

HOW KAZAKHSTANS HIGH SCHOOLS CAN BENEFIT FROM ARTIFICIAL INTELLIGENCE TOOL

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Abstract: *This article discusses the potential benefits of artificial intelligence (AI) tools in enhancing high school education across Kazakhstan, with a special focus on the region of Kyzylorda. It examines the current state of education in both rural and urban areas, analyzing the country's performance in international assessments such as PISA. The research underscores how AI can act as a supplementary tool to address disparities in educational resources and outcomes, particularly in under-resourced regions, while also helping manage challenges like rising birth rates in cities such as Kyzylorda, where overcrowded schools and teacher shortages demand scalable solutions. With Kyzylorda emerging as a hub for AI innovation, the article highlights the city's potential to lead the implementation of AI-driven education. This study offers practical insights into how AI can be integrated into high schools across Kazakhstan to improve learning experiences and outcomes, especially in areas with limited educational resources.*

Key words: Artificial Intelligence, high school education, Kazakhstan, Kyzylorda, rural- urban divide, PISA, learning tools, educational innovation.

Introduction. Artificial intelligence (AI) has heightened into almost every aspect of our modern life, reforming industries ranging from healthcare to finance. The education sector is not an exception, with more and more AI-based tools are being integrated into classrooms globally. Whether it is personalized learning experiences of learners with AI tools or virtual tutors that utilize AI, education is becoming very accessible, adaptable, and efficient with the support of AI [1]. As AI technology is continuing to evolve, platform ChatGPT – a conversational AI model developed by OpenAI – emerges as a powerful tool that can transmute every aspect of our life. Throughout the world, in countries such as India, for instance, AI-driven platforms especially ChatGPT have transformed how students learn, helping educators personalize instruction, offer real-time feedback, and reduce their administrative workload. Meanwhile, in countries like India, ChatGPT is being used as a virtual tutor and assistant, specifically in education allowing students to engage in one-on-one learning at anytime, regardless of their geographical location [2]. In particular, AI can offer broad prospective in providing flexible and sustainable learning opportunities, especially in under-resourced regions where teacher shortages and quality education remains unachievable for many [3]. As countries around the world embrace AI in education, it is crucial for Kazakhstan to employ the same potential to improve learning outcomes and address the challenges facing its education system.

The whole world is changing education under the influence of artificial intelligence (AI) [4] and Kazakhstan is no exception. To make the learning experience even more advanced for high school children for country in a time when the country's educational system is modernizing, AI is now taking shape as most valuable tool. This article will investigate how AI is being integrated as an aid in Kazakhstani high schools and discuss some of the positive impacts from the perspective of students.

Literature Review

A growing body of literature has documented the transformative potential of AI in education, notably in higher education and specialized training programs. For this reason, research has shown that AI can enhance personalized learning by speeding up adaptive assessments and improving

engagement through interactive content delivery.

At the same time, Kazakhstan has been steadily embracing technology in education, especially under the “Digital Kazakhstan” initiative, which aims to modernize the country’s infrastructure and improve digital literacy. AI is emerging as one of the most valuable tools to further these goals in the context of high school education. Though the integration of AI in Kazakhstani schools is still in its early stages, the potential is immense, particularly in addressing challenges related to personalization, multilingual education, and the divide between rural and urban areas. This is supported by global research that highlights the ability of AI to personalize learning through intelligent tutoring systems and adaptive learning platforms that can analyze student data and make real-time adjustments to the curriculum based on individual needs [4].

Currently, AI is continuing to grow at a rapid pace, making it an increasingly integral, though often unseen, part of ordinary life [5]. From tools like Siri to innovations in medical diagnoses, AI now influences a vast array of sectors. Education is no exception: AI has quietly entered classrooms around the world, with adaptive, intelligent, and personalized learning systems becoming more prevalent, whether welcomed by students, teachers, parents, or policymakers [4, p. 42].

Materials and methods

In this study a quantitative research design was employed, focusing on the use of surveys to gather data on students’ perspectives regarding the integration of artificial intelligence as a supplemental tool in high school education. The research was conducted at Ybyrai Ulttyq Mektebi, a private high school in Kyzylorda. This school was selected due to its distinctive approach to education and its teachers, which consists entirely of young teachers. The study specifically targeted students from the 11th class, as they are in their final year and are more actively engaged in various learning methods, including AI-based tools.

