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## The effectiveness of improving the quality of education through online platforms at higher education institutions in Kazakhstan

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**Abstract.** This article investigates the effectiveness of online platforms in education and suggests that they should be viewed as tools that enhance quality of language learning process. The importance of carefully examining various factors influencing the use of online platforms is immense. The primary purpose of this research is to conduct a comparative analysis of the implications of digital platforms on student engagement and learning outcomes compared to traditional educational methods. The data revealed implementation barriers, providing practical recommendations for integrating these educational language learning platforms into existing educational structures. Ultimately, this study can serve as a guide which updates educational institutions in Kazakhstan about the benefits and limitations of online platforms. The results contribute to a discussion on distance learning and digital learning innovations, while leveraging benefits of online platforms in education and addressing their challenges. It identifies the need to develop specific solutions that will impact the education landscape in Kazakhstan.

**Key words:** online platforms, distance learning, online education, Internet, digital resources.

## Introduction

In the era of globalization and technological progress, English plays a key role in teaching foreign languages and contributes to the well-being of the individual. English as a lingua franca is the most important tool for using modern information and computer technologies in various fields, including education, business, management and science [1]. The research work is regarded as significant, because in 2010 Kazakhstan became 47th member of the Bologna Process which expands access to higher education and Lisbon strategy which focuses on the supporting of knowledge and innovation. The issues of developing education, science, culture, teaching national languages, and providing high-quality foreign language education are relevant. Improving the quality of English teaching lies in the need to integrate traditional teaching methods with information and computer technologies and online English learning platforms. The article considers additional methodological recommendations on the use of online platforms in teaching English as a foreign language. It arises from the need for mass teaching of English to students using information and communication technologies.

After the realities brought about by the COVID-19 pandemic, Kazakhstan's setting has come to require the rapid development of information technology as an economic imperative. The gaps presented by this global crisis have made it clear that there is a need to rethink how education is integrated technologically to meet growing demands for learning design that is pedagogically sound and supported by reliable and fast Internet connectivity.

The purpose of this study is to explore the impact of contemporary online platforms in performing educational tasks and assess resource quality. Due to this, the following four key objectives were identified:

- to analyze modern online platforms in teaching foreign languages;
- explore the role of online digital platforms;
- to consider the impact of digital tools in pedagogical interaction;
- evaluate the potential of online platforms in improving learning effectiveness.

The following methods were used to achieve the objectives set:

- theoretical methods: analysis of scientific articles and literature;
- empirical methods: data collection through survey across various institutions, statistical analysis and processing of results.

Kazakhstan is also witnessing a growing body of research in this area. In recent years, several domestic studies have been conducted to examine impacts of online platforms on higher education in Kazakhstan. Balmagambetova et al., 2023, highlighted the effectiveness of online educational platforms in higher education institutions. The author of research shows that using digital technologies and online platforms has significant potential to improve the quality of education and manage the principles of accessibility in pedagogy [2].

Nurtayeva et al., 2024 highlighted the need to address a few challenges, such as security issues, technical errors, and reduced communication [3]. Although one study highlighted the importance of technical factors including device choice, in influencing student achievement [4].

These findings suggest that online platforms can improve the quality of education in Kazakhstani higher education institutions, but potential barriers and implementation strategies need to be carefully considered to achieve optimal results.

## **Methodology**

A review of foreign and domestic scientific works was conducted through the process of identifying the scientific and theoretical foundations of the methodology of teaching foreign languages in the field of education. Methods of analysis, comparison and generalization of the obtained data were used. The collected data were critically described and processed. Several foreign research articles were taken. In-depth analysis was carried out based on our own research experience on the effectiveness and problems of teaching through an online platform. Surveys were conducted among students and university teachers. The survey results were compared, and a general conclusion was made.

The research was conducted through an online survey. Participants are national and regional university English language teachers. There were 25 teachers aged 23 to 47. Participants' teaching experience ranged from 3 to 25. The survey consisted of 13 questions which distinguished into 2 main parts: problems in online teaching and online English teaching platforms.

The survey was conducted online. Respondents were asked to fill out a questionnaire on their teaching experience at Kazakhstani universities and their work with online platforms. The collected data were processed using statistical methods, including systematic analysis and percentage distribution. Tables and diagrams were used to show the relationships between different variables.

