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THE IMPACT OF ONLINE LEARNING PLATFORMS ON SCHOOL EDUCATION

ONLAYN TA'LIM PLATFORMALARINING MAKTAB O'QUVCHILARI TA'LIMIGA TA'SIRI

ВЛИЯНИЕ ПЛАТФОРМ ОНЛАЙН-ОБУЧЕНИЯ НА ОБРАЗОВАНИЕ ШКОЛЬНИКОВ

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Abstract

This article is described the impact of online learning platforms on school students' education, focusing on student engagement, academic performance, and overall educational outcomes. A survey of 13 participants, including teachers and non-teachers, was conducted to assess perceptions of online learning's effectiveness.

Annotatsiya

Ushbu maqolada o'quvchilarning faolligi, akademik samaradorligi va umumiy ta'lim natijalariga qaratilgan onlayn o'quv platformalarining maktab o'quvchilari ta'limiga ta'siri yoritilgan. Onlayn ta'lim samaradorligi haqidagi tasavvurlarni baholash uchun 13 ishtirokchi, jumladan o'qituvchilar va o'qituvchi bo'lmaganlar o'rtasida so'rov o'tkazildi.

Аннотация

В этой статье описывается влияние платформ онлайн-обучения на образование школьников, уделяя особое внимание вовлеченности учащихся, успеваемости и общим образовательным результатам. Был проведен опрос 13 участников, включая учителей и не учителей, для оценки восприятия эффективности онлайн-обучения.

Key words: online learning platforms, student engagement, academic performance, personalized learning, flexibility, educational outcomes, interactive learning, teacher perceptions.

Kalit so'zlar: onlayn ta'lim platformalari, o'quvchilarning faolligi, akademik samaradorlik, shaxsiylashtirilgan ta'lim, moslashuvchanlik, ta'lim natijalari, interaktiv ta'lim, o'qituvchining tasavvurlari

Ключевые слова: платформы онлайн-обучения, вовлеченность учащихся, успеваемость, персонализированное обучение, гибкость, образовательные результаты, интерактивное обучение, восприятие учителей.

INTRODUCTION

In recent years, the adoption of online learning platforms has significantly transformed educational environments, providing students and educators with new opportunities and challenges. Online platforms have been praised for their ability to offer flexible, self-paced learning, while also incorporating interactive and multimedia-rich content that can enhance student engagement. However, there are ongoing debates about the effectiveness of online education, particularly when compared to traditional face-to-face learning. This study aims to explore the impact of online learning platforms on school students' education, focusing on aspects such as student engagement, academic performance, and the overall effectiveness of these platforms in fostering meaningful learning experiences.

The study investigates how online learning environments are perceived by educators and how these perceptions align with student engagement levels and educational outcomes. Through a survey of 13 participants, including teachers and non-teachers, the study gathers insights into the advantages and challenges of online learning, such as increased interactivity, flexibility, and personalized learning paths. It also addresses potential drawbacks, such as student disengagement, distractions, and the absence of in-person teacher support. Investigating these factors, the study seeks to provide a comprehensive understanding of the role of online learning platforms in modern education.

LITERATURE REVIEW

The analysis of the data collected from English teachers in foreign countries reveal significant challenges and opportunities regarding the implementation of online education [4, p.514]. While 85.1% of teachers oppose fully implementing online teaching, citing barriers such as poor internet connectivity and lack of access to necessary devices, 48.2% support partial implementation. A major obstacle identified was low-quality internet services (84.9%), and 53.6% of teachers admitted lacking experience with ICT tools, highlighting the need for professional development. Additionally, teachers in larger cities were more likely to support online teaching, while those in smaller towns and villages, where access to resources is limited, faced greater challenges. The study suggests that to successfully integrate online education, significant investments in infrastructure, teacher training, and socio-economic support are necessary. [4, pp.520-521].

