

DOI: 10.37943/23XPQT1039

### **Aissulu Kaldarova**

PhD candidate, “8D01721 – Foreign Language Teacher Training”  
a.kaldarova@iitu.edu.kz, orcid.org/0000-0002-7128-5731  
Ablai Khan Kazakh University of International Relations and  
World Languages, Kazakhstan  
Assistant professor, Department of Languages  
International Information Technology University, Kazakhstan

### **Marco Vasquez**

Assistant professor, Department of Languages  
m-a.vasquez@iitu.edu.kz, orcid.org/0000-0003-2609-3009  
International Information Technology University, Kazakhstan

### **Alima Utemuratova**

Senior lecturer, Department of Languages  
a.utemuratova@iitu.edu.kz, orcid.org/0000-0003-2074-8107  
International Information Technology University, Kazakhstan

## **A STUDY ON THE EFFECTIVENESS OF THE INSTAGRAM APP IN DEVELOPING VOCABULARY OF STUDENTS**

**Abstract:** This study examines the effectiveness of Instagram as a tool to improve vocabulary learning among students, focusing solely on quantitative analysis. As social media platforms become integral to students' daily routines, Instagram's visual and interactive features may offer unique benefits for vocabulary acquisition. The aim of this research is to determine whether Instagram enhances vocabulary retention and engagement compared to traditional learning methods. A quantitative method was applied, involving 60 students divided into four groups of 15 each. These groups engaged with vocabulary lessons delivered through Instagram posts, stories, and interactive quizzes over a twelve-week period. Pre/posttests were used to measure vocabulary retention, providing a clear comparison of learning outcomes.

The data analysis revealed a statistically significant improvement in vocabulary retention across all groups, indicating that Instagram can serve as an effective supplementary tool for vocabulary development. Additionally, students who interacted more frequently with Instagram content demonstrated better performance, suggesting that consistent social media engagement positively influences learning outcomes. The study highlights the importance of visually appealing and context-rich content in improving memorization and understanding of new vocabulary. Interactive elements, such as polls and quizzes, were especially effective in fostering active learning and sustaining student interest.

The findings suggest that Instagram's accessibility and familiarity can help bridge gaps in traditional teaching methods, and it makes learning more relatable and enjoyable for students. Teachers may find it valuable to explore similar platforms to create engaging digital learning environments. This research underscores the need to integrate modern technology into education to maximize student participation and outcomes.

**Keywords:** English; language; teaching; technology; students; vocabulary; social media; Instagram; interactive learning; learning outcomes

## Introduction

In today's digital age, social media has become an integral part of students' lives, fundamentally transforming the way they communicate, socialize, and access information. The impact of social media cannot be overstated. Millions of gigabytes of text, graphics, audio, video, and photo data are exchanged, stored, and processed daily by users on different social media sites [1]. Among these platforms, Instagram stands out due to its visual-centric nature, which appeals particularly to younger audiences. With over one billion active users globally, Instagram has become a powerful tool for connection, creativity, and engagement. As educators seek innovative methods to enhance learning experiences, the potential of Instagram as a language learning tool warrants exploration. This study focuses on using Instagram to improve vocabulary learning among students, examining its effectiveness as a supplementary educational resource.

Traditional methods of vocabulary instruction, such as rote memorization and flashcards, often fall short in engaging today's tech-savvy students. Research indicates that students prefer learning through interactive and visually stimulating content [2]. Consequently, educators are increasingly turning to social media platforms like Instagram to create more engaging and meaningful learning experiences. The platform's unique features, including images, videos, and interactive stories, can facilitate vocabulary acquisition by providing contextual learning opportunities that traditional methods lack.

Another point to consider, vocabulary acquisition is a critical component of language learning. It is vital for reading comprehension, effective communication, and overall academic success. Studies have shown that a strong vocabulary correlates with improved reading proficiency and academic performance [3]. Finding effective methods to enhance vocabulary learning is paramount for educators. The integration of social media, particularly Instagram, offers a promising avenue for achieving this goal.

Research suggests that social media can enhance language learning by promoting collaborative learning and increasing student motivation [4]. Platforms like Instagram encourage users to share content, engage in discussions, and provide feedback, fostering a community of learners. This collaborative aspect can enhance vocabulary learning by allowing students to interact with peers and engage in meaningful conversations around new words and their usages.

Instagram's visual elements also play a crucial role in language acquisition. Visual learning theories emphasize that images and videos can aid in memory retention and comprehension [5]. Incorporating images, infographics, and videos into vocabulary lessons, educators can create a more immersive learning experience that resonates with students. The platform allows for the creation of engaging content that can help students visualize the meanings of words, thereby enhancing their understanding and retention.

Language learning approaches have undergone a paradigm shift as a result of the digital revolution's penetration into educational environments. A variety of materials, including podcasts, language-learning applications, online platforms, and immersive settings, are included in the category of digital tools. With the help of these interactive, easily accessible, and customized learning resources, students can connect with language in a variety of engaging ways [6]. As the landscape of education evolves, educators are increasingly recognizing the necessity of integrating technology into language learning environments. The shift towards digital literacy has made it essential for students to develop not only language skills but also the ability to navigate various technological platforms effectively. This understanding underlines the importance of using platforms like Instagram not just as tools for learning vocabulary but also as means to foster digital competencies.

