

Торайғыров университетінің
ҒЫЛЫМИ ЖУРНАЛЫ

НАУЧНЫЙ ЖУРНАЛ
Торайғыров университета

**ТОРАЙҒЫРОВ
УНИВЕРСИТЕТІНІҢ
ХАБАРШЫСЫ**

Педагогикалық сериясы
1997 жылдан бастап шығады



**ВЕСТНИК
ТОРАЙҒЫРОВ
УНИВЕРСИТЕТА**

Педагогическая серия
Издается с 1997 года

ISSN 2710-2661

№ 1 (2026)

Павлодар

НАУЧНЫЙ ЖУРНАЛ
Торайгыров университета

Педагогическая серия
выходит 4 раза в год

СВИДЕТЕЛЬСТВО

о постановке на переучет периодического печатного издания,
информационного агентства и сетевого издания

№ KZ03VPY00029269

выдано

Министерством информации и коммуникаций
Республики Казахстан

Тематическая направленность

публикация материалов в области педагогики,
психологии и методики преподавания

Подписной индекс – 76137

<https://doi.org/10.48081/BGQF1823>

Бас редакторы – главный редактор

Тулекова Г. М.

доктор PhD, профессор

Заместитель главного редактора

Жуматаева Е., *д.п.н., профессор*

Ответственный секретарь

Попандопуло А. С., *доктор PhD, профессор*

Редакция алқасы – Редакционная коллегия

Магауова А. С.,

д.п.н., профессор

Бекмагамбетова Р. К.,

д.п.н., профессор

Самекин А. С.,

доктор PhD, ассоц. профессор

Син Куэн Фунг Кеннет,

д.п.н., профессор (Китай)

Желвис Римантас,

д.п.н., к.псих.н., профессор (Литва)

Авагян А. В.,

д.п.н., ассоц. профессор (Армения)

Томас Чех,

д.п.н., доцент п.н. (Чешская Республика)

Искакова З. С.

технический редактор

За достоверность материалов и рекламы ответственность несут авторы и рекламодатели

Редакция оставляет за собой право на отклонение материалов

При использовании материалов журнала ссылка на «Вестник Торайгыров университета» обязательна

<https://doi.org/10.48081/BGQF1854>

***R. S. Zheldibayeva**

Zhetysu University named after Ilyas Zhansugurov,
Republic of Kazakhstan, Taldykorgan;
University of Illinois Urbana-Champaign, Champaign, US
ORCID: <https://orcid.org/0000-0002-8757-0748>
*e-mail: r.zheldibayeva@zu.edu.kz/raigulz@illinois.edu

ENHANCING ACADEMIC ENGLISH THROUGH MULTIMEDIA AND AI FEEDBACK: A CGSCHOLAR STUDY AMONG NON-LANGUAGE MAJORS

This research explores combined impact of multimedia integration and AI-driven feedback on the clarity, depth as well as overall quality of the academic writings provided for online courses of non-language major students offered by learning Design and Leadership (LDL) program of the University of Illinois Urbana-Champaign (UIUC) through CGScholar (Common Ground Scholar) platform. The LDL designed online courses require all participants to complete a writing task and each writing project is expected to include at least seven multimedia elements as a key component. We focused on five selected writing projects of the EPOL 580 FA 24 course community, analyzing how multimedia elements such as videos, tables, infographics, and images (including AI-generated ones) supported writing quality. We used a qualitative content analysis, using coding approach to explore the way multimedia elements contributed to clarity, depth, and engagement in writing. This included mapping multimedia, categorizing their role within the text, and identifying patterns and themes. Our findings suggest that multimedia and AI integration strengthens academic writing by adjusting complex concepts, providing visual evidence for arguments, and maintaining reader engagement. Moreover this study highlights the potential of CGScholar to foster multimodal literacy and offer valuable insights for educators and curriculum designers to incorporate multimedia in the digital learning environment.

Keywords: AI-assisted writing, multimedia integration, academic writing, non-language majors, multimodal literacy, CGScholar, educational technology.

Introduction

CGScholar is an innovative digital platform which was designed to transform traditional academic learning environment by means of fostering collaboration, multimodal communication, and prompt AI feedback mechanisms. CGScholar emphasizes learner agency and co-creation of knowledge through dynamic and interactive tools [1]. The platform supports various educational practices, including structured writing projects, peer review, and collaborative learning modules. Its functionalities enable participants to engage deeply with content by incorporating multimedia elements, iterative revisions, and dialogical feedback, which align with contemporary pedagogical approaches focusing on active learning and knowledge construction. Multimedia integration in educational contexts has been widely recognized for enhancing engagement, comprehension, and overall learning outcomes.