Another study aimed to investigate the relationship between online learning attitudes and readiness among sports sciences students during the Covid-19 pandemic, focusing on students from seven state universities in Turkey. The research revealed a moderately significant positive correlation between students' attitudes towards online learning and their readiness to engage in it. Specifically, the study found that students with a positive attitude toward online learning were more likely to demonstrate high levels of readiness for online education, with online attitude accounting for 38% of the total variance in explaining online readiness. This highlights the importance of fostering a positive attitude in students to ensure their success in online learning environments. The findings also suggest that a motivated and self-disciplined student, who has a positive attitude towards learning, is more likely to engage effectively in the online learning process [2, pp.72-73].

Moreover, the study emphasized the importance of online learning readiness, which is closely tied to the learners' cognitive and motivational processes. The research supports previous studies that have shown that a positive attitude toward online learning not only improves the learning experience but also significantly enhances students' readiness for online education. As online learning continues to evolve, particularly in a multidisciplinary field like sports sciences, understanding the interplay between attitude and readiness is crucial for optimizing learning outcomes. The study suggests that future research should explore various factors influencing online learning conditions in sports sciences, including student engagement, socialization, and the role of instructors. Additionally, it recommends examining online learning attitudes and readiness across different educational contexts to further improve the effectiveness of online learning in higher education [2, 73-74].

The lack of direct interaction between students and teachers in online education is a significant challenge highlighted by both prior research and the current survey. According to El Mansour and Mupinga [1], the absence of face-to-face communication contributes to negative student experiences, a sentiment echoed by 92.1% of respondents in the survey, who believe direct interaction is crucial for effective learning. Additionally, the delay in responses and insufficient individual attention during online classes further compound these issues, pointing to the need for more active engagement strategies such as increased use of discussion forums and live interactions. While students reported feeling more attentive in online settings compared to traditional classes, the lack of face-to-face interaction may hinder the overall learning experience, particularly in complex subjects like mathematics and languages. The observation that online classes have made some subjects more difficult supports the notion that the absence of direct teacher support can limit students' ability to fully grasp challenging content [3, pp.4-5].

The survey also addressed the challenges of knowledge transfer and the effectiveness of online learning in clarifying doubts. About 94% of students felt that regular classes were more effective in addressing their questions, despite the availability of communication tools in online settings. This suggests that the virtual environment fails to replicate the immediacy and depth of clarification provided in traditional classrooms. The survey revealed that online classes increased the perceived difficulty of certain subjects, emphasizing the importance of adapting teaching methods to better suit online learning contexts. Regarding evaluation, most students favored assessments through assignments and homework, as these are more familiar and feasible

compared to online exams, which they find uncomfortable. This preference highlights the necessity for well-structured, alternative evaluation methods that address the unique challenges of online learning, such as internet connectivity issues and the potential for academic dishonesty [3, pp.4-5].

