

**Exploring Perceptions of University Students with Diverse Learning Needs on the
Unified National Testing (UNT)**

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Master of Science

in

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Nazarbayev University Graduate School of Education

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Ethical Approval



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Date: 28 of October, 2025

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This letter now confirms that your research project titled: *Exploring Perceptions of University Students with Diverse Learning Needs on the Unified National Testing (UNT)* 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,

Sourav Mukhopadhyay

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Abstract

Exploring Perceptions of University Students with Diverse Learning Needs on the Unified National Testing (UNT)

The Unified National Testing (UNT) is a crucial stage in school students' academic development. Although designed to ensure fairness and transparency in university admissions, its high-stakes nature often creates inequalities and barriers for students with diverse learning needs. These barriers include socio-economic disparities that limit access to preparation and significant psychological pressure affecting exam outcomes, raising concerns about the inclusivity of the system. As central stakeholders, students' lived experiences provide important practical insights into the examination. This study explores the perceptions of university students with diverse learning needs regarding the UNT, the challenges they faced, and their suggestions for more inclusive approaches. Conducted in Astana universities, the study employed a qualitative phenomenological approach using semi-structured interviews with students who had taken the UNT for admission. The data were analyzed through a social justice perspective, drawing on Nancy Fraser's (1998; 2009) dimensions of redistribution, recognition, and representation.

The findings indicate that while students recognize the UNT as a necessary standardized assessment tool, their voices are often misrepresented, their needs misrecognized, and access to preparation unevenly distributed. Psychological pressure emerged as a consistent barrier across participants, evident during both preparation and examination stages, reinforced by teachers' emphasis on high stakes and exacerbated by exam supervision, reflecting insufficient psychological support. The UNT was also perceived as prioritizing preparation strategies over the assessment of broader academic abilities, with strong dependence on external resources. Participants highlighted misalignment between exam content and the school curriculum, as well as linguistic barriers, particularly for

Kazakh-language students, limiting their ability to demonstrate their potential. These issues contribute to disproportionate barriers and unequal opportunities. Additional systemic concerns include underdeveloped Kazakh-language academic resources, limited preparedness of teachers and supervisors for inclusive practices, and rigid exam administration that prioritizes procedures over student well-being. Overall, the UNT does not fully align with principles of inclusive education and social justice, underscoring the need for systemic reform that ensures equitable access to preparation, recognition of diverse needs, and inclusion of student voices in decision-making.

Keywords: UNT, diverse learning needs, self-identified needs, social justice

Аңдатпа

Ұлттық бірыңғай тестілеу (ҰБТ) мектеп оқушыларының академиялық дамуының маңызды кезеңі болып табылады. Жоғары оқу орындарына түсу үдерісінде әділдік пен ашықтықты қамтамасыз етуге бағытталғанына қарамастан, оның жоғары маңыздылығы әртүрлі оқу қажеттіліктері бар студенттер үшін жиі теңсіздіктер мен кедергілер туындатады. Бұл кедергілерге дайындыққа қолжетімділікті шектейтін әлеуметтік-экономикалық айырмашылықтар, сондай-ақ емтихан нәтижелеріне әсер ететін айтарлықтай психологиялық қысым жатады, бұл жүйенің инклюзивтілігіне қатысты алаңдаушылық тудырады. Негізгі мүдделі тараптар ретінде студенттер өздерінің өмірлік тәжірибесіне сүйене отырып, емтихан туралы маңызды практикалық түсініктер береді. Осы зерттеуде әртүрлі оқу қажеттіліктері бар студенттердің ҰБТ-ға қатысты қабылдаулары, олар кездестірген қиындықтар мен кедергілер, сондай-ақ емтиханға неғұрлым инклюзивті тәсілдерді енгізу жөніндегі ұсыныстары қарастырылады. Зерттеу Астана қаласының университеттерінде сапалық феноменологиялық тәсіл арқылы жүргізіліп, ҰБТ-ны тапсырып, оқуға түскен студенттермен жартылай құрылымданған сұхбаттар қолданылды. Деректер Нэнси Фрейзер (1998; 2009) ұсынған экономикалық қайта бөлу, мәдени тану және саяси өкілдік өлшемдеріне сүйенген әлеуметтік әділеттілік тұрғысынан талданды.

Нәтижелер студенттердің ҰБТ-ны қажетті стандартталған бағалау құралы ретінде мойындайтынын көрсеткенімен, олардың дауыстары жиі ескерілмейтінін, қажеттіліктері мойындалмайтынын және дайындыққа қолжетімділіктің біркелкі бөлінбейтінін аңғартады. Психологиялық қысым барлық қатысушылар үшін тұрақты кедергі ретінде анықталып, дайындық кезеңінде де, емтихан барысында да көрініс тапты; ол мұғалімдердің жоғары маңыздылыққа басымдық беруімен күшейтіліп, емтиханды бақылау барысында одан әрі ушыққан, бұл психологиялық қолдаудың

жеткіліксіздігін көрсетеді. Сонымен қатар, ҰБТ аясында кең ауқымды академиялық қабілеттерді бағалаудан гөрі дайындық стратегияларына басымдық берілетіні және сыртқы ресурстарға тәуелділік жоғары екені байқалды. Қатысушылар емтихан мазмұны мен мектеп бағдарламасы арасындағы сәйкессіздікті, сондай-ақ тілдік кедергілерді, әсіресе қазақ тілінде оқитын студенттер үшін, атап өтті, бұл олардың өз әлеуетін толық көрсетуіне шектеу қояды. Бұл мәселелер теңсіз мүмкіндіктер мен пропорционалды емес кедергілердің пайда болуына ықпал етеді. Қосымша жүйелік проблемаларға қазақ тіліндегі академиялық ресурстардың жеткіліксіз дамуы, мұғалімдер мен бақылаушылардың инклюзивті тәжірибелерге жеткіліксіз дайындығы, сондай-ақ емтихан өткізу барысында рәсімдердің студенттердің әл-ауқатынан жоғары қойылуы жатады. Жалпы алғанда, ҰБТ инклюзивті білім беру мен әлеуметтік әділеттілік қағидаттарына толық сәйкес келмейді, бұл дайындыққа тең қолжетімділікті қамтамасыз ететін, әртүрлі қажеттіліктерді мойындайтын және шешім қабылдау үдерісінде студенттердің пікірін ескеретін жүйелік реформалардың қажеттілігін айқындайды.

Кілт сөздер: ҰБТ, әртүрлі оқу қажеттіліктері, өзін-өзі анықталған қажеттіліктер, әлеуметтік әділеттілік

Аннотация

Единое национальное тестирование (ЕНТ) является важнейшим этапом в академическом развитии учеников школ. Несмотря на то, что он призван обеспечить справедливость и прозрачность при поступлении в вузы, его высокая значимость зачастую создает неравенство и препятствия для студентов с различными потребностями в обучении. К этим препятствиям относятся социально-экономические различия, ограничивающие доступ к подготовке, а также значительное психологическое давление, влияющее на результаты экзамена, что вызывает опасения относительно инклюзивности системы. Как ключевые заинтересованные стороны, студенты, опираясь на свой жизненный опыт, дают важные практические представления об экзамене. В данном исследовании изучаются восприятие ЕНТ студентами с различными потребностями в обучении, проблемы, с которыми они сталкивались, а также их предложения по внедрению более инклюзивных подходов. Исследование проводилось в университетах Астаны с использованием качественного феноменологического подхода на основе полуструктурированных интервью со студентами, сдавшими ЕНТ для поступления. Анализ данных проводился через призму социальной справедливости с опорой на определения перераспределения, признания и представительства, предложенные Нэнси Фрейзер (1998; 2009).

Результаты показывают, что, хотя студенты признают ЕНТ необходимым стандартизированным инструментом оценки, их голоса часто не учитываются, их потребности не признаются, а доступ к подготовке распределен неравномерно. Психологическое давление стало постоянным препятствием для всех участников, проявлявшимся как на этапе подготовки, так и во время экзамена; оно усугублялось акцентом учителей на высокую ставку и обострялось в ходе экзаменационного надзора, что свидетельствовало о недостаточной психологической поддержке. Кроме

того, считалось, что в рамках ЕНТ приоритет отдается стратегиям подготовки, а не оценке более широких академических способностей, при этом наблюдается сильная зависимость от внешних ресурсов. Участники отмечали несоответствие между содержанием экзамена и школьной программой, а также языковые барьеры, особенно для учащихся, обучающихся на казахском языке, что ограничивало их способность продемонстрировать свой потенциал. Эти проблемы способствуют возникновению непропорциональных барьеров и неравенству возможностей. Дополнительные системные проблемы включают недостаточно развитые академические ресурсы на казахском языке, ограниченную подготовку учителей и наблюдателей к инклюзивным практикам, а также жесткое проведение экзаменов, при котором процедуры ставятся выше благополучия учащихся. В целом, ЕНТ не полностью соответствует принципам инклюзивного образования и социальной справедливости, что подчеркивает необходимость системной реформы, обеспечивающей равный доступ к подготовке, признание разнообразных потребностей и учет мнения учащихся в процессе принятия решений.

Ключевые слова: ЕНТ, разнообразные потребности в обучении, самоидентифицированные потребности, социальная справедливость

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Chapter 1: Introduction

This chapter outlines a study focused on exploring the perceptions of university students with diverse learning needs regarding their experiences with Kazakhstan's Unified National Testing (UNT), with particular emphasis on possible barriers they encountered and the suggestions they might have to promote an inclusive approach to the testing. The study examines potential barriers to the success of a more inclusive UNT in Kazakhstan through the experiences of university students as the main stakeholders, in order to capture meaningful insights into the practical implementation of the test.

After Kazakhstan's independence, one of the country's key initiatives was to identify and adopt national development strategies by abandoning remnants of the Soviet education system and transitioning toward a competitive knowledge economy (Mingisheva, 2023). In the post-Soviet period, the country's young population experienced high unemployment due to insufficient skills for a competitive professional environment. Therefore, the primary goal was to support economic development by addressing underdeveloped industrial production associated with a large proportion of low-skilled youth. This shift was further reinforced by the announcement of Kazakhstan's Strategy 2050, which reflects the country's ambition to join the world's top 30 developed economies, with the knowledge economy identified as a key area of long-term development (Aitzhanova et al., 2014).

To meet the demands of that period, national development efforts were centered on the education system, which led to a rapid increase in the number of universities and, consequently, expanded access to higher education for citizens (Bakas uulu & Smagulov, 2016). Therefore, the proliferation of universities created a perception among citizens that obtaining higher education could guarantee "easier," non-physical jobs associated with higher social status. As Bakas uulu and Smagulov (2016) further elaborate, this

proliferation contributed to growing non-transparency in university admissions. As a result, many students with insufficient academic skills managed to enroll in higher education, while other applicants, particularly those from marginalized groups, sought less equitable and non-transparent ways to gain acceptance (Jumabayeva, 2016). The situation was further compounded by students entering programs that were not in high demand, prompting the government to recognize the urgency of reforming the education system by revisiting university admission procedures to ensure that enrolled candidates met the necessary academic requirements. This initiative aimed to contribute to the country's economic growth by selecting candidates with objectively sufficient knowledge and increasing transparency in university admissions.

This underscored the importance of developing a transparent and fair assessment to replace disparate local exams, which led to the introduction of the Unified National Testing (UNT) in 2004, marking a key milestone in Kazakhstan's education reform (Mingisheva, 2020). As a result, the National Testing Center was established as a single independent body to implement measures supporting these government initiatives. Beyond addressing domestic challenges, the UNT also aimed to increase accountability and raise education standards in Kazakhstan, thereby strengthening the country's position in international education assessments. Accordingly, the UNT was described as a tool for measuring students' quality of knowledge while mitigating corruption in admission procedures (OECD, 2007). Similar to other international high-stakes examinations, such as Germany's Abitur, China's Gaokao, and the UK's A-levels, the UNT aims to ensure comprehensive admission outcomes through the standardization of assessment (Abdrasilov et al., 2025; Baizhanov et al., 2025).

Despite advantages such as improved efficiency in processing student outcomes, combating non-transparency, and providing school graduates with the necessary

certification, controversy surrounding the exam's effectiveness has persisted. Concerns have arisen about the content of the UNT, particularly the quality and format of multiple-choice questions (Mingisheva, 2020). This reliance on memorization and recall, rather than on the development of advanced intellectual skills such as argumentation and inference, has been considered insufficient for success in competitive higher education. Another concern is the narrowing of the curriculum caused by the limited scope of the test, which compels students to prioritize exam performance over comprehensive learning (Bridges, 2014). In addition, the growing importance of the UNT has exacerbated emotional stress and challenged students' psychological preparedness, especially among those from disadvantaged backgrounds due to socioeconomic differences (Chankseliani et al., 2020).

Overall, debates surrounding the UNT as an objective assessment of students' knowledge and its impact on examinees persist despite its initially positive aims. These issues are believed to obstruct the effective implementation of inclusivity in high-stakes educational assessment, which significantly affects students' lives.

Problem Statement

Although the UNT was intended to be a fair and transparent assessment tool for evaluating students' knowledge during the university application process, it has revealed several issues and gaps in educational assessment from the perspective of inclusion. High-stakes tests (HSTs) worldwide impose immense pressure on examinees due to their influence on critical educational transition stages, which subsequently shape students' academic and professional outcomes, and a similar perception extends to the UNT (Zwier et al., 2021). Similar to other HSTs, the UNT is influenced by factors beyond students' control, particularly demographic variables such as socio-economic status, place of birth and residence, and language of examination (Abdrasilov, 2025).

In terms of functional effectiveness, the UNT can be described as a valid standardized assessment of students' cognitive abilities for university admission, yet it exerts a strong psychological influence on examination outcomes (Abdrasilov, 2025). Regarding its psychological effects, it is suggested that, compared to actual learning, success in the exam depends more on students' ability to manage test anxiety and their familiarity with the UNT format.

Concerning linguistic aspects, existing literature identifies minor differences between Kazakh- and Russian-language examinees. However, there is limited research on why the Kazakh-language format of UNT questions may be difficult for native Kazakh students to process. Existing studies suggest that code-switching between Kazakh and Russian may hinder comprehension of the academic Kazakh required in the UNT, while the language's complex word formation and the scarcity of high-quality Kazakh-language educational resources further contribute to these challenges (Mussakhoyayeva et al., 2022).

Therefore, the majority of existing research has examined the UNT through the lens of demographic factors, while limited attention has been given to students' perceptions of the exam, particularly those with diverse learning needs and their inclusion. Given the UNT's significant impact on students' educational and career trajectories in Kazakhstan, it is essential to examine the test from an inclusion perspective in order to assess its alignment with national efforts to promote an inclusive education system, which should extend to high-stakes assessment practices such as the UNT.

Purpose of the Study

The purpose of this study is to explore the perceptions of university students with diverse learning needs regarding the UNT in Kazakhstan, with a focus on understanding their preparation and examination experiences, the possible challenges or barriers they may have encountered, and the potential suggestions they might offer to improve

inclusivity in assessment procedures. The findings of the study may contribute to a more practical understanding of the UNT, as test-takers provide insights based on their lived experiences.

In this study, diverse learning needs are conceptualized as a broad term encompassing differences in backgrounds, learning styles, experiences, and other factors that may influence students' learning or test-taking outcomes. This definition is not limited to formally documented physical needs but also includes emotional and cognitive needs, as well as socio-economic barriers, including those that may not be formally recognized. This broader perspective allows for self-identification of needs and acknowledges individual feelings of inclusion, both of which play a significant role in the implementation of inclusive education (Parekh & Brown, 2020). Including students' self-identification of needs is essential, as it helps avoid assumptions about diverse learning needs and raises awareness of their variability (Skrzypiec et al., 2015).

Objectives of the Study

1. To explore and interpret the experiences and perceptions of students with diverse learning needs in relation to the UNT;
2. To identify and analyze the challenges and barriers encountered by these students throughout the UNT process;
3. To examine and synthesize students' recommendations for enhancing inclusivity within the UNT.

Research Questions

To guide this study, the following research questions are proposed:

1. How do students with diverse learning needs perceive their experiences of the Unified National Testing (UNT)?

2. What challenges or barriers did these students encounter during the UNT process?
3. What suggestions do these students provide for improving the UNT to better accommodate diverse learners?

Significance of the Study

The significance of this study lies in its comprehensive exploration of students' perceptions as key stakeholders of the UNT, providing insight into the exam's inclusivity. By capturing participants' views, the study highlights the practical challenges and barriers experienced during the UNT. The findings aim to inform understanding of the UNT from an inclusivity perspective and to amplify the voices of primary stakeholders, thereby contributing to improved accommodation practices for diverse learners, including those with both officially recognized and self-identified learning needs.

Definitions of Terms

Unified National Testing (UNT): This refers to a nationally administered standardized test established to fairly and transparently assess the academic preparedness of high school graduates for entry into higher education institutions in Kazakhstan (Jumabayeva, 2016). It serves as a critical tool for accountability, aiming to maintain educational standards in the country, and its implementation may have significant consequences for students, as the test results frequently determine university admission.