Recent studies highlight the potential of social media platforms to facilitate language learning by providing authentic contexts for communication [7]. Engaging with content that reflects real-life usage, students can develop a more nuanced understanding of vocabulary and its application in various contexts. Instagram, with its emphasis on visual storytelling, offers a dynamic medium for students to encounter new vocabulary in context, enhancing their learning experience. This study aims to capitalize on these advantages by investigating the impact of Instagram on vocabulary acquisition and exploring how its features can be effectively utilized in educational settings.

The use of Instagram for vocabulary learning also aligns with contemporary pedagogical approaches that emphasize student-centered learning. Constructivist theories advocate for active learning experiences that allow students to construct their knowledge through interaction with their environment [8]. Instagram can facilitate this process by enabling students to create their content, share their insights, and engage with vocabulary in real-life contexts. Such activities not only make learning more enjoyable but also promote critical thinking and creativity.

Despite the potential benefits of using Instagram for vocabulary learning, there are also challenges that educators must address. One concern is the potential for distraction, as social media is often associated with entertainment rather than education. Research has shown that students can become easily distracted by non-educational content on social media platforms [9]. Therefore, educators must carefully design Instagram activities to ensure that they remain focused on vocabulary learning objectives while minimizing distractions.

Another challenge is ensuring that all students have equal access to technology. While smartphone ownership is high among young people, not all students may have access to the same resources or internet connectivity. Educators must consider these disparities when implementing Instagram-based vocabulary learning activities to ensure inclusiveness and equity in education.

To address these challenges, this study will adopt a structured approach to using Instagram for vocabulary learning. The research will focus on designing specific vocabulary lessons delivered through Instagram posts and stories, incorporating interactive quizzes and visual aids to engage students effectively. A quantitative research method will be employed to assess the impact of these activities on vocabulary retention, utilizing pre/posttests to measure learning outcomes. This approach aims to provide empirical evidence of Instagram's effectiveness as a language learning tool, contributing to the broader field of educational technology.

The significance of this study lies in its potential to provide insights into innovative teaching methods that can enhance vocabulary learning. Exploring the role of Instagram in language acquisition, the research aims to inform educators about effective strategies for integrating social media into their teaching practices. Also, this study contributes to the growing body of literature on the intersection of technology and education, highlighting the importance of adapting pedagogical approaches to meet the needs of modern learners.

The integration of social media, particularly Instagram, into vocabulary learning presents a promising opportunity for educators to engage students in meaningful ways. Using the platform's visual and interactive features, this research aims to investigate its effectiveness in enhancing vocabulary acquisition among students. Through a quantitative approach, the study seeks to provide evidence-based insights that can inform teaching practices and contribute to the ongoing discourse on educational technology.

### **Literature Review**

Recent literature highlights a growing body of evidence supporting the use of Instagram and other mobile technologies in enhancing students' vocabulary acquisition, with several

studies providing quantitative data and statistical analysis to validate this approach. La'biran, Ruung, and Sallata (2024) conducted a quantitative study involving 25 purposively selected English Education students at UKI Toraja from the 2019–2022 academic years to determine the impact of Instagram on vocabulary learning. Their findings revealed a total item score of 1,534 out of a maximum possible 2,000, resulting in an index percentage of 76.7%, which is categorized as “Very High” on the Likert scale. The study identified several Instagram features as highly impactful in vocabulary development: searching vocabulary via hashtags, using diverse content formats such as images, videos, and text to aid memory retention, participating in interactive community engagement like live sessions, collaborating with peers on vocabulary-based projects, and interacting with native speakers. These statistically supported findings affirm the high potential of Instagram in facilitating vocabulary growth [10].

Researchers emphasize that adopting new teaching methods is essential for fostering students' growth and enhancing their profession-oriented communicative competence. Innovative learning approaches, in contrast to traditional aids, ensure more efficient access to information and knowledge transfer [11]. Notably, the widespread use of social networks in education has also become a key feature in modern teaching and learning practices. The integration of social media into educational contexts has garnered significant attention in recent years, particularly regarding its potential to enhance language learning. This literature review explores the role of Instagram in vocabulary acquisition, examining existing research on social media's impact on language education, the importance of vocabulary learning, and the effectiveness of visual learning strategies.

#### *Social Media in Language Education*

Social media platforms have transformed the landscape of education, providing new avenues for engagement and interaction. Numerous studies have explored the implications of social media on language learning, with findings indicating that these platforms can enhance student motivation and engagement. Instagram is noted for its visual-centric approach, which aligns well with contemporary pedagogical methods that emphasize interactive and engaging learning experiences. The platform's unique features, such as photos, videos, and stories, allow for creative expression and provide authentic contexts for language use, making it a valuable resource for vocabulary instruction.

