular questions. The results of this research study may be presented at scientific or professional meetings or published in scientific journals.

Contact information:

Questions: If you have any questions, concerns or complaints about this research, its procedures, risks and benefits, contact me or my Master's Thesis Supervisor for this student work:

a researcher: a MSc Education Leadership program student, Dina Urazbekova,

dina.urazbekova@nu.edu.kz

a research advisor: Vice Dean for Research, Nazarbayev University Graduate School of Education, tsediso.makoelle@nu.edu.kz

Independent Contact: If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your rights as a participant, please contact the NUGSE Research Committee to at

gse_researchcommittee@nu.edu.kz

Please sign this consent form if you agree to participate in this study.

- I have carefully read the information provided;
- I have been given full information regarding the purpose and procedures of the study;
- I understand how the data collected will be used, and that any confidential information will be seen only by the researchers and will not be revealed to anyone else;
- I understand that I am free to withdraw from the study at any time without giving a reason;

- With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

Signature: _____

Date: _____

Сұхбат Алуға Келісім Парағы

Зерттеу тақырыбы: Қазақстанның Жамбыл облысындағы орта мектеп мұғалімдерінің инклюзивті білімге қатынасын зерделеу

Сипаттама: Сізді Қазақстанның Жамбыл облысындағы орта мектеп мұғалімдерінің инклюзивті білімге қатынасын зерделеуге қатысуға шақырамыз.

Сұхбат Қазақстандағы Жамбыл облысындағы орта мектеп мұғалімдердің инклюзивті білім беруге деген көзқарасын зерттеуге арналады. Бұл зерттеу сіздің денсаулығыңызға, беделіңізге және жұмысыңызға ешқандай қауіп төндірмейді. Анонимділік қамтамасыз етіледі және зерттеу барысында барлық қатысушылардың аты-жөні анықталмайды.

Сізден сұхбаттасу сұрақтарына жауап беру сұралады. Әңгіме сіздің рұқсатыңызбен аудио жазылады. Бұл зерттеуге қатысу туралы шешім толығымен ерікті. Сіз кез келген уақытта зерттеуге қатысудан бас тарта аласыз. Сіз процестің кез келген нүктесінде сізді ыңғайсыз сезінетін кейбір сұрақтарға жауап бермеуге немесе сұхбаттан толығымен бас тартуға құқығыңыз бар. Осы зерттеу барысында сұхбат материалыңызды пайдаланбауды сұрауға құқығыңыз бар.

Уақытты қамту: Сіздің сұхбатқа қатысуыңыз шамамен 40-60 минутты алады

Тәуекелдер мен артықшылықтар: зерттеудің минималды тәуекелі бар, өйткені анонимділікке кепілдік бар. Зерттеудің сіз үшін пайдасы – инклюзивті білім беру бойынша педагогикалық тәжірибеңіз туралы ой елегінен өткізу және жұмыс орныңызда инклюзивті білім берудің жалпы үлгісін беру мүмкіндігіне ие боласыз. Сонымен қатар, болашақ зерттеу нәтижелері инклюзивті білімге ұмтылатын болашақ зерттеушілер үшін тиімді болмақ.

Қатысушының құқықтары: Егер сіз осы нысанды оқып шыққан болсаңыз және осы жобаға қатысуға шешім қабылдасаңыз, сіздің қатысуыңыз ерікті екенін түсініңіз

және сіз кез келген уақытта айыппұлсыз немесе жеңілдіктерсіз өз келісіміңізден бас тартуға немесе қатысуды тоқтатуға құқылысыз. құқығы бар. Балама - қатыспау. Сіз белгілі бір сұрақтарға жауап беруден бас тартуға құқылысыз. Бұл зерттеудің нәтижелері ғылыми немесе кәсіби жиналыстарда ұсынылуы немесе ғылыми журналдарда жариялануы мүмкін.

Байланыс ақпараты:

Сұрақтар: Егер сізде осы зерттеуге, оның процедураларына, тәуекелдеріне және артықшылықтарына қатысты сұрақтарыңыз, алаңдаушылығыңыз немесе шағымдарыңыз болса, маған немесе осы студенттік жұмыс бойынша магистрлік диссертация жетекшісіне хабарласыңыз:

ғылыми қызметкер: Білім беру көшбасшылығы саласындағы магистр: инклюзивті білім беру бағдарламасының магистр студенті, Уразбекова Дина,
dina.urazbekova@nu.edu.kz

ғылыми кеңесші: Назарбаев Университетінің Жоғары білім мектебінің ғылыми жұмыстар жөніндегі декан орынбасары, Тседисо Макоэле,
tsediso.makoelle@nu.edu.kz

Тәуелсіз Байланыс: Егер сіз осы зерттеудің қалай жүргізілуіне қанағаттанбасаңыз немесе сізде қандай да бір алаңдаушылық, шағым немесе зерттеу немесе қатысушы ретінде сіздің құқықтарыңыз бойынша жалпы сұрақтар болса, NUGSE Ғылыми Комитетіне gse_researchcommittee@nu.edu.kz сайтына хабарласыңыз.

Осы зерттеуге қатысуға келіссеңіз, келісіміңізге қол қойыңыз.

- Берілген ақпаратты мұқият оқып шықтым;
- Маған зерттеудің мақсаттары мен процедуралары туралы толық ақпарат берілді;

- Жиналған деректер қалай пайдаланылатындығын және кез-келген құпия ақпаратты тек зерттеушіге қол жетімді болатынын түсінемін;
- Зерттеуден кез-келген уақытта себеп берместен бас тартуға болатынымды түсінемін;
- Жоғарыда айтылғандарды түсіне отырып, мен өз еркімен осы зерттеуге қатысуға келісемін.