Inclusive Education: Inclusive education is defined by an equitable approach that ensures access to education while taking into consideration learners' diverse needs, including physical, cognitive, emotional, cultural, and other individual characteristics that may affect their learning (Orynbassarov et al., 2025). Its importance lies in its crucial role in shaping learners' development as members of society and in ensuring their equal participation in various aspects of life.

Diverse Learning Needs: The concept of diverse learning needs refers to the varied differences among learners in physical, psychological, social, economic, cultural, and other backgrounds that may affect their learning processes and outcomes (Skrzypiec et al., 2015). Diverse learning needs extend beyond physical disabilities and encompass individual characteristics that influence students' academic experiences.

Self-identification of Learning Needs: The definition of self-identification of diverse learning needs can be characterized as individuals' recognition of their conditions and needs, independent of official labels and in contrast to institutional identification (Parekh & Brown, 2020). Self-identification of needs plays a significant role in learners' academic and social experiences.

Outline of the Study

This study comprises six chapters that explore Astana university students' perceptions of their experiences with the UNT, with a focus on potential barriers they encountered and recommendations for developing more inclusive practices in UNT procedures. Chapter 1 introduces the contextual background of the UNT, the research problem, the purpose of the study, objectives, research questions, the study's significance, definitions of key terms, and an outline of the study. Chapter 2 reviews national and international research on inclusive practices in high-stakes tests, including the UNT, through the lens of social justice theory in education (Fraser, 1998) to provide a comprehensive theoretical framework. Chapter 3 presents a qualitative phenomenological study within an interpretivist paradigm, detailing participant recruitment, semi-structured interviews, and ethical considerations. Chapters 4 and 5 examine students' lived experiences regarding their preparation for and examination of the UNT, as well as potential gaps or issues in accommodating diverse learners' needs through the study's

theoretical framework. Chapter 6 summarizes the study's findings and examines their significance for future research.

Chapter 2: Literature Review

This chapter provides a review of the existing literature on high-stakes standardized testing, inclusive education, and the social justice theory framework, analyzing Kazakhstan's Unified National Testing (UNT) within both national and international contexts. The chapter is organized into several sections, including explanations of how inclusive education is perceived internationally and nationally, definitions of equity and equality in educational assessments along with their conceptual differences, and an introduction to high-stakes testing and its potential implications for inclusion. The chapter concludes by reviewing relevant empirical research through the lens of social justice theory, highlighting potential gaps in the existing literature related to the study.

Inclusive Education in Global and Local Contexts

Inclusion is a practice grounded in the key values of human rights that responds to the diverse needs of all learners by viewing diversity as the norm and implementing modifications within the general education classroom to accommodate learners' needs and eradicate exclusion (Abawi et al., 2018). Although the fundamental principles of inclusive education originate in the international context and are consistent with local imperatives, the language and interpretation of inclusive education vary across local contexts, thereby emphasizing the importance of context-specific approaches to its implementation (Carrington et al., 2018). The formulation of inclusive education at the policy-making level is described as less challenging than the implementation of inclusive education policies, highlighting that, despite policy recognition of inclusion, it is often not adequately realized in practice. This is particularly evident in developing countries, which frequently adopt policies from developed countries that are not aligned with their local contexts and are therefore not effectively implemented due to sociocultural, structural, and institutional

barriers, namely sociocultural attitudes, resource availability, funding allocation, teacher capacity, and inadequate monitoring (Khoiriyah et al., 2024; Obah, 2024).

Definitions of inclusive education at the national level vary depending on sociopolitical and cultural contexts. For instance, the conceptualizations of inclusive education in Slovakia vary and frequently lack coherence, affected by broad definitions of inclusion and misalignment between educational policies (Kaščák & Strouhal, 2023). In Indonesia, inclusive education practices are not yet institutionalized and thus require systematic support (Setiawan & Tohari, 2025). Despite global frameworks such as the United Nations Convention on the Rights of Persons with Disabilities (CRPD) and the Sustainable Development Goals (SDGs) providing an international policy agenda, inclusion in education is hindered by numerous factors, including differing interpretations of inclusion, poor data on excluded children, and uncoordinated governance (Ydo, 2020).

In the context of Kazakhstan, after signing international declarations such as the UN Convention on the Rights of Persons with Disabilities (United Nations, 2006), the Convention against Discrimination in Education (UNESCO, 1961), and the Salamanca Statement (UNESCO, 1994), inclusive education became a focal point in the State Programs for Education Development of the Republic of Kazakhstan between 2011 and 2020 (Makoelle, 2020). The first inclusive education practices were implemented in 2009 with the establishment of pilot inclusive schools teaching children with disabilities alongside non-disabled students, as well as through training teachers to change attitudes toward inclusion and diversity as part of professional development programs, yet the effectiveness of this training remained unclear. Despite Kazakhstan's attempts and progress in the implementation of inclusive education, the concept has not been clearly conceptualized due to language and terminology mirroring the USSR's education system, which was largely based on corrective and remedial teaching and medical classifications

(Makoelle, 2020). Thus, it is necessary to develop policies to eliminate the Soviet legacy in education, specifically by shifting toward the social model of inclusion and abandoning the medical model (Assanbayev & Makoelle, 2024). It is also evident from initiatives incorporating inclusive principles into Kazakhstani technical and vocational education and training (TVET) institutions that awareness of the need for more comprehensive inclusivity is increasing and remains ongoing, although the engagement of students, teachers, and communities is essential (Assanbayev & Makoelle, 2024). Therefore, it can be concluded that identifying conceptual clarity and developing a local discourse of inclusion in Kazakhstani education is an urgent priority (Makoelle, 2020).

Overall, inclusive education can be described as an internationally recognized and endorsed educational principle rooted in the core values of human rights, intended to ensure a shared educational classroom for all learners regardless of their diverse needs. However, its interpretation varies depending on the context, and in the Kazakhstani context, the conceptualization of inclusive education remains unclear.

The Conceptual Distinction Between Equity and Equality in Educational Assessment

Understanding the definitions and conceptual distinctions between equity and equality may provide a complementary perspective for examining fairness in educational assessment. Equity is defined as a principle aimed at ensuring equal learning opportunities for all learners. However, it prioritizes providing access to educational outcomes that account for circumstantial differences, rather than guaranteeing equal results. In contrast, equality focuses on the uniform provision of inputs to support students (OECD, 2018).

Therefore, educational innovations should be directed toward enhancing equity among learners and promoting equitable assessment practices, rather than solely emphasizing academic excellence and achievement (Lucas-Oliva, 2022). It is essential to address existing gaps among learners and reconsider curricular standardization in order to

foster a sustainable and inclusive educational system. Scholars also emphasize the importance of developing equity literacy among teachers by preparing them to critically reflect on injustices in education and influence school-level practices and student attitudes (Posti-Ahokas & Janhonen-Abruquah, 2021).

To achieve equity in education, assessment bias must be addressed. Equity in educational assessment is multifaceted, as it encompasses the environment in which learners are assessed, the tools and practices employed during assessment, and the quality of feedback and support provided by teachers (Onumah et al., 2023). Reflecting on these components may contribute to the development of more responsive and context-sensitive assessment practices.

Nevertheless, several barriers continue to impede equity in educational assessment. As revealed during the COVID-19 pandemic, equitable assessment is affected by disparities among learners, including social inequalities (Setlhodi, 2021). During the pandemic, the quality of assessment was negatively influenced by unequal access to learning materials and adequate preparation, thereby exposing pre-existing structural barriers that hinder equity in education. Persistent systemic inequalities, reliance on uniform approaches that fail to capture diverse learners' capabilities, disregard for cultural differences, and the underdevelopment of inclusive digital learning tools further constrain the promotion of equitable educational assessment (Zandvakili & Gordon, 2025).

In sum, recognizing the distinctions between equity and equality in education is essential for critically reconsidering standardized assessment practices that may be misaligned with the needs of diverse learners. Equitable assessment seeks to ensure fairness by providing learners with appropriate and context-responsive access to assessment opportunities, whereas equality emphasizes the uniform provision of support.

High-Stakes Testing: Implications for Equity and Inclusion

As issues of equity in educational assessment have been raised, it is important to explore the role of high-stakes testing. High-stakes testing (HST) is introduced and practiced globally with the aim of improving students' learning outcomes by raising educational standards and accountability, as well as ensuring fairer placement. HSTs were initially designed as aptitude tests to enhance school and student accountability and to predict students' success by collecting data on their academic progress over time (Marchant, 2004).

Despite their intended purpose, HSTs have been criticized due to the challenges they create for learners. For example, HSTs frequently carry significant consequences for students, generating high levels of competition that exacerbate socio-economic disparities among learners (Zwier et al., 2021). These tests also impose considerable pressure on students, as they often prioritize score improvement over actual learning, which can distort both students' and teachers' perceptions of HSTs (Spann, 2015). Consequently, HSTs may inadvertently reinforce existing inequities in education.

Overall, despite their widespread use in international education systems, the role of HSTs in promoting educational equity and their influence on students warrant careful re-evaluation. Alternative assessment tools that emphasize equity may offer fairer and more meaningful measures of learning.

Empirical Evidence on Formal Fairness and Practical Inequities in the UNT

After gaining independence, Kazakhstan's education system has undergone major transformations to meet global education quality standards and align with international education practices (Sarmurzin et al., 2021). In this context, since 2004, the Unified National Testing (UNT) has been administered annually by the National Testing Center as an assessment tool designed to evaluate the quality of secondary education and predict

students' admission to higher education (Abdrasilov et al., 2024). The UNT was introduced to ensure objective and transparent assessment of students' achievements, while also reducing admission disparities among school graduates and minimizing opportunities for corruption in education (Jumabayeva, 2016).

Although the UNT's intended implementation was a positive initiative, empirical research indicates that teachers and students perceive it as formally fair but lacking an equitable approach (Jumabayeva, 2016). Students' socio-economic differences may inadvertently affect their preparation and overall performance, as those from rural regions or disadvantaged backgrounds may have limited access to preparatory materials and external tutoring services compared to their more advantaged peers (Zwier et al., 2021). Similarly, high-stakes tests tend to overlook students' diverse backgrounds and experiences, generating increased pressure and anxiety among disadvantaged students (Fitzgerald, 2015). As evaluative tools, HSTs often lack inclusivity by failing to consider individual learning trajectories, including those of students with special needs (Avdiu & Ahmedi, 2024). These factors can reinforce existing inequalities and negatively affect examination performance.

From a policy implementation perspective, the socioeconomic challenges associated with the UNT highlight the policy's formal aim of ensuring fair competition among students, while also revealing its practical limitations in accommodating diverse socioeconomic groups (Chankseliani, 2021). This dynamic may further widen the gap between rural and urban candidates in access to higher education, particularly due to increasing reliance on private tutoring and competitive preparation. Overall, this misalignment between policy objectives and implementation underscores the need to re-examine the exam structure to achieve genuinely fair outcomes.

Interestingly, previous studies have mostly explored the aforementioned gaps from teachers' perspectives, so the voices of students as the main stakeholders have not been extensively examined to include their concerns and potential suggestions for improving inclusive practices in the UNT (Bakas uulu & Smagulov, 2016). This is particularly relevant for students with diverse learning exceptionalities, whose opinions could provide valuable insight for future changes to the UNT.

Therefore, the challenges and gaps surrounding HSTs highlight the growing importance of incorporating more inclusive and diversified assessment approaches within high-stakes testing systems. In some countries, such as Canada, mid-stakes assessments have been introduced to mitigate the negative consequences of HSTs by strengthening formative feedback and aligning assessment practices with student learning and development (Hargreaves, 2020). Similarly, a range of alternative assessment models, including portfolio-based assessment, self- and peer assessment, interactive tasks, and project-based evaluation, have been adopted to complement traditional testing by enabling students to demonstrate their knowledge through more diverse representations of learning (Avdiu & Ahmedi, 2024; Gozuyesil & Tanriseven, 2017). In Kazakhstan, criteria-based assessment has been introduced as a complementary approach aimed at reducing reliance on rote memorization, although its implementation remains an ongoing process (Begimbetova et al., 2023).

In sum, empirical research has revealed several gaps in HSTs, particularly the limited evidence on students' perceptions, especially those from diverse backgrounds, regarding the UNT's inclusivity, insufficient exploration of policy gaps, and the lack of contextually appropriate alternative assessment models. These gaps underscore the significance of the present study, which aims to explore students' perspectives alongside

policy and comparative evidence to contribute to more inclusive assessment practices in Kazakhstan.

Theoretical Framework

Respecting students' unique learning paths and diverse learning needs serves as a core principle of inclusivity in education. This aligns with the principles of social justice, which promote the equitable engagement of diverse learners in an environment designed to meet their needs and foster meaningful change in education (Adams & Bell, 2016; Fraser, 1998). However, inclusivity in classrooms is often formal rather than substantive, as the mere presence of diverse students in general classrooms does not necessarily indicate that they fully participate in classroom activities or receive appropriate support (Shyman, 2015). Moreover, to effectively ensure inclusion in educational settings, students' diverse needs and unique experiences need to be recognized, fair access to necessary resources and opportunities needs to be redistributed equitably, and reflections of learners on changes in education need to be represented (Keddie, 2012).

Similar challenges may arise in standardized educational assessments. From a social justice perspective, educational assessment should reflect learners' diversity and individual experiences, rather than functioning solely as a measurement tool, a consideration that HSTs frequently overlook (Adams & Bell, 2016). The social justice framework is often conflated with diversity; although the two concepts are interconnected, they are distinct. Social justice involves recognizing diversity respectfully and ensuring the fair distribution of economic, cultural, and political resources (Fraser, 1998; 2009).

In the context of the UNT, a social justice lens seeks to mitigate inequities in access to preparatory materials and services, address socio-economic disparities, and account for other factors that may influence students' examination performance and

outcomes (see Figure 1). Therefore, social justice is crucial in systems prone to inequities, such as the UNT.

Figure 1. Nancy Fraser's Three-Dimensional Social Justice Framework

Applying Fraser's Social Justice Framework to Students' Experiences with the UNT



Overall, the social justice framework provides an essential critical lens for examining and challenging the inequalities and injustices inherent in high-stakes testing. Applying this framework supports the development of inclusive assessment practices that promote meaningful learner participation and improve educational outcomes, as it highlights the persistent and growing inequalities within the education system, particularly in standardized high-stakes assessments such as the UNT in Kazakhstan.

Gaps in the Literature

Upon reviewing the existing empirical literature, several gaps have been identified regarding students' perceptions of the UNT, the challenges encountered during both the preparation and final examination stages, and their views on how the UNT could adopt more inclusive approaches to better accommodate learners with diverse needs. In particular, there is limited research exploring how students from diverse backgrounds, including those with physical and psychological exceptionalities, experience the UNT from both psychological and content-related perspectives. Furthermore, students' perspectives on potential changes that could enhance inclusivity within the UNT remain

underexplored. This study addresses these gaps by examining the UNT in practice from the perspective of students with diverse needs as key stakeholders, focusing on their lived experiences to gain insights into the practical realities of the examination process and its impact on them.

Chapter 3: Methodology

This chapter outlines the methodology employed in this study to address questions related to students' experiences of the UNT, the challenges and barriers they encountered, and their suggestions for enhancing inclusivity within the UNT to better accommodate learners with diverse needs. To address these research questions, the study adopted a qualitative phenomenological approach within an interpretivist paradigm to explore students' lived experiences in depth. The chapter also provides context on the research site, participant sampling strategies, the use of semi-structured interviews for data collection, data analysis procedures, ethical considerations observed during the interviews, the researcher's positionality, and the strategies used to ensure the trustworthiness of the study.

Research Design

A qualitative phenomenological approach within an interpretivist paradigm served as the framework for this study (Lim, 2025), ensuring a comprehensive and coherent examination of how university students with diverse learning needs experience the UNT. The qualitative approach was selected for its constructivist nature, which allows for the exploration and interpretation of contextual depth through examining underlying interactions and patterns in order to understand social phenomena. It also emphasizes reflexivity, the role of subjectivity, and the examination of nuances in individual experiences and perspectives (Lim, 2025).

In the context of this study, qualitative research was employed to explore participants' diverse lived experiences of the UNT, recognizing the importance of a context-rich understanding co-constructed with participants and offering an adaptable and flexible approach to inquiry (Castleberry & Nolen, 2018). Furthermore, the systematic nature of data collection and analysis in qualitative research supports the credibility and

rigor of the findings by incorporating both subjective and empirically grounded interpretations.

Phenomenology was employed in this study as it provides a lens for exploring participants' lived experiences in a layered manner, enabling the researcher to examine the phenomenon alongside its revealed nuances and insights (Neubauer et al., 2019). This approach allows for a comprehensive examination of meaning by considering both what participants experienced and how they interpret those experiences. Drawing on this foundation, the phenomenological approach captures the essence of students' perceptions, positioning those with diverse learning needs as central actors in experiencing the UNT, thereby enhancing student representation. By prioritizing students' voices, this approach helps uncover barriers that may otherwise remain invisible in policy discourse. Moreover, as scholars emphasize, incorporating student perspectives adds authenticity and value to educational decision-making, informing policies and practices that directly impact learning through meaningful student representation (Matthews & Dollinger, 2022).