#### *The Importance of Vocabulary Learning*

Vocabulary acquisition is an essential aspect of language learning and is strongly linked to overall language proficiency. Robust vocabulary enables students to comprehend texts, express their ideas effectively, and engage in meaningful communication. Research indicates that vocabulary knowledge is a predictor of reading comprehension and academic success [12]. Consequently, educators must prioritize vocabulary instruction to equip students with the language skills necessary for their academic and professional futures.

Various approaches to vocabulary teaching have been explored in literature. Traditional methods, such as rote memorization and explicit instruction, often fall short in terms of student engagement and retention. Recent studies suggest that contextualized vocabulary learning, where words are taught within meaningful contexts, can significantly improve retention and application. Social media platforms, especially Instagram, offer rich contextual learning opportunities, allowing students to encounter vocabulary in real-life situations, which can enhance their understanding and usage of new words [13].

#### *Visual Learning and Vocabulary Acquisition*

The significance of visual learning in education has been well-documented. Instagram's visual elements, such as images and videos, provide a platform for presenting vocabulary in engaging ways that can enhance learning outcomes.

The concept of dual coding theory posits that individuals process information more effectively when it is presented both verbally and visually [14]. This theory supports the notion that using Instagram for vocabulary learning can provide dual channels for processing information, allowing students to build stronger mental associations with words through visual representation. By utilizing Instagram to share visually appealing content related to vocabulary, educators can create an immersive learning experience that resonates with students.

#### *Engagement and Motivation Through Instagram*

One of the most compelling arguments for using Instagram in vocabulary learning is its potential to increase student engagement and motivation. Researchers point out that students are more likely to participate in learning activities that incorporate elements of social media, as these platforms align with their interests and daily habits. For example, a study by Al-Azawei et al. (2017) found that incorporating social media into language learning significantly increased students' motivation and interest in the subject matter [15].

Instagram's interactive features, such as likes, comments, and shares, allow students to engage with content actively. This level of engagement can foster a sense of community among learners, encouraging collaboration and peer interaction [16]. The ability to create and share content on Instagram empowers students to take ownership of their learning, promoting a more student-centered approach to vocabulary acquisition. Allowing students to curate their vocabulary-related content, educators can facilitate deeper learning experiences that encourage exploration and creativity.

#### *Challenges and Considerations*

Despite the potential benefits of using Instagram for vocabulary learning, several challenges must be considered. One concern is the risk of distraction associated with social media use. Educators must ensure that instructional activities are designed to maintain focus on vocabulary learning objectives while minimizing potential distractions.

Another challenge is the digital divide, which refers to the disparities in access to technology and the internet among students. While Instagram is widely used, not all students may have equal access to smartphones or stable internet connections, potentially hindering their ability to participate in Instagram-based learning activities. Educators should be mindful of these inequalities and strive to create inclusive learning environments that accommodate diverse student needs.

The literature indicates that Instagram has significant potential as a tool for enhancing vocabulary learning among students. Utilizing the platform's visual and interactive features, educators can create engaging learning experiences that promote vocabulary acquisition and retention. However, it is essential to address the challenges associated with social media use in educational settings to maximize its effectiveness. This review highlights the need for further research on the impact of Instagram on vocabulary learning, particularly in terms of its long-term effects on language proficiency and student engagement.

#### *Further Insights on Instagram's Role in Vocabulary Learning*

The potential of Instagram as a language learning tool extends beyond mere vocabulary acquisition; it also supports the development of intercultural competence and critical thinking skills. As students engage with diverse content on Instagram, they are exposed to various cultural contexts, fostering a deeper understanding of the language in use. According to Saville-Troike (2010), foreign languages are those that language learners rarely use in everyday life, as they are typically reserved for purposes like travel, intercultural communication, or as optional subjects in educational settings rather than for direct, practical application [17]. Interacting with posts from different cultures, students can explore vocabulary in context, enhancing their ability to use language appropriately in various social situations.



Additionally, the creative aspects of Instagram, such as creating posts, stories, and engaging with multimedia content, can significantly enhance learners' motivation. By allowing students to create their vocabulary-related content, such as visual flashcards or contextually rich posts, educators can promote active learning strategies that align with constructivist theories of education [18]. This approach encourages students to make personal connections with vocabulary, leading to improved retention and application.

The interactive nature of Instagram facilitates peer feedback and collaboration, which are essential components of effective language learning. By engaging in meaningful discussions through comments or collaborating on vocabulary challenges, students reinforce their understanding of new terms. This dynamic interaction aligns with Vygotsky's social constructivist theory, which emphasizes the critical role of social interaction in cognitive development. In this framework, Instagram becomes a tool for co-constructing knowledge, where learners benefit from shared experiences and peer support.

Furthermore, Instagram's diverse content formats—images, videos, and captions—enhance vocabulary learning by presenting new words in contextually rich and memorable ways. This multimodal approach helps learners retain vocabulary more effectively, as it caters to various learning styles and preferences. Features such as hashtags, stories, and comments further enrich this learning environment. For example, hashtags allow users to explore vocabulary within relevant themes or topics, while storytelling through captions encourages practical application and deeper engagement with new words [19].