The term "online platform" encompasses a wide range of internet-based services. According to the Organization for Economic Co-operation and Development (2019), an online platform is defined as digital service that facilitates interaction between two or more, but interdependent, groups of users over the internet. This study elaborates on this definition and provides economic characteristics common to online platforms [5].

In the research of Zyryanova et al., educational online platforms are considered as a limited interactive network. Due to this researchers online Internet resources include educational materials for individual needs of users [6]. In addition, other research works describe "online platforms" as software solutions designed to meet the educational needs of users. The use of online platforms in content education is divided into several types. These are massively open online courses (MOOC), audio, YouTube channels, real-time lectures and video materials, assignments and test materials. Smirnova.A defined these content resources as a system that makes them available through online platforms [7].

Nowadays, there is a significant increase in the use of social networks. According to a study by DataReportal (2024), the number of Internet users in Kazakhstan is increasing. In addition, the increase in Internet speed and the use of social networks is advancing the digitalization process [8].

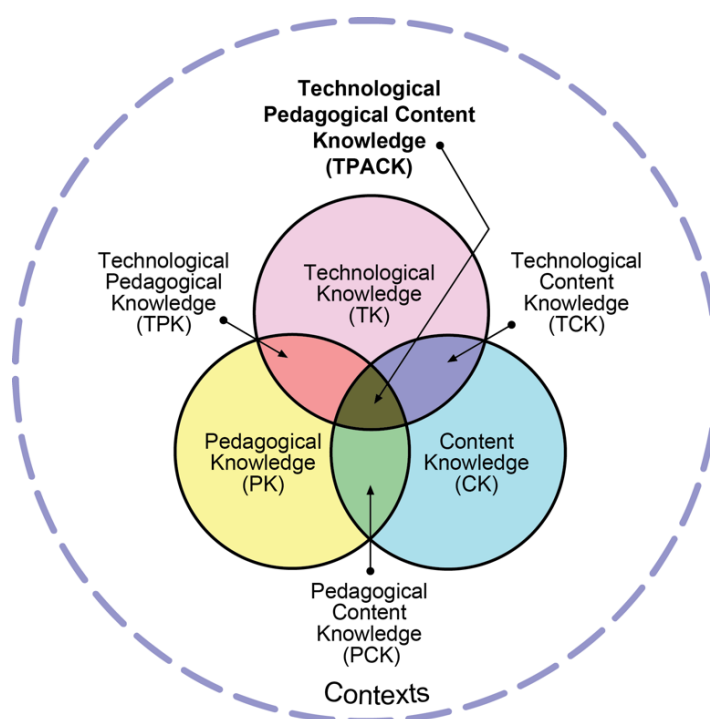
According to the Minister of Education and Science of the Republic of Kazakhstan, Askhat Aimagambetov, today Kazakhstan's higher education institutions mainly use integrated information and educational settings. Kazakhstani higher education institutions use platforms with online resources and self-organized content that make international education accessible. Including foreign online platforms (Coursera, Future Learn, edX, Khan Academy, Udacity, Ted and Codecademy) and domestic educational platforms and resources such as Bilimland, Google

Classroom, Moodle, Univer, Platonus and Darynonline. the Minister of Education and Science of the Republic of Kazakhstan, Askhat Aimagambetov noted that the Coursera platform opened access to many courses in different fields and ZOOM service provided free access to classes [9].

Mohamed Amin and Paiman delineated that platforms like Moodle, Blackboard and ZOOM require fast internet and strong data plans to be fully effective [10].

Punya Mishra and Matthew Koehler proposed the TPACK Framework as a model for the effective integration of technology in education [11]. In education, the framework provides structured guidance to educators and curriculum developers. Moreover, it is necessary to be aware of interconnection between pedagogical content knowledge and technological content knowledge.

Figure 1 shows the framework of Technology Pedagogical Content Knowledge (TPACK) identifies three categories of knowledge: content knowledge, pedagogical knowledge and technological knowledge.

