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DEVELOPING ENGLISH WRITING SKILLS THROUGH TECHNOLOGY AND SELF-REGULATION IN DIFFERENTIATED INSTRUCTION IN UZBEKISTAN

Selimova Gulsana

Tashkent University of Humanities, English language teacher

ORCID: 0009-0006-2227-5293

Abstract: This study investigates the impact of modern technology on differentiated instruction, particularly in developing writing skills through digital resources. Based on an experiment conducted with first-year undergraduate students in Uzbekistan, platforms such as Formative.com, Nearpod.com, Ludwig.guru, and Padlet.com were found to significantly enhance students' writing abilities. The research aimed to evaluate the effectiveness of using technology in differentiated writing instruction. The findings demonstrated the superiority of technology-enhanced approaches over traditional methods, with notable improvements observed in grammatical accuracy, content organization, and student motivation.

Key words: differentiated instruction, writing skills, digital technologies, self-regulated learning, English language, student motivation.

Annotatsiya: Bu tadqiqotda zamonaviy texnologiyalarning farqlashgan ta'lim usullari ta'siri, ayniqsa yozuv ko'nikmalarini rivojlantirishda onlayn platformalardan qanday foydalanish mumkinligi o'rganilgan. O'zbekistonning birinchi kurs talabalari bilan olib borilgan eksperiment natijalariga ko'ra, Formative.com, Nearpod.com, Ludwig.guru va Padlet.com kabi platformalar yozuv malakalarini sezilarli darajada yaxshilashga imkon beradi. Ushbu tadqiqot ingliz tilida yozishni o'rgatishda differentsial yondashuvning samaradorligini baholash maqsadida amalga oshirilgan. Natijalar texnologiya yordamidagi farqlashgan ta'lim usullari an'anaviy usullarga nisbatan afzalligini ko'rsatdi. Talabalar yozuvining grammatik aniqlik, mazmun to'liqligi va motivatsiyasi jihatidan katta yutuqlar qayd etildi.

Kalit so'zlar: farqlashgan ta'lim usullari, yozuv ko'nikmalari, raqamli texnologiyalar, mustaqil o'qitish, ingliz tili, o'quvchilar motivatsiyasi.

Аннотация: В данном исследовании изучается влияние современных технологий на дифференцированное обучение, особенно в контексте развития навыков письма с использованием цифровых ресурсов. На основе эксперимента, проведенного среди первокурсников университетов Узбекистана, платформы, такие как Formative.com, Nearpod.com, Ludwig.guru и Padlet.com, значительно улучшили навыки письма студентов. Исследование направлено на оценку эффективности использования технологий в дифференцированном обучении письму. Результаты показали преимущество технологически усиленного обучения перед традиционными методами. Были зафиксированы значительные улучшения в грамматической точности, содержательности текста и мотивации студентов.

Ключевые слова: дифференцированное обучение, навыки письма, цифровые технологии, саморегулируемое обучение, английский язык, мотивация студентов.

INTRODUCTION

In recent years, the integration of technology into education has transformed traditional teaching methodologies, particularly in the realm of language instruction. In Uzbekistan, where English is increasingly recognized as a critical skill for global communication, educators face the challenge of catering to diverse learner needs within mixed-ability classrooms. Differentiated instruction, which tailors teaching methods to accommodate individual learning styles, has emerged as a promising approach to address this challenge. When combined with self-regulation strategies and technological tools, differentiated instruction can significantly enhance students' English writing skills. The rapid advancement of educational technologies offers innovative solutions for fostering self-regulated learning and addressing the unique needs of learners. Tools such as digital platforms, AI-driven feedback systems, and collaborative online environments enable students to practice writing at their own pace while receiving personalized guidance. These resources not only support differentiated instruction but also empower learners to take ownership of their progress. This study explores how technology and self-regulation



can be effectively integrated into differentiated instruction to improve English writing skills among students in Uzbekistan. By examining the interplay between these elements, the research aims to provide practical insights for educators seeking to enhance writing proficiency in diverse classroom settings.