Babiker highlights that multimedia enriches traditional teaching by addressing diverse learning styles, including visual, auditory, and kinesthetic modalities. This engagement is further supported by the use of video, audio, and interactive graphics, which create a richer learning environment [2]. Within CGScholar, multimedia bridges abstract concepts and tangible applications, allowing learners to visualize complex ideas and create multimodal artifacts [3]. For example, educators and learners use tools on the platform to embed images, videos, and infographics within their research, providing an interactive and immersive experience that fosters deeper conceptual understanding [4].

Academic writing, traditionally confined to linear textual representations, has evolved with the advent of digital platforms such as CGScholar. The platform allows writers to embed multimedia elements directly into their scholarly works, enhancing clarity and engagement. Cope and Kalantzis (2024) argue that multimedia integration not only improves the presentation of research but also deepens critical thinking by encouraging learners to connect evidence with visual aids. Additionally, the iterative AI feedback mechanism on CGScholar, supported by AI-driven analytics and peer reviews, mirrors the scholarly peer-review process [1, p.3]. This approach fosters reflective practices, enabling students to refine their arguments and improve the quality of their writing [5]. The platform also facilitates collaborative writing projects, where learners create shared content while honing their academic and digital literacy skills.

There is extensive research on the benefits of multimedia and digital learning platforms. However, this is one of the first studies examining how CGScholar participants utilize multimedia in academic writing. The existing literature focuses mainly on the platform's general functions or its role in developing collaborative learning. However, a gap exists in understanding the pedagogical

implications and cognitive impact of multimedia integration within scholarly. This research analyzes the use of multimedia by CGScholar participants in their academic submissions and explores how these elements enhance communication, engagement, and learning outcomes.

Materials and methods

This study uses qualitative content analysis to explore how multimedia and AI feedback integration influences the clarity, depth, and overall quality of academic writing within CGScholar submissions. 5 writing projects from CGScholar EPOL 580 FA 24 course participants were analyzed to examine how multimedia elements are utilized to meet academic requirements and strengthen the participants' arguments. The sample consists of 5 writings from CGScholar participants across one course. All selected writings meet the platform's minimum requirement of incorporating at least seven multimedia elements. The diversity of multimedia used includes: tables, YouTube videos, pictures (both traditional and AI-generated). This purposive sampling ensures a varied representation of multimedia types to assess their individual and collective contributions to academic writing. Data were collected directly from the CGScholar platform, focusing on final submissions of participants' Work Projects. Each writing was reviewed for: type and number of multimedia elements included, placement and context of multimedia within the text, relevance of multimedia to the writing's arguments and conclusions, analysis framework. The interface of the platform is shown in the Figure 1.

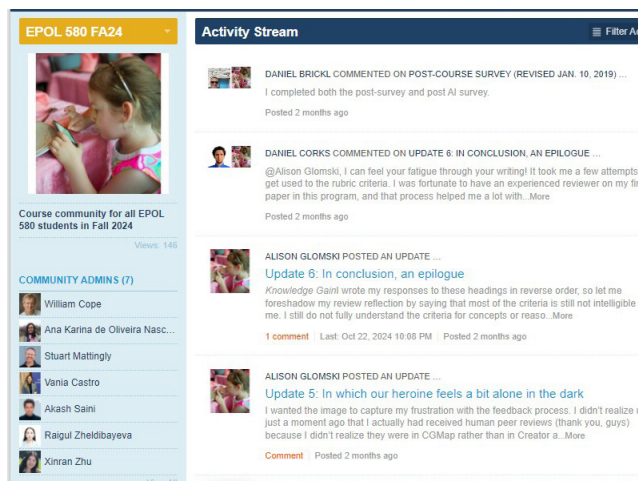


Figure 1 –The interface of the CGScholar platform

A qualitative content analysis approach was employed, guided by the following three criteria which are represented in the Table 1:

Table 1 – Criteria and explanations

Item	Explanation
Clarity	How multimedia elements clarify complex ideas or arguments. Evidence of enhanced comprehension through visual or interactive aids (e.g., tables summarizing data, videos explaining key concepts).
Depth:	How multimedia supports deeper exploration of topics. Examples include AI-generated images visualizing abstract concepts or tables offering detailed comparisons.
Overall Quality:	How well multimedia integrates with textual content to create a cohesive and persuasive narrative. Assessment of whether multimedia enhances engagement, coherence, and scholarly tone.