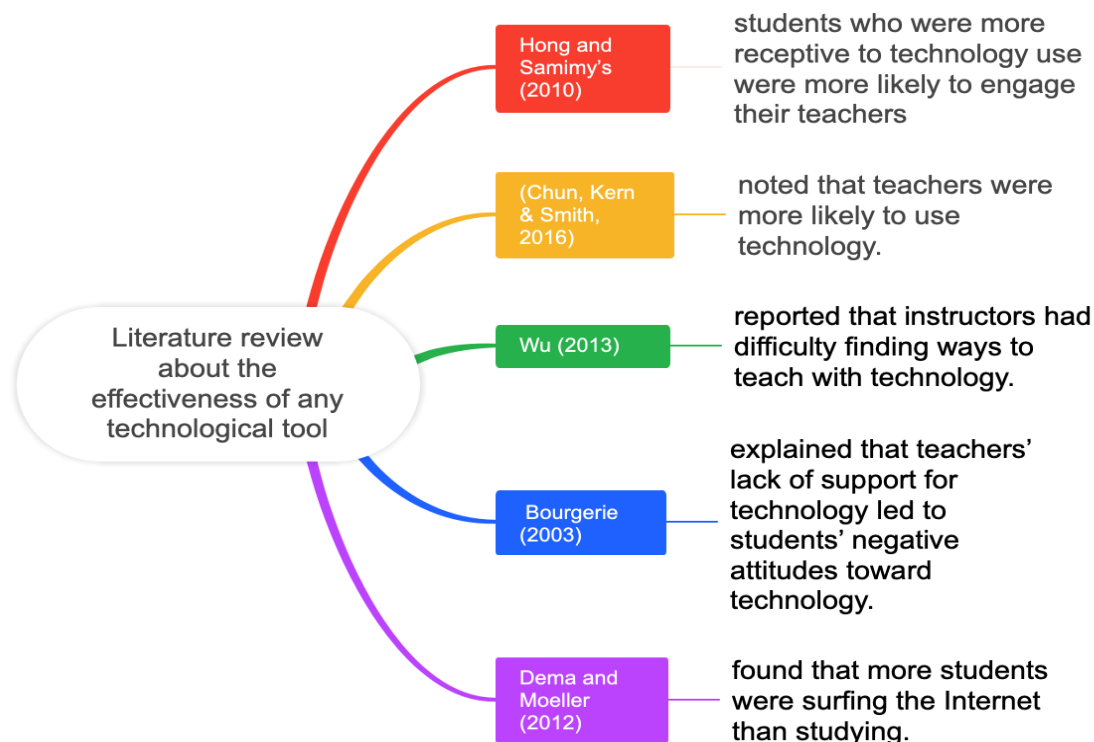


**Figure 1 – TPACK framework (Taken from [tpack.org](http://tpack.org) )**

Some scholars, such as Bell et.al., (2013) in their research, suggest that for some groups of students and teachers, technological literacy includes not only knowledge about technologies, but also skills necessary to use technology to plan and optimize instruction [12,13]. Therefore, digital platform's function is not enough. Teachers and students need to develop the skills to use them successfully in educational process and lesson planning.

Taking the ideas from previous works, we offer a mind map which includes an analysis of literature review extended around this topic, after analyzing the works published in high

indexed journals. Figure 2 illustrates some points about the effectiveness of technology tools in education. The ideas of the authors shown in Figure 2 have influenced further research on this topic. Hong and Samimy's delineated the idea about the collaborative work among learners and teachers [14]. Other researchers noted that teachers found difficulties using online platforms [15,16,17].