LITERATURE REVIEW

Differentiated instruction is rooted in the understanding that students possess varying levels of readiness, interests, and learning preferences. Carol Tomlinson, a pioneer in this field, emphasizes the importance of adapting content, process, and product to meet individual needs (Tomlinson, 2001). In the context of English language teaching, differentiation allows instructors to tailor writing tasks to suit students' proficiency levels, ensuring that all learners are appropriately challenged. For instance, while advanced students may focus on refining complex sentence structures, beginners can concentrate on mastering basic grammar and vocabulary. This approach not only enhances engagement but also fosters a positive learning environment where students feel supported and motivated.

Role of Technology in Language Learning. The incorporation of technology into language education has revolutionized the way students acquire writing skills. Digital tools such as interactive platforms, automated feedback systems, and collaborative writing environments offer scalable solutions to the limitations of traditional teaching methods. Research indicates that technology-enhanced instruction improves writing fluency, grammatical accuracy, and overall motivation by providing immediate feedback and opportunities for self-assessment (Bakla, 2020). For example, platforms like Nearpod and Padlet enable students to engage in collaborative writing activities, while tools like Ludwig.guru offer AI-driven suggestions to refine their work. These resources not only facilitate self-regulated learning but also align with Vygotsky's social constructivist theory, which highlights the role of scaffolding and peer interaction in cognitive development (Vygotsky, 1984).

Self-regulation plays a pivotal role in developing writing skills, as it encourages learners to set goals, monitor their progress, and reflect on their performance. Zimmerman's model of self-regulated learning underscores the importance of metacognitive strategies—such as planning, organizing, and revising—in achieving mastery over writing tasks (Zimmerman, 2002). In the context of differentiated instruction, self-regulation empowers students to take charge of their learning journey, regardless of their initial proficiency level. For instance, students can use digital portfolios to track their writing progress or employ online rubrics to evaluate their work against predefined criteria. By fostering a sense of autonomy and accountability, self-regulation complements the adaptive nature of differentiated instruction.

Recent studies have demonstrated the efficacy of combining technology with differentiated instruction to improve writing outcomes. Kolb's Triple E Framework, which evaluates technology's ability to Engage, Enhance, and Extend learning opportunities, provides a robust theoretical foundation for this approach (Kolb, 2021). For example, a study by Loncar et al. (2023) revealed that students who utilized technology-mediated feedback systems showed significant improvements in grammatical accuracy and content organization compared to those relying solely on traditional methods. Furthermore, Campbell (2019) highlighted the potential of digital tools to bridge gaps in mixed-ability classrooms by offering customizable interfaces and adaptive feedback mechanisms. Despite these advantages, challenges remain, such as ensuring equitable access to technology and addressing cultural nuances in AI-generated suggestions. Addressing these issues requires careful implementation strategies and ongoing refinement of digital resources.

In Uzbekistan, where English language education is gaining prominence, the integration of technology and self-regulation into differentiated instruction holds immense potential. The country's diverse student population, characterized by varying levels of linguistic exposure and academic preparedness, necessitates innovative approaches to writing instruction. By leveraging digital tools and fostering self-regulated learning, educators can create inclusive learning environments that cater to individual needs. This study seeks to contribute to the growing body of research on technology-enhanced differentiated instruction by examining its impact on English writing skills among students in Uzbekistan.

RESEARCH METHODOLOGY

In this study, 106 first-year undergraduate students from Tashkent participated. Participants were selected from two intact classes, ensuring a diverse representation of learners with varying levels of English proficiency. The students were randomly assigned to either the experimental group or the control group, with 53 participants in each group. This sample size was deemed sufficient to ensure statistical reliability while maintaining manageable classroom dynamics.

