

**The Experiences of Recently Graduated Teachers in Inclusive Education Course at
one Kazakhstani University**

Kymbat Smagulova

Submitted in partial fulfillment of the requirements for the degree of

Master of Science

in

Educational Leadership

Nazarbayev University Graduate School of Education

April, 2024

Word count: 15061

Author Agreement

By signing and submitting this license, I Kymbat Smagulova (the author) grant to Nazarbayev University (NU) the non-exclusive right to reproduce, convert (as defined below), and/or distribute my submission (including the abstract) worldwide in print and electronic format and in any medium, including but not limited to audio or video.

I agree that NU may, without changing the content, convert the submission to any medium or format for the purpose of preservation. I also agree that NU may keep more than one copy of this submission for purposes of security, back-up and preservation.

I confirm that the submission is my original work, and that I have the right to grant the rights contained in this license. I also confirm that my submission does not, to the best of my knowledge, infringe upon anyone's copyright.

If the submission contains material for which I do not hold copyright, I confirm that I have obtained the unrestricted permission of the copyright owner to grant NU the rights required by this license, and that such third-party owned material is clearly identified and acknowledged within the text or content of the submission.

If the submission is based upon work that has been sponsored or supported by an agency or organization other than NU, I confirm that I have fulfilled any right of review or other obligations required by such contract or agreement.

NU will clearly identify my name(s) as the author(s) or owner(s) of the submission, and will not make any alteration, other than as allowed by this license, to your submission.

I hereby accept the terms of the above Author Agreement.

Author's signature: 

Date: 25.04.2025

Declaration

I hereby declare that this submission is my own work and to the best of my knowledge it contains no materials previously published or written by another person, or substantial proportions of material which have been submitted for the award of any other course or degree at NU or any other educational institution, except where due acknowledgment is made in the thesis. This thesis is the result of my own independent work, except where otherwise stated, and the views expressed here are my own.

Author's signature:

A handwritten signature in black ink, appearing to be 'J. J.', written over a horizontal line.

Date: 25.04.2024

Ethical Approval



53 Kabanbay Batyr Ave.
Astana 010000
Republic of Kazakhstan
Date: 23 October 2024

Dear: Kymbat Smagulova

This letter now confirms that your research project titled:
The Experiences of recently Graduated Teachers in Inclusive Education course from one Kazakhstani university

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,

Oliver Mutanga

Oliver Mutanga (PhD)

On behalf of:
Dr Syed Abdul Manan, *PhD*
Chair, GSE Ethics Committee
Graduate School of Education
Nazarbayev University

Block C3, Room 5011
Office: +7(7172)6016
Mobile: +77079240053
email: syed.manan@nu.edu.kz, gse.irec@nu.edu.kz

CITI Training Certificate



Completion Date 27-May-2024
Expiration Date 27-May-2028
Record ID 62953534

This is to certify that:

Kymbat Smagulova

Has completed the following CITI Program course:

Not valid for renewal of
certification through CME.

Responsible Research Training

(Curriculum Group)

Social, Behav, Edu, Etc

(Course Learner Group)

1 - Basic Course

(Stage)

Under requirements set by:

Nazarbayev University

CITI
Collaborative Institutional Training Initiative

101 NE 3rd Avenue, Suite 320
Fort Lauderdale, FL 33301 US
www.citiprogram.org

Generated on 27-May-2024. Verify at www.citiprogram.org/verify/?wee50ac31-ba9f-4082-8ecf-3d34a4ae4bf7-62953534



Completion Date 27-May-2024
Expiration Date 27-May-2027
Record ID 62953533

This is to certify that:

Kymbat Smagulova

Has completed the following CITI Program course:

Not valid for renewal of certification through CME.

Students conducting no more than minimal risk research
(Curriculum Group)
Students - Class projects
(Course Learner Group)
1 - Basic Course
(Stage)

Under requirements set by:

Nazarbayev University



101 NE 3rd Avenue, Suite 320
Fort Lauderdale, FL 33301 US
www.citiprogram.org

Generated on 27-May-2024. Verify at www.citiprogram.org/verify/?wbf9b3f5a-e1ce-4079-a38c-ab028aa82ceb-62953533

Acknowledgments

First and foremost, I would like to express my deep gratitude to my supervisor, Professor Oliver Mutanga, for his invaluable support, guidance, and professional contributions not only to the writing of this thesis but also to my entire Master's studies. His mentorship and patience have helped me overcome difficulties and grow as a researcher. I am also sincerely grateful to my groupmates who supported me throughout my Master's studies, shared ideas, and fostered an atmosphere of mutual understanding and cooperation. I would like to extend my special and heartfelt gratitude to my family—my father and mother—who have always been there for me. Their boundless love, care, faith in my abilities, and sacrifices for my education have been a solid foundation throughout this journey. Thanks to them, I had the opportunity to study at one of the best universities in the country, and their support gave me confidence during the most challenging moments. They constantly reminded me of my goals and helped me maintain my inner strength, even when I doubted myself. Finally, I want to express gratitude to myself for my perseverance, hard work, and determination to see things through to the end. Let this work be just the first step on the path to further achievements and significant scientific discoveries.

Abstract

The Experiences of Recently Graduate Teachers in Inclusive Education Course at one Kazakhstani University

Inclusive education is widely recognized as a global priority in achieving equal access to quality learning opportunities. As Kazakhstan continues to enhance its inclusive education policies, the need for well-prepared teachers, the primary agents of policy implementation, becomes increasingly important. In this regard, university-level courses in pedagogy and inclusive education are essential in equipping future educators with the competencies needed to support students with diverse learning needs. However, in Kazakhstan, there is limited research on how such courses are experienced by graduates and how effectively they prepare teachers for inclusive classrooms. This lack of research limits our understanding of how these programs can best contribute to the success of inclusive education initiatives in Kazakhstan.

This study explores the experiences of teachers who completed an inclusive education course at a prominent university in Kazakhstan. Employing a qualitative phenomenological approach grounded in Vygotsky's theory of social constructivism, the research involved in-depth semi-structured interviews with nine teachers currently working in mainstream schools. Several important discoveries were made. First, participants' conceptual understanding of inclusive education shifted from a narrow focus on disability to a broader recognition of learner diversity. Second, while the university course offered a solid theoretical base, teachers identified major shortcomings in practical training, coherence of course content, and accessibility in terms of language. Third, they encountered substantial barriers to applying inclusive practices in real classrooms, such as overcrowded classes, insufficient resources, and a lack of professional development. Despite these challenges, the participants

demonstrated initiative by developing their own strategies and suggesting reforms in curriculum design, teacher training frameworks, policy development, and public awareness.

The study emphasizes the need for more practical, coherent, and contextually relevant teacher preparation in inclusive education. Its findings contribute to evidence-based improvements in teacher education and offer valuable insights for shaping national education policy.

Enhancing inclusive education at the university level has the potential to empower future teachers and promote greater educational equity throughout Kazakhstan.

Keywords: Kazakhstan, inclusive education course, recently graduated teachers, social constructivism, teacher experiences

Аңдатпа

Инклюзивті білім беру – білім алушының қабілеттеріне, әлеуметтік жағдайына, мүмкіндіктеріне қарамастансапалы білім алуын қамтамасыз ететін жаһандық бастама. Қазақстан кеңестік білім жүйесінен постиндустриалдық қоғамға бейімделіп жатқан тұста, инклюзивті саясаттың сәтті жүзеге асуы мұғалімдердің кәсіби дайындығына тікелей байланысты. Осы тұрғыда, жоғары оқу орындарындағы педагогикалық мамандықтарда оқытылатын инклюзивті білім беру курстары болашақ мұғалімдерді әртүрлі қажеттіліктері бар оқытушыларды оқытуға дайындаудың маңызды құралына айналуы тиіс. Алайда, Қазақстанда бұл курстардың тиімділігі мен тәжірибелік қолданбалығы жөнінде зерттеулер жеткіліксіз. Ал, мұндай зерттеулердің аздығы бұлбағдарламалардың Қазақстандағы инклюзивті білім беру бастамаларының табысты болуына қалай жақсы ықпал ететіні туралы түсінігімізді шектейді. Сол себепті, бұл бағдарламалардың әсерін жақсырақ түсіну және олардың студенттер мен оқытушылардың қажеттіліктерін тиімді қанағаттандыруын қамтамасыз ету үшін көбірек зерттеулер жүргізуіміз маңызды.

Бұл зерттеу Қазақстандағы алдыңғы қатарлы университеттердің бірінде инклюзивті білім беру курсына яқтап, қазіргі таңда мұғалім болып жұмыс жасайтын жас мамандардың тәжірибесін зерттеуге бағытталған. Зерттеу сапалық феноменологиялық тәсілге және Л.С. Выготскийдің әлеуметтік конструктивизм теориясына негізделіп отырып, терең зерттелді. Зерттеуге мектептерде жұмыс істейтін 9 мұғалім қатысты. Деректер жартылай құрылымдалған терең сұхбаттар арқылы жиналып, қолмен кодтау әдісімен өңделді.

Нәтижесінде төрт негізгі тақырып анықталды. Біріншіден, қатысушылардың инклюзивті білім беруге туралы түсінігі алғашында мүгедектілікпен ғана шектелсе, уақыт өте, оқытушылардың көптілігіне бағытталған жан-жақты түсінікке ауысқаны

байқалды. Екіншіден, курс теориялық база бергенімен, практикалық тәжірибенің, мазмұнның бірізділігінің және тілдік қолжетімділіктің жеткіліксіз болғаны байқалды.

Үшіншіден, мұғалімдер сыныптағы инклюзияны жүзеге асыруда уақыт тапшылығы, ресурстардың жетіспеуі және қолдап көмектесетін мамандардың болмауы сияқты қиындықтарға тап болған. Төртіншіден, мұғалімдер дербес стратегиялар жасап, жүйелік деңгейде өзгерістер қажет екенін ұсынды.

Зерттеу нәтижелері инклюзивті педагогтерді даярлауды жетілдіруге және білім беру саясатын дамытуға бағытталған нақты ұсыныстар береді.

Кілт сөздер: Қазақстан, инклюзивті білім беру курсы, жас мамандар, әлеуметтік конструктивизм, мұғалім тәжірибесі

Аннотация

Инклюзивное образование — это глобальная инициатива, направленная на обеспечение равного доступа к качественному обучению для всех учащихся независимо от их способностей, социального положения или индивидуальных особенностей. В условиях перехода Казахстана от советской системы образования к постиндустриальному обществу успешная реализация инклюзивной политики напрямую зависит от уровня профессиональной подготовки педагогов. В этой связи курсы по инклюзивному образованию, преподаваемые на педагогических специальностях в университетах, должны играть ключевую роль в подготовке будущих учителей к работе с учащимися, имеющими различные образовательные потребности. Однако в Казахстане по-прежнему недостаточно исследований, посвящённых оценке эффективности и практической применимости этих курсов. Отсутствие таких исследований ограничивает наше понимание того, насколько эти программы способствуют успешному внедрению инклюзии в стране. Следовательно, необходимо проводить больше исследований, чтобы глубже понять влияние этих курсов и обеспечить их соответствие потребностям студентов и преподавателей.

Данное исследование направлено на изучение опыта молодых специалистов, завершивших курс по инклюзивному образованию в одном из ведущих университетов Казахстана и в настоящее время работающих учителями. Исследование базируется на качественном феноменологическом подходе и теории социального конструктивизма Л.С. Выготского. В исследовании приняли участие 9 учителей, работающих в школах. Данные были собраны методом полуструктурированных глубинных интервью и проанализированы с использованием ручного кодирования.

В ходе анализа были выделены четыре ключевые темы. Участники сначала ассоциировали инклюзивное образование исключительно с инвалидностью, однако со

временем их понимание расширилось. Также были отмечены проблемы с практической частью курса, несогласованностью содержания и языковыми барьерами. Участники сообщили о нехватке времени, ресурсов и поддержки, но при этом самостоятельно разрабатывали стратегии и предлагали системные изменения.

Результаты содержат конкретные рекомендации по совершенствованию подготовки инклюзивных педагогов и образовательной политики в Казахстане.

Ключевые слова: Казахстан, курс инклюзивного образования, молодые специалисты, социальный конструктивизм, педагогический опыт

Table of Contents

CHAPTER 1: INTRODUCTION	1
1.1 INTRODUCTION AND BACKGROUND OF THE STUDY.....	1
1.2 STATEMENT OF THE PROBLEM	2
1.3 PURPOSE OF THE STUDY	3
1.4 RESEARCH QUESTIONS	3
1.5 SIGNIFICANCE AND CONTRIBUTION OF THE STUDY	4
1.6 OUTLINE OF THE THESIS	5
1.7 CONCLUSION	6
CHAPTER 2: LITERATURE REVIEW	7
2.1 INTRODUCTION	7
2.2 TEACHERS' ATTITUDES TOWARD INCLUSIVE EDUCATION	7
2.2.1 <i>Global Perspectives on Teachers' Attitudes</i>	8
2.2.2 <i>Perspectives on Teachers' Attitudes in Central Asia and Kazakhstan</i>	10
2.3 TEACHERS' PREPAREDNESS TOWARD INCLUSIVE EDUCATION	12
2.3.1 <i>Inadequate Training and Knowledge</i>	13
2.3.2 <i>Negative Attitudes and Belief Systems</i>	14
2.3.3 <i>Need for Comprehensive Curriculum Reform</i>	14
2.4 STRATEGIES EMPLOYED BY TEACHERS TO FOSTER INCLUSIVE EDUCATION	14
2.5 SOCIAL CONSTRUCTIVIST THEORY	19
2.6 CONCLUSION	21
CHAPTER 3: METHODOLOGY	22
3.1 INTRODUCTION	22
3.2 RESEARCH DESIGN	22
3.3 PARTICIPANTS	24
3.4 DATA COLLECTION INSTRUMENTS	25
3.5 DATA ANALYSIS PROCEDURES	25
3.6 ETHICAL CONSIDERATIONS	26
3.7 CONCLUSION	26
CHAPTER 4: FINDINGS	28
4.1 INTRODUCTION	28
4.2 PARTICIPANTS' PROFILES	28
TABLE 1	28
<i>Characteristics of Interview Participants</i>	28
4.3 PARTICIPANTS' UNDERSTANDINGS OF INCLUSIVE EDUCATION	29
4.3.1 <i>Participants' current understandings of Inclusive Education</i>	29
4.3.2 <i>Participants' Evolved Understandings of Inclusion</i>	31
4.3.3 <i>Participants' Perceptions of Inclusive Education in Practice</i>	31
4.4 PARTICIPANTS' INCLUSIVE EDUCATION COURSE EXPERIENCE	32
4.4.1 <i>Course Scheduling, Duration, and Language Barriers</i>	32
4.4.2 <i>Course Content and Syllabus</i>	34
4.4.3 <i>Instructor Influence</i>	35
4.4.4 <i>Effectiveness of the Inclusive Education Course in Preparing for Real-world Classroom Challenges</i>	36
4.5 IMPLEMENTING INCLUSIVE PRACTICES: CHALLENGES AND STRATEGIES.....	37
4.5.1 <i>Challenges Graduate Teachers Face</i>	37
4.5.2 STRATEGIES	38
4.6 PARTICIPANTS' RECOMMENDATIONS	39
4.6.1 <i>Enhancing Inclusive Education Course Design</i>	39