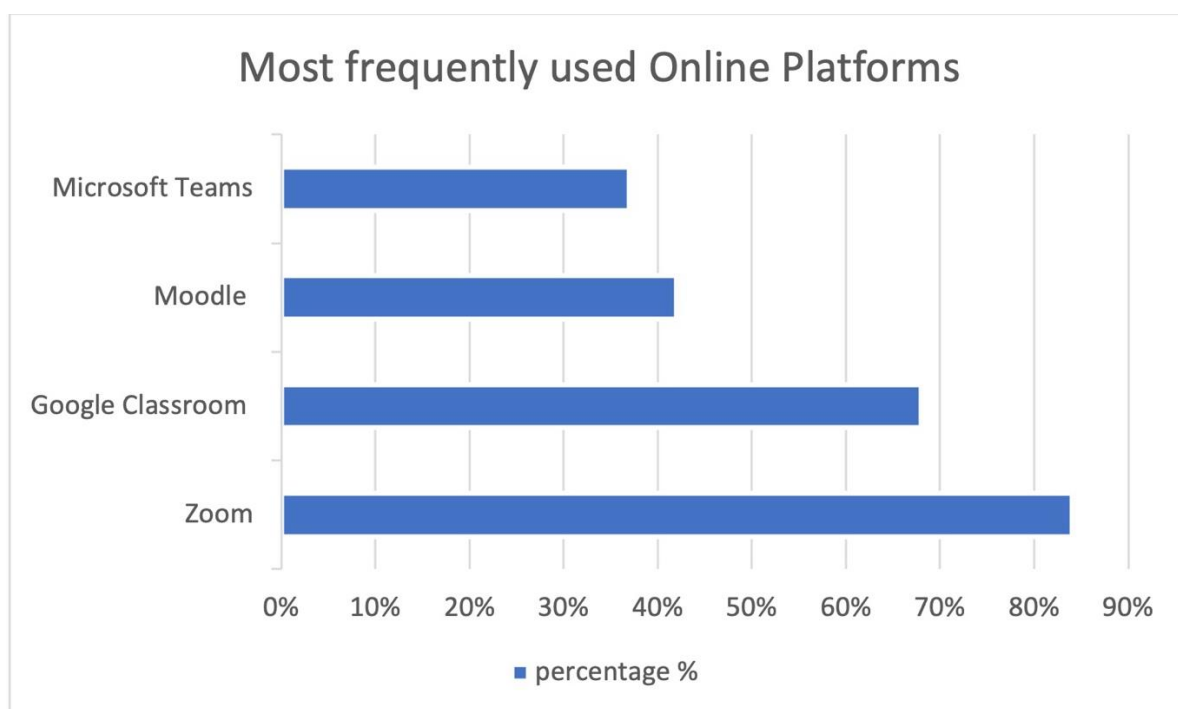


**Figure 2. Literature review about the effectiveness of technological tool  
(the figure was created using Wondershare EdrawMind)**

Munday Pilar (2016) noted that “online language learning is now becoming more effective due to its ease and accessibility [18]. Learning a foreign language requires significant physical effort. Moreover, there is an additional financial investment in terms of time.

## **Results and discussion**

In the course of our research, a survey was conducted among students of Al-Farabi Kazakh National University and Khalel Dosmukhamedov Atyrau University in order to identify the impact of platforms on the online learning process. The survey provided deeper understanding of the use of digital educational platforms by English teachers in Kazakhstan. The given results showed that university English language teachers use a limited number of key online platforms. The most used platforms are ZOOM, Moodle, Google Classroom and Microsoft Teams.



**Figure 3. Most frequently used Online Platforms**

As can be seen from the figure 3, the most popular platforms are Zoom (84%) and Google Classroom 67%. These platforms are convenient for conducting video conferences and organizing lesson materials. Respondents answered to the open-ended question, "What advantages and disadvantages have you noticed of online platforms in the process of learning English?". In the results were mentioned problems such as sharing and time limitations in the functions of platforms in teaching English.