To collect comprehensive data, a combination of quantitative and qualitative instruments was employed: ⁽¹⁾

Questionnaire (Scale): A structured questionnaire was designed to assess students' perceptions of their

writing skills, motivation, and engagement with the instructional methods. The questionnaire utilized a Likert scale to measure responses across various dimensions, such as confidence in writing, perceived usefulness of technology, and satisfaction with feedback mechanisms. ⁽²⁾

Semi-Structured Interview: Semi-structured interviews were conducted with a subset of participants from both groups to gain deeper insights into their experiences. These interviews explored themes such as challenges faced during writing tasks, the role of technology in learning, and the effectiveness of feedback received. ⁽³⁾

Writing Performance Metrics: Writing fluency, grammatical accuracy, content organization, and overall writing quality were evaluated using standardized rubrics. Pre- and post-tests were administered to measure improvements in these areas over the course of the intervention. ⁽⁴⁾

Technology Usage Logs: For the experimental group, platform analytics from tools like Formative.com, Nearpod.com, Ludwig.guru, and Padlet.com were used to track engagement and progress. These logs provided valuable data on task completion rates, frequency of tool usage, and patterns of interaction.

The study employed a mixed-methods approach to gather both quantitative and qualitative data. The experimental group received differentiated writing instruction through a variety of online tools designed to support self-regulated learning and cater to individual needs. Formative.com was used for completing writing activities both in the classroom and at home, allowing students to receive instant feedback on grammar, vocabulary, and structure. Nearpod.com was employed for assigning individual homework tasks, enabling students to work at their own pace and access multimedia resources to enhance their understanding. Ludwig.guru provided AI-driven automated feedback on sentence construction, word choice, and grammar, helping students refine their writing by offering suggestions tailored to their proficiency level. Padlet.com facilitated collaborative writing exercises, allowing students to engage in peer review and co-create content in real time. To monitor progress, all writing tasks completed by the experimental group were stored on the respective platforms, creating a digital record that enabled continuous assessment and analysis of performance trends. In contrast, the control group followed a conventional teaching approach, where writing instruction was delivered through paper-based scaffolding. Students in this group completed writing tasks in class and submitted them for teacher feedback, which was provided exclusively during classroom sessions, focusing on grammar, coherence, and content development. No digital tools or platforms were used in this group.

Table 1: Summary of the intervention

Aspect	Experimental group (technology enhanced writing instruction)	Control group (traditional paper-based writing instruction)
Duration	12 weeks	12 weeks
Frequency	Weekly writing tasks	Weekly writing tasks
Writing tasks	Varied difficulty levels, adaptive feedback, customizable interfaces, scaffold options, language support	Standardized tasks with fixed difficulty levels
Tools used	Formative.com, Nearpod.com, Ludwig.guru, Padlet.com	None
Feedback	AI-driven feedback (Ludwig.guru), peer feedback (Padlet.com), teacher feedback	Teacher feedback only
Focus area	Writing fluency, grammatical accuracy, content organization, collaborative writing, self-regulation	Writing fluency, grammatical accuracy, content organization

Quantitative data collected from pre- and post-tests, questionnaires, and platform analytics were analyzed using descriptive and inferential statistics. Descriptive statistics were used to summarize performance metrics, while paired t-tests and ANOVA were employed to compare improvements between the two groups. Qualitative data from semi-structured interviews and open-ended questionnaire responses were transcribed and coded using thematic analysis. Emerging themes related to student experiences, challenges, and perceptions of technology were identified and discussed. Table 2 presents the descriptive statistics for pre- and post-test scores, highlighting changes in overall writing quality, grammatical range and errors, content development, and writing speed. Additional tables (Table 3) provide detailed results for specific focus areas and qualitative findings.

The quantitative analysis focused on comparing pre- and post-test scores to evaluate the effectiveness of technology-enhanced differentiated instruction versus traditional paper-based methods. The results demonstrated a significant improvement in the experimental group compared to the control group across all measured dimensions of writing proficiency.