4.6.2 <i>Systematic and Community Reforms</i>	41
4.7 CONCLUSION	43
CHAPTER 5: DISCUSSION	45
5.1 INTRODUCTION	45
5.2 PARTICIPANTS’ UNDERSTANDINGS OF INCLUSIVE EDUCATION.....	45
5.3 PARTICIPANTS’ INCLUSIVE EDUCATION COURSE EXPERIENCE	47
5.4 IMPLEMENTING INCLUSIVE PRACTICES: CHALLENGES AND STRATEGIES.....	49
5.5 PARTICIPANTS’ RECOMMENDATIONS	50
5.6 CONCLUSION	51
CHAPTER 6: CONCLUSION	53
6.1 INTRODUCTION	53
6.2 LIMITATIONS	54
6.3 IMPLICATIONS AND RECOMMENDATIONS FOR POLICY	54
6.4 IMPLICATIONS AND RECOMMENDATIONS FOR PRACTICE.....	55
6.5 IMPLICATIONS AND RECOMMENDATIONS FOR RESEARCH	57
6.6 CONCLUSION	58
REFERENCES	61
APPENDIX A: AI DECLARATION FORM	67
APPENDIX B: CONSENT LETTERS	68
APPENDIX C: DATA ANALYSIS – INTERVIEW PROTOCOL	70
APPENDIX D: DATA ANALYSIS – TRANSCRIPT AND CODING SAMPLES	73

List of Tables

Table 1: <i>Characteristics of Interview Participants</i>	28
---	----

Chapter 1: Introduction

1.1 Introduction and Background of the Study

This chapter introduces the contextual background for the thesis, clearly articulating the problem statement and the study's purpose. It sets out the research questions and highlights the significance and contributions of the study. Finally, the chapter will conclude with an outline of the entire thesis.

A quality education is, among other things, inclusive and ensures the right to education for all students. The values associated with inclusion are linked to interactionist ideology and focus on fellowship, participation, democratization, benefit, equal access, quality, equity, and justice (Haug, 2016). The movement toward inclusive education is expanding globally, and Kazakhstan is following suit. According to Haug (2016), it is critical to prioritize inclusion in education, which entails guaranteeing that every student has equal access to it. The Salamanca Declaration of 1994 was a significant milestone for the global agenda of inclusive education (UNESCO, 2018). This declaration emerged at the World Conference on Special Education in Salamanca, Spain, where 92 governments and 25 international organizations agreed to support education systems worldwide. These governments and organizations emphasized that schools should welcome all children, regardless of their physical, intellectual, social, emotional, linguistic, or other conditions. Since then, many European countries have recognized that inclusive education is crucial to ensure equal educational rights for all individuals with different special educational needs (Haug, 2016). In 1995, Kazakhstan took its first step towards inclusive education by adopting a new constitution. Article 14(2) of this constitution refers to the principle of non-discrimination and universal access to quality education for everyone. Subsequently, the ratification of the Salamanca Statement (UNESCO, 1994) demonstrates the country's efforts to gradually develop inclusive education policies. Additionally, after ratifying the

Convention on the Rights of Persons with Disabilities (CRPD) in 2015, Kazakhstan willingly assumed the responsibility of ensuring equity in educational access and participation for all learners, including children with disabilities, in mainstream education (Rollan & Somerton, 2019).

1.2 Statement of the Problem

The current debate in Kazakhstan has shifted from merely defining inclusion and its necessity to addressing the critical question of how to achieve it. In this context, Haug (2016) identified a universal challenge, which is the effective implementation of inclusive education practices, a gap that is particularly evident in Kazakhstan. Despite some progress toward inclusive education, the concept is still not well understood by stakeholders in Kazakhstani schools. For example, the understanding of inclusive education continues to be associated with students with special needs and does not necessarily cater to different forms of diversity (Makoelle, 2020). As Agavelyan et al. (2020) stated, teacher training is important for the effective implementation of inclusive policies because teachers are the key stakeholders in this process. However, more than 70% of teachers surveyed in Kazakhstani schools reported insufficient training to support inclusive education, showing that the country is struggling to make significant progress in this area (Agavelyan et al., 2020). A UNESCO report (2020) stated that Kazakhstan introduced the mandatory academic discipline of inclusive education for the 2015/16 academic year across all pedagogical faculties at universities in Kazakhstan. This initiative aims to equip pre-service teachers with the skills and knowledge necessary to effectively support inclusive education practices. While this suggests that training programs for pre-service teachers are in place, questions remain regarding their effectiveness and quality. For example, Makoelle and Burmistrova (2020) argue that Kazakhstani pedagogical universities lack a cohesive strategy for preparing pre-service teachers for inclusion.

Research by Sloeas (2016) in Canada explored new teachers' perceptions of inclusive practices gained through their teacher education programs and their intention to apply these practices in their classrooms. The findings indicate that teacher education programs were not fully effective in producing confident inclusive practitioners, and new teachers identified areas where improvements could enhance their preparation for inclusive practice.

In Kazakhstan, there is a lack of similar research exploring graduate teachers' experiences in their inclusive education courses, which is crucial for assessing the effectiveness of these courses and identifying areas for improvement. Despite the existing initiatives and courses aimed at preparing teachers for inclusive education in Kazakhstan, there is a significant gap in understanding how well these courses equip teachers for inclusive education in practice. Therefore, this study aims to investigate the experiences of Inclusive Education program graduates to identify and address gaps between theory and practice.

1.3 Purpose of the Study The purpose of this research is to explore the teaching experiences of recently graduated teachers who have taken up the course of Inclusive Education at one university in Kazakhstan. "Recently graduated teachers" for this study are defined as those who graduated with their bachelor degrees in Inclusive Education between one and three years prior and are now working as teachers. This ensured that the participants possessed both pedagogic preparation and initial teaching experience with inclusive methodologies considered. The study is not only concerned with the pedagogic background of these teachers but also their practical implementation of the theory they learned during their inclusive teacher training. The aim is to learn how prepared these graduates are to establish and sustain inclusive learning environments within their areas of practice. By analyzing their preparedness and challenges they face, the study hopes to give

evidence-based recommendations for enhancing teacher training. Overall, this study seeks to maximize teacher preparedness, inform policy, and assist the effective implementation of inclusive education within Kazakhstan and work towards the effective attainment of SDG 4.

1.4 Research Questions

To gain a comprehensive understanding of how the Inclusive Education course impacts teacher preparedness in Kazakhstan, this study aims to explore a set of key questions. These questions focus on the experiences of graduates in Inclusive Education course, the challenges they face, and how they apply their training in real-world scenarios. In particular, this research seeks to examine the following research questions:

1. What do recently graduated teachers understand about inclusive education as a concept?
2. What do recently graduated teachers think about their Inclusive Education course?
3. How do recently graduated teachers apply the knowledge and skills acquired from the Inclusive Education course in their professional practice, what challenges do they face, and how do they navigate them?
4. What are the implications of these findings for practice, policy, and research?

1.5 Significance and Contribution of the Study

This research is significant for several reasons. First, it addresses the critical gap in research regarding the effectiveness of teacher education programs for inclusive education in Kazakhstan. By examining the academic experiences and challenges faced by graduates

of the Inclusive Education course, this research provides valuable insights into the strengths and weaknesses of current teacher training practices in inclusive education.

These recently graduated teachers represent the future of education. They might have learned from older generation of teachers, integrating both traditional and modern teaching methods, and they will pass on this knowledge to the next generation using innovative approaches. As these new teachers replace older ones over time, their evolving methods will significantly influence the overall direction of teaching practices (Soleas, 2015). Therefore, understanding the beliefs and ideas these new teachers bring into the profession is crucial. It not only gives us insights into the current state of teaching but also helps us anticipate future trends in education. Secondly, the findings of this study will contribute to the existing body of knowledge on inclusive education by highlighting specific areas where teacher training programs can be improved. This will help teacher training institutions develop more effective curricula and training methodologies that better prepare teachers for the realities of inclusive classrooms. Additionally, the study's outcomes will inform policymakers about the necessary changes and support needed at the national level to foster inclusive education. Moreover, this study has the potential to benefit future research by identifying key areas for further investigation.

1.6 Outline of the Thesis

This thesis consists of six chapters. The first chapter provides an introduction to the study, detailing the background information, the problem statement, and the research purpose, which focuses on exploring the experiences of graduate teachers who have completed an inclusive education course from one Kazakhstani university. It also outlines the research questions and the significance of the study. The second chapter reviews the key literature relevant to this study, presenting the main concepts and theoretical framework. The third chapter describes the methodology, elaborating on the research

design and the research site, and discussing the data collection and analysis procedures as well as the ethical considerations. The fourth chapter presents the data collected through interviews with the teachers. The fifth chapter discusses these findings. Finally, the sixth chapter concludes the thesis by discussing the implications of the findings for policy, practice, and research.

1.7 Conclusion

This introductory section provides a summary of the study's context and the research problem. By clearly defining the research objectives, research questions, and the significance of the study, this section emphasizes the need to explore the perspectives, attitudes, and experiences of recently graduated teachers in the Inclusive Education program at a university in Kazakhstan.

The following section will investigate a comprehensive review of the literature, focusing on the key themes of this study: the knowledge and attitudes of graduate teachers towards Inclusive Education and their experiences within the Inclusive Education program. The theoretical framework employed in this study to structure and comprehend the intricacies of graduate teachers' experiences in the program will be presented and discussed.

Chapter 2: Literature Review

2.1 Introduction

Inclusive education is an international priority that strives to provide equal learning opportunities for all learners, no matter what their background or ability might be (UNESCO, 2020). This analysis looks at empirical and theoretical studies of teachers' experiences of inclusive education within a Kazakh university classroom.

The research is structured around three broad themes: (1) teachers' attitudes toward inclusive education, (2) their readiness to introduce inclusive practice, and (3) the methods they adopt to advance inclusivity. These themes are viewed from Lev Vygotsky's social constructivist theory perspective, where social interaction, cultural considerations, and collective learning are highlighted as integral parts of constructing knowledge and attitudes.

The literature was reviewed using studies on inclusive education that included teachers' experiences of graduate-level study and their perceptions of inclusive education. The sources were searched within Google Scholar, ERIC and the Nazarbayev University library. The studies reviewed were all published in Russian, Kazakh or English. Thematic analysis for identifying areas and trends for future development was employed. The review highlights teacher training, resources and policy support for effective implementation of inclusive education.

2.2 Teachers' Attitudes Toward Inclusive Education

Teachers are essential, both in the classroom and in the effective implementation of inclusive initiatives (Miesera & Gebhardt, 2018). Studies reveal that self-efficacy, access to support networks, and specialized training are frequently associated with good attitudes toward inclusion (Ahmmed et al., 2012). For example, research from Canada (Sokal & Sharma, 2013) and Finland (Saloviita, 2019) shows that teachers who are more confident

in themselves and have a greater understanding of inclusive policies are more likely to have positive attitudes. Attitudes, however, differ according to variables such as the type and degree of disability, worries about workload, and the availability of resources (Mashiya, 2014; Taver & Lim, 2014).

2.2.1 Global Perspectives on Teachers' Attitudes

Worldwide, teachers' attitudes towards inclusive schooling are a result of a synergy between personal, professional, and contextual factors. For instance, Avramidis and Norwich (2002), conducted a study among teachers in the UK and reported that teachers' attitudes were shaped by their previous experience of teaching students with disability, availability of resources, and the extent of administrative support. Likewise, de Boer et al. (2011), using a meta-analysis, reviewed studies carried out in Europe, North America, and Australia and reported that teachers' attitudes were more favorable where inclusive schooling policy and practice were more well-established. Likewise, a study by Sokala and Sharma (2013) among teachers in Canada reveals that specialist training gives teachers more confidence about inclusive schooling and thereby less worry regarding workload and availability of resources. Teachers who have greater capacity for self-efficacy and greater knowledge regarding inclusive schooling policy are more likely to express a more favorable attitude. Also, according to this study, both gender and age also make their impact: younger teachers are more likely to have an optimistic attitude towards inclusion. A study by Saloviita (2019) among 1,456 teachers from primary schools in Finland indicates that confidence for one's professional competence and access to outside support are strongly related to a positive attitude towards inclusion. Once more, in Japan, a study among 359 teachers by Yada (2017) indicates that high self-efficacy predicts a positive attitude towards inclusive schooling. San-Martin et al. (2021), working among teachers from Chile, reported that a high need for training and support for adjusting teaching

methods is linked to a high attitude of caution regarding careful implementation of inclusive measures.

On the other hand, other research identified negative perceptions of inclusive education. Research by Taver and Lim (2014), which involved 1,538 teachers, identified negative perceptions towards people who are disabled and ambivalence to inclusive education. These teachers were more likely to include children who have communication or social challenges in inclusive classes, yet were less likely to include those who have physical, sensory, or learning challenges. Research within developing nations tends to emphasize the absence of resources, inadequate training, and stigmatization of disability. For example, a study by Engelbrecht et al. (2006), within South Africa, identified inadequate training and inadequate resources as significant hindrances to inclusive education. Research in Botswana by Mukhopadhyay et al. (2019) also identified that the majority of teachers did not receive adequate training and resources, which contributed to their resistance to inclusion.

Positive and negative attitudes toward inclusive education have been shown to exist in various studies. Butakor et al. (2023), in their research, illustrate how beliefs that are both positive and negative shape the attitudes of teachers toward inclusion. Positive beliefs are grounded on the potential benefits that inclusion can bring, while negative beliefs come directly from the feasibility and challenges of executing inclusion.