During the learning process, interactive whiteboards were used alongside ChatGPT to enhance lesson delivery. ChatGPT was integrated into classroom activities, making it possible for students to demonstrate theoretical concepts dynamically. Students of eleventh class engaged with ChatGPT in real time to ask questions, solve problems, and receive personalized feedback. This approach allowed them to work individually on certain tasks, as well as collaboratively in pairs and small groups, encouraging a rich interactive learning environment.

To assess students’ perceptions, a carefully structured survey was administered over a four-week period. The questionnaire included likert-scale questions, multiple-choice questions, and open-ended responses to gather insights into students’ experiences, challenges, and attitudes toward AI in education. The data collection process took place over a set period, allowing students sufficient time to engage with AI tools in their learning environment before providing feedback. A total of 78 students participated in the survey.

The survey results were analyzed to identify trends in student engagement, motivation, and perceived benefits of AI tools. Responses were examined to determine common patterns and variations in students’ views, providing a comprehensive understanding of AI’s potential role in high school education.

In later years, as part of the “Digital Kazakhstan” initiative, significant investments have been made to modernize the country’s educational infrastructure and promote digital literacy. Central to these efforts are digital platforms like Kundelik.kz, Bilimland, and Google Classroom, which are transforming how students and teachers interact with educational content (Figure 1). Kundelik.kz serves as an integrated learning management system where students, teachers, and parents can track assignments, grades, and attendance, streamlining communication and academic progress monitoring. Bilimland, a Kazakhstani educational platform, offers a vast repository of interactive lessons, multimedia resources, and exercises aligned with national curricula, helping bridge resource gaps between urban and rural schools. Meanwhile, Google Classroom facilitates remote learning and collaboration, enabling students to access assignments and instructional materials from any location, making learning more flexible and inclusive.

One of the primary benefits of AI in education is its ability to provide personalized learning experiences [5]. Traditionally, Kazakhstani classrooms have adhered to a standardized teaching model, which does not cater well to individual learning needs. Teachers often struggle to manage large classrooms with students who have varying levels of ability and comprehension. In this environment, advanced students may become bored, while those who are struggling fall behind. AI tools can help break away from this “one-size-fits-all” approach by analyzing data on individual student performance and tailoring lessons to suit their learning pace and style (Figure 1).

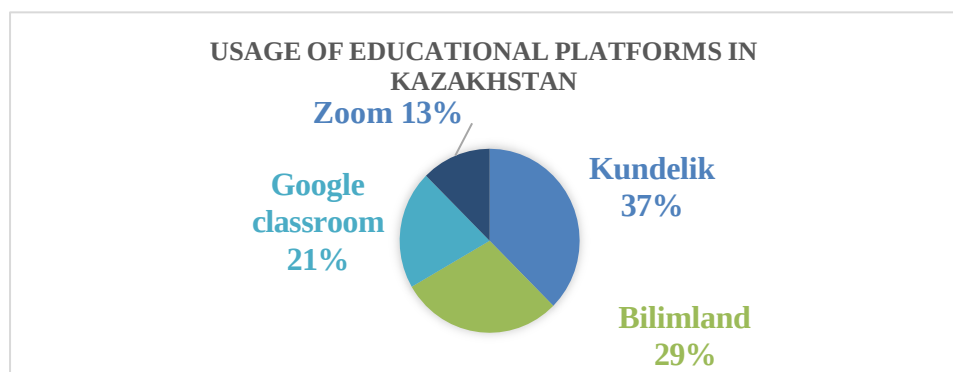


Figure 1 – Usage of educational platforms in Kazakhstan

For instance, adaptive learning platforms powered by AI can help students who are having difficulty with certain concepts by offering step-by-step explanations, while allowing those who grasp material quickly to move ahead without waiting for the rest of the class. This not only improves engagement but also fosters a sense of achievement among students, as they can see their progress in real-time. These AI-driven platforms can also provide instant feedback, which is especially important in preparing students for high-stakes exams such as the Unified National Test (UNT) and international assessments like the Programme for International Student Assessment (PISA).