Table 2: Descriptive statistics for pre- and post-tests scores

Measure	Groups	Pre-Test Mean	Post-Test Mean	Improvement
Overall Writing Quality	Experimental Group	3.45 (0.76)	4.89 (0.52)	41.7%
	Control Group	3.51 (0.72)	3.92 (0.64)	11.7%
Grammatical Range and Errors	Experimental Group	2.87 (0.63)	4.32 (0.58)	49.8%
	Control Group	2.91 (0.61)	3.25 (0.59)	11.7%
Content (Ideas Development)	Experimental Group	3.12 (0.59)	4.56 (0.48)	46.2%
	Control Group	3.08 (0.62)	3.41 (0.55)	10.7%
Writing Speed	Experimental Group	2.78 (0.54)	4.12 (0.49)	48.2%
	Control Group	2.81 (0.52)	3.09 (0.51)	9.9%

The data clearly indicate that students in the experimental group, who utilized online platforms such as Formative.com, Nearpod.com, Ludwig.guru, and Padlet.com, achieved substantially higher gains in writing fluency, grammatical accuracy, content organization, and overall writing quality compared to their peers in the control group. These findings underscore the potential of technology-enhanced differentiated instruction to foster significant improvements in English writing skills.

The qualitative analysis provided deeper insights into students' perceptions of their writing motivation and self-regulation abilities. Semi-structured interviews and questionnaire responses revealed that participants in the experimental group reported higher levels of engagement, autonomy, and confidence in their writing abilities compared to those in the control group.

Table 3: Results for writing motivation and self-regulation

Theme	Experimental Group Responses	Control Group Responses
Engagement	"Using Ludwig.guru made me feel like I was improving because it gave me instant feedback." "Padlet helped me see how others write, which inspired me."	"I liked writing sometimes, but without tools, I felt stuck when I made mistakes."
Autonomy	"I could practice anytime with Nearpod, which made me feel more in control of my learning."	"I had to wait for the teacher to correct my work, so I didn't feel independent."
Confidence	"The AI feedback from Ludwig.guru helped me understand grammar rules better."	"I wasn't sure if I was improving because the teacher's feedback was limited to class time."
Collaboration	"Working on Padlet with classmates was fun and motivating."	"We didn't have many chances to share our work, so I missed seeing others' ideas."
Challenges	"Sometimes Ludwig.guru suggested changes I didn't agree with, but I learned to adapt."	"It was hard to stay motivated without digital tools or extra help outside class."

Participants in the experimental group highlighted the benefits of using technology to enhance self-regulated learning. They appreciated the ability to receive instant feedback, collaborate with peers, and track their progress over time. In contrast, students in the control group expressed frustration with the lack of resources and opportunities for independent practice, which limited their motivation and self-regulation.

The findings of this study highlight the significant impact of integrating technology into differentiated writing instruction for first-year undergraduate students in Uzbekistan. The results demonstrate that students in the experimental group, who utilized platforms such as Formative.com, Nearpod.com, Ludwig.guru, and Padlet.com, achieved markedly higher improvements in writing fluency, grammatical accuracy, content organization, and overall motivation compared to their peers in the control group. These outcomes align with existing literature on the transformative potential of technology-enhanced learning environments (Bakla, 2020; Loncar et al., 2023). One key insight from the study is the role of self-regulation in fostering writing proficiency. Students in the experimental group reported increased autonomy and confidence due to the adaptive feedback mechanisms provided by AI-driven tools like Ludwig.guru. This aligns with Zimmerman's model of self-regulated learning, which emphasizes the importance of goal-setting, monitoring progress, and reflecting on performance (Zimmerman, 2002). By empowering learners to take ownership of their writing development, these tools effectively bridge gaps in mixed-ability classrooms, addressing the diverse needs of students. Furthermore, the collaborative nature of platforms like Padlet.com facilitated peer interaction and co-creation, reinforcing Vygotsky's social constructivist theory (Vygotsky, 1984).

Participants in the experimental group frequently noted that working collaboratively enhanced their understanding of writing conventions and inspired them to experiment with new ideas. In contrast, students in the

control group expressed frustration with the lack of opportunities for independent practice and peer engagement, which limited their motivation and progress. Despite the promising results, challenges remain in implementing technology-enhanced differentiated instruction. For instance, some students in the experimental group reported occasional mismatches between AI-generated suggestions and their intended writing styles. This highlights the need for ongoing refinement of AI algorithms to account for cultural nuances and individual preferences. Additionally, equitable access to digital tools remains a concern, particularly in resource-limited settings. Addressing these issues requires careful planning and sustained institutional support to ensure that all learners benefit from technological advancements.