Furthermore, the interpretivist paradigm was employed to explore students' perceptions in relation to their backgrounds and contexts, recognizing that experiences can be understood from multiple perspectives and aiming to uncover complex, context-specific issues (Pervin & Mokhtar, 2022). This approach allows the study to examine students with diverse learning needs, acknowledging that their experiences and perceptions of the UNT are neither singular nor uniform, but shaped by personal, socio-cultural, economic, and educational contexts. In this way, the UNT is positioned not merely as a standardized assessment, but as a complex interplay of expectations and practices that students must navigate.

Research Site

The study was conducted with participants enrolled in universities in Astana. As the capital of Kazakhstan, Astana provides an appropriate site for this research, serving as a central hub for higher education and hosting institutions with diverse student populations alongside growing initiatives aimed at promoting inclusivity in learning (Kim & Comunian, 2024). The city's educational landscape, shaped by internationalized universities, evolving accessibility policies, and varied mediums of instruction, offers a rich context for capturing the perceptions of students with diverse learning needs regarding the UNT.

The study is limited to students based in Astana, and therefore the findings cannot be generalized to all higher education contexts in Kazakhstan. However, since Astana attracts students from diverse backgrounds across the country, the experiences shared by participants provide valuable insights that may reflect broader patterns, while acknowledging that the full range of experiences in rural or less-resourced areas may not be comprehensively represented.

Participants and Sampling Strategy

The selection of participants is a critical element in ensuring that the research captures meaningful and credible insights. For this study, eight students with officially documented or self-identified diverse learning needs were recruited through a combination of institutional facilitation and snowball sampling strategies, in line with qualitative phenomenological research principles. The relatively small sample size was determined by the study's focus on in-depth analysis of participants' responses, prioritizing the richness of data generated through the quality of dialogue and emphasizing the exploration of events and lived experiences rather than the number of participants (Sim et al., 2018), reflecting the view that phenomenological studies prioritize depth over breadth and

intensive engagement with participants rather than statistical generalization. Shorey and Ng (2022) note that while there are no universal rules governing sample size in phenomenology, ranges between 5 and 25 participants are widely considered sufficient for in-depth exploration. This focus on narrative richness rather than numerical sufficiency aligns with the objectives of the current study, as the exploration of the lived experiences of university students with diverse learning needs regarding the UNT requires a sample size that enables depth of inquiry without diluting the richness of individual narratives.

The participants were recruited based on following criteria:

1. University students with officially recognized learning needs or who self-identify as having diverse learning needs,;
2. Aged 18 years or older;
3. Currently enrolled in a university in Astana through the UNT;
4. Willing to participate voluntarily.

The participants were excluded if they did not meet the inclusion criteria, including being under 18 years of age, being enrolled in universities outside Astana or in universities in Astana through routes other than the UNT, not having officially documented or self-identified learning needs, or being unwilling to participate voluntarily in the study.

The diversity of students' learning needs was conceptualized as a general term which encompasses documented physical disabilities as well as officially recognized and self-identified psychological and cognitive needs, socio-economic backgrounds, learning styles, and other needs that may create barriers to students' preparation for the UNT and the exam's outcomes. The full overview of the participants' characteristics is outlined in Table 1.

The participants were identified and accessed through institutional facilitation following contact with six universities in Astana, three of which granted permission to

recruit students who met the participant selection criteria. Students were invited by their universities to contact the researcher directly, after which detailed information about the study was provided through the participant invitation and informed consent form (Rakhshanda et al., 2020). Upon providing explicit consent, participants selected a convenient interview date, language, and format. All participants opted for the online interview format, citing convenience.

Given the difficulty of accessing participants who met the selection criteria, snowball sampling was employed to expand the pool of potential respondents by asking initial participants to refer other students who met the criteria. Snowball sampling was particularly appropriate as an effective technique for reaching individuals within specific networks or communities, such as students with diverse learning needs, who may be difficult to access through conventional sampling strategies, thereby enhancing recruitment and response rates (Ting et al., 2025). Additionally, this approach builds on existing trust, as referrals from peers or acquaintances can increase participants' willingness to engage openly in interviews.

Table 1*Participant Description*

Participant code	Age	Sex	Program	Degree level	Year of taking UNT	UNT language format	Learning need
Aruzhan	20-21	Female	Two Foreign Languages: English and Chinese	Undergraduate, year 4	2022	Kazakh	Difficulty walking
Beibarys	21	Male	Translation Studies	Undergraduate, year 3	2022	Kazakh	Psychological, self-identified
Kanat	20-21	Male	General Medicine	Undergraduate, year 2	2022	Kazakh	Psychological, self-identified
Aibek	18-19	Male	Automation and Control Engineering	Undergraduate, year 2	2024	Kazakh	Psychological, self-identified
Zhasulan	18-19	Male	Informatics	Undergraduate, year 2	2024	Kazakh	Logistical (remote rural area with a population of no more than 100 people)
Adil	21-22	Male	Medicine	Undergraduate	2021	Russian	Sarcoma, Group I/II disability
Madina	20-22	Female	General Medicine	Undergraduate, year 3	2023	Kazakh	Heart failure, Group III disability
Raushan	22-24	Female	Stomatologist	Undergraduate, year 5	2021	Russian	Congenital idiopathic scoliosis, Grade 4

Data Collection Instruments

The study employed semi-structured interviews, which are well suited to qualitative phenomenological research for exploring the core features of students' experiences and perceptions of the UNT. These interviews facilitate rapport, often leading to deeper disclosures and richer data by enabling the researcher to understand the phenomenon from participants' perspectives and explore their experiences prior to drawing analytical conclusions (Adhabi & Anozie, 2017). Moreover, the semi-structured format allows the researcher to pose follow-up questions to gain a more nuanced understanding of participants' experiences.

To accommodate participants' circumstances and preferences, interviews were conducted in both online and offline settings. Online interviews, in particular, enhance accessibility by offering a cost-effective approach that reduces barriers related to mobility, health, or scheduling, allowing participants to engage from their own homes at convenient times and thereby promoting greater inclusivity in research (Saarijärvi & Bratt, 2021). This flexibility is especially important for students with diverse learning needs, as it helps create a supportive environment conducive to open and reflective responses.

Data Collection Procedures

Interested participants were provided with an invitation outlining the purpose of the study, their rights, and the researcher's contact information, followed by an informed consent form to confirm voluntary participation. Semi-structured interviews served as the primary data collection method, each lasting 15–20 minutes. Although I initially planned for the interviews to last 45–60 minutes, participants presented recurrent experiences, and no new substantial themes emerged from their responses, indicating that data saturation had been reached. In qualitative research, interviews of approximately 15 minutes may be sufficient when participants share similar experiences (Mwita, 2022). Participants were

assigned pseudonyms to ensure anonymity. To maximize accessibility, interviews were conducted either face-to-face or online, according to participants' preferences. Interviews were conducted in Kazakh or Russian, based on participants' preference, and were subsequently transcribed and translated into English by the researcher, who holds a Bachelor's degree in Translation Studies, for analysis and reporting.

With participants' permission, interviews were audio-recorded. All data were transcribed verbatim, anonymized immediately following transcription, and stored securely on the researcher's password-protected personal laptop, with access restricted solely to the researcher. Participants were reminded that they could withdraw from the study at any time prior to the commencement of data analysis, without any penalty.

This combination of recruitment strategies and flexible interview formats ensured both inclusivity and feasibility while maintaining ethical standards of confidentiality and voluntary participation.

Data Analysis

The thematic analysis used in this study consists of six stages within a phenomenological framework to examine participants' lived experiences and perceptions of the UNT. This approach enables the examination of collected data in a structured yet flexible manner, allowing for the identification and analysis of recurrent patterns or themes in the study (Clarke & Braun, 2017).

During the **first stage**, I familiarized myself with the data collected from semi-structured interviews by transcribing them verbatim from Kazakh and Russian into English, after which I read the interview transcripts multiple times to ensure reflexivity. I also assigned pseudonyms to participants to protect their identities. This stage involved note-taking to identify potential nuances in students' responses and to gain a deeper understanding of the data.

The **second stage** of the analysis focused on the manual organization of data into manageable and meaningful units, referred to as codes, which provide both summaries of the main meanings and their interpretation. Reflexivity was a key component during this stage and was maintained to minimize bias, thus ensuring the rigor of the study (Ahmed et al., 2025).

The **third stage** involved organizing related codes into meaningful themes to identify shared patterns. At this stage, I reviewed the codes and examined their relationships based on the study's research questions. This stage enabled an in-depth analysis of underlying patterns by grouping similar codes into themes, which were further refined to maintain reflexivity. After the themes were identified, the **fourth stage** involved reviewing them for coherence and distinctiveness, while reflecting on the refinements made during the revision process.

The **fifth stage** (see Appendix F) involved the assignment of clear definitions to the identified themes. The importance of this stage lies in the accurate representation of each theme, while also analyzing the interactions among themes and their connection to the study's research questions (Clarke & Braun, 2017).

Finally, the **sixth stage** involved summarizing the themes into a coherent report that demonstrates their alignment with the research questions and their contribution to the study. During this stage, I provided explanations of the themes, supported by participants' quotes, and emphasized the depth of the collected data.

This approach facilitated the identification of individual perceptions, unique experiences, systemic barriers, and inequities, as well as students' direct suggestions for improving inclusivity, reflecting the social justice framework underpinning the study. Rigor and trustworthiness were maintained throughout the analysis by documenting coding decisions, practicing reflexivity, and ensuring confidentiality. Participants retained the

right to withdraw prior to data analysis, reinforcing ethical standards of voluntary participation.

Ethical Considerations

Ethical integrity was a central consideration in this study, ensuring that the protection of participants' rights and well-being remained the highest priority throughout the research process. All participants received an invitation form outlining the study's purpose, potential risks and benefits, and an informed consent form detailing their rights, including the voluntary nature of participation. Participants signed the informed consent form and were reminded during the interview that they could withdraw from the study at any point.

Identification and access to students meeting the participant criteria were facilitated through direct contact with universities, following the acquisition of a support letter from the Dean of the Nazarbayev University Graduate School of Education.

Participants' confidentiality was strictly maintained through the use of pseudonyms. Interviews were anonymized immediately after transcription, and audio recordings were translated into English and securely stored on a password-protected personal laptop, with access restricted solely to the researcher.

To minimize potential discomfort and accommodate participants' diverse needs, individuals were allowed to select the interview format (face-to-face or online), language (Kazakh or Russian), as well as the date and time most convenient to them. This flexibility promoted a supportive environment conducive to open and reflective responses.

Ethical approval for this study was obtained from the Nazarbayev University Graduate School of Education Ethics Committee prior to data collection. Reflexivity was maintained throughout the research process, with careful consideration of the researcher's

positionality and acknowledgment of how personal experiences and perspectives may have influenced interactions and the interpretation of participants' responses.

Positionality

As the researcher, I acknowledge the ways in which my educational background and personal experiences influence my approach to the study and the interpretation of participant responses. Although I do not identify as a student with diverse learning needs, I took the Kazakh-language format of the UNT in 2019, placing me in a marginal position that allows for both analytical distance and empathetic understanding of participants' experiences. As an inclusive education agent, I have sought to maintain reflexivity throughout the research process, recognizing how my perspectives, assumptions, and experiences may shape interactions and the representation of participants' voices.

This reflexive approach aligns with the principles of the social justice framework, ensuring the accurate and ethical representation of students' experiences and suggestions.

Trustworthiness

Trustworthiness is essential in qualitative research as it ensures that findings are valid, rigorous, and credible, allowing confidence in the study's results through the criteria of credibility, applicability, consistency, and neutrality (Kakar et al., 2023; Lincoln & Guba, 1985). This study employed this model to achieve trustworthiness across all four dimensions.

Credibility was established through repeated and careful review of interview transcripts and translations throughout the research process to accurately capture participants' perspectives. Applicability was supported by providing rich descriptions of participants and their experiences, illustrating how the insights and suggestions of students with officially documented or self-identified learning needs can inform broader educational contexts beyond standardized and high-stakes testing, from an inclusive

education perspective. Consistency was maintained through transparent and systematic procedures for data collection, transcription, and thematic analysis, ensuring that the research process is coherent and could be replicated under similar conditions. Neutrality was achieved by maintaining analytical distance from participants, carefully documenting analytical decisions, using direct participant quotes to support interpretations, and practicing consistent reflexivity, thereby ensuring that findings reflect participants' experiences rather than researcher bias.

Summary

In summary, this chapter has outlined the methodological framework guiding the study, including the qualitative phenomenological design, research setting, participant sampling, data collection instruments and procedures, data analysis, trustworthiness, researcher positionality, limitations, and ethical considerations that collectively ensure rigor and validity. Together, these elements provide a solid foundation for examining students' perceptions of the UNT, capturing student voices, and exploring the tensions between the exam and inclusive education practices. The following chapter presents the study's findings regarding students' experiences and perceptions of the UNT, the challenges and barriers they encountered, and their suggestions for fostering more inclusive assessment practices.

Chapter 4: Findings

This chapter presents the findings of a research study exploring the perceptions of university students with diverse learning needs regarding the UNT, focusing on students from universities in Astana. The study is guided by social justice theory, which emphasizes inclusive access to equitable educational opportunities, as well as the fair recognition and treatment of students with diverse learning needs.

As outlined in the methodology chapter, the themes were developed through an inductive coding process. Eight participants with diverse learning needs were selected to take part in semi-structured interviews. The interview transcripts were carefully examined, and meaningful units of data were identified. The participants included individuals with officially recognized physical disabilities and self-identified psychological needs, as well as one participant from an isolated rural area who had taken the UNT in both Kazakh and Russian.

These meaningful data segments were subsequently assigned open codes and grouped into broader pattern codes based on recurring patterns. The related pattern codes were then organized into overarching themes that capture shared experiences among participants through an iterative process of comparison and refinement. The themes were finalized based on their relevance to the research questions and their internal coherence.

All interviews were transcribed from Russian and Kazakh, and participants' identities were kept confidential through the use of pseudonyms.

The study was guided by the following research questions:

1. How do students with diverse learning needs perceive their experiences of the Unified National Testing (UNT)?
2. What challenges or barriers did these students encounter during the UNT process?

3. What suggestions do these students provide for improving the UNT to better accommodate diverse learners?

The findings were organized into four overarching themes and multiple sub-themes, which are discussed in the following sections. All participants reported experiencing psychological barriers related to the UNT, contributing to Theme 1, Psychological pressure of the UNT experience, which comprises two sub-themes: psychological pressure and psychological support from teachers. A similar pattern was observed in the development of Theme 2, UNT as Preparation-dependent rather than reflective of holistic academic ability, as all participants shared this perception.

The majority of participants (6 out of 8) described experiences that informed Theme 3, Extraneous cognitive and environmental factors shaping UNT performance. Additionally, half of the participants (4 out of 8), specifically those with officially diagnosed physical disabilities, contributed to the sub-theme Accommodating students' diverse needs within Theme 4. However, all participants expressed a preference for subject-focused assessment and the inclusion of critical thinking in the UNT, as reflected in sub-themes 1 and 2 of Theme 4. Table 2 provides an overview of the identified themes and corresponding sub-themes, along with key verbatim excerpts from the participants.

Table 2*Themes and Corresponding Sub-themes*

	Themes	Sub-themes	Key verbatim expressions
1	Psychological pressure of the UNT experience	Psychological pressure	“no mental support”, “enormous stress”, “psychological difficulties”
		Psychological support from teachers	“psychological pressure”, “occasional support”
2	UNT perceived as preparation-dependent rather than a holistic academic ability	No sub-theme	“11 years of study”, “reflection of abilities”
3	Extraneous cognitive and environmental factors shaping UNT performance	Extraneous load	“poor question formulation”, “questions in Kazakh were confusing”
		Misalignment between preparation materials and UNT content	“mistakes in questions”, “gaps in preparation and exam content”, “overwhelming preparation”
		Forced self-reliance	“fear-driven self-preparation”
		Perceived impact of exam environment/setting on performance	“uncomfortable examination environment”, “pressure from exam supervisors”
4	Expectations for competency-focused and student-centered UNT practices	Preference for subject-focused assessment	“focus on profile subjects”, “remove unnecessary questions”
		Preference for critical thinking in exam content	“add open-ended questions”, “improve critical thinking”
		Accommodating students’ diverse needs	“physical convenience”, “improve digital accessibility”, “more breaks”, “improve psychological support”

Theme 1: Psychological Pressure of the UNT Experience

This theme illustrates how psychological pressure emerges as a defining feature of the UNT experience. In this study, “psychological pressure” refers to inconsistent or insufficient psychological support from school teachers, the amplified importance attributed to the UNT, and the resulting anxiety that led to students’ psychological needs being overlooked or inadequately addressed. The participants’ accounts revealed two sub-themes: (1) psychological pressure and (2) psychological support from teachers. These sub-themes are examined in the following sections.