Kazakhstan’s multilingual education system, which requires students to learn Kazakh, Russian, and English, also benefits from AI. Tools like ChatGPT, which can seamlessly switch between languages, provide students with real-time language practice and feedback. For example, a student learning English can engage in conversation with ChatGPT, receive grammar corrections, and improve their pronunciation, all without the need for a human tutor [6]. This type of personalized language support is especially valuable for students preparing to attend universities abroad or aiming to improve their communication skills in an increasingly globalized world [6].

Results and discussions

One of the most pressing issues in Kazakhstan’s education system is the disparity between urban and rural schools. Students in urban centers like Almaty and Astana have greater access to high-quality resources, experienced teachers, and extracurricular opportunities. In contrast, many rural schools face significant challenges, including outdated infrastructure, a lack of qualified teachers, and limited access to educational materials [7]. This urban-rural divide is further reflected in standardized test scores, where students in rural areas tend to perform worse on assessments like PISA compared to their urban peers (tabl. 1).

AI has the potential to bridge this gap by providing equal access to high-quality educational resources, regardless of a student’s location [7].

AI-powered learning platforms can be accessed remotely, meaning that students in even the most isolated regions can benefit from the same tools and technologies used in urban schools. Moreover, AI can help rural students keep pace with their urban counterparts by providing personalized feedback and support, which is particularly important in subjects like mathematics and science [7]. For instance, an AI tutor could guide a student through a difficult algebra problem, providing hints and explanations at each step, while more advanced students in the same classroom can move on to more challenging material [8].

Table 1 – PISA results for regions in Kazakhstan

Mean score in Mathematics performance	
Regions	Scores
Zhambyl region	433
Aktobe region	437
Almaty	453
North-Kazakhstan region	441
Astana	449
Kostanay region	440
Karagandy region	421
Kyzylorda region	414

The Kazakhstani government has recognized the importance of addressing this disparity and is working to improve internet connectivity and technological infrastructure in rural areas under the “Digital Kazakhstan” program. As more rural schools gain access to high-speed internet and digital tools, AI can help provide students with individualized learning experiences, real-time feedback, and a broader range of learning materials. This could significantly reduce the educational gap between rural and urban areas, giving all students the opportunity to succeed [9].

Kyzylorda, a city with a rich historical and cultural legacy, is becoming a focal point in Kazakhstan’s efforts to modernize its education system through the adoption of AI. The city has experienced significant population growth in recent years, with a rising birth rate that places increasing pressure on its educational infrastructure. With more students entering the school system each year, Kyzylorda’s schools face challenges related to overcrowding, teacher shortages, and limited access to specialized educational resources.

The latest value from 2022 is 20.57 births per 1000 people, a decline from 23.5 births per 1000 people in 2021. In comparison, the world average is 18.38 births per 1000 people, based on data from 195 countries. Historically, the average for Kazakhstan from 1960 to 2022 is 23.24 births per 1000 people [Figure 3].

Currently, the number of schools and teachers in Kyzylorda struggles to keep pace with the city’s growing student population. Teachers are often overwhelmed by administrative tasks, large class sizes, and the need to cater to students with varying abilities [11]. AI tools like ChatGPT can alleviate some of these pressures by assisting with administrative work and providing supplementary tutoring to students. For example, a student in Kyzylorda struggling with physics could use ChatGPT to receive a detailed explanation of complex concepts, ask follow-up questions, and work through practice problems—all without needing to wait for a teacher’s availability.

AI and Education Reform in Kazakhstan

Kazakhstan is undergoing significant educational reforms aimed at modernizing its system to meet the demands of the 21st century. With a growing emphasis on STEM (Science, Technology, Engineering, and Mathematics) education, AI tools are playing an increasingly important role in helping students master these critical subjects [11].

Kazakhstan’s growing population, particularly in cities like Kyzylorda, highlighted the need for scalable solutions in education (Figure 2). AI provides a pathway to support both teachers and students, ensuring that the country’s education system can meet the challenges of the future. Research on use of AI as a supplementary tool was conducted at Ybyrai high school in Kyzylorda, with school's eleventh "C" class students through a survey as part of the study (Figure 3). Three females and fourteen boys took part in the survey. The survey conducted among 11th class students revealed several key insights regarding the use of artificial intelligence (AI) as a supplementary learning tool.