Additionally, Instagram's user-friendly design supports learning by allowing students to explore profession-specific terminology, fostering motivation and relevance in their studies. Students often view Instagram as a bridge between social interaction and formal learning, seamlessly integrating language practice into their daily routines [20]. This perception highlights Instagram's ability to transform everyday activities into opportunities for language acquisition, blending informal and structured learning environments.

Ultimately, Instagram serves as a multifaceted tool for vocabulary learning, promoting language acquisition alongside critical thinking, intercultural competence, and collaborative skills. Its unique features empower educators to create engaging, dynamic learning experiences that cater to diverse student needs, offering a platform that is both flexible and effective for modern language education.

### **Methods and Materials**

The study involved 60 second-year pre-intermediate students enrolled in the Profession Oriented Foreign Language (POFL)/English for STEM course program at the International Information Technology University (IITU) during the 2024–2025 academic year. The participants were divided into four groups of 15 students each. Two groups (POFL Pre-intermediate 1 & 2,  $n = 30$ ) were assigned as experimental groups, while the other two groups (POFL Pre-intermediate 3 & 4,  $n = 30$ ) were designated as control groups. This quantitative study was conducted over a twelve-week period to evaluate the impact of Instagram on vocabulary acquisition among pre-intermediate-level students. The primary objective was to assess Instagram's effectiveness as a medium for improving learners' lexical resources, with a particular focus on profession-oriented vocabulary related to fields such as STEM and IT. Additionally, students engaged with IT-specific tools and platforms as part of their Instagram tasks. They explored terminology related to cloud computing, cybersecurity protocols, programming syntax, and data storage solutions. By embedding vocabulary instruction into real-world IT contexts—such as discussing the differences between relational databases or commenting on GitHub repository screenshots—learners were exposed to language that aligns with current industry practices.

The experimental groups utilized Instagram as a learning tool to complete various tasks designed to enhance vocabulary acquisition. These tasks included the following activities: creating English-language Instagram stories or posts related to assigned topics; sharing opinions and personal experiences through posts and comments; practicing real-time communication via direct messages or comments on Instagram posts; hosting live sessions to answer questions and discuss specific topics. The topics covered during the experiment included "Digital Age," "Cybercrime," "Data Storage," "Programming Languages," and "Current Trends in IT." All tasks were aligned with these profession-oriented topics to ensure relevance to the students' academic and professional needs. The control groups followed a traditional learning approach, which included classroom-based instruction, textbook exercises, and in-class discussions. These students studied the same topics as the experimental groups but without using social media tools.

Pre/posttests were administered to evaluate students' vocabulary acquisition. The tests included items that assessed knowledge of general vocabulary and profession-specific terms related to the study topics. The pretest established a baseline for each group's vocabulary knowledge, while the posttest measured their progress after the intervention. Since the groups were formed based on existing class sections of pre-intermediate STEM students, the focus was on their current level of proficiency in POFL/English for STEM contexts, rather than on prior technology experience or other individual background variables. Approximately 400 students were enrolled in the Profession Oriented Foreign Language (POFL)/English for STEM course at the pre-intermediate level during the academic year; from this population, four intact groups ( $n = 60$ ) were selected to participate in the study. This sample was chosen based on accessibility and logistical feasibility, and while not fully representative of the entire population, it provided a practical and sufficiently diverse basis for a classroom-level intervention. The data collected from the pre/posttests were analysed to compare the performance of the experimental and control groups. Statistical methods were employed to evaluate the effectiveness of Instagram-based learning in comparison to conventional teaching methods. The results of these analyses are detailed in the subsequent sections of the paper.

## Results

This study, conducted at the International Information Technology University (IITU), looks at how Instagram affects second year pre-intermediate level students' vocabulary learning, with the goal of statistically evaluating how well Instagram helps POFL pre-intermediate students improve their lexical resource/vocabulary range. In order to measure students' vocabulary before and after the intervention, teachers administered pre- and post-assessment tests.

During the 12-week intervention, Instagram was used by the experimental groups to complete a series of profession-oriented tasks aligned with the semester topics. These tasks included creating their own English-language Instagram stories or posts, sharing thoughts and experiences on assigned topics, practicing real-time communication through direct messages or comments, and hosting live sessions to answer questions and discuss specific topics (Figure 1). For instance, during the topic "Cybercrime," students were asked to create Instagram posts describing different types of cyberattacks and recommend protective measures. In the "Programming Languages" module, students shared comparisons of Python and JavaScript using visuals and short descriptions. As part of the "Digital Age" topic, students created mini-Instagram polls or quizzes to test their groupmates' knowledge of digital tools. These interactive and collaborative tasks aim to strengthen both general and professional vocabulary in a meaningful, real-world context.