Saloviita (2019) states that teachers' professional confidence, support they receive, and workload concerns are related to their positive or negative attitudes toward inclusion. The teachers are behind the inclusion of students with mild disabilities within mainstream schools, but they express worries regarding workload or limited resources.

In general, the literature discussed above captures a multidimensional snapshot of teachers' attitudes toward inclusive education. There is a relationship between specialist

training, teacher confidence, and provision of external support, i.e., in-service training. Teachers who are confident are more positively disposed toward inclusion. There exist, however, differential attitudes based on the type and severity of impairments and available resources. There are also negative attitudes due to workload, training concerns, and limited resources concerns. Thus, better support systems and better provision of training are crucial. Mixed attitudes may be viewed both ideologically and practically: on one hand, inclusion is obviously the preferred option, yet on the other hand, those who are supposed to implement it are questioning its feasibility.

2.2.2 Perspectives on Teachers' Attitudes in Central Asia and Kazakhstan

The research on the attitudes of teachers in Central Asia, and more specifically in Kazakhstan, towards inclusive education has identified a range of repeated themes. Teachers' attitudes are shaped by both policy developments (such as the ratification of the Convention on the Rights of Persons with Disabilities) and by access to training and resources as well as cultural understandings of disability and inclusion. A repeated theme in these studies is teacher ambivalence or uncertainty, which is often caused by a lack of training, insufficient methodological support, and concerns about classroom social dynamics. Additionally, there are differences in teacher attitudes between rural and urban schools that are influenced by local factors such as community cohesiveness and availability of resources. Overall, the research emphasizes the importance of teacher preparation, system-level support, and ongoing training in order to promote inclusive practices.

In the Central Asian context, Prisiazhniuk et al. (2024) conducted a study on teachers' attitudes toward inclusive education in Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan. They investigated the perspectives of 869 teachers. The results shows that the relationship between the ratification of the Convention on the Rights of Persons with

Disabilities (CRPD) and teachers' attitudes in these countries is not an easy one to draw. In the case of Tajikistan, inclusive education views were varied. Uzbekistan, having ratified the Convention in 2021 but with less developed systems for inclusive education, displays more ambivalent and negative attitudes. Kyrgyzstan, which ratified the Convention in 2019, resulted in somewhat more positive teacher attitudes, though teachers still felt underprepared, with a greater need for additional resources. Positive and negative attitudes ensued from teachers in Kazakhstan, where the Convention was ratified in 2015, based on their experiences with regard to dealing with inclusive education in everyday practice.

This regional context thus suggests that further research needs to be conducted into how mixed attitudes and the need for more resources and training affect the experiences of graduate teachers in Kazakhstan. Investigating such factors allows the researchers to gain insight into how educators could be better prepared and supported for inclusive education.

In the Kazakh context, the concept of inclusive education is primarily associated with students who have specific educational needs. To illustrate, Zholtayeva et al. (2013) describe inclusive education as an approach where all students with special needs are integrated into regular classrooms, teaching approaches are varied, resources are adapted, and educators are empowered to make informed decisions based on their expertise.

Numerous studies suggest that teachers in Kazakhstan often demonstrate ambivalence or uncertainty when it comes to inclusive education. For example, a survey conducted by Sagandykova (2020) among 234 teachers in northern Kazakhstan found that a significant number of general education teachers were hesitant or unsure about working with students with special educational needs. Their responses indicated a lack of knowledge or familiarity with the subject rather than a clear endorsement or rejection. This may be due to the relatively recent implementation of inclusive policies and the limited training available to educators at the time.

While Agavelyan et al. (2020) found that teachers' attitudes ranged from cautiously positive to uncertain, Yussupova and Issabayev (2022) noted that some teachers expressed hesitant or reserved attitudes, occasionally leaning toward the negative. The primary concerns highlighted were both methodological (e.g., lack of training or suitable teaching strategies) and social (e.g., fear of peer rejection or stigma). Interestingly, Agavelyan et al. (2020) also noted that rural teachers tended to be more open to inclusive practices than their urban counterparts, possibly due to the close-knit nature of rural communities.

Literature in this theme proves that factors such as training, self-efficacy, resource availability, and demographic ones play important and strong roles in influencing the attitudes of teachers toward inclusive education. This becomes very crucial for bringing about successful implementation because positive attitudes can allow for a very supportive learning environment for all the students. With a clear understanding of specific needs and attitudes, the policymakers will be in a better position to offer more support for the implementation of inclusive education in order to provide equal opportunities for all students in Kazakhstan.

2.3 Teachers' Preparedness Toward Inclusive Education

This section draws on both international and Kazakhstani literature to investigate how prepared teachers are to implement inclusive education. Much research globally focuses on systemic obstacles, such as inadequate training, negative attitudes among educators, and shortcomings in curriculum development, these same concerns also arise within the Kazakhstani context. By exploring both types of literature, this section aims to create a comprehensive understanding of the most significant factors that influence teacher readiness.

According to many scholars, one of the important conditions with respect to the successful implementation of inclusive education is the intensive training of qualified teachers who will create an inclusive atmosphere in the classroom. However, research shows that in-service teachers are often underprepared to implement inclusive education effectively in practice (Florian, 2012; Forlin & Chambers, 2011; Savolainen et al., 2012; Symeonidou & Phtiaka, 2009). This synthesis integrates the findings from such studies to make a complete analysis of the factors behind this unpreparedness.

2.3.1 Inadequate Training and Knowledge

It has been repeatedly shown in research that in-service teachers lack enough inclusive education training. Forlin (2010) further insisted that the dominant approach with teacher education programs treated inclusive education as an add-on, with the result that coverage was inconsistent and training inadequate. Mukhopadhyay et al. (2019) established that special education student-teachers in Botswana had little to no knowledge of various disabilities and specific needs of students, which is a pointer to inadequacies in the existing programs.

In South Africa, Hay et al. (2001) found that many teachers either had not heard of or could not describe essential key inclusive education concepts. Only a small percentage of respondents had meaningful training in teaching or working with learners having special educational needs (Hay et al., 2001). Further, this knowledge gap exists in Ukraine because significant portions of teachers do not understand the terms "inclusive education" or "inclusive competence" (Myronova et al., 2021).

2.3.2 Negative Attitudes and Belief Systems

Educators' preparedness to implement inclusive education is significantly influenced by their perceptions and beliefs regarding inclusive practices. Research has shown that teachers who hold negative attitudes towards inclusive education are less likely to feel adequately prepared to implement inclusive approaches (Chhabra et al., 2010).

For instance, a study conducted in Botswana found that most teachers expressed dissatisfaction with inclusive practices and struggled with accommodating children with disabilities in the classroom (Mukhopadhyay et al., 2019). Similar challenges have also been reported in Kazakhstan, where several teachers have expressed negative attitudes towards inclusivity due to concerns about workload and resource constraints

(Sagandykova, 2020). These findings suggest that interventions targeting teachers' attitudes and actual competence are essential to support educators' preparedness for inclusive education.

2.3.3. Need for Comprehensive Curriculum Reform

Many studies are there to support the case that teacher-training curriculum reforms at all levels are a necessity for proper support of teachers in inclusive classrooms. Forlin (2010) suggests that inclusive practice needs to be the foundation of such programs and not an add-on. Mironova et al. (2021) also highlight that inclusion needs to become a fundamental component of teacher training in Ukraine. Positive attitudes towards inclusion at university levels do exist, but lower levels are confronted with severe issues that need specific measures and training.

The complex problem of teachers' preparedness for inclusive education is amplified by inadequate opportunities for training, inappropriate attitudes, limited availability of resources, and weak support systems. Therefore, there is an urgent need for radical reforms to teacher education programs and teacher training to enhance teachers' capacities to cope with inclusive classrooms.

2.4 Strategies Employed by Teachers to Foster Inclusive Education

Research has demonstrated that inclusive education not only benefits students with special needs by providing access to quality education but also enhances the social and academic experiences of all students (Murawski, 2005; Stainback & Stainback, 1990). Effective inclusive education practices require teachers to employ various instructional strategies tailored to meet the diverse needs of their students. This section explores several strategies that teachers use to foster inclusive education, drawing on evidence from various studies.

Hidayah and Morganna (2019) conducted a qualitative case study involving English as a Foreign Language (EFL) teachers at a junior high school in Curup-Bengkulu, Indonesia. The study aimed to investigate the strategies used in teaching students with disabilities in regular EFL classes. The four major teaching methods that have been attempted by the instructors are active learning, peer tutoring, cooperative learning, and direct instruction. Active learning incorporated teacher-centered and student-centered learning. Students were made active participants by asking questions and encouraging them to give their opinions. Peer tutoring and the use of cooperative learning were used to raise the confidence of each student in order to enable him or her to interact even between and amongst the students themselves. Teaching approached direct instruction so that the

students would master the material. Teachers were the central controllers in the classroom, giving explanations in an explicit and detailed manner.

Similarly, in a study by Moraña and Orozco (2019), 25 primary education teachers from eleven Spanish urban public schools demonstrated their use of peer tutoring and group work. Additionally, they highlighted the differentiation strategy, where teachers adapted their teaching methods to be more inclusive, using a variety of instructional strategies to address the needs of all students. Teachers from East Africa who participated in a qualitative case study by Chataika et al. (2017) also stated the importance of the strategy differentiation strategy. Moreover, these teachers utilized resource centers for additional support, where specialist teachers assisted both learners and regular teachers and they emphasized the need for ongoing professional development to equip teachers with the necessary skills and knowledge for inclusive education.

Another qualitative study by Soodak (2003) conducted in a US school among teachers concluded that teachers utilize community-building management strategies, parental involvement, and school-wide positive behavioral supports. The community-building management strategy is used to promote diversity and create a sense of community within the classroom. This includes fostering friendships and collaboration. For example, activities such as class meetings, friendship circles, and cooperative projects were designed to encourage inclusivity and mutual respect among students. Teachers actively involve parents in the educational process, fostering trust and open communication. Parents were considered partners in decision-making about their children's education. Additionally, they try to implement positive behavioral supports on a school-wide level, requiring explicit expectations and a commitment to understanding and addressing student behavior within its context.

Similar strategies that teachers employed to foster inclusive education were found in a study by Elder et al. (2015) conducted in a rural setting in Kenya, which involved 18 participants including teachers and administrators from eight different schools. The teachers reported using the following strategies: home groups and morning meeting to build a sense of community. For example, teachers seated students in a horseshoe formation; this allowed all students in the group to be inclusive and to be encouraged actively and fully. They also use co-constructed definitions and color coding as strategies to make learning accessible for all students. These include incorporating music and movement in lessons so that students with different learning styles can easily engage in the lesson materials.

Li and Li conducted a study in 2020 in China and compared the strategies of rural and urban teachers that they employed to support inclusive education. In this regard, the findings have shown that both rural and urban teachers commonly employ shorter assignments to make their workload manageable for these students and help them keep pace with their classes. If in the class a student has special educational needs, teachers try to employ hands-on activities, thematic teaching, such as using stories related to the lesson topics, or visual support, including enlarged text and visual aids. Group instruction and peer tutoring were used to foster collaborative learning and social interaction, with students grouped by strengths and interests. While teachers primarily followed the standard curriculum, urban teachers were more adaptive in their methods compared to rural teachers, who relied more heavily on the syllabus. Urban teachers benefited from greater support from parents, volunteers, and school staff, whereas rural teachers faced barriers such as a lack of parental support and inadequate resources.

Saloviita (2017) conducted a quantitative study and surveyed 2136 Finnish comprehensive school teachers to assess the prevalence of co-teaching, group work, and

differentiation as inclusive educational strategies. Co-teaching, where two or more teachers share instructional responsibilities, was used by 42% of teachers weekly, with a higher prevalence among special education teachers (62.3%) compared to the classroom (50.2%) and subject teachers (19.1%). Younger teachers and those in larger municipalities, particularly big cities where co-teaching reached 63.1% among classroom teachers, were more likely to implement this strategy, often involving subject collaboration in mathematics and science. Group work, involving students working in small groups, was utilized weekly by 43% of teachers, with classroom teachers (53.6%) more likely to use it compared to subject (31.6%) and special education teachers (34.8%). Younger teachers and those with positive attitudes towards inclusion favored group work more, with 61.6% of classroom teachers under 40 using it regularly. Differentiation, tailoring teaching methods to meet individual student needs, was the most commonly used strategy, employed by 83% of teachers regularly, and was particularly prevalent among special education teachers (98.3%), followed by classroom (86.3%) and subject teachers (68.8%). Teachers with students needing intensified support were more inclined to differentiate, rising from 79% to 88% among classroom teachers with such students.

These studies collectively highlight that teachers across various contexts employ a range of strategies to foster inclusive education. It becomes clear that incorporating these proven strategies into teacher training programs can significantly enhance the preparedness of future educators. Emphasizing practical strategies such as differentiation, co-teaching, peer-tutoring, community-building, etc. in the curriculum can equip graduate teachers with the necessary tools to implement inclusive education effectively. Unfortunately, there are a limited number of studies conducted in Kazakhstan on the experiences of graduate teachers who have taken Inclusive Education courses in their universities. Therefore, it is necessary to pay more attention to this issue and conduct further research. Such research

could help improve the quality of education in inclusive settings and lead to better outcomes for all students.

To guide and support the analysis of these experiences, it is important to ground the study in a clear theoretical framework. A theoretical framework not only provides a lens through which to interpret data but also helps connect the research questions, methodology, and findings in a coherent and meaningful way. It allows for a deeper understanding of how individuals construct meaning from their experiences, particularly in educational settings.

2.5 Social Constructivist Theory

For this study, Social Constructivist Theory is used to conceptualize and understand the experiences of graduate teachers in an Inclusive Education course from a Kazakhstani university. Social Constructivist Theory, originally developed in 1968 by Lev Vygotsky, emphasizes the active creation of knowledge through social interaction within cultural and historical frameworks. This theory was incorporated into the research process by influencing the formulation of research questions that explore how participants construct meaning for inclusive education through interaction with peers, educators, and experiential learning.

The theory was guided by the use of semi-structured interviews, allowing participants to reflect on and articulate their learning experiences in a social context. During data analysis, a constructivist approach will inform how participants describe their development as learners, emphasizing collaborative learning and shared experience. In summary, the theoretical framework assisted in understanding how these teachers construct inclusive knowledge and practices within the context of a university setting, confirming that learning is a socially mediated process.