In response to the inquiry, “How often do you use AI tools for studying?” a significant percentage of students reported having prior knowledge of AI-powered educational tools, with the majority indicating their familiarity with platform such as ChatGpt, Grammarly, Gamma. However, 22% only of students actively used AI for studying purposes, highlighting a gap between awareness and practical application.

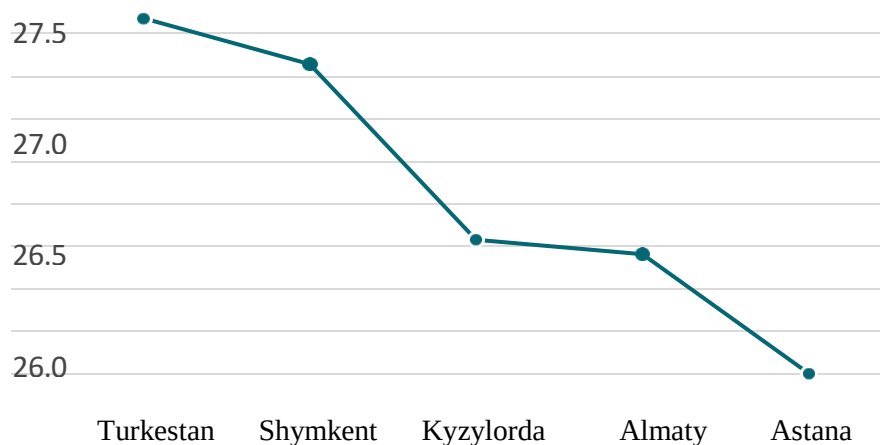


Figure 2 – Regional birth chart (per 1000 people)

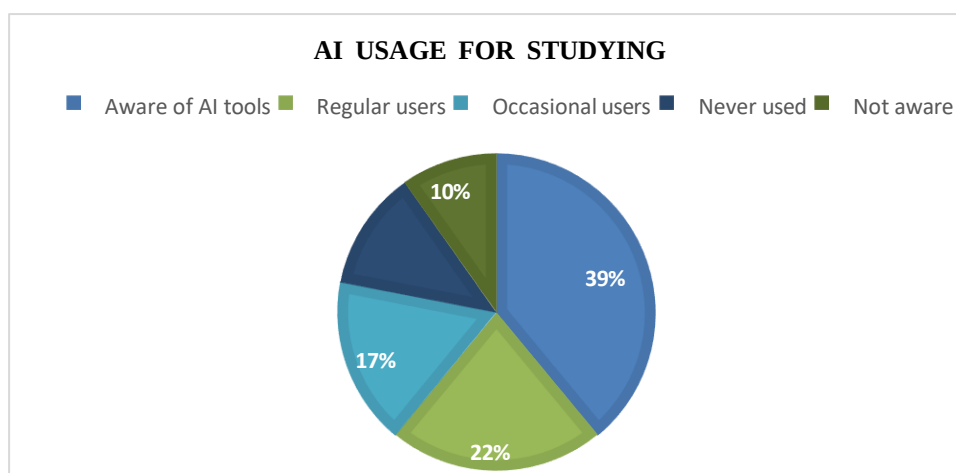


Figure 3 – AI usage for studying

Seventeen respondents agreed that AI enhances learning efficiency by providing instant explanations, personalized feedback, and additional resources. The most frequently cited benefits included improved comprehension of complex subjects, assistance with language learning, and easier access to study materials.

The survey results showed that 68% of students felt that ChatGpt promoted a collaborative learning environment. In class activities often involved pair work and small group discussions, where ChatGpt served as a resource for validating ideas and providing diverse perspectives. Additionally, students valued the opportunity to work independently on assignments with ChatGpt's support, which boosted their confidence and problem-solving skills.

Despite the positive reception, students also identified several challenges. Nine students expressed concerns about over-reliance on AI, fearing it might reduce critical thinking skills. Additionally, issues related to the accuracy of AI-generated responses and the potential for misinformation were mentioned.