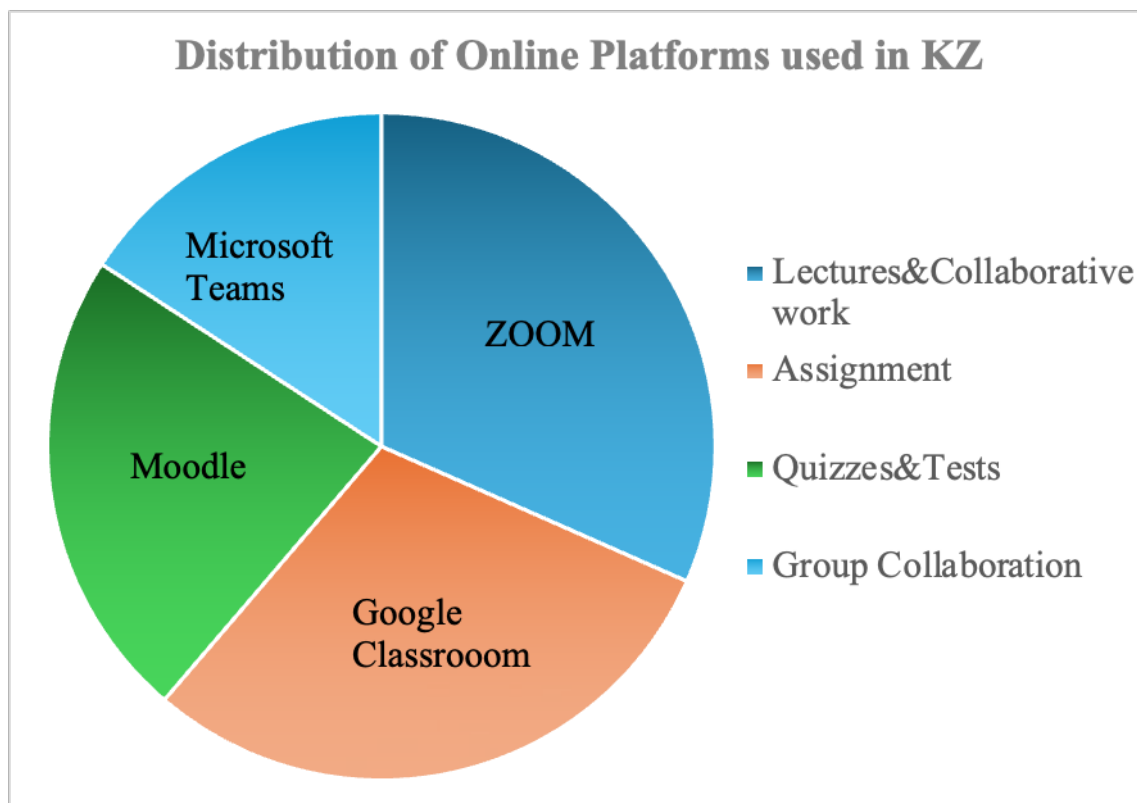
**Table 1**

**Advantages and disadvantages of platforms for online teaching**

Online Platform	Main Features	Lack of the platform
ZOOM	Video conference, screen sharing, divide rooms, user friendly	Limited time (40mins),
Google Classroom	Grading and document sharing	60 mins time limit, without whiteboards
Moodle	Quizzes, course management	Only for corporative users
Microsoft Teams	File sharing and collaborative projects, no time limit	Plans per month 15 US \$

Table 1 shows the results of participants' responses to open-ended questions. They shared opportunities and challenges of these tools. Zoom is the most selected tool due to its features like breakout rooms and screen sharing. Moreover, it allows a great number of online meetings. Besides of it in a free basic user account time is limited (40mins for a section).

Teachers expressed their satisfaction with the video conferencing and interactive whiteboard capabilities of these platforms. The disadvantages they noted in using online platforms were time constraints and poor internet connectivity.



**Figure 4. Distribution of Online Platforms used in Kazakhstan**

Figure 4 shows quantitative data collected through a result of a survey of English teachers at Al-Farabi Kazakh National University and Khalel Dosmukhamedov Atyrau university. The diagram shows the distribution of platform usage. ZOOM platform (80%) is used mainly for lectures and collaborative work. This indicates its effectiveness in speaking and presentation skills. Google Classroom (75%) was considered necessary tool for sharing the files and assessing assignments. This platform is often popular among schoolteachers and demonstrates its effectiveness in regulation coursework. Moodle system (58%) is used for quizzes and tests. Microsoft Teams is recognized by 40% as a platform that facilitates group collaboration, supports teamwork and student interaction.

Analysis of the results of the survey conducted the following results. Effective implementation of interactive lessons using the online platform is concerned by teachers. It has shown its effectiveness especially in conducting practical lessons. In addition, it has the functions of exchanging theoretical lecture materials and assignments. The survey results showed that most of them are aware of the relevance of the technologies which they use in the educational process and the technologies presented on the platform will be useful to them in their professional activities.

Results show that attention must be paid not only to the introduction of technology, but also to learning how to use it effectively in the educational process. When teachers are not adequately trained and work with unstable systems, the quality of education is negatively affected. Moreover, this analysis highlights the aspects of online learning and importance of digital platforms for English language teachers. Most of participants cited students' lack of access to technology resources and a lack of reliable internet connectivity as one of the main challenges. This issue is not only an inconvenience, but can also lead to learning disruption, poor performance, and poor overall educational experience.