Sub-theme 1: Psychological Pressure

In the UNT, as in any high-stakes examination, students frequently experience significant responsibility and psychological pressure. Regarding this sub-theme, all participants reported similar experiences, describing substantial psychological pressure both during the preparation period and throughout the examination itself. In particular, pressure during the preparation phase was linked to prevailing beliefs about the importance and influence of the UNT on students’ future prospects. These beliefs either reinforced existing anxieties or generated negative perceptions, even when students had multiple opportunities to retake the exam. As participants explained, this pressure had a detrimental effect on students’ mental preparation, as they were often overwhelmed not only by the study demands but also by additional responsibilities, such as financial concerns and meeting external expectations. In this context, school teachers were reported to contribute to the intensification of this pressure. During the examination, both the exam environment and the behavior of supervisors were perceived to place students in vulnerable positions, negatively affecting their mental well-being and, consequently, their exam performance.

Aruzhan, who has an officially recognized difficulty walking emphasized experiencing significant psychological pressure and intense stress reactions during the examination process. Aruzhan stated:

I personally think that many people and also government make this exam sound like something bad. You think that you cannot get into a university and this is an aspect the UNT overlooks; there is probably no mental support from the government at all.

Based on Aruzhan's explanation, the government and society should focus on mentally preparing students for the UNT, given the exaggerated significance attributed to the exam in shaping students' future academic and career paths, and should not neglect the provision of emotional support during this crucial transitional stage. As Aruzhan further explained, fear associated with the UNT or other high-stakes examinations appears to be common among students, even in the absence of additional barriers:

The only barrier is the mental aspect of preparation. Students are scared not only during the UNT but when it comes to any exams in general. It is an enormous stress for us as we are told that our future and so on are dependent on this exam.

Similarly, Beibarys with self-identified psychological needs noted that many students perceive the UNT negatively due to the overwhelming responsibilities associated with preparation: "Mostly students face psychological difficulties as they cannot decide on their program, are torn between subjects and it is hard to prepare oneself for the exam. Difficulty concentrating and pressure negatively affect them the most."

Drawing from his response, students should be provided with the necessary guidance to manage exam anxiety, while also ensuring that their individual concerns are addressed. Another participant from an isolated rural area in Northern Kazakhstan named Zhasulan described a comparable experience, emphasizing the high stakes of the

examination and limited financial alternatives said: “Failing UNT meant that I would not enter a university as paying for tuition was not an option for me because I could not afford it. Thus, the preparation was long and hard.” This underscores the importance of approaching student guidance with appropriate professionalism, tailoring emotional support to students’ individual circumstances in order to foster effective preparation. He also described emotional distress during the examination itself expressed that: “I was sitting in the examination room and I was trembling. I was scared but eventually I passed and left with huge relief.” As Zhasulan explained, he had to manage stress during the examination independently, and despite successfully passing and being satisfied with the results, this underscores that he experienced a strong emotional response to stress and had to cope with it on his own. This aligns with the observations of other participants, indicating that psychological pressure persists not only during the preparation process but also throughout the examination itself.

Madina, who has an officially documented Group III disability, reflected on the experience as predominantly negative, although not entirely devoid of positive elements: “Obviously, it was a negative experience. Sometimes I think that I could have done better but I understand that UNT is temporary. I was extremely anxious but I do have good memories as well like meeting other students.”

According to Madina, although students may occasionally encounter positive aspects of the exam, negative experiences clearly outweigh them, and students reconcile with this by recognizing that the UNT represents a temporary transitional stage, despite its significant negative influence on their perceptions of the examination. Likewise, Raushan, who has an officially diagnosed Grade 4 congenital idiopathic scoliosis, highlighted that repeated exposure to the examination did not reduce stress levels: “It was a very

responsible and quite stressful work. I took UNT three times, one time for a tuition-based program and twice for a government-funded one, and every time was very stressful.”

Overall, participants consistently described both the preparation process and the examination experience as predominantly negative. They attributed this to the perceived exaggerated emphasis on the importance of the UNT and its impact on their future. This heightened significance appears to intensify anxiety and fear, stemming from the overwhelming responsibility associated with the examination. The intensified anxiety stemming from the high stakes of the UNT disproportionately affected students with additional individual challenges, such as physical or psychological needs, suggesting that existing practices may privilege some learners while placing others at a disadvantage.

Sub-theme 2: Psychological Support from Teachers

All students reported receiving occasional or no psychological support from school teachers during the preparation process. Aruzhan explained that, rather than alleviating anxiety, some teachers intensified it: “One of the teachers said ‘If you do not pass, I will laugh at you’. You are such an awful class that will not pass.” This commentary highlights either the absence of psychological support or the invalidation of students’ concerns and emotions at moments when such support is most needed, from teachers with whom they spend the majority of their time. This may suggest that school teachers and exam supervisors possess insufficient professional experience and training in this area, which is particularly critical during major educational transition stages such as the UNT.

Similarly, Aibek, an Automation and Control Engineering student with self-identified needs, confirmed that teachers’ discouraging remarks undermined students’ confidence and negatively affected their preparation:

There was occasional pressure from school. The school administration sometimes entered our classes and called us “такие-сякие” (you are something else) and that

we would not pass UNT. Who will you become? So, it was difficult for us. There was some psychological pressure.

However, some participants acknowledged receiving psychological support from teachers and they noted that such support was inconsistent and insufficient and interestingly, when emotional support was present, it was described to positively influence students' preparation. Zhasulan who had received such support emphasized that emotional encouragement positively influenced his preparation:

We had a 60 years old informatics teacher who confessed that she knew little about informatics but could help me with mathematics. She supported the most and I am very grateful to her. The school principal and other teachers believed in me as well.

Zhasulan emphasized the importance of transparency, as such a relationship fosters trust between teachers and students. Drawing from his positive experience of receiving support from a teacher, it can be inferred that teachers' influence on students' well-being and preparation may be greater than commonly anticipated. However, even those participants who acknowledged receiving psychological support from teachers noted that such support was inconsistent and insufficient. Madina similarly described mixed experiences, noting that teacher attitudes toward support and accommodation varied: "We had different teachers. Some expressed support by reminding that we had two attempts to take the exam and provided classrooms for preparation, while others were strongly against it."

This may suggest that while some teachers possess experience in providing psychological support, its availability varies across educators, thereby undermining the overall effectiveness of such support. Raushan reported a comparable pattern: "Some teachers tried to support us by giving us practice tasks. For example, the Russian language teacher supported us so we passed it well. Others seemed not to care." Therefore, it

appears that all teachers should receive uniform training in providing psychological support to students, in order to ensure consistency across the support system and to maximize its effectiveness in enhancing students' preparation.

In sum, psychological support was perceived as important by students; however, teachers' attitudes often contributed to increased anxiety by undermining students' potential rather than fostering encouragement. Even when support was present, it appeared to be inconsistent and unevenly distributed. It can be suggested that existing educational practices may have gaps in providing adequate psychological support, limiting the creation of an inclusive environment that fully accommodates students with diverse psychological needs.

Theme 2: UNT Perceived as Preparation-dependent Rather Than Holistic

This theme addresses students' perceptions of the UNT as an assessment that does not evaluate holistic academic ability but is instead heavily dependent on the quality and extent of preparation. In responding to the research question, "How do students with diverse learning needs perceive their experiences of the Unified National Testing (UNT)?" participants frequently reflected on the nature of the examination itself. All participants acknowledged the importance of the UNT as a standardized assessment tool for accessing further education. One participant with international study experience compared the exam to other high-stakes tests globally, characterizing it as a common practice.

However, participants expressed frustration regarding inequities in preparation, noting that not all test takers have equal access to preparatory services and resources, particularly highlighting the proliferation of private test preparation centers. According to the participants, the core issue lies in the misalignment between the UNT and the school curriculum it is intended to assess. Specifically, they argued that exam content does not fully correspond to school textbooks or taught material, thereby placing additional pressure

on students. The presence of “unexpected” questions was perceived to compel students to seek supplementary preparation in order to perform successfully.

All participants indicated that the UNT primarily reflects how well students recall content accumulated over 11 years of schooling, thereby emphasizing rote learning and memorization rather than broader competencies. In other words, preparation was primarily perceived as test-specific training, whereby students are required to memorize potential exam patterns and items. Zhasulan argued that the examination does not adequately assess critical thinking or overall academic ability: “In my opinion, UNT poorly reflects students’ abilities. I do not think it tested my abilities; I just had to revise all 11 years of study and that was all.” Consequently, based on Zhasulan’s commentary, the effectiveness of the UNT as an accurate and objective assessment of students’ abilities is called into question, as success appears to depend primarily on the extent of preparation rather than the application of their knowledge and skills.

Although another participant, Kanat, described his overall experience of the UNT as positive, he nonetheless expressed a similar view regarding its focus on preparation rather than comprehensive knowledge, indicating that “UNT did reflect my abilities. Preparation was mostly about 11 years of study materials.” He further highlighted that the UNT is fair in terms of assessment, as it primarily requires students to be familiar with the school curriculum and encourages them to reflect on their learning, while still acknowledging a reliance on memorization and review of the school program. Based on his commentary, although he framed the recall of school materials as a means of reflecting on learning, memorization and recall nonetheless remain central to preparation for the UNT.

Kanat also noted that the UNT did not present barriers in terms of its format or administration, particularly emphasizing the convenience of the computer-based format.

Rather, he identified a more common issue among test takers as insufficient knowledge to fully meet exam requirements, as well as the potential influence of teachers' instructional approaches on how information is delivered and understood. Specifically, he suggested that variations in teaching styles may affect students' comprehension of the material. Furthermore, Kanat highlighted the need for greater discussion of exam questions between teachers and students, reporting that many UNT items contained errors, particularly in cases where questions required the selection of a single correct answer despite including multiple correct options. He further noted that, in such cases, he sought to address these issues both at school and in external preparatory centers, but the experience proved unsatisfactory.

Overall, based on participants' responses, it can be concluded that students perceive the UNT as an assessment that inadequately reflects their broader academic abilities. Rather, they view it as heavily reliant on intensive preparation, often involving rote learning and memorization of school content accumulated over 11 years of study. Access to preparatory resources is unequal, and even when such resources are available, test takers may still question the sufficiency of their preparation. This dynamic reflects a potential distrust toward the UNT and exacerbates existing fear and exam-related anxiety.

Theme 3: Extraneous Cognitive and Environmental Factors Shaping UNT

Performance

This section examines the challenges or barriers students faced during the UNT process. These obstacles were largely attributed to extraneous cognitive load arising from the complexity of exam preparation materials and content, as well as the influence of the exam environment on students' performance. Participants' responses to the research question "What challenges or barriers did these students encounter during the UNT process?" were analyzed and categorized into the following sub-themes: (1) extraneous

load, (2) misalignment between preparation materials and UNT content, (3) forced self-reliance, and (4) perceived impact of exam environment on performance.

Sub-theme 1: Extraneous Load

Among the participants, six out of eight who took the UNT in Kazakh, their native language and the medium of instruction at school, reported difficulties in understanding question formulations. They noted that a significant portion of exam time was spent interpreting the questions rather than answering them, and that psychological pressure further exacerbated these comprehension challenges. Madina explained that some questions were so complex that they had to be read multiple times, yet doubts remained regarding their understanding. Agreeing with Madina's concerns, Kanat highlighted issues in subjects such as chemistry and biology: "In most cases UNT questions were unclear, and as a result, you do not know which option to choose; you lose confidence, you are not sure what is being asked, and which answer to select." He added that the exam questions included challenging terminology that should be aligned with students' linguistic abilities and expressed frustration over how this issue complicates time management during the exam.

Similarly, Aibek, whose profile subjects included physics, reported: "I will be straightforward: some questions were confusing. It is sometimes easier for me to process information in Russian than in Kazakh, although I studied in Kazakh." Aibek further explained that contextual questions in physics were particularly confusing, and even after discussions with teachers during preparation, misunderstandings persisted. Attempts to practice using mock tests in both Kazakh and Russian revealed that while subjects such as history and reading literacy were more accessible in Kazakh, technical subjects such as physics and mathematics remained challenging.

Zhasulan, whose profile subjects were informatics and mathematics, shared similar concerns regarding linguistic difficulties:

Sometimes questions in Kazakh were confusing. In general, I think that some UNT questions in Kazakh were translated from Russian, and there is a feeling that something is wrong. You answer the questions while being unsure whether the question formulation is correct.

He further noted that some informatics terms, such as “mouse,” were translated into unfamiliar equivalents, creating a language barrier even in his native language. Notably, participants who took the UNT in Russian did not report similar issues related to linguistic comprehension.

Therefore, students who took the UNT in Kazakh, particularly those with technical profile subjects, experienced significant extraneous cognitive load while attempting to comprehend exam questions. This additional burden arose despite having studied in Kazakh as their language of instruction, highlighting how linguistic and subject-specific factors contributed to performance challenges.

Sub-theme 2: Misalignment Between Preparation Materials and UNT Content

By “misalignment,” students referred to the lack of correspondence between school materials, mock test practices, and the actual UNT content. This discrepancy resulted in low confidence when answering questions, despite extensive preparation. Although students perceived the UNT as assessing the full 11 years of school knowledge and practiced using mock tests, they frequently doubted their answers and encountered unexpected questions.

Kanat explained that a common challenge was the limited alignment between school-taught material and the exam content. He noted that UNT questions drew from both an “old” database, which emphasized precise factual knowledge such as dates and

formulas, and a “new” database, which included contextual items requiring understanding beyond memorization. Questions based on the new database were often concise and contained complex terminology, whereas the old database included more detailed questions. In some cases, UNT questions drew on the new database, while the correct answers corresponded to the old one. Kanat further noted errors in the answer options: “I had such questions: when a question was supposed to have one correct answer, it came with two or three correct answers. There were many mistakes like that.”

The majority of participants, specifically six out of eight, reported that even school teachers occasionally struggled to interpret UNT questions. Students observed this when requesting error correction exercises, often encountering contradictions between their own interpretations and those of their teachers, who at times found it challenging to understand and clearly explain the tasks. Aibek shared one teacher’s candid reaction: “My mathematics teacher openly shared that UNT changes every year and that teachers cannot catch up with those changes.”

In terms of preparation materials, which presented an additional barrier, Zhasulan reported that limited Internet access prevented him from participating in online UNT preparation courses, leading him to rely on printed textbooks. However, preparing for informatics using multiple textbooks for the same subject due to differences between humanities and science streams and variations among authors rendered the preparation process overwhelming:

UNT is based on several authors, as I understand. For example, grade 11 has several tracks, such as mathematics for humanities and for science. I had to revise both to prepare for UNT completely. It took too much of my time.

In summary, unpredictable exam content and the misalignment between school curriculum, preparation materials, and UNT questions exacerbated students’ extraneous

cognitive load and anxiety. This misalignment negatively affected both their performance and overall perception of the examination, undermining the exam's primary purpose of assessing knowledge accumulated and developed through the school curriculum and thereby compromising fairness.

Sub-theme 3: Forced Self-Reliance

All participants identified a common challenge during UNT preparation: the need to rely on external resources beyond school textbooks and available exam preparation materials due to misalignment between these resources and the actual UNT content. As previously discussed, attending preparation centers was a common practice. However, respondents did not perceive this trend positively, noting that students often felt compelled to attend these centers, even though the UNT is intended to assess knowledge acquired at school.

This reliance on external resources presented personal challenges for students. Aruzhan, Zhasulan, and Beibarys cited financial constraints, while Kanat, who had access to such resources, emphasized the limited quality of instruction in group preparation sessions. He reported that preparatory courses themselves posed challenges to the effectiveness of preparation, ultimately necessitating a return to self-study. Large group sizes often impeded effective teaching, particularly when detailed analysis of UNT questions was required, leaving students confused. Kanat described his experience:

At preparation centers I experienced many situations in which I could not clearly hear the correct answers. Many students simultaneously discussed the questions with teachers, which often left me guessing what they said and what the correct answer was. Then I had to look up the necessary information myself anyway.

For Zhasulan, self-reliance was further reinforced by challenges in accessing preparatory materials, which compelled him to spend the majority of his time at school or travel to a neighboring town to obtain Internet access. He explained:

I was born and raised in a very isolated village with a population of fewer than 100 people, and the Internet connection was poor, so I had no access to online preparation services or even online textbooks, including mock testing on the website of the National Test Center. So, I had to travel to a neighboring town with a population of a few thousand people to access the Internet, and I spent most of my time downloading preparation materials and studying for the exam.

In terms of preparation, Aibek described his experience of preparing independently by seeking out preparatory materials and occasionally completing Russian Unified State Exam (USE) mock tests for his profile subjects, physics and mathematics. He explained that he used USE mock tests because they are comparatively more challenging, requiring greater critical thinking, while also noting that reliable preparation materials for these tests are more readily accessible than those for the UNT.

Additionally, two participants indicated that these issues impose additional pressure on test takers, even when they have access to preparatory resources, as they foster a degree of distrust toward the UNT. Aruzhan stated:

I was ready but the questions were tough and I did not expect these questions to come. You try to prepare yourself when you go there, so you think you are ready; question formulation is difficult, students forget what they know.