Profession-Oriented Foreign Language Pre-intermediate level students studied the following topics during the semester: Digital Age, Cybercrime, Data Storage, Programming Language

es, and Current Trends in IT. All tasks were customized to reflect these profession-oriented themes and required students to apply target vocabulary actively in communicative settings. Figure 1 presents screenshots of student posts on Instagram, where they shared their experiences using various technological tools in education. These posts were part of the topic "Current Trends in IT," in which learners created visual and written reflections on tools such as Telegram, Google Drive, Zoom, and others.

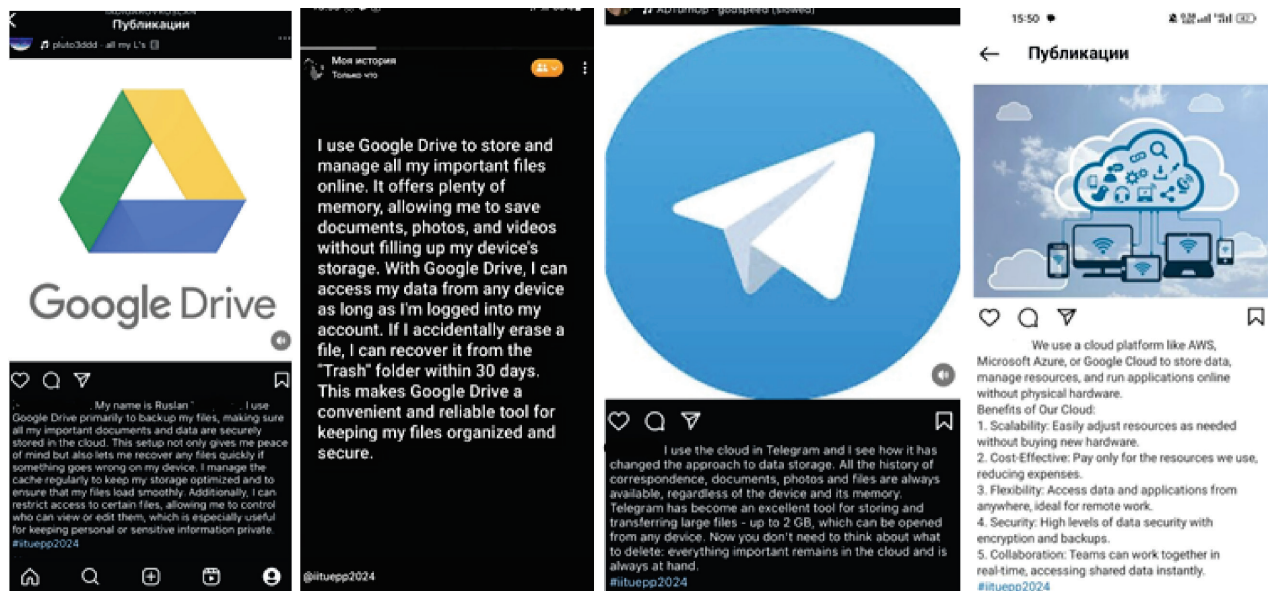


Figure 1. Instagram tasks

The pre/posttest results for the Profession-Oriented Foreign Language (POFL) Pre-intermediate students are presented in Table 2. The study included two experimental groups (Groups #1 and #2), which used Instagram-based tasks, and two control groups (Groups #3 and #4), which followed a traditional learning approach without integrating social media (Table 2).

Table 2. Results of pre/posttests

Groups	Pretest results 100%	Posttest results 100%
POFL Pre-intermediate #1	70.5	76,2
POFL Pre-intermediate #2	72.8	76,8
POFL Pre-intermediate #3	73,6	77,1
POFL Pre-intermediate #4	71.4	73,8
Note: Compiled by the authors		

POFL Pre-intermediate Group #1 (Experimental) showed an increase from 70.5% in the pretest to 76.2% in the posttest, reflecting a gain of 5.7 percentage points. POFL Pre-intermediate Group #2 (Experimental) improved from 72.8% to 76.8%, with a gain of 4.0 percentage points.

POFL Pre-intermediate Group #3 (Control) demonstrated a smaller increase, with scores rising from 73.6% to 77.1%, a gain of 3.5 percentage points. POFL Pre-intermediate Group #4 (Control) showed the least improvement, increasing from 71.4% to 73.8%, an increase of 2.4 percentage points. While all groups showed progress, the experimental groups that utilized Instagram for vocabulary learning exhibited more significant improvements compared to the control groups.



## Discussion

The findings highlight Instagram's significant potential as a powerful tool for improving vocabulary learning within professional language education. The experimental groups (POFL #1 and #2), which participated in Instagram-based learning activities, achieved notably higher vocabulary scores than the control groups (POFL #3 and #4), which utilized traditional methods. These scores represent the percentage of correct responses on vocabulary assessments administered before and after the intervention. This improvement among the experimental groups suggests that integrating social media into the learning process created a more engaging and interactive environment for students.

Moreover, the results of this study demonstrate that Instagram can significantly enhance vocabulary acquisition when integrated into profession-oriented language instruction. The higher posttest scores of the experimental groups compared to the control groups indicate that social media-based learning provides benefits beyond those offered by traditional textbook-centered methods. However, the value of these findings lies not only in statistical differences but also in the interpretation of why such differences emerged.