CONCLUSION AND RECOMMENDATIONS

In summary, the study underscores the potential of combining technology with differentiated instruction to enhance English writing skills among EFL learners. By leveraging digital resources and fostering self-regulated learning, educators can create inclusive and engaging learning environments that cater to diverse learner needs. This study examined the effectiveness of integrating technology and self-regulation into differentiated writing instruction for first-year undergraduate students in Uzbekistan. The results indicate that technology-enhanced approaches significantly outperform traditional paper-based methods in improving writing fluency, grammatical accuracy, content organization, and overall motivation.

Platforms such as Formative.com, Nearpod.com, Ludwig.guru, and Padlet.com played a pivotal role in facilitating personalized feedback, promoting collaboration, and supporting self-regulated learning. The findings contribute to the growing body of research on leveraging technology to address the unique needs of EFL learners. They also reinforce the theoretical foundations of differentiated instruction and self-regulated learning, demonstrating how digital tools can serve as effective scaffolds for developing writing proficiency. However, the study also highlights the importance of addressing challenges such as contextual accuracy, over-reliance on AI-generated feedback, and equitable access to technology. Moving forward, educators and policymakers should prioritize the integration of technology into language instruction while ensuring that implementation strategies are tailored to local contexts. Future research could explore long-term effects of technology-enhanced differentiated instruction, examine its applicability across different educational levels, and investigate strategies for mitigating potential drawbacks. By embracing innovative tools and pedagogical approaches, Uzbekistan's education system can empower students to develop essential writing skills and thrive in an increasingly globalized world.

References:

1. Bakla, A. (2020). A mixed methods study of feedback modes in L2 writing. *Language Learning & Technology*, 24, 107–128. <https://doi.org/10.10125/44712>
2. Campbell, M. (2019). Teaching academic writing in higher education. *Educational Quarterly Review*, 2, 608–614. <https://doi.org/10.31014/aior.1993.02.03.92>
3. Kolb, L. (2021). The Triple E Framework: Using technology to engage, enhance, and extend learning.
4. Loncar, M., Schams, W., & Liang, J. S. (2023). Multiple technologies, multiple sources: Trends and analyses of the literature on technology-mediated feedback for L2 English writing published from 2015–2019. *Computer Assisted Language Learning*, 36, 722–784. <https://doi.org/10.1080/09588221.2021.1943452>
5. Tomlinson, C. A. (2001). *How to differentiate instruction in mixed-ability classrooms* (2nd ed.).
6. Tomlinson, C. A. (2005). Grading and differentiation: Paradox or good practice? *Theory Into Practice*, 44, 262–269.
7. Vygotsky, L. S. (1984). The problem of age. *Pedagogical*.
8. Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice*, 41(2), 64–70. https://doi.org/10.1207/s15430421tip4102_2

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- 13.00.00 Pedagogika fanlari
 - 13.00.01 Pedagogika nazariyasi. Pedagogik ta'limotlar tarixi
 - 13.00.02 Ta'lim va tarbiya nazariyasi va metodikasi (sohalar bo'yicha)
 - 13.00.03 Maxsus pedagogika
 - 13.00.04 Jismoniy tarbiya va sport mashg'ulotlari nazariyasi va metodikasi
 - 13.00.05 Kasb-hunar ta'limi nazariyasi va metodikasi
 - 13.00.06 Elektron ta'lim nazariyasi va metodikasi (ta'lim sohaları va bosqichlari bo'yicha)
 - 13.00.07 Ta'limda menejment
 - 13.00.08 Maktabgacha ta'lim va tarbiya nazariyasi va metodikasi
 - 13.00.09 Ijtimoiy pedagogika
 - 07.00.00 Tarix fanlari
 - 19.00.00 Psixologiya fanlari
 - 01.00.00 Fizika-matematika fanlari
 - 02.00.00 Kimyo fanlari
 - 03.00.00 Biologiya fanlari
 - 09.00.00 Falsafa fanlari
 - 10.00.00 Filologiya fanlari
 - 11.00.00 Geografiya fanlari



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Ingliz tili muharriri: Feruz Hakimov

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