All five writing projects focus on technology-driven topics, such as AI in education, flipped classrooms, MOOCs, game-based learning, and the concept of digital natives. This shared theme underscores the participants' engagement with digital innovation and its implications for education and learning.

Each participant incorporated at least seven multimedia elements, including videos, tables, figures, and infographics, demonstrating a consistent adherence to task requirements. Multimedia elements enhanced explanations, visualized data, and connected theoretical frameworks with practical examples. Most participants grounded their arguments in established theories or frameworks:

- Participant A referenced policy development frameworks.
- Participant B incorporated Bloom's Taxonomy and Cognitive Load Theory.
- Participant C used the Five Pillars of Online Pedagogy.
- Participant D explored Self-Determination Theory.
- Participant E discussed Prensky's digital native theory.

Common multimedia vocabulary was also analyzed. Terms such as “*visual representation*”, “*data visualization*”, “*graphical depiction*”, and “*interactive media*” were frequently used to describe multimedia elements. Multimedia was often referred to as a tool to “*enhance clarity*”, “*engage audiences*”, and “*simplify complex concepts*”. Course participants used different types of multimedia. For example, participant A (AI Policy) relied on comparative tables and figures summarizing institutional policies. Participant B (Flipped Classroom) used diagrams and conceptual graphics, such as Bloom's Taxonomy Pyramid, to link theory to practice. Participant C (MOOCs) emphasized videos (e.g., TED Talks) to provide real-world context and a mix of infographics to visualize concepts.

Participant D (Game-Based Learning) combined videos with motivational frameworks and case studies like Minecraft Education. Participant E (Digital Natives) incorporated citations, theoretical graphics, and a variety of data-driven visualizations. It should be emphasized that multimedia was used in purposeful way. Participant A and C primarily used multimedia to support policy and theory comparison. Participant B and D leveraged multimedia to bridge theoretical and practical applications. Participant E focused on theoretical critique and validation through data visualizations. Participants varied in how explicitly they connected multimedia to their narrative: Participant B and D integrated multimedia seamlessly, referring to it frequently within their arguments. Participant A and E occasionally lacked direct contextualization for some multimedia elements, requiring readers to infer their relevance. Common and distinct terms used by participants to describe multimedia and its role are given in the Table 2:

Table 2 – Multimedia and its role

Participant	Frequent Terms	Context
A	<i>“comparative table”</i> , <i>“policy visualization”</i>	Described multimedia as a means to summarize and compare institutional strategies.
B	<i>“cognitive diagram”</i> , <i>“visual taxonomy”</i>	Highlighted multimedia as tools for breaking down theoretical concepts (e.g., Bloom’s Pyramid).
C	<i>“interactive media”</i> , <i>“visual definition”</i>	Emphasized multimedia’s role in making MOOCs accessible and engaging.
D	<i>“motivational visuals”</i> , <i>“game demo”</i>	Focused on multimedia’s ability to showcase real-world applications of game-based learning.
E	<i>“theoretical graph”</i> , <i>“data-driven chart”</i>	Used multimedia primarily for validating and critiquing theoretical claims.

Key Observations. While all participants used multimedia to enhance their projects, its role varied from providing theoretical clarity (e.g., Bloom’s Taxonomy) to offering real-world applications (e.g., Minecraft Education). Participants who explicitly integrated multimedia into their narrative (e.g., Participant B and D) demonstrated stronger cohesion between text and visuals. Participants discussing practical applications (e.g., B, C, D) used terms like *“interactive”* and *“engaging”*, while those focusing on theory (e.g., A, E) leaned toward *“validation”* and *“analysis”*. Data analysis shows how multimedia integration influences the clarity, depth, and overall quality of academic writing development within five CGScholar writing projects. By analyzing the role of multimedia in enhancing these dimensions, the study identifies patterns, strengths, and areas for improvement across different participant submissions.