When asked about integrating AI tools into their daily studies, a majority of students stated they would be more inclined to use AI if schools provided official guidance on its ethical and effective usage. Fifteen students also suggested that AI should be incorporated into specific subjects, such as biology and foreign language learning.

Overall, the results suggested that while AI holds significant potential as a supplementary tool in high school education, there is a need for structured implementation and awareness programs to maximize its benefits while addressing students concerns.

In addition to supporting students, AI enabled the creation of adaptive learning environments that accommodated students with diverse learning styles and abilities. For example, students struggling with a particular STEM concept were provided with additional resources or interactive exercises tailored to their specific learning gaps [12]. Meanwhile, students who excel were challenged with advanced materials, keeping them engaged and motivated. This flexibility is crucial for

Kazakhstan's education system, which serves a broad range of students from urban centers to remote rural areas, each with unique educational needs.

The integration of AI in education also aligns with Kazakhstan's broader economic goals. By equipping students with skills in technology and problem-solving, the education system is preparing a generation that can contribute to the country's growing knowledge economy. As industries increasingly adopt digital technologies, there will be a growing demand for a workforce skilled in areas such as data analysis, artificial intelligence, and software development [12]. Through educational reforms that prioritize STEM and digital literacy, Kazakhstan is positioning itself to be a competitive player in the global economy.

However, the rapid adoption of AI in education also presented challenges that need to be addressed. Ensuring equitable access to AI-based tools were essential, as not all schools and regions have the necessary infrastructure or resources [12]. Additionally, data privacy and security must be carefully managed to protect students' information. Training teachers to effectively use AI tools is another critical component, as they will need ongoing support to integrate these technologies into their classrooms effectively.

Conclusion

The results of this study demonstrated that integrating AI tools into the high school curriculum can significantly benefit student learning. The tool's capacity to deliver immediate, tailored responses not only conceptual understanding but also increased overall classroom engagement.

Kazakhstan's education system is at a demanding phase where the establishment of artificial intelligence (AI) could have a significant impact on solving some of its most convoluted challenges. As accentuated by the differences between urban and rural areas where PISA results revealed a significant performance gap – there is a vital need for more broad educational resources.

Overcrowded classrooms, and expanding birth rate, and overworked teachers only boosted these issues, displaying the need for innovative solutions that can overpass these educational divides.

Mainly, the importance of AI in public education lied in its capability to create a flexible, adaptive, and more reasonable educational system that meets modern challenges and prepares students for life and work in the digital world [13].

The introduction of platforms like ChatGPT in high schools showed that it can further enhance the learning experience, act as a virtual guide, provide students with personalized feedback, and help them develop critical thinking skills through the use of AI in the learning environment [13]. In Kyzylorda, where learning outcomes linger behind urban regions, AI can play a transformative role. Personalized AI-powered learning tools adapted to the needs and pace of each student, giving students access to the same quality of learning as their peers in urban schools. Such tool was especially useful for subjects that required constant practice and feedback, such as math and language learning. Moreover, by analyzing performance data, AI systems helped identify areas where students were struggling, allowing for early intervention and more targeted support from educators. Over time, this could help narrow the gap in rural-urban achievement and create a more proper learning environment across the country.

Additionally, as AI systems automate administrative tasks such as grading and attendance tracking, more effort can be directed toward activities that directly support student development [13, pp. 18-25]. Looking ahead, Kazakhstan's commitment to digital transformation, as seen in the Digital Kazakhstan program, positions the country well for the benefits of AI advances. However, as AI increasingly finds its way into classrooms, it is important to approach its integration thoughtfully [14, pp. 14-21]. Ensuring data privacy, addressing ethical concerns, and providing adequate training for teachers are critical steps in creating a responsible and effective AI framework. By implementing AI

in a way that aligns with educational values and societal goals, Kazakhstan can create a more adaptive, resilient education system that can prepare students for an increasingly digital future.

In conclusion, the strategic integration of AI into Kazakhstan's schools has the potential to transform the educational environment, making it more inclusive and responsive to the needs of students. With sustained commitment and careful implementation, AI can indeed be a powerful tool for advancing education in Kazakhstan, empowering its youth, and supporting the country's broader development goals.