The Social Constructivist Theory maintains that learning is a social process. As McMahon (1997) explains, learning cannot occur completely within the individual or as a passive response to external stimuli. Instead, learning occurs when individuals engage in social activities or when external forces influence their existing knowledge.

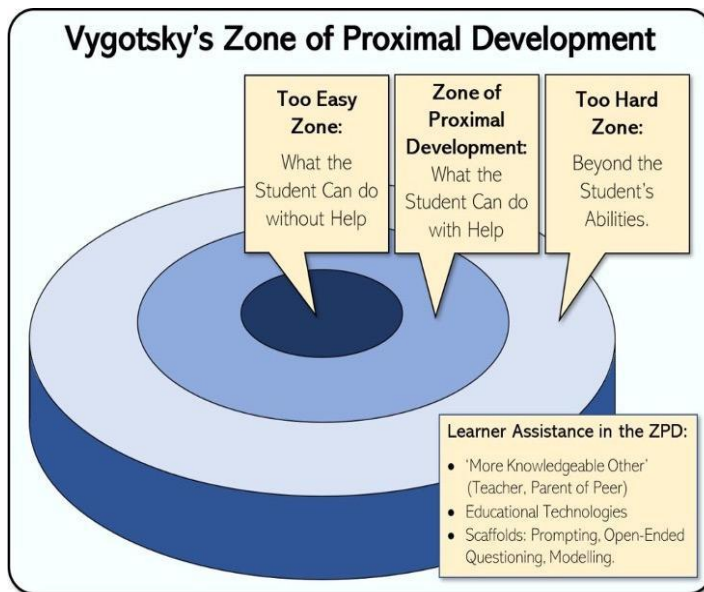
For teacher trainees and other education professionals, peers, instructors, and students play important roles in shaping their knowledge and attitudes towards inclusive education. Through collaborative learning environments, discussions, group work, and other activities, teachers can share their experiences, challenge assumptions, and gain new insights into inclusive practices.

The emphasis of the social constructivism theory on the cultural environment is also significant. The cultural context in Kazakhstan is still influenced by the historical Soviet educational model, which separates children with special educational needs from others in specialized schools. Understanding this cultural context is essential for understanding how teacher trainees perceive and implement inclusive approaches today.

The zone of proximal development (ZPD), shown in Figure 1, is a fundamental concept in social constructivist theory that describes the difference between what learners can achieve independently and what they can achieve with guidance and support. This research uses the term ZPD to conceptualize how graduate teachers develop their understanding of inclusive education through social interactions within their courses. These interactions may include group discussions, peer collaboration, and feedback from instructors and students. Guided group projects and scaffolding activities, such as reflective tasks, help graduate teachers move from a shallow understanding of inclusion to a deeper, practice-based understanding. The ZPD provides an effective framework for understanding how course-based support affects teacher learning.

Figure 1

Zone of Proximal Development to Understand Graduate Teachers' Experiments in Inclusive Education Course



This theoretical perspective supports the idea that the learning of graduate teachers in the Inclusive Education program is not a purely intellectual phenomenon, but rather is shaped by interactions within the institution and the wider society.

Drawing on Social Constructivism, this study aims to examine how teachers' beliefs and practices are formed, negotiated, and modified through collaborative learning, reflection, and contextual factors. This approach will contribute to a deeper understanding of how inclusive teaching is co-created and how prospective teachers can be prepared to meet diverse learner needs in real classroom settings.

2.6 Conclusion

This literature review provides an in-depth understanding of the various factors that influence teachers' perspectives, readiness, and approaches to inclusive education. This research aims to explore how social interactions, cultural backgrounds, scaffolding, and reflective practice shape the experiences and attitudes of teachers in Kazakhstan through the lens of social constructivism.

Despite the growing body of literature on inclusive education both globally and within Kazakhstan, several critical research gaps remain. Firstly, there is a lack of research

on recently graduated teachers who have recently completed inclusive education courses and entered the teaching profession. Most current studies focus on in-service or pre-service teachers, with limited research on the experiences of early-career teachers during their initial transition. Secondly, while course materials and attitudes towards inclusion have been explored, there has been little examination of how graduates understand and apply the learning outcomes from inclusive education courses in actual classroom settings. This study aims to address these gaps by examining the experiences of recently graduated teachers from a constructivist perspective, providing new insights into the preparation and support of inclusive teachers in Kazakhstan. To this end, the following Chapter describes the research methodology used in this study, including the research design, participants, data collection methods, and analytical techniques employed.

Chapter 3: Methodology

3.1 Introduction

This chapter provides an overview of the key methodological elements. The chapter is organized into five major sections around methodological aspects of the study. First, it gives a general description of the research design; second, it reviews the research site; third, it describes data collection, while the fourth part deals with the aspect of data analysis. These sections address the reasons a particular method or tool was chosen for this study. Finally, it closes with some ethical considerations and main statements of ethical challenges that were faced during the research process.

3.2 Research Design

This study investigates the experiences of recently graduated teachers with an Inclusive Education course from one Kazakhstani university. A qualitative research design was selected based on the aims and research questions of the study. Qualitative research,

according to Creswell and Poth (2018), best suits a study when the problem is to be explored, or in other words, when an issue is required to be understood comprehensively. Due to the qualitative nature of the research, most might find it appropriate for the study to be focused on the experiences of graduate teachers; hence, I wanted to learn how people construct their world, interpret their experiences, and make sense of those experiences. Moreover, qualitative methodology fits the purpose of the current study since, according to Creswell (2017), in qualitative research methods, a researcher can develop an intricate understanding of the subject at hand, studying meanings of and attaching to an individual's actions, circumstances, situations, people, and objects.

This study adopted a qualitative research method within a phenomenological design. This design focuses on an in-depth explanation of the meaning of shared experiences of participants as they interact with a particular phenomenon, which is the lived experiences of recently graduated teachers who had completed an inclusive education program at one university in Kazakhstan. The study explored how these educators interpreted the program, internalized its principles, and implemented them in their early careers as teachers. Using this approach, I gained an understanding of the lived experiences of recently graduated teachers inside an inclusive education course. Qualitative methods let us dive more into descriptions of great detail regarding many aspects of human experiences. These findings can then be used in developing better training programs, policies, and support systems meant for inclusive education. Understanding the experiences of teachers may help educators and policymakers find ways to deal with the challenges they face, thus enhancing effectiveness in inclusive practices.

As the goal and research questions of the current study are directed toward attaining an in-depth understanding of the investigated issue, a qualitative research design was adopted. According to Creswell and Poth (2018), the need to explore a problem or

attain a comprehensive understanding of the issue best falls under the purview of qualitative research. Since the experiences of recently graduated teachers were studied, a qualitative research design was most important to the researcher because they are interested in learning how people construct their worlds, interpret their experiences, and give those experiences meaning (Merriam & Tisdell, 2016). Besides, qualitative methodology was relevant to the present study since, according to the report by Leavy (2017), a subject can be deeply understood by the researchers when the qualitative research methodology is employed for the exploration of meanings that people attribute to their actions, circumstances, situations, people, and objects.

3.3 Participants

Creswell (1998) suggests that the ideal number of participants for a phenomenological approach is not predetermined, but recommends conducting 5 to 25 interviews. On the other hand, Morse (1994) states that at least 6 interviews should be sufficient. Therefore, for this study nine participants were recruited. All participants met the following criteria: having completed the Inclusive Education course as a part of their bachelor's degree at the selected university and actually being employed as teachers. For this research, recently graduated teachers are defined as individuals who have completed their undergraduate studies within the past one to three years. As both recent graduates and practicing professionals, they are in a unique position to reflect on how the course material translates into practical application in actual classrooms and bridge the gap between theoretical knowledge and pedagogical practice. The participants were recruited using purposive sampling. Criterion sampling involves selecting cases that meet specific criteria (Creswell, 2018). With the consent of the institution and access, suitable candidates were chosen from the list of alumni in the Department of Education at the university. This department keeps a record of graduates' educational backgrounds, current workplaces, and

contact information. Snowball sampling was also used to identify information-rich cases through networks of acquaintances (Creswell, 2018).

3.4 Data Collection Instruments

In this study, data were collected through one-on-one, in-depth interviews as suggested by Creswell (2018). Merriam and Tisdell (2015) advocate for the use of semi-structured interviews as a flexible tool that allows researchers to adapt to the evolving context of the conversation, the participant's unique perspective, and the emergence of new insights related to the topic. Following this guidance, my semi-structured interview questions were open-ended and flexible, ensuring they were conducive to eliciting in-depth, nuanced responses. Accordingly, the study included approximately 5 to 15 questions, intentionally designed without predetermined wording or a fixed sequence.

3.5 Data Analysis Procedures

According to Creswell (2018), the first step in data analysis is organizing data into digital files. This study audio-recorded all interviews (with participant consent) and transcribed them verbatim. To protect identities, transcripts were kept confidential by assigning unique identifiers to each participant. Creswell (2018) also emphasizes memoing during data analysis to track idea development.

Once all the data was collected, I reviewed the transcripts multiple times to gain an in-depth understanding. Then I described, categorized, and interpreted the data through coding, a crucial step in qualitative research (Creswell, 2018). Initial coding identified key themes, patterns, and categories relevant to the research questions, involving both deductive and inductive coding. The coded data was analyzed using thematic analysis to synthesize and interpret findings.

Themes were refined for accuracy and reliability through a process of member checking. Member checking involved participants reviewing and confirming interpreted findings. These methods helped ensure the credibility and reliability of the findings.

3.6 Ethical Considerations

This section describes the ethical considerations that were attended to in the research study. Next are the procedural ethics measures followed in the process. First in the process was the seeking of approval from the NUGSE Research Committee before data collection. As Creswell (2018) explained, some ethics-related issues are expected by anticipation in the study, and for which the researcher should prepare. As such, in this study, ethical considerations included informed consent sought from participants on the purpose of the research and their rights to withdraw at any time during the interview. Unique identifiers have been assigned to the participants to help in anonymization, with anonymized transcripts that protect the identity of participants and sensitive information. The research is informed by the principles of non-maleficence and beneficence at its core to ensure that there is no harm but positive outcomes for inclusive education. In addition, participants were provided with feedback to consolidate the commitment to ethics that the research upholds in adding to useful insights on inclusive educational practices.

3.7 Conclusion

The methodologies that were used in this research and the justification of the research design are contained in this chapter. Information about the instruments of data collection and the methods of data analysis has been given, while the discussion on ethical considerations has been full, covering anonymity and confidentiality, risks, and benefits associated with the research. This is followed by the next chapter, which gives the findings of the research.

Chapter 4: Findings

4.1 Introduction

This chapter presents the research findings. The study aimed to understand graduate teachers' experience in Inclusive Education courses from one Kazakhstani university. The findings are based on the analysis of 9 in-depth one-on-one interviews conducted with recently graduated teachers who had an Inclusive Education course in their bachelor's degree and are now working as teachers. Four themes were generated after thematic analysis. In this chapter, I present findings based on these themes.

4.2 Participants' Profiles

Nine recently graduated teachers from one university were selected for the interview. Four of them were men, and five were women, with 1 to 3 years of teaching experience since graduating from the university.

Table 1.

Characteristics of Interview Participants

Participant	Gender	Years of Experience (since graduating)	Subject
Participant 1	F	1	Biology
Participant 2	F	1	Biology
Participant 3	F	3	English
Participant 4	M	2	English
Participant 5	F	3	Chemistry
Participant 6	M	2	English
Participant 7	F	1	Biology
Participant 8	M	3	Chemistry
Participant 9	M	3	Chemistry

4.3 Participants' understandings of Inclusive Education

To gain a deeper understanding of graduate teachers' experiences in the Inclusive Education course, it was essential to comprehend how they define the concept of "Inclusive Education."

4.3.1 Participants' current understandings of Inclusive Education

Findings revealed that most of the participants understand inclusive education as education, and Participant 4 stated that,

Honestly, I define inclusive education as making sure every learner feels supported, regardless of their abilities, background, or needs. It is not just about having ramps or offering extra worksheets, it is about ensuring that each student feels they truly belong in the classroom.

Additionally, Participant 2 responded that “*Inclusive Education is about the rights of all children, including adults too.*” Participant 5 stated, “*It is about meeting every learner where they are, whether they are dealing with specific challenges, learning differences, or just struggling with a new subject. In practice, it means creating an environment where each student feels valued and supported.*”

While Participant 8 defined inclusive education as “*Part of education that makes education more accessible to people with special needs*”, Participant 3 answered, “*In my opinion, inclusive education means providing universal, accessible education for everyone, regardless of their differences. Whether a student is hyperactive, has a certain disability, or is typically developing, the idea is to teach all of them at their own level, without separating or excluding anyone.*”

However, this participant in one of his answers distinguished between “normal child” and “inclusive child,” he said:

An inclusive child still needs a special approach. Some children may have a slower thought process or, on the contrary, be extremely intelligent, so we need to give them different kinds of tasks. At university, I learned that if there is an inclusive child in the class, ideally, a support teacher should be assigned specifically to work with them. A normal child is just a typical one- someone who does well in class without significant physical or medical issues.

Participants also identified the key elements of inclusive education. The most common responses were:

- **Diversity:** It means *“Recognizing that each student has a unique background, learning style, and set of strengths,”* said Participant 5.
- **Teacher preparedness:** According to Participant 2, *“It is extremely important to train teachers so they have a clear picture of each child’s needs, as well as an understanding of the actions they must take”*.
- **Accessibility:** *Participant 4* emphasized that *“Schools must provide physical accommodations and educational resources for students who need them”*.
- **Support:** The participants indicated that support can vary from collaborative teamwork among school staff, parents, and local organizations to a holistic approach involving the entire community. However, Participant 8 stated,

It is important to understand that a person in need of inclusion also has their own future, and when teaching, the teacher must be fully aware of the level of responsibility involved. It is also essential to develop a specific educational program for such students, because, as practice shows, it is very difficult for them to learn using standard textbooks.

4.3.2 Participants' Evolved Understandings of Inclusion

The data collected shows that after completing the course, participants' understanding of inclusive education improved. Participants expressed their newly developed perspectives on the topic, noting that their understanding evolved from a narrow definition of inclusion to a broader one.