In addition to multimedia integration, this study also explored the role of AI-generated feedback provided by the CGScholar platform. Each participant received automated formative feedback from the CGScholar AI Helper, which is aligned with a rubric-based assessment model focusing on clarity, depth, argumentation, evidence, and audience engagement. Participants were encouraged to revise their writing projects based on this feedback before final submission. The AI feedback offered targeted suggestions, including restructuring of sentences, improving lexical choices, refining coherence, and enhancing academic tone. This layer of support was particularly beneficial for non-language majors, who often struggle with expressing academic content in English. The study examined whether and how participants incorporated AI feedback into their revisions by comparing earlier drafts and final submissions where available, as well as by reviewing the presence of addressed AI comments in the content.

While the primary focus was on multimedia integration, informal reflections collected from course discussion threads and peer comments indicated that participants found the AI feedback helpful for improving their academic writing. Several participants highlighted that the AI suggestions enhanced their confidence in using academic English, especially in structuring arguments and refining transitions. For instance, one participant noted that the AI helped identify repetitive phrases, while another mentioned how the AI-assisted feedback clarified paragraph flow. Although these reflections were not collected through formal interviews, they provide valuable insight into the perceived usefulness of AI tools in supporting academic writing development among non-language majors.

Results and discussion

In terms of clarity multimedia elements consistently enhanced clarity across all projects. Visual aids such as tables, infographics, and diagrams were particularly effective in summarizing complex concepts and theoretical frameworks. For example: Participant B (Flipped Classroom) utilized Bloom's Taxonomy Pyramid and a Cognitive Load Theory diagram to simplify theoretical underpinnings, ensuring accessibility for a broader audience. Participant E (Digital Natives) incorporated tables and graphs to provide a clear and concise overview of digital proficiency and generational technology use. However, some multimedia elements lacked contextualization in the narrative, such as Participant A's video on AI resistance, which was referenced but not fully integrated. Clearer links between multimedia and text would further enhance clarity. The depth of analysis varied based on how well multimedia elements were integrated into the argument: Participant D (Game-Based Learning) excelled by connecting videos and motivational frameworks to practical applications, bridging theoretical concepts with real-world examples like Minecraft Education. Participant C (MOOCs) effectively used TED Talks and infographics

to introduce key ideas but did not explore the implications of these multimedia elements in sufficient depth. Participants who explicitly tied multimedia to theoretical frameworks and discussions demonstrated a more comprehensive understanding of their topics. Multimedia significantly enhanced engagement in all projects by providing dynamic and interactive content: Videos were particularly effective, with examples such as Participant D's Gimkit demonstration and Participant C's TED Talks capturing reader interest. Infographics and data visualizations, such as Participant E's depiction of Tapscott's interactive learning shifts, added visual appeal and maintained reader attention. Nevertheless, inconsistent formatting and inadequate narrative integration of multimedia in some projects slightly detracted from their overall impact. AI feedback contributed to engagement by improving linguistic variety and tone. The AI Helper flagged monotonous sentence structures and suggested more engaging alternatives. Participant B, for example, replaced repetitive introductory phrases based on AI input, resulting in a more varied and compelling academic style. Comparative Summary of the mentioned dimensions are shown in the Table 3.

Table 3 – Comparative Summary of dimensions

Dimension	Notable Strengths	Areas for Improvement
Clarity	Tables and diagrams (e.g., Participant B, D) effectively simplified complex ideas; AI feedback enhanced phrasing and cohesion	Stronger narrative links needed for multimedia elements (e.g., Participant A's video).
Depth	Practical applications (e.g., Participant D's game-based tools) deepened analysis; AI prompted further elaboration of key points	Limited critical exploration of multimedia implications in some projects (e.g., Participants C, E).
Engagement	Videos and infographics (e.g., Participant C's TED Talks, Participant D's Minecraft demo) maintained interest; AI improved academic tone and stylistic variety	Inconsistent formatting of captions and integration reduced effectiveness in certain cases.

The combined use of multimedia and AI feedback across the analyzed projects demonstrates their potential to enhance academic writing by:

1 Improving Clarity: Visuals and data-driven representations simplify and clarify complex topics.

2 Adding Depth: Multimedia and AI prompts support detailed discussions, particularly when linked to theoretical and practical contexts.

3 Increasing Engagement: Interactive elements maintain reader attention and enhance understanding.

However, multimedia's effectiveness depends on its integration into the narrative. Projects that explicitly connect multimedia elements to their arguments achieve stronger overall quality. These findings highlight the importance of thoughtful multimedia use and suggest that CGScholar participants benefit from additional guidance on integrating multimedia into their academic writing.