First, the structured use of Instagram tasks created authentic and interactive contexts for vocabulary practice, aligning with constructivist learning theory. Students were not passive recipients of knowledge; they became active creators of posts, and discussions. This active engagement promoted deeper cognitive processing of new words, thereby increasing retention. The comparative analysis of results shows that while control groups achieved modest gains of 2.4–3.5%, the experimental groups improved by 4.0–5.7%. Although these numerical differences may seem small, in a classroom setting they reflect a meaningful educational impact, especially considering that all groups studied the same profession-oriented topics.

Second, the study demonstrates that Instagram supports dual coding of information through both textual and visual channels which may explain why learners retained words more effectively. When students created visual representations of technical terms (e.g., infographics on cyberattacks or programming languages), they engaged both verbal and visual memory, reinforcing the meaning of new vocabulary. This feature is absent in traditional approaches and explains why Instagram tasks led to stronger outcomes.

Third, the results highlight the role of motivation and community in professional language learning. The experimental groups reported higher levels of engagement when tasks involved commenting on peers' posts or participating in live discussions. This peer-to-peer interaction not only fostered collaboration but also created accountability, which strengthened vocabulary practice. In contrast, the researchers limited the control groups to classroom-based exercises, which lacked such interactive and socially driven dimensions.

Finally, it is important to critically consider potential confounding factors. One limitation is the "novelty effect," whereby students may initially be more motivated simply because of the innovative nature of Instagram-based tasks. Future longitudinal studies should investigate whether these positive effects can be sustained over time. Additionally, while Instagram provided contextualized, profession-oriented learning, educators must remain vigilant about potential distractions and ensure that activities remain pedagogically structured.

Taken together, these findings suggest that the superiority of Instagram-based instruction lies not only in statistical differences but in the pedagogical shift it represents: moving vocabulary learning from abstract exercises to contextual, collaborative, and visually enriched experiences.

Tasks on Instagram, including creating stories, engaging in direct messaging, and participating in live discussions, provided authentic opportunities for vocabulary practice. These tasks were designed around profession-specific themes such as "Digital Age," "Cybercrime," "Data Storage," "Programming Languages," and "Current Trends in IT." The relevance of these

topics likely contributed to greater student motivation and deeper engagement among the experimental groups. By aligning language learning with real-world professional contexts, these activities encouraged students to actively use and retain new vocabulary.

In contrast, the control groups, which relied on traditional learning techniques like textbook-based exercises and classroom discussions, demonstrated comparatively lower vocabulary growth. While these conventional methods provided structure and familiarity, they lacked the interactive and dynamic elements that characterized Instagram-based learning. The results underline the importance of using innovative tools like social media to make language learning more engaging and effective.

However, despite its advantages, the use of Instagram in educational settings also presents certain limitations and challenges. One of the main concerns is the potential for distraction. Because Instagram is a social platform designed for entertainment, students may become sidetracked by non-educational content, reducing the overall effectiveness of the learning experience. Additionally, not all students may be equally familiar or comfortable with using Instagram as a learning tool, which could affect participation and learning outcomes.

Another drawback involves technological access and equity. Students without reliable internet access or compatible devices may face difficulties fully engaging in the tasks, which can create disparities in learning opportunities. Furthermore, monitoring student progress and ensuring academic integrity in informal learning spaces like Instagram can be challenging for educators.

Teachers also need to be cautious about privacy and data security. Encouraging students to use public platforms for academic purposes raises concerns about exposure to inappropriate content or online interactions outside the educator's control. Developing clear guidelines and ensuring digital literacy are essential to minimizing these risks.

The superior performance of the experimental groups raises critical questions about how traditional teaching methods can be improved to achieve similar outcomes. Although textbook exercises and in-class discussions are valuable components of language learning, they may need to be reimagined to compete with the immersive experiences offered by digital platforms. Educators could consider integrating features such as gamified learning, collaborative activities, and real-world simulations to enhance student engagement within traditional frameworks.

Moreover, we would like to emphasize the need for future research to explore hybrid instructional approaches that combine the strengths of both social media and traditional methods. Such approaches could balance the flexibility and interactivity of digital tools with the structure and depth of conventional techniques. For instance, incorporating Instagram tasks alongside classroom discussions could create a comprehensive learning environment that caters to diverse student preferences and learning styles. Hybrid methods may also address challenges such as accessibility and over-reliance on technology by ensuring that all students have equitable opportunities to benefit from innovative tools.

The findings also underscore the broader implications of using social media in professional language learning. Instagram's ability to facilitate interaction and contextualized vocabulary practice highlights its potential as a valuable supplement to traditional curricula. Additionally, its role in creating engaging, profession-oriented learning scenarios suggests that social media platforms can be strategically employed to bridge the gap between academic learning and real-world applications.