Initially, I believed that inclusion was exclusively about placing children with physical or medical disabilities in the same classroom as their peers. However, the course expanded my understanding by showing me that inclusion goes beyond just disabilities. It includes any factors, such as health, socioeconomic status, or language barriers, that can impact a child's learning experience. (Participant 4)

Similarly, Participant 1 stated, *“In my mind, inclusion was related to disabilities. But after the course, my perspective changed. I began to view my students differently. I realized that all of them are unique and that every student has diverse needs.”*

However, according to Participant 8, *“It wasn't until I began working with kids who have hearing impairments that the term inclusive education became clear to me in a new way. I had never experienced it before, and I found it challenging to adjust”.*

4.3.3 Participants' Perceptions of Inclusive Education in Practice

Despite participants' broader understanding of the concept of inclusive education, their responses varied when asked how they see it in practice. Participant 4 said,

Within the school environment, in a particular class, a child with special needs (for example, a child with an autism spectrum disorder or a visual impairment) studies alongside other children. In this case, teachers note that one of the main tasks is to provide the child with adapted assignments using specialized methods and materials. For example, for a child with low vision, texts are printed in large font, or audio

textbooks are provided. A student with a disability is provided with special elevators or other digital facilities on the university campus. Additionally, a sign language interpreter or a personal assistant may be invited to certain classes.

Furthermore, Participant 8 said, *“When you do not know sign language, but you try to explain to a child the concept of electrons in elements in chemistry. Typically, each group has an interpreter assigned to translate the teacher’s explanation. However, there were times when the interpreter was unavailable, so I had to use a projector and explain through the Word program.”* Participant 6 noted, *“In my class, I have a student with ADHD who struggles to stay focused for long periods”*, while Participant 1 said, *“An example from my teaching experience involves a student who was Korean and did not speak Russian”*.

4.4 Participants’ Inclusive Education Course Experience

Participants discussed their experiences in the course to address the second research question, and the results indicated that their perceptions of the Inclusive Education course were diverse. Many participants noted a lack of practical experience, highlighting a conflict between theory and practical application, even as some commended interactive teaching methods and fundamental theory.

4.4.1 Course Scheduling, Duration, and Language Barriers

The Inclusive Education course is offered in the fourth year for pedagogical students for one semester. It is mandatory for some pedagogical majors, while it is elective for others. Some students take the course in English, while others take it in Kazakh.

Participants highlighted the inclusive education course as an essential component of teacher training. For example, Participant 6 stated, *“When I was taking the course during my last year, I didn’t realize how foundational it would be. I thought it was mostly theoretical,*

and I admit I didn't focus on it as much as I should have. Now that I'm teaching, I see how vital those concepts are."

Most participants (six) highlighted concerns about the timing and duration of the course. For instance, Participant 6 mentioned,

I think it should not only be taught in the final years of our program; we should also have it in the first or second year. We only studied it for one semester, which was not enough. Because it felt like an afterthought rather than a fundamental principle, and it was difficult to establish connections between this concept and the courses we have already completed. However, if it had been introduced in the early stages of our curriculum, we would have had ample time to fully grasp its significance and integrate it into various subjects such as classroom management and student psychology. My teaching experience showed me that inclusive education is a highly relevant topic for teachers. Therefore, for future educators, this subject should be introduced right from the first year.

Participant 2 identified the course's biggest shortcoming as the limited amount of time dedicated to it. Similarly, Participant 1 remarked that the course was too brief, lasting only one semester. Participant 2 said, *"By that point, I was juggling so many other obligations. Looking back, I realize it is probably the important course I took, yet it received the least time and attention."*

Additionally, participants underlined how important language is to their educational process. According to Participant 4, *"We sometimes struggled to find relevant research in Kazakh, and most up-to-date materials were in English."* Similarly, *"It is better to study in English or at least provide us with bilingual resources, I think we might have accessed a wider array of studies and practical guides"*, noted Participant 7.

4.4.2 Course Content and Syllabus

Based on the data, participants had mixed experiences with the syllabus and course material.

Participant 3 shared his/her experience of studying during the course:

The teacher divided us into groups and assigned each group a topic to research, which we then presented to our peers. This approach encouraged independent learning, which was beneficial in some ways. Participant 5 also highlighted the use of hands-on strategies:

We learned techniques like differentiated instruction and multi-modal teaching. For instance, one assignment required us to design lesson modifications for a hypothetical student with dyslexia.

Participant 2 emphasized the importance of case studies and group discussions about teaching methods, noting their value in understanding practical applications.

However, there were also negative opinions. Participant 3, who found the practical lessons helpful, highlighted a drawback, *“However, a downside was that the professor provided limited theoretical instruction-most of it came from student presentations.”*

Similarly, Participant 1 noted, *“One problem with this method (dividing students into groups and giving topics to work on) was that the information we received was not presented step by step and lacked a clear logical connection. Each group would present on a different topic on a different day, but we did not have continuous lectures from the instructor. This resulted in a fragmented understanding of the content, and we struggled to comprehend the connections between topics.”*

Participant 9 responded to the question about areas for improvement by stating:

A stronger focus on practical challenges would’ve been beneficial. For instance, how do you maintain an inclusive classroom with 25+ students who have varying needs but limited resources or support staff? We only touched on it briefly.

Most participants highlighted the absence of real-world experiences, such as visiting schools or inviting speakers. Participant 6 stated, *“It would be helpful to visit specialized schools or at least organize activities where students can work directly with children with special needs.”*

Furthermore, Participant 4 said, “We talked about hypothetical situations only, but we never had real-world case studies with concrete answers we could test. Consequently, since I began teaching full-time, I had to learn practical skills on my own.” Likewise, Participant 5 noted, “We never had the opportunity to try them out in a real classroom, but we had a lot of reading assignments on inclusive strategies. Theoretically, this is all helpful, but what should I do if a student with behavioral problems interrupts my class? To get ready for that, we required additional case-based simulations”.

4.4.3 Instructor Influence

Data analysis showed that students' opinions of the course are influenced by the professionalism and attitudes of the instructors, too. Participants graduated in different years; however, if they graduated in the same year, they may have had different instructors based on their distinct pedagogical specialties. Participants 2, Participant 4, and Participant 8 emphasized their instructor's beneficial influence. Participant 8 said, for example, *“Because our instructor knew the subject well and found a way to connect with all students. She was an excellent example of a true educator.”*

However, Participant 1 expressed a different experience, noting that their instructor tended to teach in a more traditional manner, providing fewer opportunities for discussion and engagement. As a result, Participant 1 felt that their learning experience was less interactive. Similarly, Participant 3 stated, *“Our instructor primarily delivered lectures and*

there were fewer chances for us to actively participate, which made it challenging to fully engage with the material on inclusive education."

These variations serve to highlight the significant contribution of instructors' teaching approaches and interactions in shaping students' perceptions and learning experiences. A supportive and participatory teaching approach was found to maximize the educational benefit of the inclusive educational program.

4.4.4 Effectiveness of the Inclusive Education Course in Preparing for Real-world Classroom Challenges

Responses varied regarding how well the Inclusive Education course prepared participants for real-world classroom challenges. Three participants were unable to answer. One participant, Participant 2, responded positively, stating, *"The course gave me a solid body of knowledge. I have only positive impressions. I no longer see Inclusive Education as only about students with disabilities, but about supporting every learner."*

In contrast, Participant 1 remarked, *"Basically, I left the course with the understanding that Inclusive Education is mostly about working with students who have medical conditions."* Participants 8, Participant 6, and Participant 5 agreed that the course was overall helpful but emphasized the need for improvement. For example, Participant 5 added, *"It taught me the terminology and provided a framework for thinking about diverse learners. But I've had to learn so much on the job. It's one thing to write a plan for a hypothetical student with ADHD; it's another to manage that same student's meltdowns or off-task behavior in a real classroom with 25 other learners, all within 45-minute blocks."*

4.5 Implementing Inclusive Practices: Challenges and Strategies

This section discusses the challenges graduate teachers face and their strategies to implement inclusive practices in their classrooms.

4.5.1 Challenges Graduate Teachers Face

By analyzing the data identified three main challenges that graduate teachers face when implementing inclusive practices in real classroom settings were identified: time management, resource management, and handling emergencies.

Participant 5 highlighted the struggle with time management, stating, *“Time management is a major hurdle. Adapting materials for different learners can be time-consuming, and sometimes there’s pressure to cover the curriculum quickly. Another challenge is balancing individual support with the collective progress of the class.”* This sentiment is echoed by Participant 2, who noted, *“Finding enough time and resources to prepare materials tailored to each student’s needs, especially when there are many students with different needs.”* Additionally, Participant 4 emphasized the difficulty of managing large class sizes, saying, *“One major challenge is large class sizes. I have 25 students in one class, each of them has unique needs. Balancing individual support with whole-class instruction can be overwhelming, especially with 45 minutes. This dynamic approach is time-consuming but necessary.”* As demonstrated by Participant 1’s experience, managing emergencies also became a major challenge,

I had a student with epilepsy, but I was not informed about it. One day, the student had a seizure in class, and I was in shock and did not know what to do or how to handle this situation. Then, I called the administration, then we called an ambulance, and the parents of the student.

Within the classroom, social-emotional interactions present another challenge. According to Participant 6, *“I had a student with a speech impairment who was mocked by classmates,”* highlighting an example of peer bullying.

4.5.2 Strategies

When asked about the strategies participants use to implement inclusive practices, a variety of approaches were shared.

Collaboration and knowledge sharing were common themes. Participant 4 explained, *“I work closely with experienced colleagues, sharing my knowledge and seeking their advice. I try to use pre-made or adapted materials as much as possible, saving time and focusing on each student's individual needs.”*

Participant 5 emphasized the importance of consultation with peers and involving parents, saying, *“I regularly talk to those who have had similar experiences, and working with parents helps, as they understand what motivates their child.”*

Strategic grouping and differentiation were also mentioned frequently. Participant 9 said,

“I observe all my students in each class and divide them into groups based on their similar needs, if any. By doing this, I can prepare tasks or teaching methods that save me time, and I don't have to prepare for each student in every class.”

This approach is supported by Participant 8's use of mixed-ability groups, where *“Students with different abilities work on projects together - this helps them learn from each other and support one another.”* Participant 3 agreed, saying, *“To keep students interested in the subject and save time, I prefer to give them longer-term assignments like projects or group tasks.”*

Furthermore, fostering classroom values plays a crucial role in creating an inclusive environment. As Participant 6 noted, *“For me, it is important to establish classroom values, so I conduct sessions on this topic.”* Additionally, the use of visual and multimedia resources was a prevalent strategy among participants. Many participants mentioned utilizing visual aids or video clips to illustrate written content, enhancing comprehension and engagement for all students.

4.6 Participants’ Recommendations

This theme is about participants' recommendations for improving inclusive education at various levels. The recommendations reflect a belief that creating an effective and fair learning environment requires coordinated improvements in both teacher training and institutional support.

4.6.1 Enhancing Inclusive Education Course Design

Participants' answers were similar when it came to improving course design. Therefore, I organized the answers into groups.

- All education-related majors should be required to offer a course like “Inclusive Education”.

The participants noted inconsistencies in how inclusive education is provided in different educational programs. While some programs include it as a mandatory component, others offer it as an optional course or not at all. Based on these observations, the participants recommended that all education-related programs should include a course on "Inclusive Education" in their curriculum to ensure that all future educators receive training in this important area.

- Standardized course content or syllabus across all majors

“First, it would be good if the course content or syllabus were standardized across all majors at the university. Because, in our experience, we had different instructors with different teaching styles and different course materials. Some groups seemed to have more engaging activities or interactive learning experiences than others. For example, while some students had practical case studies, our focus was primarily on theory”, said Participant 6 and emphasized the importance of the same standardized course syllabus across all majors. Other participants (Participants 3,4,5,9) also mentioned it.

- Hands-on experience

As with the course content, there was a clear concern regarding the lack of practical components in the Inclusive Education course. While many students appreciated the theoretical learning offered by the course, they noted that there was a gap when it came to practicing inclusive teaching in a real classroom setting.

The course was great, and I gained a solid foundation, but it was mainly theoretical. There were no practical exercises or simulations to help me apply the theory in real-life situations. I remember how, when I started teaching, I realized that my understanding of inclusive education was only academic, and what was needed in practice was quite different, said Participant 8.

I believe that more direct engagement with students from diverse backgrounds during our university training would be more beneficial. Rather than just analyzing hypothetical scenarios, we should be exposed to inclusive classrooms and see how teachers use a variety of strategies, said Participant 7.

Other participants argued for the need to include practical components such as case studies, and role-playing exercises not only to increase student engagement, but also to bridge the gap between the two different approaches.

4.6.2 Systematic and Community Reforms

This section provides recommendations from participants on broader reforms beyond teacher training and strategies at the classroom level.

- Improving school policies and resource allocation

The data showed that the need for more effective policies and increased resources to support inclusive education were the most common responses of participants when asked how inclusive education in Kazakhstan could be improved. Participant 3 stated,

“Having 25 or more students in one class, including those with diverse needs, makes it difficult to give individual attention. More teacher assistants or specialized staff would help ensure that all students receive the support they need”.

Similarly, Participant 5 said *“Policies must shift toward smaller class sizes and improve funding so that inclusive teaching isn’t seen as “extra work” but as a standard”.*

“Schools require extra financial support to provide adapted instructional materials, assistive technologies, and accessible infrastructure. Even the best learning techniques won't work without this”. Participant 7 added.

- Popularizing Inclusive Education

In addition to school policy, the participants highlighted the importance of fostering greater societal acceptance and awareness of Inclusive Education. Participants were worried that inclusive education is typically perceived as a specialist or distinct system and not as part of mainstream education.

Participant 1 emphasized,

Inclusive education is not merely a matter of the classroom—it's about shifting attitudes. If society continues to think of students with disabilities or learning differences as 'separate' or 'different,' genuine inclusion cannot be achieved.

To solve this issue, some strategies were proposed by participants:

1. To launch public campaigns to make people aware of the advantages of inclusive education (Participant 1,7,9,3, and 4).

2. To alter minds, one needs to showcase success stories from different learning environments. Social media can be used with the keywords #EducationForAll and #InclusionMatters to post questions, share motivational stories, and bring into focus the positive impacts of inclusive education (Participant 3). Outreach in communities can be done through organizing workshops, seminars, and town hall meetings to educate communities about the necessity of inclusion and debunk common myths.

3. Facilitating Government Support

Collaborate with organizations to advance inclusive education programs and use their power to raise awareness about inclusivity.

- Strengthening Research

Participants emphasized conducting more research on inclusive education so that practices can be devised for teaching effectively, based on evidence. No matter how inclusive education is being talked about, many pointed to a vast disconnect between theory and practice, especially in regions where inclusive policies are recent (Participant 6 and 9).