From this, it appears that students may encounter difficulties in aligning with exam expectations, thereby prompting them to question the adequacy of their preparation.

Another participant, Raushan, expressed a similar view yet her account further highlighted that some test takers may resort to questionable and inequitable practices, such

as accessing leaked exam materials through online platforms. Notably, despite attending preparatory courses and receiving both academic and emotional support from a school teacher, she reported still seeking out such materials. Raushan reported: “I went to a preparation center but also revised leaked exam questions on Telegram channels. In general, I revised extensively.” Similarly, Adil, who had spent considerable time abroad receiving treatment, also relied on leaked exam questions due to limited time available for formal preparation.

In summary, despite varied educational needs and contextual challenges, forced self-reliance emerged as a common issue among students. Anxiety and fear associated with the UNT drove them to depend on external preparation sources, navigate misaligned materials, and, in some cases, consult leaked exam questions, thereby exacerbating their emotional stress during the preparation process.

Sub-theme 4: Perceived Impact of Exam Environment on Performance

This section explores how the examination environment influenced students’ performance, taking into account both the organization of the exam and the attitudes of exam supervisors, which exerted underlying negative effects on the students. All participants reported experiencing a certain degree of psychological discomfort during the examination process, with four of the eight participants who had officially diagnosed disabilities experiencing additional physical discomfort.

Aruzhan received accommodations such as additional time and teacher assistants but described the classroom as inconvenient in terms of layout and planning:

Better technical support, such as improved computers and network, should be provided, and the study room where the UNT is held should be larger and have windows. I also think there is no need for so many people walking around while you are taking this test, as it increases stress even further.

Drawing on this, Aruzhan commented on the intense monitoring by exam supervisors, which created distractions. She also suggested the consideration of UNT alternatives for students with mobility difficulties to enhance the convenience of the exam.

Based on the commentary of all participants, psychological pressure and discomfort were evident, even if not experienced with the same intensity by all. For example, Adil described the exam environment as uncomfortable, despite not being directly affected by it:

The exam environment did not affect me, but I would not say that it was comfortable at all. I understand that it is necessary to check whether students have cheat sheets, but the supervisors did it with “таким остервенением” (such wild ferocity). It was definitely uncomfortable because of passive aggression, and when students entered the examination room, they were checked “чуть ли не до трусов” (down to their underwear). I was wearing a watch to see the time, as I did not have my phone, and they would pick it apart on the spot.

Adil noted that this aggressive behavior reinforced students’ negative perceptions of the exam. He suggested that supervisors may create obstacles to an inclusive and safe examination by treating all students uniformly, including those with special needs, thereby highlighting the potential distress caused by overly strict and aggressive interactions:

In general, I did not experience difficulties specifically related to my diagnosis. I was given a disability after I received treatment for cancer. After cancer treatment, people are not fully healthy; some may experience muscle contractions, weakness, and so on. Part of the muscles in my arm were removed, and my arm would go numb, but I personally did not have problems. However, for other groups, for example, those who are unable to walk, use a wheelchair, or have diabetes, I think that if someone with diabetes came, their insulin pump could be taken away. They

wanted to take away my watch, so nothing would stop them from taking the insulin pump.

The attitudes of exam supervisors impacted not only students' emotional states but also neglected their special needs, thereby exacerbating discomfort and further complicating the examination experience. Raushan reported experiencing physical pain due to being required to remain still for the entire duration of the exam: "I lost concentration during the four-hour exam because I was restricted in movement, so I would not say that the exam reflected my knowledge 100%."

She also emphasized that fear of supervisors' strict monitoring contributed to this stress:

There definitely was pressure from supervisors. We were told not to move our head left or right. I knew students who were asked to leave the examination room after moving too much, and their results were cancelled. Teachers told us that our future depended on this exam.

In sum, the examination environment exerted a significant, yet often overlooked, impact on students' psychological and physical well-being, influencing both their performance and overall experience of the exam. Excessive monitoring and aggressive supervisory behavior contributed to distrust and heightened anxiety among test takers, particularly those with special learning needs, whose needs were frequently neglected.

Theme 4: Expectations for Competency-Focused and Student-Centered UNT Practices

This theme explores students' expectations and recommendations for more inclusive UNT practices, aiming to accommodate all exam-takers, including those with diverse learning needs. In response to the research question, "What suggestions do these students provide for improving the UNT to better accommodate diverse learners?"

respondents addressed both the exam content and organizational aspects, resulting in the following sub-themes: (1) preference for subject-focused assessment, (2) preference for critical thinking in exam content, and (3) accommodating students' diverse needs.

Sub-theme 1: Preference for Subject-Focused Assessment

Participants emphasized that the UNT should reduce the overwhelming volume of content and eliminate “unnecessary” questions, prioritizing profile subjects that are directly related to students' intended fields of study. Given that the exam is perceived as a measure of students' knowledge, they suggested that focusing on profile subjects would more accurately reflect their preparedness, rather than requiring rote memorization of extensive core subjects. Consequently, students prioritize practical and future-oriented knowledge that directly aligns with their career decisions, which they argued should be reflected in the exam.

Beibarys highlighted the importance of reducing the level of detail in certain subjects, such as history, which currently requires memorization of excessive information:

“UNT requires specific knowledge in subjects. Narrowing the number of subjects and focusing on profile subjects with more questions in them instead so that students could focus on them more rather rote-learn all this mess.”

He further explained that the exam's excessive content may not be effective in terms of quality, as test takers ultimately devote time to knowledge that may not be relevant to their chosen professions. Supporting this view, Kanat emphasized that prioritizing profile subjects in the UNT enhances students' readiness for the first year of university, since content from these subjects is subsequently revisited in higher education:

Profile subjects in UNT are taught again in the first year of university and then students' basic knowledge will be clear. If I did not have basic knowledge, I would not have understood material and many things would be confusing to me.

Aibek expressed a similar view, noting that certain topics in subjects such as biology and physics are unnecessary and could be reduced in favor of content more directly related to students' profiles:

For example, biology is taught until grade 9 but some topics are unnecessary.

Those who selected chemistry and biology told me that some materials are unnecessary. The same thing is in physics. I think content should be reduced focusing more on profile subjects.

In addition, Adil expressed the perception that some exam questions appeared to be included merely for the sake of inclusion, offering limited informational or assessment value in evaluating test takers' knowledge or keeping pace with annual exam updates. He further noted that, given the exam's intended purpose of assessing students' profession-related knowledge, this practice is problematic:

UNT is supposed to test students' knowledge in a specific profession, isn't it? I had an impression that some questions were for the sake of asking as the exam needs to be updated annually.

In general, students emphasized the need for the UNT to concentrate on selected profile subjects rather than overwhelming students with extensive information unrelated to their chosen field. They perceived many questions as unimportant and questioned the practical purpose they served in assessing their readiness for further study. The participants suggested that increasing the number of subject-related questions could make the assessment more practical and equitable, better demonstrating students' potential in their chosen areas.

Sub-theme 2: Preference for Critical Thinking in Exam Content

Five out of eight students strongly agreed on the need to reform the UNT format to assess knowledge more accurately, shifting away from rote learning and memorization

toward an emphasis on critical thinking. Two participants compared the UNT to other high-stakes examinations, noting that the exam's demand for advanced cognitive skills, such as critical thinking, is relatively low and should be enhanced to improve the quality and objectivity of assessing students' potential.

Aibek compared the UNT with the USE and proposed the inclusion of open-ended questions to better foster critical thinking:

If we compare UNT with other Unified State Exam and SAT or other international high-stakes exam, UNT is very easy. Even if students do not know the answer, they can predict it. It should have open-ended questions to improve critical thinking.

Participants noted that, despite the standardized testing purpose, UNT content was often misaligned with the school curriculum, not only in terms of coverage but also in how it fosters students' critical thinking. Kanat expressed the view that some elite schools, such as Bilim-Innovation Lyceums (BIL), have curricula that differ from those of mainstream schools, being more closely aligned with the cognitive skill requirements of the UNT, including critical thinking: "For example, chemistry tasks asked about calculating the probability of something. We had not done it before but such a logical database exists in BIL, as far as I know."

Adil further advocated for the removal of questions that do not meaningfully reflect students' knowledge and supported the inclusion of open-ended questions: "In fact, such exams are held practically everywhere around the world and they contain not only test questions but also open-ended questions. I would remove insignificant questions that do not reflect students' true knowledge of the subject."

Thus, students emphasized that the UNT should consist of questions clearly articulated to align with students' comprehension and recommended a combination of

multiple-choice questions focused on profile subjects with open-ended questions aimed at fostering critical thinking.

Sub-theme 3: Accommodating Students' Diverse Needs

This section examines how the UNT could become more inclusive by addressing the physical and psychological needs of students with diverse learning requirements. Four out of eight participants proposed potential improvements aimed at addressing the often-overlooked challenges faced by students with physical needs.

Aruzhan, from a perspective of a person with officially documented physical disability, suggested:

One thing I want to advise is that they have to make UNT home-based because home-based exam is more convenient for students who cannot walk, for example, or who are on a wheelchair. Me personally, I can walk, but even if I can walk it is hard for me and we have students who cannot walk or are on a wheelchair and come to pass this exam and it is hard for them.

The students recommended making the exam more accessible in terms of location through an improved digital format. Zhasulan emphasized the importance of enhancing Internet access and the availability of online preparation services in rural areas to support equitable participation. To accommodate physical needs during the exam itself, Raushan, who needed to relieve her pain from sitting too long due to her physical disability, suggested incorporating breaks to reduce physical discomfort and maintain focus, particularly during long examinations; “I do not know how possible this is, but I think adding breaks or at least not restricting us in movement would be good. Sitting for 4 hours is difficult.”

Participants also highlighted the role of teachers in supporting students' psychological well-being. They recommended improving teacher training to enhance the

provision of emotional and psychological support during both preparation and examination. Such support would help teachers understand diverse student needs and prevent interactions from negatively affecting performance, thereby fostering a more positive exam experience.

Overall, students emphasized that the UNT should be organized to accommodate both physical and psychological needs, making the preparation and examination process more inclusive and comfortable. This could be achieved by improving the digital format, allowing rest periods, and ensuring that teachers and exam supervisors are trained to provide appropriate emotional support.

Summary of the Findings

This chapter presented the perceptions of Astana university students with diverse learning needs regarding the UNT by examining their preparation and examination experiences. A careful analysis of participant responses identified psychological pressure as a common barrier across all participants, including those with officially diagnosed disabilities and self-identified learning needs. Notably, these psychological barriers were evident both during the preparation stage, manifesting as pre-existing negative perceptions about the exam's importance, often reinforced by school teachers, and during the examination itself, where they were further exacerbated by exam supervisors. These findings suggest that school teachers should enhance their professional skills in providing psychological support to ensure a safe and supportive learning environment, taking into account the individual needs of students regardless of their backgrounds or circumstances.

Regarding perceptions of the examination's content, participants consistently noted that the UNT emphasizes preparation strategies, which are often contingent on students' access to resources, over the assessment of broader academic abilities. This emphasis limits students' opportunities to fully demonstrate their potential. Specific issues, such as

misalignment between the exam's language and students' comprehension, as well as discrepancies with the taught curriculum, intensify the already high stakes of the exam, prompting students to question both the adequacy of their preparation and their overall readiness.

The combination of these findings suggests that the current UNT format may not fully align with the principles of inclusive education and social justice. Students with diverse learning needs experience disproportionate barriers, while those with access to appropriate preparation resources are placed at an advantage. Furthermore, the psychological demands of the exam are insufficiently addressed, undermining equitable assessment. By highlighting these systemic barriers, this chapter underscores the need for reforms aimed at promoting fairness, meaningful assessment, and accessibility.

These findings are discussed in the next chapter, in which the implications of the UNT for student equity and inclusivity are critically examined.

Chapter 5: Discussion

This chapter revisits the study's research questions concerning (1) how students with diverse needs perceive their experiences with the UNT, (2) the challenges and barriers they encounter, and (3) their recommendations for fostering a more inclusive approach to the examination. Overall, the findings suggest that students predominantly perceive the UNT negatively, largely due to its limited inclusivity as experienced by learners with diverse needs, thereby necessitating a more nuanced and multi-faceted examination of the issue.

The analysis highlights a pressing need to strengthen the preparation of school teachers and exam supervisors in providing adequate psychological support, in order to ensure a safe and supportive learning environment. In addition, participants consistently reported that the UNT amplifies existing socio-economic and logistical disparities among test takers, consequently undermining principles of fairness and inclusivity. Beyond its high-stakes nature, further barriers were identified, including concerns regarding exam content, particularly the substandard quality of Kazakh-language questions, as well as external distractions related to the organization of the assessment.

Despite these challenges, students continue to recognize the UNT as a valid standardized assessment tool yet they strongly advocate for reforms aimed at improving its inclusivity. In particular, they emphasize the need for a more comprehensive approach that accounts for frequently overlooked student needs and actively incorporates student perspectives, thereby contributing to a more equitable and accessible examination experience.

This chapter is structured into three sections, corresponding to the study's research questions. Within each section, key findings from the data analysis are discussed and interpreted in relation to relevant literature and are framed through Nancy Fraser's (1998)

three-dimensional framework of social justice, namely redistribution, recognition, and representation.

In this study, the recognition of students with diverse learning needs in the UNT is defined as the extent to which their psychological, cognitive, physical, and other relevant needs that affect their participation in educational settings are acknowledged and addressed to ensure equitable participation.

From a redistribution perspective, students' socioeconomic status and their access to the resources necessary for successful UNT outcomes are examined to identify underlying factors that may intensify systemic inequalities.

With regard to the representation dimension of Nancy Fraser's (2009) framework, the findings highlight the importance of incorporating students' voices into reforms related to the UNT, as these voices are often overlooked despite students being the primary stakeholders affected by the examination. As Fraser (2009) argues, all three dimensions of justice must be addressed in an integrated manner, as they are interrelated and, together, can more effectively respond to the injustices shaping students' experiences and outcomes in the UNT. The chapter concludes by examining students' recommendations for mitigating barriers faced by learners with diverse needs and by considering strategies for a more inclusive approach to the UNT.

RQ1: How do students with diverse learning needs perceive their experiences of the Unified National Testing (UNT)?

The findings of the study indicate that participants' predominantly negative perceptions of their experiences with the UNT emerged from the interaction of both extrinsic and intrinsic factors. Extrinsic factors included psychological pressure during the preparation and examination stages, which was associated with inconsistent or absent support from teachers and an exaggerated emphasis on the high-stakes nature of the exam.

In contrast, the intrinsic factor was reflected in students' perception that the UNT inadequately assesses their overall academic abilities.

Psychological Barriers in the UNT Experience

A closer examination of psychological barriers in the UNT highlights that the implementation of systematic psychological support within school culture is often inconsistent or absent. From the perspective of Fraser's (1998) recognition justice, students faced misrecognition as their psychological diversity was undermined by a school culture, particularly in the relationships between school staff and students, that prioritized academic outcomes and student independence over well-being. As teachers failed to recognize students' lived experiences as key participants in educational processes, this led to a certain level of subordination, which resulted in students' inability to openly voice their needs and demand necessary psychological support.

Psychological support from teachers was generally described as absent, sporadic, inconsistent, or even contradictory. Moreover, all participants reported that their schools failed to provide uniform psychological support, and half indicated that at least one teacher had violated teaching ethics by expressing negative views about students' abilities. This suggests that, although psychological support is formally recognized as important, its implementation remains weak: teachers may not fully appreciate its significance or may require further professional training, and the prevalence of such incidents points to broader institutional issues.

Participants reported that most teachers appeared unaware of how their presence and support could influence student preparation and performance, despite being central figures in students' academic lives. This lack of support led students to question their academic adequacy and self-confidence, while also fostering negative perceptions and prejudices toward the exam. In the context of the UNT, where stakes are particularly high,

students' psychological state strongly influences their performance, with personal vulnerabilities and extrinsic pressures placing them in precarious positions and exacerbating inequalities, particularly for those from disadvantaged backgrounds or with special needs, often leading them to question their own abilities. Participants noted that this pressure affects students regardless of need, representing a persistent barrier in the examination process. As Anuarbekova and Yaylaci (2025) show, empirical evidence indicates that heightened anxiety can hinder learning, resulting in lower academic success even when students possess similar knowledge and preparation. Conversely, when psychological support was provided effectively, students experienced positive effects on their preparation. Notably, cultural factors, such as the enforcement of strict obedience norms and the broader culture surrounding the UNT, which amplifies the perceived consequences of the exam and fosters pessimistic views about success, may exacerbate psychological barriers for students. Therefore, it can be argued that school teachers should prioritize fostering trusting student–teacher relationships.