METHODS

Participants demographic

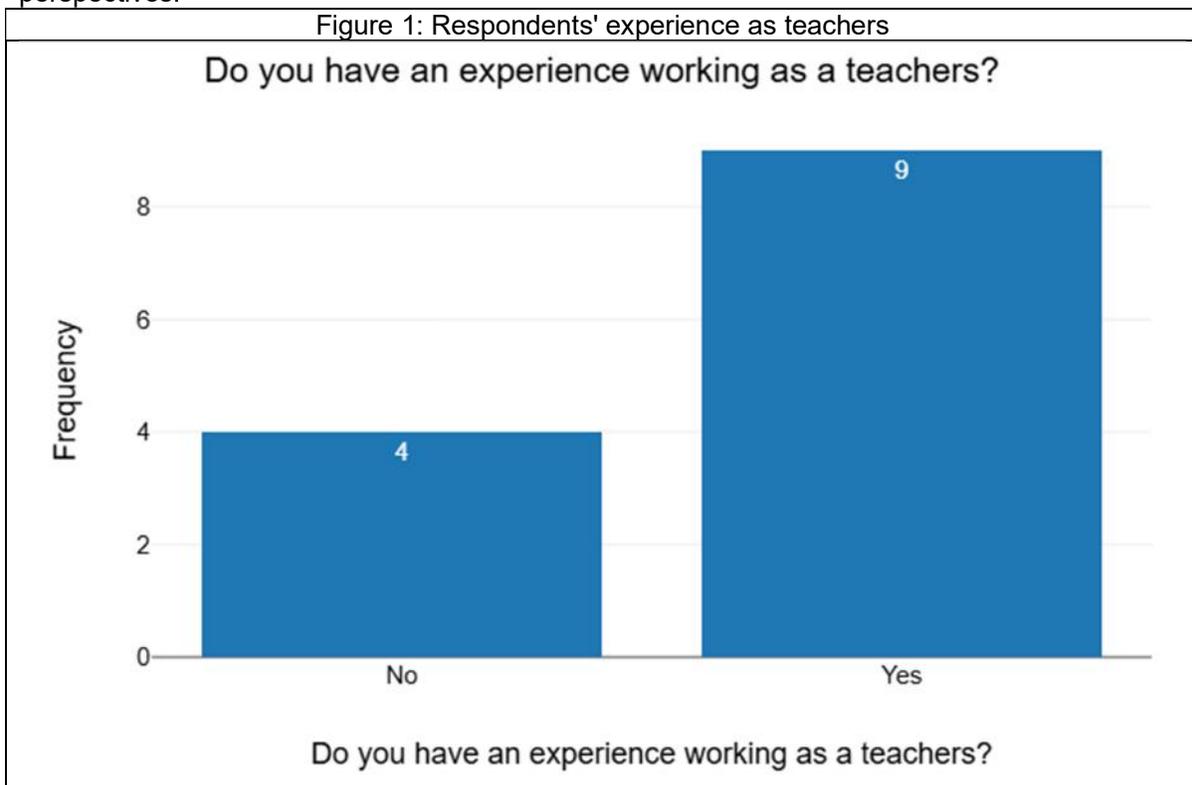
On the Table 1 the data reveals a gender imbalance among the respondents, with the majority being female (12 out of 13). The age distribution is relatively balanced, with 5 respondents aged 20, 6 aged 21, and 2 aged 22. However, the number of male respondents is notably low, as only one male respondent participated, which could limit the generalizability of the findings across different genders. This suggests that the sample is predominantly female, potentially skewing any gender-specific analysis or conclusions drawn from the data.

Table 1: Age and gender distribution of respondents

		Please, state your age below			
		20	21	22	Total
Pleasee, indicate your gender from the list below	female	5	6	1	12
	male	0	0	1	1
	Total	5	6	2	13

Figure 1 shows that the majority of respondents (9 out of 13) have experience working as teachers, while 4 respondents have not. This indicates that a significant portion of the sample has teaching experience, which may provide valuable insights into educational practices and perspectives.

Figure 1: Respondents' experience as teachers



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Research instrument and data collection

The data were collected through a structured questionnaire designed to assess respondents' perceptions of online learning platforms, student engagement, and academic performance. The questionnaire included both closed-ended questions (quantitative) and open-ended questions (qualitative). Participants were asked to rate their agreement with statements related to online learning engagement, the benefits of online platforms, and the potential challenges they face in these environments. The survey also included questions about the respondents' teaching experience and their attitudes toward the flexibility, interactivity, and personalized learning offered by online platforms. Quantitative data were analyzed using descriptive statistics, while qualitative responses were analyzed thematically to provide additional context and deeper insights into the respondents' experiences.

Data analysis

The data analysis focused on identifying trends and patterns related to the impact of online learning on student engagement and academic outcomes. Descriptive statistics were used to summarize responses to closed-ended questions, with particular attention given to the frequency of responses and the correlation between student engagement and perceived academic performance. Thematic analysis was applied to the open-ended responses, which helped uncover common themes such as the advantages of personalized learning paths, the role of interactive activities in student engagement, and concerns about the potential for distractions in online learning environments. The combination of quantitative and qualitative data provides a holistic understanding of the impact of online platforms on students' education, offering insights into both measurable outcomes and the nuanced experiences of educators and students.