As Participant 5 explained,

Too many of the methods we learned in our Inclusive Education courses were abstract theory and not concrete case studies from the real classroom. We need more studies with an eye on what is happening in actual classrooms and what the implications are for teachers in terms of practice.

Moreover, members requested more research conducted in Kazakh or Russian languages, as much of the current literature is in English and may not be tailored to the cultural, linguistic, and geographical contexts of their education systems.

- Enhancing Technology and Accessibility

Members identified how significant technology has become in enhancing inclusive learning and suggested that schools and universities invest in assistive technologies to cater to the diverse needs of learners. Participant 7 identified a key consideration:

Low-income students may not have access to technology at home, which creates an additional layer of barriers to learning. Schools need to make digital resources available and accessible to everyone.

To increase technology integration, the following actions were recommended by Participant 2:

Teacher Training: Provide teachers with training on how to effectively use digital tools to assist students with different learning needs.

Accessible Online Platforms: Ensure that online learning platforms are accessible for students with visual, hearing, or cognitive impairments.

Blended Learning Models: Invest in blended learning models that combine face-to-face and online instruction to cater to more than one style of learning and make learning accessible to all students.

4.7 Conclusion

This chapter presented the findings of the study, highlighting the experiences of graduating teachers with the Inclusive Education course. The participants had very often only associated inclusive education with impairments, having a limited understanding of inclusive education. But after finishing the course and having some teaching experience, their views broadened.

Although the Inclusive Education course was beneficial, students expressed dissatisfaction with its practicality, citing the duration of the Inclusive Education course and the challenges posed by language barriers and the course structure. In real-world scenarios,

teachers encountered difficulties such as crisis management, time constraints, limited resources, and overcrowding. To address these challenges, they employed technological integration, personalized training, and collaborative teaching methods. The participants also proposed systemic changes, including standardizing the curriculum, integrating practical training, increasing funding, and raising public awareness. The findings indicate that inclusive education can only be achieved if teachers are adequately prepared, institutional support is enhanced, and policies are improved.

Chapter 5: Discussion

5.1 Introduction

This chapter discusses the findings presented in Chapter 4. The study investigates the experiences and perceptions of inclusive education of teachers who completed an Inclusive Education course at their bachelor's degree. This section presents the key findings from the study in relation to the research objectives, existing literature, and the selected theoretical framework. The aim is to explore the participants' common experiences and how they reflect the broader realities of inclusive education in Kazakhstan. This study relied on the following research questions: 1. What do recently graduated teachers understand about inclusive education as a concept? 2. What do recently graduated teachers think about their Inclusive Education course? 3. How do recently graduated teachers apply the knowledge and skills acquired from the Inclusive Education course in their professional practice, what challenges do they face, and how do they navigate them? 4. What are the implications of these findings for practice, policy, and research? Each aspect is analyzed from the participants' individual perspectives and within the context of Vygotsky's social constructivist theory, which explains the formation of knowledge about inclusion through social and cultural interactions. In this analysis, I intend to highlight the strengths and weaknesses of the course and identify areas for improvement to better prepare future educators for inclusive classrooms in Kazakhstan.

5.2 Participants' Understandings of Inclusive Education

Most participants' understanding of Inclusive Education before taking the course Inclusive Education, was narrow, often equating it with teaching students with disabilities. This is not surprising, as Kazakhstan's history of special education systems and segregated schooling continues to shape how many teachers perceive inclusion. Several participants

described how, before the Inclusive Education course, they thought Inclusive Education only involved children with severe disabilities or required special educators. This finding is consistent with some studies that showed inclusive education in Kazakhstan is often misunderstood as being only for students with disabilities (Sagandykova, 2020; Zholtayeva et al., 2013). Kazakhstan's historical dependence on segregated educational paradigms, a legacy from the Soviet system, is cited as an explanation for early misunderstandings held by instructors in this country (Zholtayeva et al., 2013). According to similar findings by Agavelyan et al. (2020) and Sagandykova (2020), inclusive education remains closely linked to disability in the local context.

After completing the course and entering the teaching profession, most participants' understanding expanded to include a broad range of student diversity. Their definitions of inclusion expanded to embrace a broader view of diversity. Many came to understand that Inclusive Education also encompasses language barriers, socioeconomic disadvantages, behavioral and emotional needs, and varying learning styles.

This shift aligns with other research that has demonstrated that training and practical teaching experience enhance teachers' inclusive attitudes (Avramidis & Norwich, 2002; Saloviita, 2019; Yada, 2017).

These findings highlight the dynamic nature of teachers' learning and the development of beliefs. Instead of being static or simply absorbing information, teachers' understanding evolved as they engaged with real students, made decisions in the classroom, and reflected on their practices. This is consistent with the view that learning is a social and culturally embedded process.

While the Inclusive Education course provided a theoretical understanding, much of the more profound learning occurred through daily interactions and collaborative efforts within the school setting. This approach aligns with the core principles of social

constructivist theory (Vygotsky, 1978). Although participants seldom used theoretical terminology to describe their learning experiences, their reflections demonstrated how knowledge was gradually built through experience and engagement. Learning did not take place solely through lectures, but rather through meaningful interaction with students, colleagues, and challenging classroom situations. Although these instances were unplanned, they served as opportunities for development, encouraging participants to move beyond superficial definitions and begin considering inclusion in terms of relationships rather than categories.

However, this also reveals a challenge: without adequate structured opportunities for practical application during the Inclusive Education course, many participants had to develop these understandings independently, often through trial and error. This raises questions about the design of inclusive education programs and whether they effectively promote the type of social and experiential learning required by both theory and practice.

5.3 Participants' Inclusive Education Course Experience

The Inclusive Education course was highly regarded by most participants as beneficial. The course on inclusive education was praised by the majority of participants. However, their feedback also highlighted some areas for improvement in its structure and implementation. The course's late start and short duration limited its practical impact, with many only realizing its value after they had graduated and gained real teaching experience. This indicates that inclusive education is still seen as an additional subject, rather than a fundamental part of teacher training. If inclusive education is not integrated throughout teacher training, it risks being seen as optional rather than essential for daily teaching practice.

Participants also noted inconsistent delivery of the course across instructors and specialties, leading to unequal learning outcomes. This lack of a standardized curriculum poses a challenge to the aim of providing all students with a common understanding of inclusion. Furthermore, language barriers create additional challenges for students from diverse backgrounds. From a constructivist perspective, these factors limit the ability of students to engage in collaborative and contextual learning which is essential for acquiring inclusive principles. Therefore, if the course itself is not designed to be inclusive in its delivery, its potential to promote inclusive teaching practices is compromised.

These issues mirror broader trends documented in the scholarly literature. Forlin (2010) underscored that inclusive education is frequently presented as an additional feature rather than a fundamental aspect of teacher training programs. Similarly, Florian (2012) contends that for inclusion to be truly effective, it must be integrated throughout the entire process of teacher preparation, rather than confined to a single isolated course. In the context of Kazakhstan, Makoelle and Burmistrova (2020) noted a lack of coherent planning in the approach to inclusive education across universities, leading to inconsistent quality and limited fusion of theory and practice.

The lack of practical elements and some design flaws in the course limited students' ability to collaborate with their peers and instructors during the knowledge acquisition process. Additionally, the inconsistent structure of the course probably hindered the development of a shared understanding essential for effective collaboration. While the course may have provided a theoretical foundation, the lack of real-world application meant that most of the learning occurred later, on the job, through unstructured exploration. This suggests that effective preparation for inclusion requires more than simply awareness; it necessitates structured, guided, and socially interactive learning environments that mirror the complexity of inclusive classrooms.

5.4 Implementing Inclusive Practices: Challenges and Strategies

The responses of the participants reinforce that there is a gap between theory and practice in inclusive teaching. Even with a foundation laid by the Inclusive Education course, participants still felt inadequate to handle real-life classrooms, especially in resource-scarce environments. Time limitations, high student numbers, and few supporting staff made it difficult to implement inclusive strategies efficiently. These findings reveal an underlying systemic problem: when teacher training is unable to tackle practical limitations, inclusive education is rendered unfeasible (Makoelle & Burmistrova, 2020).

Despite the numerous challenges they encountered, their inclusive practice strategies tended to evolve as a result of collaboration, observation and reflection in real classrooms. As opposed to depending on coursework alone at the university level, most made improvements by interacting with students and teachers on a day-by-day basis. By negotiating with colleagues, modifying materials on the needs basis and trying out group projects, they were able to respond accordingly and learn themselves. For instance, studies by Hidayah and Morganna (2019) and Moraña and Orozco (2019) have shown that when teachers engage affirmatively with students' and classroom needs, differentiated instruction, peer tutoring, and collaborative learning strategies evolve naturally. The participants in this study built more inclusive learning environments utilizing analogous strategies like adjusting course materials, flexible grouping, and communication with teachers. This learning by doing is comparable to Vygotsky's theory of learning socially (Vygotsky, 1978), whereby we learn with people and through communication. We learn what is applicable in our culture and everyday lives. The zone of proximal development is key, as it refers to the period when we receive assistance from others in our learning process.

Generally, findings depict the complexities of inclusive practice in Kazakhstani schools. Teachers have real challenges, from structural barriers to emotional labor, that they navigate, but they also manifest great commitment to inclusive classrooms. Teachers' practice has been formed through collaboration, experimentation, and a commitment to addressing students' needs. These illustrative examples speak to the salience of context, communication, and support in forming inclusive education. For teacher education programs and education systems, it is evident that in order to move toward an inclusive model, we have to develop an environment that does not just deliver training but also long-term support for teachers as they practice.

5.5 Participants' Recommendations

The participants provided concrete and thoughtful suggestions regarding how inclusive education could be enhanced at both the course and systemic levels. At the course level, they suggested that inclusive education should be incorporated into all study programs, beginning earlier in the curriculum. They also recommended including practical components such as classroom observations, simulations, guest lectures, and collaborations with students with special educational needs through university-organized visits.

These proposals are consistent with the ideas proposed by Florian (2012) and Soleas (2015), who support incorporating inclusive education into core curricula and promoting the seamless integration of theory and practice.

At a broader level, respondents emphasized the need for smaller class sizes, additional support staff, increased funding, and improved provision of assistive technologies. They also emphasized the importance of promoting awareness about the benefits of inclusivity on a societal level and conducting more research in Russian and Kazakh in order to enhance accessibility. These recommendations are supported by

Agavelyan et al. (2020) and UNESCO (2019), who argue that successful inclusion requires not only high-quality teachers, but also adequate financial and material resources.

The participants' focus on systemic and cultural change is in line with the principles of social constructivism. According to Vygotsky (1978), learning is greatly influenced by the tools, language, and values used within a specific cultural context. In order to promote inclusive education, institutional changes must involve not only the training of teachers, but also the broader socio-cultural environment in which pedagogy and learning take place.

To establish inclusive schools, there is a need for a collaborative effort through supportive policies, relevant research at the local level, and active participation of the community. These efforts will create a learning environment that is accessible to all students, regardless of their background or abilities.

5.6 Conclusion

This chapter has discussed the main findings of the research in relation to relevant literature and the theoretical foundation of social constructivism. The study showed how the recently graduated teachers' understanding of inclusive education was significantly changed by coursework and teaching experience. Although the Inclusive Education course provided a foundation, its short length, lack of practical modules, and inconsistent follow-up weakened its impact. Teachers struggled to implement inclusive practices, but most were able to overcome obstacles through collaboration, differentiated instruction, and values-based approaches. From a constructivist perspective, the findings emphasize the importance of culturally responsive, interactive, and experiential learning in teacher education. The recommendations made by the participants emphasize the need for structural changes to align institutional policies with inclusive goals. Ultimately, the

success of inclusive education in Kazakhstan depends not only on individual teachers' efforts but also on systemic and culturally supported inclusive practices.

Additionally, the learning experiences of the participants demonstrated the core principles of Social Constructivist Theory. As Vygotsky (1978) emphasized, knowledge is not transferred from teacher to student, but is actively constructed through social interactions and contextual experiences.

For this study, it is clear that real learning about inclusive education occurred whenever the participants interacted with colleagues, addressed challenges with students, and reflected on their own practices. These collaborative experiences served as a scaffold, assisting novice teachers in transitioning from a superficial theoretical understanding to a more sophisticated and practical comprehension of inclusion.

The diversity of classroom settings, peer support, and exposure to actual classroom dynamics within the "zone of proximal development" (ZPD) all contributed to the value of mediated learning experiences.

Chapter 6: Conclusion

6.1 Introduction

This chapter summarizes the research and concludes with suggestions for policy, practice, and future research. The main aim of this research was to explore the experiences of novice teachers who had completed an Inclusive Education course during their bachelor's degree at a Kazakhstani university, within the last 1-3 years. The study was based on the following research questions:

1. What do recently graduated teachers understand about inclusive education as a concept?
2. What do recently graduated teachers think about their Inclusive Education course?
3. How do recently graduated teachers apply the knowledge and skills acquired from the Inclusive Education course in their professional practice, what challenges do they face, and how do they navigate those challenges?
4. What are the implications of these findings for practice, policy, and research?

The study found that while participants acknowledged the importance of inclusive education, many found that the Inclusive Education course lacked practical application, was too short in duration, and did not fully prepare them enough for real classroom challenges. Despite these limitations, graduate teachers demonstrated creativity and commitment by developing strategies to support diverse learners. These results highlight the importance of enhancing teacher training programs and providing sustained institutional assistance.

6.2 Limitations

This study has some limitations. Firstly, it was conducted with nine participants from only one single university, which may limit the generalizability of the findings. However, the aim of this qualitative research was not to apply its results to a broader population, but rather to gain a deeper understanding of the experiences of recently graduated teachers in this specific context. Despite this, the rich and contextual data collected offers valuable insights into inclusive education at a local level. Secondly, the interviews were conducted in Kazakh and Russian and later translated into English for analysis, which presents a risk of meaning loss during translation. To prevent this, strict attention was paid to the translation process in order to ensure accuracy and consistency. I was able to cross-check key terms and phrases, ensuring cultural accuracy in all three languages. Also, only graduate teachers' perspectives were explored; the study did not include input from university faculty or in-service mentors, which limits the comprehensiveness of the findings. The lack of feedback from university professors or in-service mentors means that important perspectives on the educational process and the assistance provided to educators were not considered. This lack of diverse perspectives may lead to an incomplete comprehension of the complexities within the educational context. However, the decision to focus exclusively on recent graduates was deliberate, as the study intended to explore the experiences of recently graduated teachers. Future research could build on this work by involving a broader range of stakeholders in order to provide a more comprehensive understanding of inclusive education practices.