Importantly, students' voices, although central to the effectiveness of psychological support, were frequently overlooked, influencing how teachers perceived and implemented such support when it was available. Participants reported that psychological support in schools is still developing and requires improvements not only in-service availability and quality, but also in consideration of student satisfaction. In line with these observations, Mamerkhanova et al. (2025) emphasize that, despite formal recognition of its importance, psychological support in Kazakhstan remains at a preparatory stage of development, while Sarzhanova et al. (2025) stress that student satisfaction is critical for its effective implementation; therefore, students' voices and their psychological diversity must be actively incorporated into these processes. This finding underscores significant, yet often overlooked, social and systemic obstacles, particularly the failure to recognize students'

psychological needs as an integral component of their preparation and performance, and the lack of proactive engagement with student well-being as a central aspect of school culture, especially during a critical transitional stage such as the UNT.

Overall, recognitive justice is essential for respecting students' identities and acknowledging their diverse psychological conditions in high-stakes contexts such as the UNT, thereby enhancing the effectiveness and inclusivity of psychological support. Students should be positioned as central figures within this system, with changes informed by their authentic feedback, particularly for those with diverse needs who are placed in vulnerable positions. However, the ongoing development of psychological support in schools, combined with teachers' limited knowledge and experience and the influence of cultural factors, hinders progress in recognizing students as individuals whose voices should directly shape the system. Addressing this aspect is crucial to making the UNT experience both more supportive and meaningful for test takers.

Students continue to rely on rote learning, despite the UNT being designed to encourage deeper understanding

Another consistent issue emerging from the study findings is that students perceive the UNT as inadequate in assessing their overall academic abilities, as the exam primarily relies on lower-order cognitive skills practiced through test-specific training, particularly through the revision of common test patterns. This finding suggests that students' diversity in learning may not be sufficiently recognized, resulting in misrecognition within the assessment framework due to a narrow conception of academic ability. While one participant described their experience as positive, another as neutral, and the remainder as negative, participants emphasized that their main concern during preparation was how effectively they could engage with the school curriculum in a test-focused manner.

These observations align with Spann (2015), who notes that high-stakes tests are inherently limited in their ability to guarantee positive educational outcomes, as they prioritize performance on specific skills over broader learner potential, producing negative consequences that may affect students' future trajectories. Furthermore, the extensive reliance on test-specific skills fosters a belief among students that success in the UNT depends solely on repetitive preparation, with little expectation for critical thinking. Consequently, beyond this systemic gap, such practices may reinforce negative perceptions of both the exam and its examinees, as students reported that the UNT often appears to require lucky guesses.

Interestingly, despite their negative associations with the UNT, students acknowledged the exam as a necessary standardized assessment tool, comparable to other high-stakes tests worldwide, and suggested that it should evaluate students' potential in a manner that meaningfully contributes to their future academic and professional development in line with contemporary competitive demands. However, in comparison with international counterparts, students noted that the UNT still requires reforms to better equip test takers to meet global trends and contemporary demands. Indeed, Baizhanov et al. (2025) highlighted that the exam format remains misaligned with today's academic and professional requirements, as students continue to rely heavily on memorization and frequently encounter difficulties in developing argumentation, critical thinking, creativity, and other advanced cognitive skills that are highly demanded in real-world contexts. This suggests that students' expectations regarding the UNT's role in their long-term academic and professional plans may not fully align with the skills necessary for them, which results in the misrecognition of important, more future-oriented skills.

In particular, students highlighted the UNT's future-oriented role in developing skills applicable to real-world contexts, expressing concerns that even successful

preparation and passing of the exam may not fully capture or guarantee their overall potential. This perspective is supported by Baizhanov et al. (2025), who demonstrated that high UNT scores do not necessarily reflect students' actual knowledge, as evidenced by instances in which applicants with strong exam results failed to meet the academic standards of competitive universities, thereby revealing a misalignment between school-based preparation and university expectations.

Consequently, the underdevelopment of these skills may place students at a disadvantage in competitive academic and professional environments. This illustrates that students perceive assessment broadly, extending beyond successful university enrollment to encompass their preparedness for meeting the expectations of their chosen academic programs and future professional roles.

Nevertheless, the UNT is undergoing transformations aimed at aligning with global education standards and preparing students as skilled and knowledgeable human capital. Existing research on UNT reforms indicates a gradual shift toward a competency-based approach, moving away from outdated assessment practices. Importantly, students' perspectives should also be integrated, as they are key stakeholders whose voices must help shape educational trends within a system as significant as the UNT. This further underscores the necessity of treating students with respect and recognition to uphold social justice within the examination process.

RQ2: What challenges or barriers did these students encounter during the UNT process?

The participants reported experiencing difficulties when working with preparatory materials for the UNT due to misalignment among exam preparation resources, curriculum content, and the exam itself, which substantially affected their outcomes. During the examination process, participants also highlighted experiencing extraneous cognitive load

arising from the formulation of exam questions. Specifically, students reported difficulties in understanding questions presented in the Kazakh-language format of the UNT, which hindered their ability to maintain attention and manage examination time, thereby increasing anxiety and negatively affecting their perceived performance.

The Kazakh-language format of the UNT requires improvement to better accommodate students' linguistic needs

A linguistic barrier emerged as a significant challenge in students' experiences with the UNT, particularly among those who took the exam in the Kazakh language, whereas students who completed the Russian-language version did not report similar issues.

Although Kazakh is their first language, these students found the exam questions confusing and difficult to comprehend. This difficulty was reflected in students' frustration with the structure and wording of questions, as well as with the interpretation of specific scientific and technical terms, an issue that was especially pronounced in science-related subjects, including mathematics, physics, chemistry, informatics, and biology.

Participants suggested that these challenges may stem from the use of overly complex academic and scientific terminology in Kazakh that is not aligned with students' levels of understanding. Following this idea, it can be understood that academic language proficiency required in the UNT is not aligned with students' actual levels, and these inconsistencies led students to question their own comprehension abilities, further complicating the preparation process. This concern was further reinforced during exam revision sessions, where discrepancies in interpretation between teachers and students became evident, with the same questions being understood differently. Consequently, students struggled to manage their time effectively during the exam while attempting to interpret the questions accurately. Based on Fraser's (1998) concept of recognitive justice, this suggests that the standardized format of the UNT expects a certain level of language

comprehension from students, and when they fail to meet this expectation, their actual linguistic levels may not be fully recognized. As a result, these students may not be able to fully participate in the assessment.

Therefore, these findings highlight concerns regarding the quality of question formulation in the Kazakh-language version of the UNT and raise broader issues about the development and standardization of academic and scientific language in Kazakh. From a social justice perspective, this also suggests a limited recognition of students' linguistic needs and backgrounds in the design of exam content, potentially imposing additional barriers to their performance. The importance of exam question quality in HSTs was highlighted in the findings of Madaus and Russell (2010), who emphasized that question design directly affects how students interpret and engage with tasks. Well-designed questions must go beyond exam content to consider factors influencing students' information processing, and students' ability to correctly process information should be appropriate to their developmental stage.

According to the concept of extraneous cognitive load introduced by John Sweller (1988), students may experience unnecessary cognitive effort imposed by poorly designed instructional materials, even when the content itself is familiar and comprehensible, thereby further supporting participants' concerns. This aligns with participants' growing distrust toward exam questions, which should not impose additional cognitive load, particularly when examinees possess the necessary knowledge; therefore, overcomplicated question formulations should be avoided.

Additionally, this issue raises an important consideration that academic and scientific Kazakh used in schools and in the UNT may not be fully aligned, suggesting that the teaching and standardization of modern Kazakh terminology should be more actively promoted among students. The study by Anafinova et al. (2025) further supports this

concern, demonstrating that contemporary Kazakh scientific, technological, and media terminology is significantly influenced by Russian and English. Given the structural differences between these languages, the standardization of Kazakh in testing contexts remains an evolving process, highlighting the need for further research on its development.

Although this issue appears to be common among students, there is limited research addressing it, and further investigation is required to understand why native Kazakh-speaking students perceive the Kazakh-language format of the exam as more challenging. Empirical evidence also suggests a relationship between the language of instruction in Kazakhstani schools and UNT outcomes. Taken together, these findings indicate the need to examine the underlying factors contributing to the complexity of students' comprehension of academic Kazakh language.

Misalignment in UNT Preparation

Another consistent issue emerging from the study findings is that students perceive the UNT as inadequate in assessing their overall academic abilities, relying instead largely on the quality and duration of exam preparation. In particular, students identified gaps between the school curriculum and the UNT content as a major challenge. By “misalignment,” students specifically referred to difficulties in achieving confidence when selecting correct answers, despite having covered the topics at school, as exam questions often contained errors. For example, one participant shared that some questions included more than one correct option, even though they were designed as single-answer questions. Moreover, students noted that textbooks provided at schools contained information that differed from the exam content, which prompted them to consult textbooks by different authors on the same subjects to ensure more comprehensive revision and build confidence in their preparation.

Given that mainstream schools often provide insufficient coverage of the content necessary for successful UNT preparation, students are forced to rely on supplementary preparatory services outside of school. Although the use of test preparation centers is widespread, students expressed concerns that the proliferation of such centers and their somewhat normalized culture is problematic, asserting that students should not contribute to their expansion. They emphasized that effective preparation for the UNT should ideally depend on knowledge acquired in school and its practical application.

While the UNT may demonstrate formal stakes fairness on paper, it frequently overlooks disparities in starting points, particularly regarding access to and quality of preparation. Consequently, fairness in exam consequences does not fully account for students' real-life inequalities, including financial constraints, and logistical disadvantages, raising significant concerns regarding the recognitive justice of preparation opportunities and the persistent gaps between students from different socio-economic and educational backgrounds.

This aligns with the findings of Avdiu and Ahmedi (2024), which suggest that students may be forced to invest unequal amounts of financial resources and time not only in the preparation process itself, which already imposed substantial psychological pressure, but also in searching for and accessing appropriate preparatory materials. As a result, students with easier access occupy a privileged position, reflecting socio-economic disparities among learners and contributing to feelings of inadequacy, which in turn intensifies pressure and responsibility. Further supporting this, Anuarbekova and Yaylaci (2025) note that these disparities directly influence examination outcomes: not only do disadvantaged students experience preparation difficulties, but even those with access report dissatisfaction with the quality of supplementary preparatory services.

Therefore, exam success is perceived as closely tied to circumstantial factors, such as the accessibility and affordability of additional preparatory services, the quality of knowledge delivery in schools and test preparation centers, and the interpretation of exam content by both teachers during revisions and students' own understanding of the questions. These inequalities should be addressed through the lens of socially just redistribution, which affirms that economic and other disparities that hinder access to quality preparation obstruct the inclusion of students from diverse backgrounds, not only during the examination process but also from the very starting point of their academic journey.

RQ3: What suggestions do these students provide for improving the UNT to better accommodate diverse learners?

In order to develop inclusive approaches to the UNT, the majority of students emphasized the significance of improving both the content of the exam and the conditions under which it is administered. Specifically, improvements in the exam content were proposed to potentially address inequalities at the preparation stage, particularly in relation to participants' individual experiences, financial and logistical disadvantages, and the need for a more accurate assessment of overall student potential. Regarding the conditions of the examination procedure, students highlighted the importance of minimizing discomfort and distractions caused by overly strict security checks, classroom conditions, and rigid rules in the examination environment. This underscores the often-overlooked influence of exam organization, suggesting that classroom conditions should be more accommodating to students with diverse psychological and physical needs. Students' lived experiences revealed underlying factors that often go unnoticed by decision-makers when changes are made to the UNT, as students are influenced by the exam throughout the whole process, from the preparation stage to the examination stage, each of which has its own

peculiarities. This suggests that, in order to make the UNT more inclusive, students' lived experiences need to be recognized, distributive inequalities among examinees need to be addressed, and their voiced needs need to be represented altogether. Only by meeting all three dimensions of justice can the UNT become more inclusive (Nancy Fraser, 2009). A similar perspective is reflected in Shyman's (2015) study, which emphasizes that accommodating students' needs should involve addressing all potential barriers and ensuring a comfortable learning environment to provide comprehensive inclusive support.

Students recognize the importance of the UNT but desire a more comprehensive and flexible format

One suggestion made by several students was to ensure that the content of profile subjects is relevant and to incorporate open-ended questions into the UNT. The content of profile subjects in the UNT was described as overwhelming and, at times, irrelevant, with participants recommending that it be narrowed to essential topics more frequently applied in their prospective university studies. The perceived irrelevance of exam questions was framed in relation to students' practical expectations of their chosen professions, particularly regarding how often certain topics would be used in real-life contexts; however, students reported encountering overly specific factual questions that they considered unrelated to their specialization. These perceptions indicate that students remain engaged with and attentive to the purpose of the exam, while expressing a clear preference for greater alignment between exam content, their specialty expectations, and practical applications. As Fraser (2009) explains, this further suggests the importance of adequately representing students' voices in shaping reforms of the UNT, as key stakeholders whose participation in decision-making processes directly contributes to more equitable and responsive assessment practices.

Also, open-ended questions were proposed as a means of more fairly assessing students' learning by encouraging the use of higher-order cognitive skills that are more closely aligned with the demands of competitive academic and professional environments. In particular, students suggested that current UNT question formats are somewhat predictable due to reliance on memorization and rote learning, thereby limiting students to the use of lower-order cognitive skills and offering little long-term benefit. This suggestion aligns with findings by Baizhanov et al. (2025) indicate that such questions can serve as an effective tool for fostering advanced cognitive skills, such as creativity and reasoning, which are essential for further educational environments. In contrast, the absence of open-ended questions in testing was described as potentially limiting creativity. Therefore, it is recommended that students be given opportunities to approach tasks in different ways and demonstrate argumentation when solving them, which aligns with the requirements of contemporary educational standards.

Another perceived benefit of open-ended questions in standardized testing, as highlighted by students, is that, compared to the current closed-ended questions in the UNT, they may better represent the diversity of students' thinking. This is particularly important in the context of inclusive assessment practices, as examinees may have diverse learning needs that can influence their UNT outcomes. This perspective aligns with the findings of Adams and Bell (2016), who argue that the foundation of inclusive practices in assessment, and in education more broadly, lies in acknowledging students' individuality and learning experiences, including their unique interpretations of exam content and performance. Thus, participants expressed that the current UNT format may not accurately assess students' knowledge and therefore requires modification to become more comprehensive, particularly through changes to the question format. Such changes could

enhance both the recognition and representation of students within the UNT, suggesting pathways toward more inclusive testing practices.

Both the content and the examination environment are crucial, particularly for students with diverse psychological and physical needs

Factors influencing student outcomes in the UNT that are often overlooked relate to the examination environment, particularly exam administration and its impact on students' physical and psychological well-being. Participants' accounts highlight how formal procedures, such as security checks, invigilator monitoring, classroom conditions, and examination rules, are perceived as integral yet insufficiently addressed components of the broader assessment system. All participants' lived experiences suggest that the UNT process should be consistently supported from beginning to end.

Despite familiarity with the exam format, participants reported psychological and physical discomfort, including heightened anxiety and, in one case, visible shaking and pain. Exam supervisors were frequently described as overly strict, displaying distrust and passive aggression during security checks and monitoring, which contributed to cognitive distraction and reduced concentration. Their emphasis on obedience imposed additional physical and behavioral constraints, with students reporting restrictions on movement and threats of removal for non-compliance. Concerns were also raised regarding students with disabilities, particularly those using assistive medical devices, as stringent security procedures were perceived to place additional pressure on them. Distrust between examinees and supervisors emerged as a key source of anxiety, further shaping negative examination experiences.

These findings raise questions about supervisors' preparedness to foster supportive, trust-based interactions. They also reflect broader attitudes toward inclusive practices, as well as cultural norms emphasizing authority and strict discipline. From a social justice

perspective, this suggests a form of recognition injustice, whereby students' diverse needs and lived experiences are insufficiently acknowledged.

Negative examination experiences were found to reinforce pre-existing concerns about the UNT, particularly among students with officially diagnosed physical conditions, raising questions about the system's capacity to ensure full and equitable participation. This aligns with Makoelle and Burmistrova (2024), who emphasize that inclusivity should involve not only presence but also meaningful participation and support.

Additionally, inadequate classroom conditions, such as excessive heat, poor ventilation, and disruptions during the exam, further exacerbated these challenges. Participants suggested that improved environmental conditions and accommodations, including scheduled breaks, could enhance performance and support inclusivity. These issues may not only relate to students' comfort but also to how resources may be distributed unequally in providing examination conditions, and to how their physical and psychological needs are overlooked and misrecognized. This is consistent with Adams and Bell (2016), who argue that inclusive practices require proactive recognition and support of students' diverse needs.

Once again, this finding underscores that achieving a fully inclusive approach to the UNT as a high-stakes examination requires the recognition of student diversity, the equitable redistribution of resources influencing examination outcomes, and the meaningful representation of students' voices in decision-making processes and system-level reforms. Social justice is essential for inclusivity in high-stakes assessments such as the UNT and should be addressed across all three interrelated dimensions, as together they form a coherent system for ensuring justice (Fraser, 2009).