References

1. Aguiar J.J.B. ChatGPT as an educational support tool: an analysis of its potential in the teaching and learning process / J.J.B. Aguiar // *Caderno Pedagógico*. – 2024. – Vol. 21, № 2. – P. 7. doi: 10.54033/cadpedv21n2-019.
2. Baker T. Educ-AI-tion rebooted? Exploring the future of artificial intelligence in schools and colleges / T. Baker, L. Smith // Nesta Foundation. – 2019. – P. 10.
3. Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan.
4. Darrell M.W. Turning Point: Policymaking in the Era of Artificial Intelligence / M.W. Darrell, R.A. John // Brookings Institution Press. – 2020. – P. 43-62.
5. Daniel J. Mallinson. Artificial intelligence technology, public trust, and effective governance/ J. Daniel // *Review of Policy Research*. – 2023. – Vol. 42, № 2. – P. 16-17.
6. Goel A.K. Using AI to teach AI: Lessons from an online AI class / A.K. Goel, D.A. Joyner // *AI Magazine*. – 2017. – Vol. 38, № 2. – P. 29-33. <https://doi.org/10.1609/aimag.v38i2.2732>
7. Holmes W. Artificial Intelligence in Education / W. Holmes, M. Bialik, C. Fadel // The Center for Curriculum Redesign. – 2019. – P. 81-98.
8. Johri A. Generative artificial intelligence and engineering education / A. Johri, A.S. Katz // *Journal of Engineering Education*. – 2023. – Vol. 112, № 3. – P. 572-577. doi: 10.1002/jee.20537.
9. Jovanović M. Generative Artificial Intelligence: Trends and Prospects / M. Jovanović, M. Campbell // in *Computer*. – 2022. – Vol. 55, № 10. – P. 107-112. doi: 0.1109/MC.2022.3192720.
10. Luckin R. Intelligence unleashed: An argument for AI in education / R. Luckin, W. Holmes, M. Griffiths, L.B. Forcier // *Journal of Multidisciplinary Research and Innovation (JMIRI)*. – 2016. – Vol. 3, № 1. – P. 23-34.
11. Niel Francis B. Casillano. Education in the ChatGPT Era: A Sentiment Analysis of Public Discourse on the Role of Language Models in Education / Niel Francis B. Casillano // *Journal Evaluation in Education (JEE)*. – 2024. – Vol. 5, № 4. – P. 8. DOI: 10.37251/jee.v5i4.1151.
12. Snyder S. Inclusive education: A comprehensive approach / S. Snyder. – London: Routledge. – 2016. – P. 81-98.
13. Wu L. AI-based writing tools: Empowering students to achieve writing success / L. Wu // *Advances in Educational Technology and Psychology*. – 2024. – Vol. 8. – № 2. – P. 40-44. doi: 10.23977/aetp.2024.080206.
14. Zaman B.U. Transforming education through AI, benefits, risks, and ethical considerations / B.U. Zaman // *Authorea Preprints*. – 2023. – P. 4. doi: 10.36227/techrxiv.24231583.v1.
15. Zawacki-Richter O. Systematic Review of Research on Artificial Intelligence Applications in Higher Education – Where Are the Educators? / O. Zawacki-Richter, V.I. Marín, M. Bond, F. Gouverneur // *International Journal of Educational Technology in Higher Education*. – 2019. – Vol. 16, № 1. – P. 4-5.