RESEARCH RESULTS

The majority of respondents (8 out of 13) believe that students show higher engagement on online platforms because they have more interactive activities as it is shown on the Table 2. This suggests that the interactive nature of online learning environments, such as quizzes, videos, and discussions, significantly contributes to keeping students actively involved in the learning process. The ability to participate in these activities may make the learning experience more engaging and enjoyable compared to traditional methods.

A smaller portion of respondents (3 out of 13) pointed out that students might engage more in online platforms because they can sleep during lessons, indicating a potential drawback where students may take advantage of the flexibility of online learning. Additionally, only one respondent each mentioned that students can skip difficult topics or avoid homework as reasons for higher engagement. These answers suggest that while online platforms offer flexibility, some students might use this to avoid challenges, potentially undermining the overall effectiveness of the learning process.

Table 2: Reasons for higher engagement on online platforms

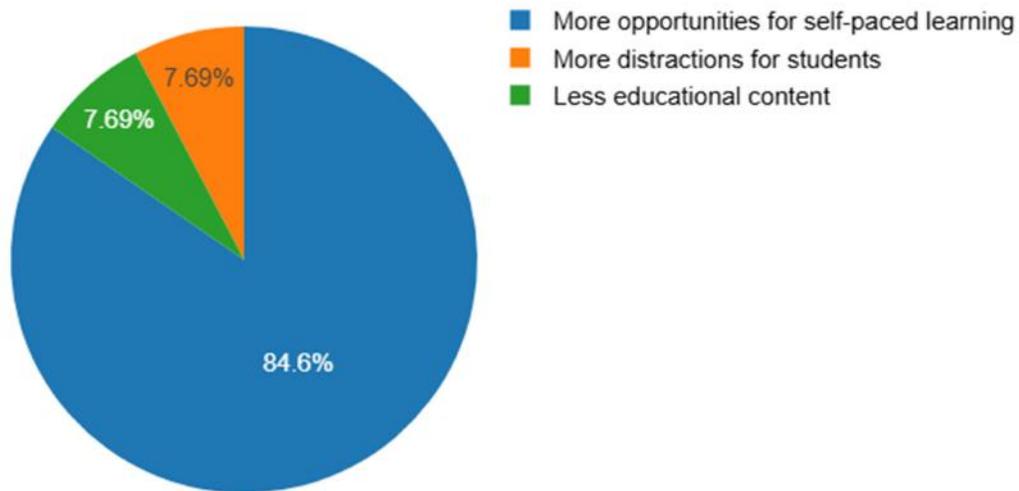
Students using online platforms often show higher engagement because	Frequency
They can sleep during lessons	3
They have more interactive activities	8
They can skip difficult topics	1
They don't need to do homework	1
Total	13
Invalid	0
Total	13

Figure 2 shows that the majority of respondents (11 out of 13) believe that online learning platforms generally offer more opportunities for self-paced learning compared to traditional classrooms. This reflects the flexibility that online platforms provide, allowing students to progress at their own speed and revisit materials as needed. In contrast, only a small number