6.3 Implications and Recommendations for Policy

The findings of this study highlight the need for systemic changes in teacher education policy in Kazakhstan. Firstly, Inclusive Education should be a core component of all teacher preparation programs. I observed that not all pedagogical majors include an

Inclusive Education course; for some, it is mandatory, for others, it is elective, and some majors do not offer it at all. Therefore, national education policy should require inclusive education courses to be a mandatory, credit-bearing part of all teacher training programs, regardless of the teaching specialty. The current inconsistencies, where the course is either offered as an elective or not at all, create gaps in teacher preparation and impede efforts toward comprehensive inclusion.

Secondly, curriculum policy should be revised to require the placement of Inclusive Education earlier in the program timeline (e.g., within the first or second year) and for a duration longer than one semester to ensure students gain more comprehensive knowledge.

At the policy level, the Ministry of Education should also revise school funding and resource allocation to ensure that schools are adequately supported in implementing inclusive practices. This includes providing assistive technologies, hiring teacher assistants, and creating accessible classroom environments. Additionally, national education reforms should encourage stronger collaboration between universities and schools, enabling student teachers to gain real-world experience with inclusion.

6.4 Implications and Recommendations for Practice

The study highlights the need to strengthen the practical aspects of teacher training programs. To this end, universities should incorporate a variety of experiential learning opportunities into their curricula. For example, offering structured internships in a variety of school settings can provide student teachers with hands-on experience in implementing inclusive strategies. Furthermore, incorporating case studies and project-based assignments will enable them to analyze real-world scenarios and develop practical solutions to the challenges faced by students with diverse needs.

While it is essential for teachers to reflect on their teaching practices and collaborate with their colleagues to continuously improve their inclusive strategies, school leaders and administrators must also actively promote and support the inclusion of diverse perspectives. They must ensure that all staff adhere to and implement inclusive values, as they play a crucial role in creating an inclusive environment within their institutions. They must model inclusive values, provide the necessary resources and time for teachers to implement inclusive practices, and establish structures for collaboration and peer support. This will help create a more inclusive and welcoming environment for all students and staff. In addition, establishing mentorship during the early years of teaching is essential. Schools can introduce structured mentorship programs in which senior, experienced educators mentor recently graduated teachers. These mentorship relationships not only provide psychological support but also expose new teachers to real-world models of inclusive practices. According to Ingersoll and Strong (2011), teachers who participate in mentoring activities are more likely to develop effective classroom management skills, adapt inclusive teaching methods, and experience increased job satisfaction. Furthermore, continuous mentoring can help bridge the gap between theoretical knowledge and practical application, which remains a significant challenge for new teachers when dealing with diverse cultural contexts. Therefore, formalizing mentorship structures is crucial for ensuring effective delivery of inclusive education.

Parents and caregivers also play an essential role in inclusive education. Schools should establish regular communication with families, conduct workshops or orientation sessions on inclusive practices, and provide opportunities for parents to be involved in the learning process. By keeping parents informed and appreciated, schools can increase their support for inclusive practices at home and advocacy for their child's needs.

By involving all stakeholders – teachers, school leaders, and parents – in a collaborative process, inclusive education has the potential to move beyond theoretical concepts and become an effective classroom practice. Building strong partnerships among these groups is essential for creating learning environments that value and support every student.

6.5 Implications and Recommendations for Research

The results of this study provide a basis for further research on inclusive education in Kazakhstan. Although this study focused on the perspectives of recently graduated teachers who have completed a university-based inclusive education course, there is a need for more research to explore the wider system surrounding their learning and professional development.

One significant area for further exploration is the role of university instructors in inclusive education. Understanding how inclusive pedagogy is taught, assessed, and modeled in pre-service teacher training programs could provide a deeper understanding of the gap between theoretical knowledge and practical application as experienced by graduate teachers.

Additionally, future research could investigate how inclusive education is implemented in private and mainstream schools.

In conclusion, further research using qualitative and mixed-methods approaches could explore the collaborative interactions between graduate teachers and other stakeholders. Future research may explore the perspectives of other significant stakeholders involved in inclusive education, such as policymakers, administrators, and parents. The insights gained from these stakeholders' roles and perspectives would provide a

comprehensive understanding of how inclusive practices are implemented at various levels. For example, administrators shape school policies and resource allocation, while parents play a crucial role in advocating for their children's needs. Considering factors from these viewpoints could lead to more comprehensive recommendations for the advancement of inclusive education in Kazakhstan.

6.6 Conclusion

This research has successfully accomplished its aim of exploring the experiences of recently graduated teachers on Inclusive Education program at a university in Kazakhstan. The study has identified both the strengths and weaknesses of the program, and has highlighted the ongoing difficulties that teachers encounter when implementing inclusive practices in real-life classrooms. This research provides key findings into how recently graduated teachers in Kazakhstan perceive, experience, and implement inclusive education based on their university training:

- Initial understanding of inclusive education was narrow (focused on disabilities); it broadened after the course and teaching experience.
- The course was useful but criticized for being too short, theoretical, and offered too late in the program.
- Lack of practical experience (e.g., school visits, real cases) was a major gap.
- Teachers faced real-world challenges: large classes, time limits, lack of resources, emergencies.
- They used strategies like peer support, differentiation, visual aids, and building inclusive values.

- Participants recommended: Making the course mandatory and earlier, adding practical components, more funding, support staff, and public awareness, localized research and assistive technology access.

These findings have important implications for teacher education, educational policy, and classroom practices in Kazakhstan and similar contexts. By improving the structure and content of inclusive education programs, providing support for graduate instructors through mentorship and resources, and promoting reflective and interactive learning environments, stakeholders can better prepare future educators to create inclusive and equitable classrooms for all students.

While conducting this research, I have achieved a high level of personal and professional growth. Initially, starting this dissertation process was challenging, given that the topic of inclusive education is multifaceted and complex. However, the more I immersed myself in the literature, conducted interviews, and worked on analyzing data, the more I learned not only about the theoretical aspects but also about the practical reality of the teaching environment.

I realized that inclusive education is less about policy or practice and more about attitude, empathy, and flexibility in actual classrooms. Inclusive education is about creating an environment where all students can feel valued and supported. This requires teachers to be flexible and adaptable, as each student has unique needs and abilities. By adopting this approach, teachers can help students reach their full potential and develop a sense of belonging and belonging in the classroom.

One of the most significant lessons I have learned is the value of patience and flexibility when conducting research. Despite thorough planning, challenges arose during

the project, including difficulties coordinating interviews and navigating the complexities of multilingual translations. I learned the importance of adapting and remaining resolute when faced with unforeseen obstacles.

If I were to conduct a similar study again, I would begin collecting data earlier and allow more time for participant recruitment and transcription. Additionally, I learned the significance of maintaining ongoing reflection during the research process, keeping detailed notes and memos was essential for interpreting the complex data.

Additionally, this research has significantly influenced my professional goals. I have a stronger commitment to the principles of inclusive education and am motivated to use the knowledge I have gained to assist students in the future. I now understand the importance of continuous professional development, networking with other educators, and fostering inclusive values within educational institutions. I look towards the future and aspire to become an even stronger advocate for more inclusive practices at both the policy and implementation levels.

Overall, this thesis process has been transformational. It has enhanced my research skills, deepened my empathy as a teacher, and sharpened my analytical thinking. I will apply the lessons learned about perseverance, flexibility, and embracing diversity in both my professional practice and future academic endeavors.

References

- Agavelyan, R. O., Aubakirova, S. D., Zhomartova, A. D., & Burdina, E. I. (2020). Teachers' Attitudes towards Inclusive Education in Kazakhstan. *Integraciã Obrazovaniã*, 24(1), 8–19. <https://doi.org/10.15507/1991-9468.098.024.202001.008-019>
- Ahmmed, M., Sharma, U., & Deppeler, J. (2012). Variables affecting teachers' attitudes towards inclusive education in Bangladesh. *Journal of Research in Special Educational Needs*, 12(3), 132-140.
- Amr, M., Al-Natour, M., Al-Abdallat, B., & Alkhamra, H. (2016). Primary school teachers' knowledge, attitudes, and views on barriers to inclusion in Jordan. *International Journal of Special Education*, 31(1), 67-77.
- Butakor, P., Mensah, A. D., & Ayiku, L. A. (2023). Attitudes of Ghanaian teachers towards inclusive education: A mixed-method study. *International Journal of Inclusive Education*, 27(2), 115-132. <https://doi.org/10.1080/13603116.2022.2039821>
- Chataika, T., Kamchedzera, E. T., & Semphere, N. K. (2017). An exploration of the challenges faced by regular primary school teachers in planning instructional strategies for inclusive classrooms. *African Journal of Special and Inclusive Education*, 2(1), 12-21.
- Chhabra, S., Srivastava, R., & Srivastava, I. (2010). Inclusive education in Botswana: The perceptions of school teachers. *Journal of Disability Policy Studies*, 20(4), 219-228.
- Chu, M.-W., Craig, H., Yeworiew, L., & Xu, Y. (2020). Teachers' unpreparedness to accommodate student needs. *Canadian Journal of School Psychology*, 35(3), 210-224.

- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. SAGE Publications.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Elder, B. C., Damiani, M. L., & Oswago, B. O. (2015). From attitudes to practice: Utilizing inclusive teaching strategies in Kenyan primary schools. *International Journal of Inclusive Education*, 20(4), 413-434.
<https://doi.org/10.1080/13603116.2015.1082648>
- Florian, L. (2012). Preparing teachers to work in inclusive classrooms. *Journal of Teacher Education*, 63(4), 275-285.
- Forlin, C., & Chambers, D. (2011). Teacher preparation for inclusive education: Increasing knowledge but raising concerns. *Asia-Pacific Journal of Teacher Education*, 39(1), 17-32.
- Greguol, M., Malagodi, B. M., & Carraro, A. (2018). Inclusion of students with disabilities in physical education classes: Teachers' attitudes in regular schools. *Revista Brasileira de Educação Especial*, 24(1), 33-44. <http://dx.doi.org/10.1590/S1413-65382418000100004>
- Haug, P. (2016). Understanding inclusive education: Ideals and reality. *Scandinavian Journal of Disability Research*, 19(3), 206-217.
<https://doi.org/10.1080/15017419.2016.1224778>
- Hidayah, J., & Morganna, R. (2019). Fulfilling the needs of diverse students: Teaching strategies for EFL inclusive classrooms. *Suar Betang: Jurnal Ilmiah Kebahasaan dan Kesastraan*, 14(2). <https://doi.org/10.26499/surbet.v14i2.135>

Kazakhstan / INCLUSION / Education Profiles. (n.d.). [https://education-](https://education-profiles.org/central-and-southern-)
[profiles.org/central-and-southern-](https://education-profiles.org/central-and-southern-)

[asia/kazakhstan/~inclusion#Teachers%20and%20Support%20personnel](https://education-profiles.org/central-and-southern-)

Karynbaeva, O. V., Shapovalova, O. E., Shklyar, N. V., Emelyanova, I. A., & Borisova, E.

A. (2019). Motivational-personal readiness of teachers to model an inclusive educational environment. *Ad Alta: Journal of Interdisciplinary Research*, 9, 23-26.

Li, H., & Li, X. (2020). Rural and urban general education teachers' instructional strategies in inclusive classrooms in China: A dual system perspective.

International Journal of Inclusive Education, 27(1), 72-88.

<https://doi.org/10.1080/13603116.2020.1821796>

Makoelle, T. M. (2020). Inclusive education in Kazakhstan: Defining its scope and the challenges to its implementation. *International Journal of Inclusive Education*, 24(2), 169-186.

Makoelle, T. M. (2020). Schools' transition toward inclusive education in Post-Soviet countries: Selected cases in Kazakhstan. *SAGE Open*, 10(2), 215824402092658.

<https://doi.org/10.1177/2158244020926586>

Makoelle, T. M., & Burmistrova, V. (2021). Teacher education and inclusive education in Kazakhstan. *International Journal of Inclusive Education*.

<https://doi.org/10.1080/13603116.2021.1889048>

Mashiya, J. N. (2014). Educators' attitude towards inclusive education in South Africa. *International Journal of Special Education*, 14(1), 80-92.

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass

- Miesera, S., & Gebhardt, M. (2018). Inclusive vocational schools in Canada and Germany: A comparison of vocational pre-service teachers' attitudes, self-efficacy and experiences towards inclusive education. *European Journal of Special Needs Education, 33*(5), 707-722.
- Moriña, A., & Orozco, I. (2019). Understanding inclusive pedagogy in primary education: Teachers' perspectives. *Educational Studies, 47*(2), 137-154.
<https://doi.org/10.1080/03055698.2019.1670139>
- Niholm, C., & Alm, B. (2010). Inclusivity in a Swedish classroom: A qualitative case study. *Scandinavian Journal of Educational Research, 54*(6), 603-616.
<https://doi.org/10.1080/00313831.2010.00000>
- Prisiazhniuk, D., Makoelle, T. M., & Zangieva, I. (2024). Teachers' attitudes towards inclusive education of children with special educational needs and disabilities in Central Asia. *Children and Youth Services Review, 160*, 107535.
- 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>
- Saloviita, T. (2017). How common are inclusive educational practices among Finnish teachers? *International Journal of Inclusive Education, 22*(5), 560-575.
<https://doi.org/10.1080/13603116.2017.1390001>
- Saloviita, T. (2019). Explaining classroom teachers' attitudes towards inclusive education. *Support for Learning, 34*(4), 433-447. <https://doi.org/10.1111/1467-9604.12277>
- San Martin, C., Ramirez, C., Calvo, R., Muñoz-Martínez, Y., & Sharma, U. (2021). Chilean teachers' attitudes towards inclusive education, self-efficacy, and intention to implement inclusive practices. *Sustainability, 13*(4), 2300.
<https://doi.org/10.3390/su13042300>

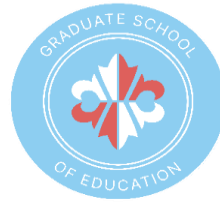
- Savolainen, H., Engelbrecht, P., Nel, M., & Malinen, O.-P. (2012). Understanding teachers' attitudes and self-efficacy in inclusive education: Implications for pre-service and in-service teacher education. *European Journal of Special Needs Education, 27*(1), 51-68.
- Sokal, L., & Sharma, U. (2013). Canadian in-service teachers' concerns, efficacy, and attitudes about inclusive education. *Exceptionality Education International, 23*(1), 24-41.
- Soleas, E. K. (2016). New teacher perceptions of inclusive practices: An examination of contemporary teacher education programs. *Alberta Journal of Educational Research, 61*(3), 294-313. <https://doi.org/10.55016/ojs/ajer.v61i3.56075>
- Thaver, T., & Lim, L. (2014). Attitudes of pre-service mainstream teachers in Singapore towards people with disabilities and inclusive education. *International Journal of Inclusive Education, 18*(11), 1033-1048.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem-solving. *Journal of Child Psychology and Psychiatry, 17*(2), 89-100. <https://doi.org/10.1111/j.1469-7610.1976.tb00381>
- Yada, A., & Savolainen, H. (2017). Japanese in-service teachers' attitudes toward inclusive education and self-efficacy for inclusive practices. *Teaching and Teacher Education, 64*, 222-229. <https://doi.org/10.1016/j.tate.2017.02.005>
- Yussupova, A., & Issabayev, M. (2022). Attitudes of teachers toward inclusive education in Kazakhstan: The case of mainstream schools in Almaty. *Central Asian Economic Review*.