A comparative evaluation of both experimental and control group results reveals that the traditional approach may not suffice in meeting the demands of today's digitally native learners. While both groups showed improvement, the Instagram-based instruction clearly outperformed traditional methods in learner engagement and vocabulary acquisition. However,

this study critically acknowledges that Instagram, while beneficial, is not a catch-all solution. It is most effective when blended with structured, curriculum-aligned activities. This hybrid approach ensures that educational depth is not sacrificed for interactivity. Further critical assessment also suggests that Instagram's informal style must be guided with pedagogical structure to avoid dilution of academic content.

Overall, the results demonstrate that integrating Instagram into language education can significantly enhance vocabulary acquisition, particularly in professional contexts. Nonetheless, educators should remain aware of the method's potential downsides and take proactive steps to mitigate them. With thoughtful integration, clear guidelines, and ongoing support, social media tools like Instagram can be a powerful complement to existing language teaching strategies. By rethinking language teaching strategies, educators can create more dynamic and effective learning experiences tailored to the needs of modern learners.

### **Conclusion**

This study explored the potential of Instagram as an innovative tool for enhancing vocabulary learning among students. The findings suggest that Instagram's unique features—such as visual content, interactive engagement, and peer collaboration—create a dynamic and motivating environment conducive to language acquisition. The novelty of this research lies in its specific focus on profession-oriented vocabulary within the IT field, integrated into a visual and social platform used daily by students. Unlike prior studies that examined social media use in general terms, this study offers an original instructional model that blends Instagram's multimedia capabilities with profession-specific content. The authors developed tailored Instagram tasks based on STEM-related themes, reflecting a hands-on, classroom-embedded implementation strategy. This direct classroom application is a key original contribution that distinguishes this study from broader surveys or theoretical explorations. Moreover, the originality of this research lies in three key areas. First, unlike prior studies that examined social media use in general terms, this study specifically focused on profession-oriented vocabulary within IT and STEM contexts, bridging a gap between academic language learning and real-world professional communication. Second, the authors developed and implemented a structured instructional model that embedded Instagram into classroom practice, demonstrating a replicable framework that can be applied by other institutions. Third, this study contributes to Kazakhstani educational research by providing one of the first empirical examinations of Instagram-based learning in the local higher education context. Enabling students to create, share, and engage with vocabulary in context, Instagram facilitates a deeper understanding of word meanings and usage. Additionally, the platform promotes intercultural awareness and critical thinking, essential skills in today's globalized world. The integration of Instagram into vocabulary instruction not only addresses the traditional challenges of language learning but also aligns with contemporary educational practices that prioritize student engagement and active learning.

The author's contribution is therefore twofold: (1) the design of profession-specific Instagram tasks that integrate technical vocabulary into authentic communicative activities, and (2) the validation of this approach through a controlled classroom experiment, showing measurable improvements in students' lexical competence.

While the positive impact of Instagram on vocabulary acquisition is evident in the experimental groups, it is important to recognize the limitations of this method. The study primarily focuses on the advantages of using Instagram in vocabulary learning, yet challenges such as reliance on digital tools, potential distraction, and issues related to access for some students should be acknowledged. Moreover, while Instagram provided an engaging and interactive

environment, it may not be universally suitable for all learners, especially those with limited exposure to technology or those who prefer traditional learning methods.

#### *Limitations:*

While this study highlights the potential benefits of using Instagram for vocabulary learning, it is not without limitations.

1. **Sample Size and Diversity:** The research may be limited by the sample size and diversity of participants. A broader and more diverse sample could provide a more comprehensive understanding of the effectiveness of Instagram across different demographics. Additionally, qualitative methods such as interviews or open-ended feedback from diverse participants could enrich the analysis and reveal how experiences vary across subgroups.

2. **Self-Reported Data:** The reliance on self-reported data from participants regarding their engagement and learning outcomes may introduce bias. Future studies could incorporate observational methods or more objective assessments to validate findings.

3. **Limited Focus on Other Social Media Platforms:** This research primarily focused on Instagram, which may not reflect the effectiveness of other social media platforms in vocabulary learning. Comparative studies involving multiple platforms could provide a more nuanced understanding of their roles in language acquisition.

4. **Short-Term Study:** The study's duration may limit the ability to assess the long-term effects of Instagram on vocabulary learning. Longitudinal studies would be beneficial to determine sustained impacts over time.

#### *Recommendations:*

Based on the findings of this research, several recommendations can be made for educators and institutions looking to integrate Instagram into their vocabulary instruction:

1. **Curriculum Integration:** Educators should consider incorporating Instagram activities into their existing curriculum. This could include creating assignments that require students to post vocabulary-related content or engage in language challenges that promote interaction.

2. **Training and Support:** Institutions should provide training and support for teachers to effectively utilize Instagram in the classroom. Professional development workshops can equip educators with strategies to integrate social media into their teaching practices.

3. **Monitoring and Guidance:** It is essential for educators to establish guidelines for appropriate use of Instagram in the classroom. Monitoring student interactions and providing constructive feedback can enhance the learning experience and ensure a safe online environment.

4. **Assessment of Learning Outcomes:** Future research should investigate the long-term impact of Instagram on vocabulary retention and overall language proficiency. Implementing assessments to measure learning outcomes can provide valuable insights into the effectiveness of this approach.