Қолы: _____ күні: _____

Форма Информированного Согласия для Интервью

Тема исследования: Изучение отношения учителей школ среднего звена к инклюзивному образованию в Жамбылской области, Казахстан

Описание: Вам предлагается принять участие в Изучение отношения учителей школ среднего звена к инклюзивному образованию в Жамбылской области, Казахстан.

Интервью будет посвящено Изучение отношения учителей школ среднего звена к инклюзивному образованию в Жамбылской области, Казахстан. Данное исследование не несет никаких рисков для вашего здоровья, репутации и работе. Вам будет обеспечена анонимность, и имена всех участников не будут использоваться во время исследования.

Вас попросят ответить на несколько вопросов во время интервью. Разговор будет записан на аудио с вашего разрешения. Решение об участии в этом исследовании является полностью добровольным. Вы можете отказаться от участия в исследовании в любое время. Вы имеете право не отвечать на некоторые вопросы, которые заставляют вас чувствовать себя некомфортно, или полностью отказаться от интервью в любой момент его проведения. Вы имеете право потребовать не использовать какие-либо материалы вашего интервью во время этого исследования.

Время участия: Ваше участие в интервью займет примерно 40-60 минут.

Риски и преимущества: Риск исследования минимален, так как участникам гарантируется анонимность. Преимущество исследования заключается в том, что у вас будет возможность поразмышлять над своей педагогической практикой в отношении инклюзивного образования и дать общее понятие инклюзивного образования на вашем рабочем месте. Более того, результаты будущего исследования будут полезны будущим исследователям, изучающим инклюзивное образование.

Права участника: если вы прочитали эту форму и решили участвовать в этом проекте, пожалуйста, поймите, что ваше участие является добровольным, и вы имеете право отозвать свое согласие или прекратить участие в любое время. Альтернативой является не участие. Вы имеете право отказаться отвечать на определенные вопросы. Результаты этого исследования могут быть представлены на научных или профессиональных встречах или опубликованы в научных журналах.

Контактная информация:

Вопросы: если у вас есть какие-либо вопросы, опасения или жалобы по поводу данного исследования, его процедуры, рисков и преимуществ, свяжитесь со мной или моим научным руководителем данной магистерской работы:

исследователь: студентка программы магистратуры в области управления образованием: инклюзивное образование, Уразбекова Дина,
dina.urazbekova@nu.edu.kz

научный руководитель: заместитель декана по научно-исследовательским вопросам, ассоциированный профессор по научной работе Высшей школы образования Назарбаев Университета, Тседисо Макоэле, tsediso.makoelle@nu.edu.kz

Независимое контактное лицо: если вас не устраивает то, как проводится это исследование, или если у вас есть какие-либо опасения, жалобы или общие вопросы об исследовании или ваших правах в качестве участника, свяжитесь с

Исследовательским комитетом NUGSE по gse_researchcommittee@nu.edu.kz

Пожалуйста, подпишите это согласие, если вы согласны участвовать в данном исследовании.

- Я внимательно прочитал предоставленную информацию;
- Мне была предоставлена полная информация о цели и процедурах исследования;

- Я понимаю, как будут использоваться собранные данные, и что любая конфиденциальная информация будет видна только исследователям и не будет раскрыта никому другому;
- Я понимаю, что могу отказаться от участия в исследовании в любое время без объяснения причин;
- С полным пониманием всего вышеизложенного, я согласен, по собственному желанию, принять участие в этом исследовании.

Дата подписания: _____

Подпись: _____

Appendix F

Interview protocol

Research title: Exploring secondary school teachers' attitudes toward inclusive education in the Zhambyl region in Kazakhstan.

Time of interview:

Date:

Place:

Interviewee:

Mode: face-to-face interview

Dear Participant,

I would like to thank you for your participation in the interview, which is a part of my master programme. I believe your contribution will be valuable to this research. The goal of this study is to explore teachers' attitudes toward inclusive education at one selective school in the Zhambyl region in Kazakhstan. Confidentiality of responses will be guaranteed, and no names will be indicated during the study. The interview will be audio recorded with your permission and stored in a password protected computer. It will be transcribed and at which time your real name will be replaced with a pseudonym. The interview will take approximately 40 – 60 minutes. Before we start, I would like you to read the consent form one more time and sign it.

Interview questions:

1. How old are you?
2. What subject do you teach?
3. How long have you been teaching?
4. What is your work experience at Nazarbayev Intellectual Schools?
5. How do you understand inclusive education?

6. How do you think if Nazarbayev Intellectual Schools are inclusive?
7. Do you think that less abled students should be excluded from Nazarbayev Intellectual Schools?
8. Can you say that your teaching practice is inclusive?
9. To what extent it is important for teachers to be inclusive?
10. Have you ever had students with disabilities in your classroom? If yes, describe your experience.
11. Do you think that children with disabilities should be taught at special institutions?
12. Can you share your fears (if any) regarding teaching children with disabilities?
13. Is there any support from the administration regarding inclusive education at school?
14. How can teachers' attitudes toward inclusive education (if necessary) be improved?

Note: since the interview format is semi-structured, some follow-up questions may be asked during the interview to receive in-depth answers

Thank the participant for the interview.