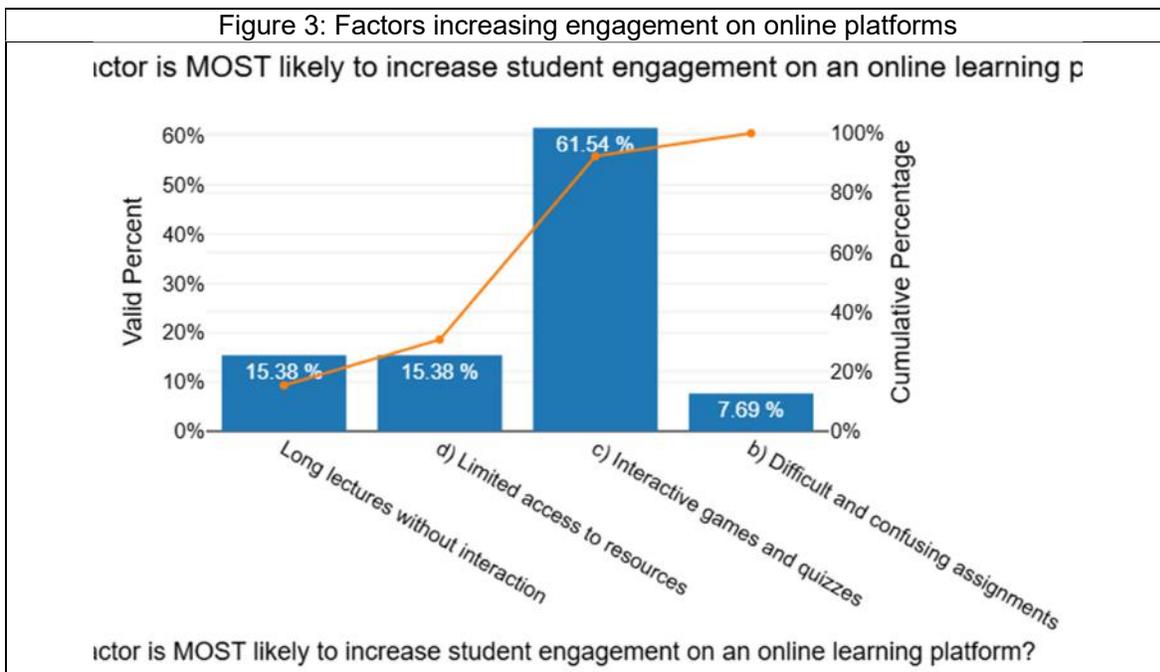
of respondents noted that online platforms could lead to more distractions for students (1 respondent) or offer less educational content (1 respondent). These results suggest that while online learning platforms are seen as beneficial for personalized learning, concerns about potential distractions or reduced content availability may still exist for some.

Figure 2: Comparison of online vs. traditional classrooms

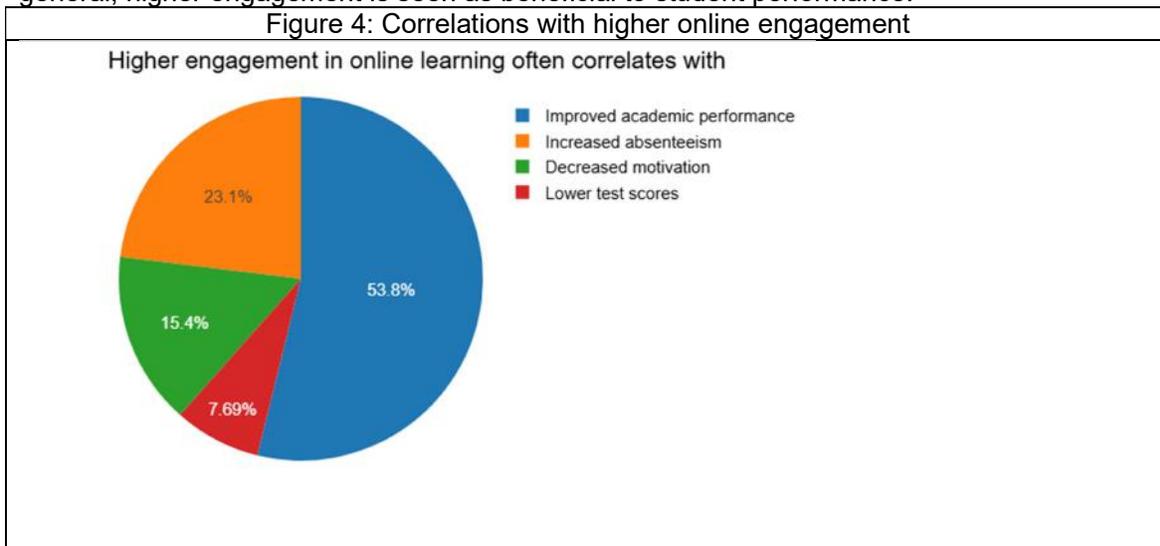
Compared to traditional classrooms, online learning platforms generally offer



The majority of respondents (8 out of 13) believe that interactive games and quizzes are the most likely factors to increase student engagement on an online learning platform as on the Figure 3. This indicates a strong preference for active, participatory learning methods that make the online experience more engaging and enjoyable. In contrast, only a small number of respondents identified long lectures without interaction (2), limited access to resources (2), or difficult and confusing assignments (1) as factors that could increase engagement, suggesting that students value interactive and accessible learning experiences over passive or challenging content.