## References

- [1] Hamada, M. A., & Abiche, A. E. (2023). Impact of data mining and social media marketing to enrich customer satisfaction. DTESI 2023: Proceedings of the 8th International Conference on Digital Technologies in Education, Science, and Industry, Almaty, Kazakhstan, 1-8. CEUR Workshop Proceedings. <https://ceur-ws.org/ISSN1613-0073>
- [2] Hwang, G. J., Lai, C. L., & Wang, S. Y. (2015). Seamless flipped learning: A mobile technology-enhanced flipped classroom with effective learning strategies. *Journal of Computers in Education*, 2(4), 449-473. <https://doi.org/10.1007/s40692-015-0043-0>
- [3] Sun, Y., Wang, J., Dong, Y., Zheng, H., Yang, J., Zhao, Y., & Dong, W. (2021). The relationship between reading strategy and reading comprehension: A meta-analysis. *Frontiers in Psychology*, 12, 635289. <https://doi.org/10.3389/fpsyg.2021.635289>

- [4] Amin, B., Rafiq, R., & Mehmood, N. (2020). The impact of social media in English language learning. *Journal of Critical Reviews*, 7(10), 3126-3135. <https://doi.org/10.31838/jcr.07.10.50>
- [5] Mayer, R. E. (2009). *Multimedia learning* (pp. 1-350). Cambridge University Press. <https://doi.org/10.1017/CBO9780511811678>
- [6] Belgibayeva, G. K., Baimakhan, A. S., & Akparova, Zh. M. (2024). The formation of English language communicative competence through podcasts. *Iasui Universitetinin Habarshysy*, (2), 232–242. <https://doi.org/10.47526/2024-2/2664-0686.57>
- [7] Al-Qaysi, N., Mohamad-Nordin, N., & Al-Emran, M. (2020). A systematic review of social media acceptance from the perspective of educational and information systems theories and models. *Journal of Educational Computing Research*, 57(8), 2085-2109. <https://doi.org/10.1177/0735633118817879>
- [8] Piaget, J. (1976). *The child and reality: Problems of genetic psychology* (pp. 1-340). Penguin Books.
- [9] Jin, Y., Zhou, W., Zhang, Y., Yang, Z., & Hussain, Z. (2024). Smartphone distraction and academic anxiety: The mediating role of academic procrastination and the moderating role of time management disposition. *Behavioral Sciences*, 14(9), 820. <https://doi.org/10.3390/bs14090820>
- [10] La'biran, R., Ruung, T., & Sallata, Y. (2024). Exploring the influence of Instagram usage on English education students' vocabulary acquisition at UKI Toraja. *International Journal of Social Science and Human Research*, 7(1), Article 62. <https://doi.org/10.47191/ijsshr/v7-i01-62>
- [11] Kaldarova, A., Kulgildinova, T., Berdenova, S., Zakirova, G., & Zhanabayeva, S. (2024). Subject-related communicative language competence: Exploring future information technology specialists' learning and teaching. *Journal of Education and E-Learning Research*, 11(1), 26–35. <https://doi.org/10.20448/jeelr.v11i1.5288>
- [12] Nation, I. S. P. (2001). *Learning vocabulary in another language* (pp. 1-350). Cambridge University Press.
- [13] Schmitt, N. (2000). *Vocabulary in language teaching* (pp. 1-300). Cambridge University Press.
- [14] Paivio, A. (1986). *Mental representations: A dual-coding approach* (pp. 1-300). Oxford University Press.
- [15] Al-Azawei, A., Parslow, P., & Lundqvist, K. (2017). The effect of Universal Design for Learning (UDL) application on e-learning acceptance: A structural equation model. *The International Review of Research in Open and Distributed Learning*, 18(6), 1-15. <https://doi.org/10.19173/irrodl.v18i6.2880>
- [16] Nasution, A. K. P. (2022). Social media used in language learning: Benefits and challenges. *Journal of Linguistics, Literature, and Language Teaching (JLLLT)*, 1(2), 59–68. <https://doi.org/10.37249/jllt.v1i2.396>
- [17] Saville-Troike, M. (2006). *Introducing second language acquisition* (pp. 1-250). Cambridge University Press.
- [18] Jonassen, D. (1999). Designing constructivist learning environments. In C. M. Reigeluth (Ed.), *Instructional-design theories and models: A new paradigm of instructional theory* (pp. 215-239). Pennsylvania State University.
- [19] Nasution, A. (2023). Instagram in English language learning: A systematic literature review. *Journal of Linguistics, Literature, and Language Teaching (JLLLT)*, 3(1), 33–52. <https://doi.org/10.37249/jllt.v3i1.708>
- [20] Lailiyah, M., & Setyaningsih, L. (2020). Students' perception of online communication language learning through Instagram. *EnJourMe (English Journal of Merdeka): Culture, Language, and Teaching of English*, 5(2), 188–195. <https://doi.org/10.26905/enjourme.v5i2.5202>