Summary

In sum, the findings indicate that students generally hold negative perceptions of the UNT, primarily linked to barriers encountered during preparation, exam content, and administration, rather than the exam itself, which remains an important standardized assessment of academic potential in Kazakhstan. Analyzing these barriers through a social justice lens reveals that students' voices, as central stakeholders, are insufficiently represented. Exam changes often overlook content appropriateness for students' linguistic comprehension, preferences for subject-relevant questions that foster higher-order cognitive skills, and equitable distribution of resources to support diverse preparation needs. These oversights may intensify existing inequalities and hinder inclusive approaches to the UNT.

The study also identified systemic issues affecting social justice and inclusivity. First, the underdevelopment of academic and scientific Kazakh-language resources, alongside gaps between the school curriculum and the UNT, creates linguistic barriers for Kazakh-language students. Second, teachers' and exam supervisors' limited preparedness for inclusive practices, potentially influenced by institutional or cultural norms, contributes to non-recognition of students' individuality and needs, straining teacher–student relationships. Finally, examination administration was reported as overly strict, prioritizing formal procedures over students' psychological and physical well-being, particularly for those with officially recognized needs.

Overall, enhancing inclusivity in the UNT requires recognizing students' lived experiences, needs, and individuality to enable their active engagement in the system and decision-making processes. Institutional and cultural barriers must be addressed, and gaps in access to preparation reconsidered to ensure both fairness and equal starting points, highlighting distributive injustice in the system. The UNT should be conceptualized as a

broader system that includes both preparation and examination stages, providing continuous support to students throughout the process. Its justice toward students needs to be addressed through all three dimensions simultaneously, with their diverse needs and individual backgrounds being recognized, inequalities in participation caused by the misdistribution of resources being addressed, and students' voices being included in decision-making, as they are the ones directly affected by the UNT.

Chapter 6: Conclusion

This study explores perceptions of university students with diverse learning needs on the UNT, guided by the following research questions: (1) How do students with diverse learning needs perceive their experiences of the Unified National Testing (UNT)? (2) What challenges or barriers do these students encounter during the UNT process? (3) What suggestions do these students provide for improving the UNT to better accommodate diverse learners? To achieve these objectives, this study analyzed perceptions of students from three universities in Astana with officially documented physical disabilities and self-identified psychological and other needs, with diversity of needs kept broad to ensure stronger student representation and a more comprehensive examination. This study applied Nancy Fraser's (1998; 2009) three-dimensional social justice framework, namely recognition (students' backgrounds), redistribution (potential economic injustices), and representation (the extent to which students' voices are included in decision-making regarding the UNT).

In relation to the first research question, the findings revealed that students perceived their experiences of the UNT negatively due to psychological aspects of preparation and examination, which were frequently overlooked or insufficiently addressed by school teachers and exam supervisors. They attributed to and due to exam content that prioritized rote learning rather than fostering higher-order cognitive skills such as critical thinking and argumentation among examinees. Ongoing gaps in psychological support in schools and insufficient attention to student well-being suggest that teachers should receive professional training in this area to better support students at a critical stage such as the UNT (Mamerkhanova et al., 2025; Sarzhanova et al., 2025). Students also expressed a preference for the UNT to provide an objective assessment of overall student

potential while simultaneously allowing the development of skills aligned with contemporary academic and professional demands (Baizhanov et al., 2025).

Regarding the second research question, students' challenges and barriers were linked to linguistic barriers in the Kazakh-language version of the exam, which were perceived to result from a misalignment between UNT language proficiency expectations and students' actual comprehension levels, particularly in technical and science-related subjects such as mathematics, informatics, physics, chemistry, and biology. The findings suggest that academic and scientific Kazakh language is insufficiently developed among students and should be more systematically supported and promoted (Anafinova et al., 2025). Another barrier encountered by participants was the misalignment between UNT content and the materials provided and taught in schools, which led students to seek additional preparatory services. The proliferation of such services was negatively perceived by participants and was seen as exacerbating inequalities among students (Avdiu & Ahmed, 2024).

The third research question explored students' suggestions for developing more inclusive approaches to the UNT for learners with diverse needs. Students highlighted the importance of addressing overlooked factors affecting their performance, particularly examination administration conditions such as monitoring practices, classroom environment, and examiner–student interactions. This suggests the need for a more proactive approach to recognizing students' diverse needs, alongside more meaningful engagement and support (Adams & Bell, 2016; Makoelle & Burmistrova, 2024).

Overall, ensuring social justice and promoting more inclusive approaches to the UNT requires the balanced and integrated implementation of all three dimensions of justice, as these are deeply interrelated (Fraser, 2009).

Limitations

This study contains limitations that should be acknowledged when interpreting the findings. The first limitation is that the study focused on students from three universities in Astana, as these institutions agreed to provide access to students who met the participant selection criteria; therefore, the findings may not be fully applicable to the broader Kazakhstan context beyond Astana. However, as the capital city and an educational hub of the country, Astana attracts students from other regions with diverse backgrounds, which contributes to the diversity aspect of the study.

The second limitation is that some students provided relatively brief responses due to limited prior experience with interviews and difficulty elaborating on their experiences, despite the use of probing and follow-up questions. Nevertheless, the number of participants was sufficient to achieve data saturation, as no new ideas emerged, thereby still providing comprehensive insights.

Implications and Contributions of the Study

This study offers theoretical, policy, and practical implications for understanding and improving the inclusivity of the UNT. It also makes several key contributions to the existing body of research.

From a theoretical perspective, the study extends the application of Nancy Fraser's three-dimensional social justice framework to the context of standardized high-stakes assessments such as the UNT, conceptualizing the examination as a broader system. The findings demonstrate how the dimensions of redistribution (students' socio-economic backgrounds and how these affect access to exam preparation), recognition (students' diverse needs and backgrounds), and representation (students' voices in UNT decision-making) are reflected in the lived experiences of students with diverse learning needs,

highlighting the importance of addressing all three dimensions to tackle both structural and practical inequalities and to promote justice and inclusivity in assessment.

In terms of policy implications, the findings indicate the need for a more inclusive approach to the implementation of the UNT. This includes ensuring equitable access, improving the distribution of preparatory resources, and incorporating students' voices into decision-making processes related to assessment reforms. Policymakers should consider students' diverse backgrounds and needs to enhance the responsiveness of the UNT and reduce barriers to participation and performance.

At the level of practice, the study underscores the importance of institutional support for students. This includes improving the examination environment to make it more accommodating to diverse learning needs, as well as providing adequate psychological support to enhance students' overall experience and performance. The findings may also inform teachers, parents, and decision-makers seeking to implement more inclusive approaches within the assessment system.

In addition to these implications, the study contributes to the literature in several ways. Empirically, it foregrounds the lived experiences of students with diverse learning needs, including those with officially documented disabilities, self-identified psychological needs, logistical barriers, and other contextual challenges affecting their engagement with the UNT. It also highlights students' perceptions of the Kazakh-language format of the UNT as a significant but underexplored area of concern. Furthermore, the study draws attention to the perceived demand for greater emphasis on critical thinking and other higher-order cognitive skills within the UNT, which students believe may better support their future academic and professional development. Importantly, the study amplifies student voice, positioning learners as key stakeholders in evaluating and improving high-stakes assessment systems.

Overall, this study contributes to a more nuanced understanding of the UNT by foregrounding students' lived experiences and emphasizing the need for a more inclusive, responsive, and equitable assessment system.

Recommendations for Future Research

Although this study provides multi-layered insights regarding the UNT, several areas require further examination.

First, to expand the diversity of participants, it is recommended that similar studies incorporate other regions of Kazakhstan. This could ensure broader participant representation and a more nuanced and accurate investigation.

Second, the Kazakh-language format of the UNT should be examined more thoroughly from the perspective of students and their lived experiences to ensure a more accurate and in-depth understanding of this barrier.

This study may be useful for teachers, parents, and decision-makers involved in the UNT who may seek to propose or implement more inclusive approaches to the assessment system. By examining this study through Nancy Fraser's (1998; 2009) three-dimensional social justice framework, it provides a nuanced and holistic understanding of how justice and inclusion are enacted within the assessment system.

Final Reflection

As an inclusive education agent at a marginal position, I reflected on my own experience of the UNT; thus, I had certain expectations, most of which were confirmed. I had a somewhat unique experience with preparation, as I initially planned to study abroad, which is why I dedicated the first half of my final year of high school to preparing application documents for a foreign institution, while my classmates attended preparatory test centers. Due to certain circumstances, my plans changed, and I had to catch up with my peers. Overwhelmed by sudden changes in my plans, increased personal responsibility,

and reluctance to attend preparatory courses, I began preparing independently, which largely relied on rote learning and memorization, as I selected World History as my second profile subject. I attended preparatory courses only towards the end of the final school year and managed to outperform other students in the same group, which reinforced the perception that success in the exam is strongly dependent on memorization.

As I witnessed my peers' constant anxiety and lack of psychological support from teachers, as well as the normalized reliance on preparatory centers, I further realized that standardized testing requires reform and a stronger focus on inclusivity. Most participants' responses resonated with my own experience, while also providing deeper and more valuable insights from individuals with diverse backgrounds compared to mine.

I sincerely hope that this study contributes to further research on similar topics, offering valuable insights into inclusive practices within the UNT system and promoting justice for students as its central stakeholders.

References

- Abawi, L., Bauman-Buffone, C., Báez, C., & Carter, S. (2018). The rhetoric and reality of leading the inclusive school: Socio-cultural reflections on lived experiences. *Education Sciences*, 8(2), 55. <https://doi.org/10.3390/educsci8020055>
- Abdrasilov, B. (2025). The influence of demographics on student academic performance in university admission tests. *Psychology in Russia: State of the Art*, 18(4).
- Adams, M., & Bell, L. A. (Eds.). (2016). *Teaching for diversity and social justice* (3rd ed.). Routledge.
- Adhabi, E., & Anozie, B. C. (2017). Literature review for the type of interview in qualitative research. *International Journal of Education*, 9(3).
<https://doi.org/10.5296/ije.v9i3.11483>
- Ahmed, S. K, Mohammed, R. A., Nashwan, A. J., Ibrahim, R. H., Abdalla, A. Q., Ameen, B. M., & Khdhir, R. M. (2025). Using thematic analysis in qualitative research. *Journal of Medicine, Surgery, and Public Health*, 6.
<https://doi.org/10.1016/j.glmedi.2025.100198>
- Aitzhanova, A., Katsu, S., Linn, J. F., & Yezhov, V. (Eds.). (2014). *Kazakhstan 2050: Toward a modern society for all*. Oxford University Press.
- Anafinova, M. L., Zhanzhigitov, S. Zh., Bulegenova, I. B., & Ormanova A. B. (2025). The contemporary Kazakh terminology: Examining interference patterns. *Philological Sciences*, 1(76), 30-43. <https://doi.org/10.48371/PHILS.2025.1.76.002>
- Anuarbekova, A., & Yaylaci, A. M. (2025). Challenges faced by high school students in preparing for the English exam at UNT in Kazakhstan. *SDU Bulletin: Pedagogy and Teaching Methods*, 2(71).
<https://repository.sdu.edu.kz/handle/123456789/1891>

- Assanbayev, A., & Makoelle, T. (2024). Practices promoting the inclusion of adult students with disabilities in the classroom: A case of a technical vocational education and training college in Kazakhstan. *Education Sciences*, 14(5), 529. <https://doi.org/10.3390/educsci14050529>
- Avdiu, V., & Ahmedi, V. (2024). Alternative assessment strategies to enhance learning for students with special needs. *Journal of Social Studies Education Research*, 15(5), 1-25.
- Baizhanov, N., Hao, J., Yelemessov S., & Tursynbekova, A. (2025). Reforming Kazakhstan's Unified National Test for the 21st century: Achievements, challenges, and a next-generation assessment model. *Pedagogical Sciences*, 4(88). <https://doi.org/10.51889/2959-5762.2025.88.4.001>
- Bakas uulu, B., & Smagulov, Y. (2016). Analysis of dynamics of high school graduates who participated in the unified national test Kazakhstan. *International Electronic Journal of Mathematics Education*, 11(8), 3176-3186.
- Beginbetova G., Kassymova G., & Abduldayev, Ye. (2023). Criteria-based assessment model in the education system of Kazakhstan. *Iasaui Universitetinin Habarshysy*, 1(127), 276–287. <https://doi.org/10.47526/2023-1/2664-0686.23>
- Bridges, D. (2014). Educational reform and internationalization: The case of school reform in Kazakhstan. *Educational Review*, 74(1), 158–159. <https://doi.org/10.1080/00131911.2021.2013606>
- Carrington, S., Tangen, D., & Beutel, D. (2018). Inclusive education in the Asia Indo-Pacific region. *International Journal of Inclusive Education*, 23(1), 1-6. <https://doi.org/10.1080/13603116.2018.1514727>
- Castleberry, A., & Nolen, A. (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds? *Currents in Pharmacy Teaching and Learning*, 10, 807-815.

- Chankseliani, M., Gorgodze, S., Janashia, S., & Kurakbayev, K. (2020). Rural disadvantage in the context of centralized university admissions: A multiple case study of Georgia and Kazakhstan. *Journal of Comparative and International Education*, 50(7), 995-1013. <https://doi.org/10.1080/03057925.2020.1761294>
- Clarke, V., & Braun, V. (2017). Thematic analysis. *The Journal of Positive Psychology*, 12(3), 297-298. <https://doi.org/10.1080/17439760.2016.1262613>
- Fitzgerald, L. (2015). *Consequences of high-stake testing* [Master's thesis, St. John Fisher University]. Fisher Digital Publications.
https://fisherpub.sjf.edu/education_ETD_masters/306
- Fraser, N. (1998). *Social justice in the age of identity politics: redistribution, recognition, participation*. Social Science Open Access Repository, 98-108. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-126247>
- Fraser, N. (2009). *Scales of justice: Reimagining political space in a globalizing world* (Vol. 31). Columbia University Press.
- Gozuyesil, E., & Tanriseven, I. (2017). A meta-analysis of the effectiveness of alternative assessment techniques. *Eurasian Journal of Educational Research*, 70, 37-56.
<http://dx.doi.org/10.14689/ejer.2017.70.3>
- Hajar, A., & Abenova, S. (2021). The role of private tutoring in admission to higher education: Evidence from a highly selective university in Kazakhstan. *Hungarian Educational Research Journal*, 11(2), 124–142.
- Hargreaves, A. (2020). Large-scale assessments and their effects: The case of mid-stakes tests in Ontario. *Journal of Educational Change*, 21(3), 393-420.
<https://doi.org/10.1007/s10833-020-09380-5>

- Jumabayeva, Z. (2016). The key drivers of the Unified National Test in Kazakhstan: A critical analysis of its impact on school leavers. *International Journal of Educational Development*, 50, 36–45.
<https://doi.org/10.1016/j.ijedudev.2016.06.004>
- Kakar, Z., Rasheed, R., Rashid, A., & Akhter, S. (2023). Criteria for assessing and ensuring the trustworthiness in qualitative research. *International Journal of Business Reflections*, 4(2), 150-173.
- Kaščák, O., & Strouhal, M. (2023). Inclusion discourses in contemporary Slovak education policy – From the individual to the community and from right to performance. *European Journal of Education*, 58(2), 197-208.
- Keddie, A. (2012) Schooling and social justice through the lenses of Nancy Fraser. *Critical Studies in Education*, 53(3), 263-279.
- Khoiriyah, U., Karwanto, K., Setyowati, S., Nursalim, M., & Khamidi, A. (2024). Analysis of inclusive education policy implementation in developing countries. *Edukasia*, 5(1), 851-858. <https://doi.org/10.62775/edukasia.v5i1.868>
- Kim, S., & Comunian, R. (2024). Higher education and sustainable creative cities: The development of creative and cultural ecosystems in the (new) capital city of Kazakhstan. *Industry and Higher Education*, 38(1), 51–63.
<https://doi.org/10.1177/09504222231222258>
- Lim, M. W. (2025). What Is Qualitative Research? An Overview and Guidelines. *Australasian Marketing Journal*, 33(2), 199 –229.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications, Inc.