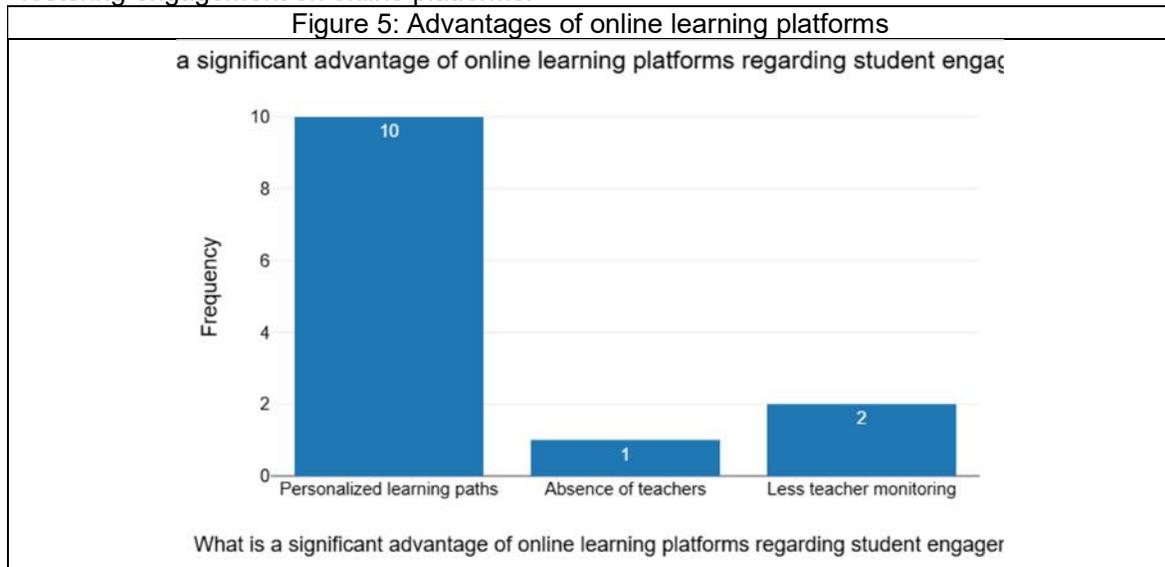


The majority of respondents (7 out of 13) believe that higher engagement in online learning often correlates with improved academic performance, highlighting the positive impact that active participation can have on student outcomes (Figure 4). However, a smaller portion of respondents pointed out that higher engagement could also be linked to decreased motivation (2 respondents) and increased absenteeism (3 respondents), suggesting that in some cases, students might become disengaged or less committed despite being more active in online learning. Only one respondent noted a correlation with lower test scores, indicating that, in general, higher engagement is seen as beneficial to student performance.



The significant advantage of online learning platforms regarding student engagement, according to the majority of respondents (10 out of 13), is the ability to offer personalized learning paths as on the Figure 5. This suggests that students appreciate the flexibility and autonomy to learn at their own pace, tailoring the experience to their individual needs. Fewer respondents

identified the absence of teachers (1) or less teacher monitoring (2) as advantages, indicating that while independence is valued, the presence of teacher support and guidance may still be crucial for many learners. The results highlight the importance of personalized learning in fostering engagement on online platforms.



The majority of respondents (9 out of 13) agree that a student consistently completing online quizzes and interactive exercises demonstrates high levels of engagement, highlighting the effectiveness of personalized learning paths in maintaining student interest as on the Table 3. This suggests that students are more likely to remain engaged when they have tailored learning experiences that cater to their individual needs. Only 2 respondents identified less teacher monitoring as a significant factor for engagement, and just 1 respondent mentioned the absence of teachers. The low frequency of responses indicating disinterest in the subject suggests that, overall, personalized learning paths and interactive activities are key drivers of student engagement on online platforms.