Conclusions

This research explored the impact of multimedia integration and AI-generated feedback on the clarity, depth, and overall quality of academic writing within online courses offered by the Learning Design and Leadership (LDL) program at the University of Illinois Urbana-Champaign (UIUC) through the CGScholar platform. In these courses, participants are required to complete writing tasks that incorporate at least seven multimedia elements, including videos, tables, infographics, and AI-generated images. Five selected writing projects were analyzed to examine the way these elements were used to support academic argumentation and develop content. Participants who successfully used multimedia in their works showed stronger cohesion between visual and written elements. This fact contributed to improved clarity and reader engagement. However, this study also identified challenges, including inconsistent formatting, inadequate contextualization of some multimedia as well as insufficient critical reflection in certain projects. These findings illustrate the importance of providing learners with detailed guidance on multimedia alignment with academic writing goals. This study also examined the supportive role of CGScholar's AI Helper in the writing revision process. The AI-generated feedback suggested detailed recommendations to improve linguistic clarity, coherence as well as academic tone elements, especially critical for non-language majors completing complex academic English writing tasks. Participants who responded to AI feedback were better able to set their arguments, improve organization, and achieve greater depth in their final submissions. Overall, this research highlights the combined pedagogical potential of multimedia and AI-powered formative feedback to support academic literacy development, especially in digital learning environments. It positions CGScholar not only as a platform for promoting multimodal literacy, but also as an AI-supported writing assistant that can significantly benefit students outside of language-related disciplines. Future studies may build on these findings by exploring the long-term effects of AI-integrated writing tools on learner autonomy, writing confidence, and academic achievement.

Acknowledgements

This research was funded by the Science Committee of the Ministry of Science and Higher Education of the Republic of Kazakhstan under the project "Artificial intelligence as an assistant in acquiring academic English by non-language major students: Randomized study" (AP25794537).

References

1 **Cope, B., Kalantzis, M.** Creating a different kind of learning management system: The CGScholar experiment // Promoting next-generation learning environments through CGScholar / Ed. by M. Montebello. – Hershey, PA: IGI Global, 2024. – P. 1–18. – <https://doi.org/10.4018/978-1-6684-5124-3.ch001>

2 **Babiker, M. E.** For effective use of multimedia in education, teachers must develop their own educational multimedia applications // Computers in Human Behavior. – 2015. – Vol. 49. – P. 110–115. – <https://doi.org/10.1016/j.chb.2015.01.001>

3 **Cope, B., Kalantzis, M., Searsmith, D.** Multimodal meaning: Technologies for knowledge representations // Computers and Education. – 2013. – Vol. 62. – P. 53–64. – <https://doi.org/10.1016/j.compedu.2012.10.019>

4 **Vaughan, N.** Multimedia learning: A strategy to improve student engagement and understanding // Educational Technology Research and Development. – 2011. – Vol. 59, No. 6. – P. 869–887. – <https://doi.org/10.1007/s11423-011-9212-2>

5 **Castro, V. C.** Designing a 21st-century learning module with CGScholar: An example for Brazilian educators // Smart Learning Environments. – 2023. – Vol. 10, No. 2. – P. 45–59. – <https://doi.org/10.1186/s40561-023-00312-4>

6 **Nian, F., Bao, B.-K., Li, T., Xu, C.** Multi-Modal Knowledge Representation Learning via Webly-Supervised Relationships Mining // Proceedings of the 25th ACM International Conference on Multimedia (MM '17). – New York: Association for Computing Machinery, 2017. – P. 411–419. – <https://doi.org/10.1145/3123266.3123443>

7 **Akpen, C. N., Asaolu, S., Atobatele, S., et al.** Impact of online learning on student's performance and engagement: a systematic review // Discover Education. – 2024. – Vol. 3. – Article 205. – <https://doi.org/10.1007/s44217-024-00253-0>

8 **Tang, X., Zainal, S. R. B. M., Li, Q.** Multimedia use and its impact on the effectiveness of educators : a technology acceptance model perspective // Humanities and Social Sciences Communications. – 2023. – Vol. 10. – Article 923. – <https://doi.org/10.1057/s41599-023-02458-4>

9 **Chakraborty, M.** Impact of Multimedia on Learners' Engagement : An Experimental Study // International Journal of Educational Research and Technology. – 2019. – Vol. 9. – P. 196–206.