- Lucas-Oliva, I., García-Jiménez, J., Gordillo, J., & Rodríguez-Santero, J. (2022). Equity and parity in primary education: A study on performance in language and mathematics using hierarchical linear models. *Sustainability*, 14(19), 12404. <https://doi.org/10.3390/su141912404>
- Madaus, G., & Russell, M. (2010). Paradoxes of high-stakes testing. *Journal of Education*, 190(1-2), 21-30.
- Makoelle, M. T., & Burmistrova, V. (2024). Teachers' personality traits that promote students' trust within an inclusive environment in the classroom. In M. P. Levine (Ed.), *Trust and Psychology - Who, When, Why and How We Trust*. Intech Open. <https://doi.org/10.5772/intechopen.1004312>
- Makoelle, T. (2020). Language, terminology, and inclusive education: A case of Kazakhstani transition to inclusion. *Sage Open*, 10(1). <https://doi.org/10.1177/2158244020902089>
- Mamerkhanova, Z., Sakayeva A., Akhmetkarimova K., Assakayeva D., & Bobrova V. (2025). Development of inclusive education in the Republic of Kazakhstan: An inside view (case of the Karaganda region). *Front. Educ.*, 10.
- Marchant, G., Paulson, S., & Shunk, A. (2006). Relationships between high-stakes testing policies and student achievement after controlling for demographic factors in aggregated data. *Education Policy Analysis Archives*, 14, 30. <https://doi.org/10.14507/epaa.v14n30.2006>
- Matthews, K. E., & Dollinger, M. (2022). Student voice in higher education: The importance of distinguishing student representation and student partnership. *Higher Education*, 85, 555-570. <https://doi.org/10.1007/s10734-022-00851-7>

- Mingisheva, N. A. (2023). Development and challenges of standardized testing in Kazakhstan: Transition from national to international standards. *Journal of Educational Sciences*, 76(3). <https://doi.org/10.26577/JES.2023.v76.i3.08>
- Mwita, M. K. (2022). Factors influencing data saturation in qualitative studies. *International Journal of Research in Business and Social Science*, 11(4), 414-420. <https://doi.org/10.20525/ijrbs.v11i4.1776>
- Neubauer, E. B., Witkop, T. C., & Varpio, L. (2019). How phenomenology can help us learn from the experiences of others. *Perspect Med Educ*, 8, 90-97. <https://doi.org/10.1007/s40037-019-0509-2>
- Obah, A. (2024). The effectiveness of inclusive education policies for students with disabilities. *IJHSS*, 2(5), 50-63. <https://doi.org/10.47941/ijhss.1888>
- Onumah, C., Pincavage, A., Lai, C., Levine, D., Ismail, N., Alexandraki, I., & Osman, N. (2023). Strategies for advancing equity in frontline clinical assessment. *Academic Medicine*, 98(8S), S57-S63. <https://doi.org/10.1097/acm.0000000000005246>
- Orynbassarov, D., Baiyrbek, P., & Saparkhan, L. (2025). Towards an inclusive future: Public administration, legal reforms and education in Kazakhstan. *SDU Law Journal*, 2(2), 34-52. <https://doi.org/10.47344/676v3423>
- Parekh, G., & Brown, R. S. (2020). Naming and claiming: The tension between institutional and self-identification of disability. *Canadian Journal of Disability Studies*, 9(5). <https://doi.org/10.15353/cjds.v9i5.701>
- Pervin, N., & Mokhtar, M. (2022). The interpretivist research paradigm: A subjective notion of a social context. *International Journal of Academic Research in Progressive Education and Development*, 11(2), 419–428. <http://dx.doi.org/10.6007/IJARPED/v11-i2/12938>

- Posti-Ahokas, H., & Janhonen-Abuquah, H. (2021). Towards equity literacy: Exploratory enquiry with Finnish student teachers. *European Journal of Teacher Education*, 47(1), 5-22. <https://doi.org/10.1080/02619768.2021.1952977>
- Rakhshanda, N., Shahid, K. A., Shabana, M., & Uzma, Q., (2020). Institutional facilitation for learning improvement with consideration of students' voices. *World Journal on Educational Technology: Current Issues*, 12(4), 389 – 400.
- Saarijärvi, M., & Bratt, E. (2021). When face-to-face interviews are not possible: Tips and tricks for video, telephone, online chat, and email interviews in qualitative research. *European Journal of Cardiovascular Nursing*, 20, 392–396.
- Sarmurzin, Y., Amanzhol, N., Toleubayeva, K., Zhunusova, M., & Amanova, A. (2021). The impact of OECD research on the education system of Kazakhstan. *Asia Pacific Education Review*, 22(4), 757-766. <https://doi.org/10.1007/s12564-021-09715-8>
- Sarzhanova, G. B., Ashimkhanova G.S., & Sadvakassova N.A. (2025). Well-being: A comparative analysis of international and Kazakhstani experience. *Pedagogical Sciences*, 1(76), 229-242. <https://doi.org/10.48371/PEDS.2025.76.1.015>
- Setiawan, F., & Tohari, T. (2025). Inclusive education management in Indonesia: A literature analysis of policies and implementation practices. *Journal Corner of Education, Linguistics, and Literature*, 5(1), 273–282. <https://doi.org/10.54012/jcell.v5i001.569>
- Setlhodi, I. (2021). The nexus of the critical trio: Access, equity and quality in distance learning. <https://doi.org/10.25159/unisarxiv/000020.v1>
- Shorey, S., & Ng, E. D. (2021). Examining characteristics of descriptive phenomenological nursing studies: A scoping review. *Journal of Advanced Nursing*, 78(7), 1968-1979.

- Shyman, E. (2015). Toward a globally sensitive definition of inclusive education based in social justice. *International Journal of Disability, Development and Education*, 62(4), 351-362.
- Sim, J., Saunders, B., Waterfield, J., & Kingstone, T. (2018). Can sample size in qualitative research be determined a priori? *International Journal of Social Research Methodology*, 21(5), 619-634.
- Skrzypiec, G., Askill-Williams, H., Slee, P., & Rudzinski, A. (2016). Students with self-identified special educational needs and disabilities (si-SEND): Flourishing or languishing! *International Journal of Disability, Development and Education*, 63(1), 7-26.
- Spann, P. (2015). The negative effects of high-stakes testing. *The Loyola University Chicago: Education law and policy institute forum*, 2015.
<https://www.luc.edu/media/lucedu/law/centers/childlaw/childed/pdfs/2015studentpapers/Spenn.pdf>
- The Organization for Economic Co-operation and Development. (2007). *Reviews of national policies for education: Higher education in Kazakhstan*. OECD, World Bank Publishing.
- The Organization for Economic Co-operation and Development. (2018). *Equity in education: Breaking down barriers to social mobility*. PISA, OECD Publishing.
<https://doi.org/10.1787/9789264073234-en>
- Ting, H., Memon, A. M., Thurasamy, R., & Cheah, J. (2025). Snowball sampling: A review and guidelines for survey research. *Asian Journal of Business Research*, 15(1). <https://10.0.57.115/ajbr.250186>

- United Nations (2006). *Convention on the rights of persons with disabilities*. United Nations. <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html>
- United Nations Educational, Scientific and Cultural Organization. (1961). *Convention against discrimination in education*. UNESCO.
- United Nations Educational, Scientific and Cultural Organization. (1994). *The Salamanca statement and framework for action on special needs education*. UNESCO.
- Ydo, Y. (2020). Inclusive education: Global priority, collective responsibility. *Prospects*, 49, 97-101. <https://doi.org/10.1007/s11125-020-09520-y>
- Zandvakili, E., & Gordon, E. W. (2025). Inclusive assessment strategies: Advancing equity and excellence in contemporary education. In R. E. Bennett, L. Darling-Hammond, & A. Badrinarayan (Eds.), *Socioculturally responsive assessment: Implications for theory, measurement, and systems-level policy* (1st ed.). Routledge.
- Zwier, D., Geven, S., & Werfhorst, H. (2021). Social inequality in shadow education: The role of high-stakes testing. *International Journal of Comparative Sociology*, 61(6), 412–440. <https://journals.sagepub.com/home/cos>

Appendix A: AI Declaration Form



Thesis Title: Exploring Perceptions of University Students with Diverse Learning Needs
on the Unified National Testing (UNT)

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 ChatGPT to correct grammatical errors, refine my original ideas, and organize my text coherently.

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: Altynay Sherkuat

Signature: 

Date: 27.04.2026

Appendix B: Recruitment Emails

Dear Ainagul,

I hope this message finds you well. My name is **Altynay Sherkuat**, and I am a MSc Educational Leadership (Inclusive Education) student at the Nazarbayev University Graduate School of Education, currently conducting my thesis research under the supervision of **Professor Sourav Mukhopadhyay**.

I have been advised that students seeking access to research sites at other universities can request an **official support letter from the Dean**, which can then be attached to their outreach or invitation letters. I understand that this process has successfully supported many students in the past.

In line with this, I would like to kindly request assistance with obtaining such a **support letter from the Dean** for my research. My study focuses on the experiences of university students with diverse learning needs during the Unified National Testing (UNT) in Kazakhstan, and I will need to contact universities in Astana to identify eligible participants.

My study involves interviewing university students who meet the following criteria:

1. University students who have formally documented diverse learning needs or who self-identify as having such needs;
2. Aged 18 or older;
3. Currently enrolled in a university in Astana through the UNT;
4. Willing to participate voluntarily.

If you could please guide me through the required steps or let me know what documents or information you need from my side, I would be happy to provide them immediately (research description, ethics approval, recruitment materials, etc.).

Thank you very much for your time and support. I greatly appreciate your help with this formal requirement.

Warm regards,

Altynay Sherkuat

Активация Windows

Dear [REDACTED]

I hope this email finds you well. I am writing to share information about my thesis research titled *"Exploring Perceptions of University Students with Diverse Learning Needs on the Unified National Testing (UNT)."* I would be grateful if you would consider taking part in a research interview to share your experiences. Your contribution would be valuable, but please note that **participation** is entirely voluntary.

You can find detailed information about the study in the attached **Participant** Invitation Sheet and the Informed Consent Form.

If you agree to participate, please let me know your preferred date and time, the interview format (online or face-to-face), and the language you would like to use (Russian or Kazakh).

To ensure confidentiality and protect anonymity, I kindly ask that you do not discuss your **participation** with others.

Thank you for your time and consideration.

Best regards,

Altynay Sherkuat

2 Attachments • Scanned by Gmail



Appendix C: Informed Consent Form

Exploring Perceptions of University Students with Diverse Learning Needs on the Unified National Testing (UNT)

DESCRIPTION: You are invited to participate in a research study that aims to explore the experiences and perceptions of university students with diverse learning needs regarding the Unified National Testing (UNT) in Kazakhstan. The study will investigate how students experienced the UNT, the challenges they encountered, and their suggestions for improving the testing process to make it more inclusive.

Participation will involve a one-on-one semi-structured interview, which, with your consent, will be digitally recorded for research purposes. You may choose to participate online or face-to-face, at a time that is convenient for you.

TIME INVOLVEMENT: Your participation in this study will take approximately 45–60 minutes.

RISKS AND BENEFITS:

Risks:

- Emotional discomfort: Some questions may ask you to recall past experiences with the UNT that could be upsetting. You may skip any question, pause, or stop the interview at any time without any consequences.
- Privacy concerns: As the study involves sharing personal experiences, you may have concerns about confidentiality. These will be addressed by anonymizing all data and securely storing recordings and transcripts. No personal or identifying information about you will be disclosed.

Benefits:

Although there is no direct benefit to you, your participation would add the following value:

- Students (you): Sharing your experiences may provide a sense of empowerment and validation, contributing to a better understanding of students' needs.
- Education stakeholders: The study may provide insights into improving the inclusivity of the UNT in Kazakhstan.
- Research: The findings will contribute to the limited literature on inclusive assessment practices and may inform future policy and practice.

PARTICIPANT'S RIGHTS:

Your participation is **voluntary**. You **may withdraw from the study at any time** without giving a reason and without any negative consequences. You **may refuse** to

answer any question.

The information you provide will be **anonymized** and **used only for academic purposes**, including my thesis and presentations. **Only the researcher and supervisor** will have access to identifiable data.

This study is conducted in compliance with the ethical guidelines of the **Nazarbayev University Graduate School of Education (GSE) Research Ethics Committee**.

CONTACT INFORMATION:

Questions: If you have any questions, concerns, or complaints about this research, its procedures, risks, or benefits, contact me or my Supervisor regarding this research study.

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 NU GSE Research Committee by writing to gse_researchcommittee@nu.edu.kz.

CONSENT

By signing this form, I confirm that:

- I have read and understood the information provided above.
- I understand the purpose and procedures of the study.
- I understand that all data will be kept confidential and only accessed by the researchers.
- I understand that I may withdraw at any time without penalty.
- I voluntarily agree to participate in this study.

Participant Name (printed): _____

Participant Signature: _____

Date: _____

Researcher Name (printed): _____

Researcher Signature: _____

Date: _____

Signature: _____

Date: _____

The extra copy of this signed and dated consent form is for you to keep.

Appendix D: Interview Protocol

Exploring Perceptions of University Students with Diverse Learning Needs on the Unified National Testing (UNT)

Date of the interview: _____

Start time of the interview: _____

End time of the interview: _____

Place of the interview: _____

Participant: _____

Interviewer: _____

Opening and Rapport-Building

1. I will thank the participant for joining and remind them of the study's purpose: to understand experiences and perspectives of university students with diverse learning needs regarding the Unified National Testing (UNT).
2. I will reconfirm consent and remind them they may skip any question or stop at any time.
3. As a warm-up, I will ask: Could you tell me a little about yourself – for example, what you are studying now and when you took the UNT?

Section 1: Perceptions of UNT (RQ1)

4. When you think back to your experience of the UNT, what are your first impressions or memories?
5. How would you describe your overall experience of preparing for and taking the UNT?
6. In what ways did the UNT reflect (or not reflect) your abilities and knowledge?

Section 2: Challenges and Barriers (RQ2)

7. What challenges did you face when preparing for or taking the UNT?
8. Were there any specific difficulties related to your learning needs?
9. Did you feel that the UNT process created barriers for you? If so, how?

Section 3: Suggestions for Improvement (RQ3)

10. Looking back, what kind of support would have made the process easier for you?
11. If you could change something about the UNT, what would you suggest?
12. What advice would you give to policymakers or educators to make the UNT more inclusive for students with diverse learning needs?

Closing Questions

13. Is there anything else about your UNT experience that you think is important but we haven't covered?

Closing statement: I will thank the participant again, remind them that their responses will be anonymized, and emphasize that their contribution is valuable for improving understanding of educational equity in Kazakhstan.

Appendix E: Information Sheet

Dear Sir/Madam,

Thank you for taking the time to read this letter.

My name is Altynay Sherkuat, and I am a graduate student at Nazarbayev University Graduate School of Education. I am currently planning research entitled “Exploring Perceptions of University Students with Diverse Learning Needs on the Unified National Testing (UNT)”. I hope you will consider being part of my Master’s study.

The purpose of my research is to explore the experiences and perceptions of university students with diverse learning needs regarding the Unified National Testing (UNT) in Kazakhstan. Specifically, the study seeks to understand how students experienced the UNT, the challenges or barriers they encountered, and the suggestions they may have for improving the testing process to make it more inclusive and supportive of all learners. By investigating these experiences, the study aims to provide insights that can contribute to more equitable and inclusive standardized testing practices in Kazakhstan.

You are invited to participate if you are a university student of legal adult age who has taken the UNT and consider yourself to have diverse learning needs.

Participation in this study will involve an interview conducted either online or face-to-face at a time convenient for you. With your consent, the interview will be digitally recorded and used as part of this research. The interview is expected to take approximately 45-60 minutes.

Your participation is entirely voluntary. You may choose not to answer any question, and you may pause or withdraw from the interview at any time without any negative consequences. Your name or any other identifying information will not be shared with anyone apart from myself and my supervisor. All interview data will be anonymized, securely stored, and used solely for my thesis and related academic presentations. I will be following the ethical guidelines set by the NU GSE Research Ethics Committee.

Should you have any additional questions, please contact me or supervisor via the following E-mail:

E-mail: altynay.sherkuat@nu.edu.kz

WhatsApp: +7 705 714 11 24

Supervisor’s E-mail: sourav.mukhopadhyay@nu.edu.kz

Regards,

Altynay Sherkuat

Graduate School of Education

Nazarbayev University

Appendix F: Data Analysis Coding Samples

Patterns across participants:

- pattern 1 - psychological pressure
- pattern 2 - psychological support from teachers
- pattern 3 - extraneous load
- pattern 4 - perceived impact of exam environment/setting on performance
- pattern 5 - misalignment between preparation materials and UNT content
- pattern 6 - preference for subject-focused assessment
- pattern 7 - perception that UNT prioritizes preparation over broader abilities
- pattern 8 - forced self-reliance
- pattern 9 - preference for critical thinking in exam content

RQ1: How do students with diverse learning needs perceive their experiences of the Unified National Testing (UNT)?

- pattern 1 - psychological pressure
- pattern 2 - psychological support from teachers
- pattern 7 - perception that UNT prioritizes preparation over broader abilities

THEME 1 and 2: psychological pressure + psychological support from teachers + perception that UNT prioritizes preparation over broader abilities = **Theme 1: Psychological pressure as a defining characteristic of the UNT experience/Theme 2: UNT perceived as preparation-dependent rather than a holistic academic ability**

RQ2: What challenges or barriers did these students encounter during the UNT process?

- pattern 3 - extraneous load
- pattern 4 - perceived impact of exam environment/setting on performance
- pattern 5 - misalignment between preparation materials and UNT content
- pattern 8 - forced self-reliance

THEME 3: extraneous load + perceived impact of exam environment/setting on performance + misalignment between preparation materials and UNT content + forced self-reliance = **Extraneous cognitive and environmental factors shaping UNT performance**

RQ3: What suggestions do these students provide for improving the UNT to better accommodate diverse learners?

- pattern 6 - preference for subject-focused assessment
- pattern 9 - preference for critical thinking in exam content

THEME 4: preference for subject-focused assessment + preference for critical thinking in exam content = **Expectations for competency-focused and student-centered UNT practices**