Table 3: Student engagement and learning advantages

What is a significant advantage of online learning platforms regarding student engagement?						
			Personalized learning paths	Absence of teachers	Less teacher monitoring	Total
A student consistently completes online quizzes and interactive exercises. This shows:	High levels of engagement		9	0	2	11
	Disinterest in the subject		1	1	0	2
Total			10	1	2	13

The majority of respondents (10 out of 13) believe that online platforms offer better engagement compared to traditional classes primarily due to flexible learning schedules as on the Table 4. This flexibility allows students to learn at their own pace and at times that are most convenient for them, which likely enhances their engagement. In contrast, only a small number of respondents pointed to less peer interaction (1) and limited opportunities for questions (2) as

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factors that may affect engagement negatively, suggesting that while flexibility is highly valued, some students may miss the social aspects and real-time interaction of traditional classroom settings.

Table 4: Factors enhancing engagement on online platforms

Compared to traditional classes, online platforms may offer better engagement due to	Frequency
Flexible learning schedules	10
Less peer interaction	1
Limited opportunities for questions	2
Total	13
Invalid	0
Total	13

DISCUSSION

The findings from the study highlight the importance of engagement and personalized learning, which are crucial for the effectiveness of language courses, including the potential use of advanced mnemonic techniques. Students in the survey expressed a strong preference for interactive activities and self-paced learning, particularly through online platforms. This suggests that mnemonic techniques, which rely on active engagement with material, could enhance language retention by tapping into students' preferences for active, participatory learning. Techniques such as the method of loci, peg systems, and chunking can provide students with structured ways to encode and retrieve vocabulary or grammar rules, enhancing both short-term and long-term retention. Given the respondents' familiarity with digital platforms, incorporating mnemonic tools into an online or blended learning environment may allow students to leverage technology to visualize and interact with mnemonic devices in dynamic ways.

Additionally, the data suggests that while students value flexibility and personalization in their learning experiences, they also face challenges with motivation and absenteeism. The use of mnemonic techniques could help address these issues by offering students personalized strategies to connect new language concepts to familiar mental frameworks, making learning more meaningful and less daunting. Providing mental associations that learners can easily recall, mnemonic techniques reduce cognitive load and make learning more effective, which can increase motivation and reduce feelings of overwhelm. When students feel they can successfully recall information through these techniques, it can enhance their sense of accomplishment, ultimately contributing to higher levels of engagement and persistence in language courses.

Finally, the integration of mnemonic techniques within language courses can complement traditional teaching methods by promoting independent learning. The survey results indicate that students appreciate self-paced learning, where they can take control of their learning journey. Mnemonic devices can be particularly beneficial in this context, as they provide students with tools to actively organize and retrieve knowledge independently. This aligns with the trend toward flexible, personalized learning environments, which are valued in modern education. Thus, the incorporation of advanced mnemonic techniques could offer an effective way to support college students' language acquisition, fostering greater retention, motivation, and self-sufficiency in their learning processes.

CONCLUSION

The findings of this study suggest that online learning platforms offer significant advantages in terms of engagement and personalized learning opportunities, which are crucial for enhancing students' educational experiences. Interactive elements such as quizzes, videos, and discussions contribute to higher engagement levels, as students are more actively involved in the learning process. The flexibility and self-paced nature of online platforms are appreciated by both

students and educators, as they allow for a more individualized learning experience. However, the study also identifies challenges, such as the risk of student disengagement and distractions, which can undermine the effectiveness of these platforms if not carefully managed.

This research highlights the growing importance of online learning in contemporary education, particularly for school students. While online platforms offer many benefits, such as greater flexibility and interactivity, it is essential to consider the potential drawbacks, including decreased motivation and the lack of face-to-face interaction. To maximize the benefits of online learning, educators must implement strategies to ensure that students remain engaged and motivated, while also addressing the challenges associated with this mode of education. Future research could explore more deeply the long-term impact of online learning on academic outcomes, as well as the effectiveness of various tools and techniques for keeping students engaged in virtual learning environments.

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