ҚАЗАҚСТАННЫҢ ОРТА МЕКТЕПТЕРІ ЖАСАНДЫ ИНТЕЛЛЕКТ ҚҰРАЛДАРЫНАН ҚАЛАЙ ПАЙДА КӨРЕ АЛАДЫ

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Аңдатпа: Бұл мақала Қызылорда облысына ерекше назар аудара отырып, Қазақстан бойынша орта мектептегі білім деңгейін арттыруда жасанды интеллект (АІ) құралдарының әлеуетті артықшылықтарын талқылайды. Сонымен қатар, PISA сияқты халықаралық білім беру бағалауларындағы осы қаланың көрсеткіштерін талдай отырып, ауыл және қала мектептерінің қазіргі білім беру жағдайын зерттейді. Қызылорда АІ инновациясының орталығы ретінде қалыптасып келе жатқандықтан, мақалада қаланың АІ негізіндегі білім беруді енгізуде көшбасшы болып, жетекшілік ету мүмкіндігі көрсетілген. Бұл зерттеу оқыту тәжірибесі мен нәтижелерін жақсарту үшін, әсіресе білім беру ресурстары шектеулі аймақтарда АІ жасанды интеллектіні Қазақстан бойынша орта мектептерге қалай біріктіруге болатыны туралы практикалық түсініктерді ұсынады.

Кілтті сөздер: Жасанды интеллект, орта мектеп, Қазақстан, Қызылорда, ауыл-қала бөлінісі, PISA, оқыту құралдары, білім беру инновациялары.

КАК ШКОЛЫ КАЗАХСТАНА МОГУТ ВОСПОЛЬЗОВАТЬСЯ ПРЕИМУЩЕСТВАМИ ИНСТРУМЕНТОВ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА

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Аннотация: Эта статья рассматривает преимущества инструментов искусственного интеллекта (ИИ) в улучшении среднего образования в Казахстане, с особым акцентом на регион Кызылорда. В ней анализируется текущее состояние образования в сельской и городской местности, а также показатели города Кызылорда в международных оценках, таких как PISA. Исследование подчеркивает, что внедрение ИИ в качестве дополнительного инструмента обучения может повысить качество образовательного процесса и обеспечить более равномерный доступ к знаниям в разных регионах, а также способствовать решению таких актуальных проблем, как рост рождаемости в городах, например, в Кызылорде, где переполненные школы и нехватка учителей требуют эффективных решений. Поскольку Кызылорда становится центром инноваций в сфере ИИ, в статье подчеркивается потенциал города в лидировании внедрения ИИ-ориентированного образования. Данное исследование предлагает практические идеи о том, как ИИ может быть интегрирован в казахстанские школы для улучшения учебного процесса и образовательных результатов, особенно в районах с ограниченными ресурсами.

Ключевые слова: искусственный интеллект, среднее образование, Казахстан, Кызылорда, разрыв между городом и селом, PISA, образовательные инструменты, образовательные инновации.

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PSYCHOMETRIC ASSESSMENT IN THE UNIFIED NATIONAL TESTING (UNT) ENGLISH SECTION

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Abstract: This article is devoted to the analysis of the current state of assessment (UNT) Unified National Testing of the English language in secondary schools of Kazakhstan. In the study, the authors attempted to identify the shortcomings of the English language competence assessment section of the Unified National Testing, with particular emphasis on the lack of tasks aimed at assessing oral speech and listening skills. The paper analyzes the existing approaches to testing the language competencies of students, and also examines the impact of a limited testing format on the objectivity of assessing the level of English language proficiency. The current system is more focused on testing grammatical and lexical knowledge, while communication skills remain insufficiently covered. According to the results of the study, the introduction of tests to assess oral speech and listening skills will allow students to gain a more complete and objective understanding of their language skills, increase their level of communicative competence and contribute to the development of practical knowledge of a foreign language. In addition, such changes will help students better prepare for the difficulties that arise both in the educational process and in future professional activities, where oral communication and listening skills are of particular importance. Suggestions are offered for improving the UNT to assess all fundamental linguistic abilities while preserving reliability and fairness.

Keywords: Unified National Testing, UNT, assessment, psychometric assessment, graduates, secondary school.

Introduction. The UNT plays a very important role in determining whether school graduates are prepared to enter higher education in Kazakhstan. It was implemented in 2004 with the aim of assessment and certification of the complex knowledge of school graduates for further entry to higher education institutes. However, such a high-stakes test must be strictly tested by psychometric principles to ascertain its efficiency as well as its fairness. For example, the first objective of the UNT is to verify what knowledge school graduates have. The test, however, cannot measure pupils' actual knowledge because its questions only test 'factual' knowledge and not understanding. Concerning this matter, Kanat Nurov, who represents the scientific and educational platform "Aspandau," asserted

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