This context highlights the need to rethink the relationship between accessibility and participation in the education ecosystem. Digital platforms should not be barriers, but rather enablers. This requires a collective commitment to digital inclusion alongside pedagogical innovation. If these issues are not addressed, technological inequality will increase, and a new generation of learners will likely be denied the opportunity to fully participate in the global digital environment.

The development of the digital era poses new challenges to ensuring equity in education, and in this process, improving technological infrastructure, increasing access to digital resources, and preparing teachers and students for quality online learning will be crucial factors. Thus, the results of the study can not only identify problems but also serve as a basis for proposing comprehensive solutions aimed at improving education policy and practice.

## Conclusion

In conclusion, online platforms play an important role in the development of the teaching process of teachers, especially in the English language classroom. On the one hand, the use of these platforms creates challenges and problems such as insufficient Internet speed in many regions of the country. To eliminate this, it is necessary to carry out major work in the educational process. The research allows us to draw conclusions due to the purpose and objectives. File sharing opportunities of platforms in real time communication allows us to evaluate the quality of the learning process and design the planned educational outcomes for students and develop the goals and objectives of distance learning and lessons based on the use of modern educational online platforms. Moreover, to construct whole pedagogical didactic process and provide understanding ethics of development of the modern educational process and emerging new requirements for its organization.

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### **Қазақстанның жоғары оқу орындарында онлайн платформалар арқылы білім сапасын арттырудың тиімділігі**

**Аңдатпа.** Бұл зерттеу жұмысы онлайн платформалардың білім беру үдерісіндегі тиімділігін зерттейді және оларды тіл үйрену процессінің сапасын арттыратын құрал ретінде қарастыруды ұсынады. Онлайн платформаларды пайдалануға әсер ететін әртүрлі факторларды мұқият қарастырудың маңыздылығы өте зор. Бұл зерттеу жұмысының негізгі мақсаты – студенттердің белсенділігі мен оқу нәтижелеріне цифрлық платформалардың әсерін дәстүрлі білім беру әдістерімен салыстырмалы түрде талдау. Алынған деректер онлайн платформаларды енгізудегі кедергілерді анықтады және осы тілдік оқыту платформаларының қолданыстағы білім беру орындарында біріктіру бойынша практикалық ұсыныстар жасады. Сайып келгенде, бұл зерттеу Қазақстандағы жоғары оқу орындарын онлайн платформалардың артықшылықтары мен шектеулері туралы ақпараттандыру үшін нұсқаулық бола алады. Алынған нәтижелер білім берудегі онлайн платформалардың артықшылықтарын пайдалана отырып және олардың мәселелерін шешуде қашықтықтан оқыту мен цифрлық оқытудағы инновацияларды талқылауға ықпал етеді. Ол Қазақстанның білім беру ландшафтына әсер ететін нақты шешімдерді әзірлеу қажеттілігін анықтайды.

**Түйін сөздер:** онлайн платформалар, қашықтықтан оқыту, онлайн білім беру, интернет, цифрлық ресурстар.

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### **Эффективность повышения качества образования посредством онлайн-платформ в высших учебных заведениях Казахстана**

**Аннотация.** В данной научной работе рассматривается эффективность онлайн-платформ в образовательном процессе и предлагается рассматривать их как инструмент повышения качества процесса изучения языка. Крайне важно тщательно учитывать различные факторы, влияющие на использование онлайн-платформ. Основная цель данной исследовательской работы – проанализировать влияние цифровых платформ на вовлеченность студентов и результаты обучения по сравнению с традиционными методами обучения. Полученные данные позволили выявить препятствия на пути внедрения онлайн-платформ и сформулировать практические рекомендации по интеграции этих платформ изучения языка в существующие образовательные контексты. В конечном итоге данное исследование может послужить руководством для информирования высших учебных заведений Казахстана о преимуществах и ограничениях онлайн-платформ. Полученные результаты способствуют обсуждению инноваций

в дистанционном обучении и цифровом обучении, использованию преимуществ онлайн-платформ в образовании и решению их проблем. В нем обозначена необходимость разработки конкретных решений, которые окажут влияние на образовательный ландшафт Казахстана.

**Ключевые слова:** онлайн-платформы, дистанционное обучение, онлайн-образование, интернет, цифровые ресурсы.

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