Creswell, J. W. (1973). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). *Sage Publications Inc.*

Ivanič, R. (2010). Discourses of writing and to write. *Language and Education*, *18*(5), 220–245.

<https://www.tandfonline.com/doi/epdf/10.1080/09500780408666877?needAccess=true>

Appendix A: AI Declaration Form



Thesis Title: The Experiences of Recently Graduated Teachers in Inclusive Education

Course at one Kazakhstani University

Declaration of the Use of Generative AI

I hereby declare that I have read and understood NUGSE's policy concerning appropriate use of AI and composed this work independently (please check one):

- with the use of artificial intelligence tools, or
- without the use of artificial intelligence tools.

(If you have used AI tools as defined in the GSE policy document, please complete the rest of this form.)

During the preparation of this thesis/examination, I used Grammarly, Quillbot, and ChatGPT for proof-reading, to make it more academic to.

I also declare that I

- am aware of the capabilities and limitations of AI tool(s),
- have verified that the content generated by AI systems and adopted by me is factually correct,
- am aware that as the author of this thesis I bear full responsibility for the statements and assertions made in it,
- have submitted complete and accurate information about my use of AI tools in this work, and
- acknowledge that there may be disciplinary consequences if I have not followed NUGSE's guidelines regarding appropriate AI use.

Name: Kymbat Smagulova

Signature: 

Date: 25.04.2025

Appendix B: Consent Letters

INFORMED CONSENT FORM

The Experiences of Graduate Teachers in Inclusive Education course from one Kazakhstani university

DESCRIPTION: You are invited to participate in a **research study** that explores the experiences of graduate teachers in Inclusive Education course from one Kazakhstani university. The study aims to assess how well these graduates are prepared to create and sustain inclusive learning environments in their professions.

TIME INVOLVEMENT: Your participation in this study will take approximately **40 to 60 minutes**. The interview will be scheduled at a time and location convenient for you, ensuring your comfort throughout the process.

RISKS AND BENEFITS: This study does not pose any significant risks. However, there is a small chance that discussing challenges related to inclusive education might cause some emotional discomfort or bring up difficult experiences. If this happens, you are welcome to pause the interview or withdraw from the study at any time without any consequences.

As a participant, you may benefit from the chance to reflect on and evaluate your experiences with implementing inclusive education, which could provide valuable personal and professional insights. Furthermore, your feedback will help enhance the understanding of the effectiveness and challenges of inclusive education in Kazakhstan, potentially shaping future educational practices and policies.

PARTICIPANT'S RIGHTS: Your participation in this study is entirely voluntary. You have the right to withdraw your consent or discontinue participation at any time without any penalty or loss of benefits to which you are otherwise entitled. You are also free to refuse to answer any particular questions without consequence. The results of this research study may be presented at scientific or professional meetings or published in scientific journals, but your identity and any identifiable information will remain confidential.

CONTACT INFORMATION:

Questions: If you have any questions, concerns, or complaints about this research or its procedures, please contact:

Thesis Supervisor:

Dr. Oliver Mutanga
Email: oliver.mutanga@nu.edu.kz

Researcher:

Kymbat Smagulova
Email: kymbat.smagulova@nu.edu.kz
Phone: 8 (747) 882 0522

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 by writing to gse_researchcommittee@nu.edu.kz.

Date: *Participant #6*
Participation code: *23.12*

CONSENT

- 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.

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

Signature: _____



Date: _____

2-2

Appendix C: Data Analysis – Interview Protocol

Date:

Participant code:

Interview components:

1. Welcoming the Participant:

- Greet the participant warmly and express gratitude for their cooperation and willingness to participate.

2. Confidentiality, Risks, and Benefits:

- Provide a brief overview of confidentiality protocols, including how their information will be kept confidential.
- Discuss any potential risks and benefits associated with the study.

3. Duration of the Interview:

- Inform the participant of the expected duration of the interview (approximately 40-60 minutes).

4. Interview Process and Recording:

- Explain how the interview will be conducted, including the use of audio recording (with their consent).

5. Consent Form:

- Provide a hard copy of the consent form, ensuring the participant has time to review it.

6. Questions from the Participant:

- Ask if the participant has any questions or concerns before beginning the interview.

7. Conducting the Interview:

- Proceed with the interview, following the prepared questions and allowing for open dialogue.
8. **Closing the Interview:**
- Again, Thank the participant for their time and contribution, and offer a friendly goodbye.

The interview questions

1. Can you describe what inclusive education means to you in your role as a teacher?
2. How has your understanding of inclusive education evolved throughout your career and educational training?
3. In what ways did the Inclusive Education course you completed influence how you approach your teaching practices?
4. Can you provide specific examples of how the Inclusive Education course impacted the way you plan and execute lessons in diverse classroom settings?
5. How do you apply the skills and knowledge you acquired from the Inclusive Education course in your classroom setting?
6. What challenges or successes have you encountered while trying to apply what you learned from the Inclusive Education course in your teaching practice?
7. Can you describe a specific instance where you faced difficulties in implementing inclusive practices? How did you address these challenges?
8. What strategies have you used to overcome the challenges of implementing inclusive practices in your classroom?
9. How do you adapt or modify your teaching methods to ensure that all students, regardless of their abilities, are included?

10. How do you think your experience with inclusive education has influenced your views on education policy and future research in this area?

Appendix D: Data Analysis – Transcript and Coding Samples

1. How would you describe your understanding of inclusive education as a concept?

****Participant (P):****

To me, inclusive education is about ensuring everyone feels like they genuinely belong in the classroom. It's not just about ramps or extra help for students with disabilities; it's about meeting every learner where they are—whether they're dealing with specific challenges, learning differences, or just struggling with a new subject. In practice, it means creating an environment where each student feels valued and supported.

For instance, a few weeks ago, I noticed one of my new students—who was extremely shy—hesitant to join group discussions. By talking to her individually and allowing her to share ideas with a partner first, I saw her gradually open up. That moment reminded me that inclusive education is as much about social and emotional belonging as it is about academics.

2. What do you believe are the key elements of inclusive education?

****p:****

I see four crucial elements. First, ****embracing diversity****—recognizing that each student has a **unique background** learning style, and set of strengths. Second, ****adaptability****—as teachers, **we have to flex and revise our methods** instead of expecting **all kids to learn the same way**. Third, ****support****—which can range from collaborative teamwork with parents and specialists to providing accommodations like assistive tech or differentiated assignments. Lastly, ****empathy****—being willing to step into our students' shoes and understand what might be holding them back or pushing them forward.

In a real sense, these elements came alive for me when I had to rework a group project so that a student with fine motor difficulties could contribute digitally instead of drawing posters. It took more planning time, but it made them feel genuinely included.

3. How has your understanding of inclusive education evolved since completing the course?

****p:****

Initially, I assumed it was mostly about physical accessibility—ramps, wheelchair-friendly hallways, or seating arrangements. But over time, and after some actual classroom experience, I've realized it's much broader. It's about fostering a classroom culture that celebrates different personalities, cultural backgrounds, and learning needs. It's also about being proactive: thinking ahead to what a student might struggle with and adjusting before it becomes a barrier.

7. Were there any parts of the course that you found lacking or could be improved?

p:

Yes. A **stronger focus on practical challenges** would've been beneficial. For instance, how do you maintain an inclusive classroom if you have 30+ students with varying needs but limited resources or support staff? We touched on it briefly, but not enough to feel prepared.

Also, we rarely had opportunities to interact with professionals already working in inclusive settings. Real stories and tips from experienced teachers would have supplemented the theory nicely.

8. How well do you think the course prepared you for real-world classroom challenges?

p:

It was a solid starting point—no doubt about that. It gave me the fundamental principles of inclusion, taught me the terminology, and offered a framework to think about diverse learners. But as anyone who's stepped into a real classroom knows, **theory only goes so far**. There's no perfect blueprint for every challenge you face, and so much depends on the specific dynamics of your students, school culture, and resources.

In truth, **you learn by doing**, and I've had to figure out a lot on the fly—like how to adapt homework for a student who doesn't have internet access at home or how to support a child with mild autism who needs breaks to decompress.

9. How have you applied the knowledge and skills taken from the Inclusive Education course in your teaching career?

p:

I've taken the idea of **flexibility** to heart. *→ strategies* Now my lessons combine different formats—videos, group discussions, reading activities—so there's something that resonates with every student. I also try to modify assessments, giving options like oral presentations, written papers, or creative projects. That shift came directly from the course content, where we studied diverse ways of measuring learning outcomes.

10. Can you share specific strategies or methods you've implemented from the course?

p:

Peer learning has been a big one. Pairing students who have complementary strengths encourages mutual support and cooperation. This method helps them learn academically but also fosters empathy and respect.

Additionally, I've become more intentional about **visual supports**—like using mind maps, diagrams, or interactive simulations in biology. These strategies make complex topics more digestible for all learners, not just those with special needs.

11. How have these strategies impacted your students, particularly those with diverse needs?

p.

It's been amazing! Students who used to hang back are now taking part in group activities. The ones who dreaded tests feel less anxious because they can choose an assessment format that suits them. I've even noticed a student with attention challenges thriving when given short, structured tasks and immediate feedback.

I only wish I'd gotten more **real-life guidance** on how to handle these moments back in the course. But at least the foundations were there, and I've been building on them ever since.

12. What areas of your teaching have been most influenced by the knowledge gained from the course?

p.

Lesson planning and assessment design. I'm constantly asking, "How can I make this content engaging for multiple learning styles?" Rather than relying on a standard lecture or worksheet, I mix in group activities, multimedia presentations, and reflective journals.

13. What challenges have you faced when implementing inclusive practices in the classroom?

p.

Time management is a major hurdle. Adapting materials for different learners can be **time-consuming**, and sometimes there's pressure to "cover the curriculum" quickly. Another challenge is balancing individual support with the collective progress of the class—especially when you have one teacher and many students with diverse needs.

I also feel that **lack of resources** can be an obstacle, whether it's not having enough assistive technology or not having extra staff to help run small-group interventions.

14. How have you navigated or overcome the challenges of implementing inclusive practices in real classroom settings?

p:

Collaboration has been crucial. I regularly consult with colleagues who've handled similar issues, and I've attended a few workshops that focus on practical strategies. Working with parents also helps; they can provide insights into what truly motivates their child.

At the end of the day, I've learned to **embrace imperfection**. Not every lesson will go off without a hitch, and that's okay. The point is to keep reflecting, adjusting, and striving to meet each student's needs a bit more effectively next time.

15. Based on your experiences, what are the implications of your findings for teaching practice, policy, and future research?

p:

Inclusive education can't be done in isolation—it requires **community**. We need better teacher training programs that integrate hands-on experience with real inclusive classrooms. Policies must shift toward smaller class sizes and improved funding so that inclusive teaching isn't seen as "extra work" but as a standard.

For research, I'd love to see more studies that produce **practical, scalable strategies**. It's one thing to read about inclusive theory in a textbook, but we need real-world data and examples that teachers can directly apply.

4.6.2

16. What changes in policy would better support inclusive education in schools?

p:

Definitely smaller class sizes and increased funding for resources. Schools should also set aside budgets for **ongoing professional development**—teachers need refresher courses and up-to-date training in inclusive methods. Another crucial aspect is involving teachers in policy-making. We're the ones implementing these ideas, so our voice matters.

17. What areas do you think require further research to improve inclusive practices in education?

p:

Technology in under-resourced schools is a big one. How do we leverage tech solutions for students in rural or low-income areas? Another topic is **teacher well-being**. If we're burning out from trying to meet every need without sufficient support, it's hard to provide

Discussion part

That said, **the course itself was more theoretical** than practical. While it highlighted the broader vision of inclusive education, I wish we had visited real classrooms or practiced simulations with actual students who had diverse needs. Experiencing it first-hand would have made the transition from theory to practice much smoother.

4. Can you provide an example of what inclusive education looks like in practice?

p:

Absolutely! Just the other day in my biology class, I had a student who really struggled with traditional writing tasks but happened to be an amazing artist. So, instead of having everyone submit a standard essay on mitosis, I allowed her to create a comic strip depicting each phase of cell division. It was incredible to see her excitement—she ended up doing additional research just to illustrate the details more accurately.

In the course we took, we covered the importance of “alternative assessments,” but seeing a student shine in real life is far more powerful than reading about it. That’s why I believe we could have benefited from more hands-on case studies in the course.

5. What are your thoughts about the Inclusive Education course that you completed?

p:

Honestly, it was a game-changer in terms of opening my eyes to different perspectives, but it **lacked real-life scenarios** and concrete practice. We had a lot of discussions and presentations, which were great for brainstorming, but I’d have loved to spend time in an actual inclusive classroom. I think if we’d paired the theory with on-site visits or more practical assignments, I would have felt more confident stepping into my current role.

sub heading #3

6. What aspects of the course did you find most valuable?

p:

The **hands-on strategies** we did learn, like differentiated instruction and multi-modal teaching, were gold. We also examined case studies, which helped me connect the dots between inclusive theory and real application. For example, one assignment required us to design lesson modifications for a hypothetical student with dyslexia. Working through those details as a group helped me see what’s truly involved in planning for inclusion.

→ sub heading #2

However, in hindsight, it would have been even more valuable to **test** those lesson plans in a real classroom, or at least observe a teacher doing it.