10 **Zacchi, V. J. Review of: Cope, B., Kalantzis, M.** Making Sense : Reference, Agency, and Structure in a Grammar of Multimodal Meaning; Kalantzis, M., Cope, B. Adding Sense : Context and Interest in a Grammar of Multimodal Meaning // DELTA : Documentação de Estudos em Linguística Teórica e Aplicada. – 2022. – Vol. 38. – <https://doi.org/10.1590/1678-460x202238256749>

References

- 1 **Cope, B., Kalantzis, M.** Creating a different kind of learning management system: The CGScholar experiment // Promoting next-generation learning environments through CGScholar / Ed. by M. Montebello. – Hershey, PA: IGI Global, 2024. – P. 1–18. – <https://doi.org/10.4018/978-1-6684-5124-3.ch001>
- 2 **Babiker, M. E.** For effective use of multimedia in education, teachers must develop their own educational multimedia applications // Computers in Human Behavior. – 2015. – Vol. 49. – P. 110–115. – <https://doi.org/10.1016/j.chb.2015.01.001>
- 3 **Cope, B., Kalantzis, M., Searsmith, D.** Multimodal meaning: Technologies for knowledge representations // Computers and Education. – 2013. – Vol. 62. – P. 53–64. – <https://doi.org/10.1016/j.compedu.2012.10.019>
- 4 **Vaughan, N.** Multimedia learning: A strategy to improve student engagement and understanding // Educational Technology Research and Development. – 2011. – Vol. 59, No. 6. – P. 869–887. – <https://doi.org/10.1007/s11423-011-9212-2>
- 5 **Castro, V. C.** Designing a 21st-century learning module with CGScholar: An example for Brazilian educators // Smart Learning Environments. – 2023. – Vol. 10, No. 2. – P. 45–59. – <https://doi.org/10.1186/s40561-023-00312-4>
- 6 **Nian, F., Bao, B.-K., Li, T., Xu, C.** Multi-Modal Knowledge Representation Learning via Webly-Supervised Relationships Mining // Proceedings of the 25th ACM International Conference on Multimedia (MM '17). – New York: Association for Computing Machinery, 2017. – P. 411–419. – <https://doi.org/10.1145/3123266.3123443>
- 7 **Akpen, C. N., Asaolu, S., Atobatele, S., et al.** Impact of online learning on student's performance and engagement: a systematic review // Discover Education. – 2024. – Vol. 3. – Article 205. – <https://doi.org/10.1007/s44217-024-00253-0>
- 8 **Tang, X., Zainal, S. R. B. M., Li, Q.** Multimedia use and its impact on the effectiveness of educators: a technology acceptance model perspective // Humanities and Social Sciences Communications. – 2023. – Vol. 10. – Article 923. – <https://doi.org/10.1057/s41599-023-02458-4>
- 9 **Chakraborty, M.** Impact of Multimedia on Learners' Engagement: An Experimental Study // International Journal of Educational Research and Technology. – 2019. – Vol. 9. – P. 196–206.
- 10 **Zacchi, V. J. Review of: Cope, B., Kalantzis, M.** Making Sense: Reference, Agency, and Structure in a Grammar of Multimodal Meaning; Kalantzis, M., Cope, B. Adding Sense: Context and Interest in a Grammar of Multimodal Meaning // DELTA: Documentação de Estudos em Linguística Teórica e Aplicada. – 2022. – Vol. 38. – <https://doi.org/10.1590/1678-460x202238256749>.

Received 19.06.25.

Received in revised form 17.02.26.

Accepted for publication 18.02.26.

**Р. С. Желдибаева*

І. Жансүгіров атындағы Жетісу университеті,
Қазақстан Республикасы, Талдықорған,
Урбана-Шампейндегі Иллинойс университетінің (UIUC),
АҚШ, Шампейн.

19.06.25 ж. баспаға түсті.

17.02.26 ж. түзетулерімен түсті.

18.02.26 ж. басып шығаруға қабылданды.

МУЛЬТИМЕДИА МЕН ЖИ КЕРІ БАЙЛАНЫСЫ АРҚЫЛЫ АКАДЕМИЯЛЫҚ АҒЫЛШЫН ТІЛІН ЖЕТІЛДІРУ: CGSCHOLAR ПЛАТФОРМАСЫНДАҒЫ ТІЛДІК ЕМЕС МАМАНДЫҚТАРДЫҢ СТУДЕНТТЕРІНЕ ЖҮРГІЗІЛГЕН ЗЕРТТЕУ

Бұл зерттеу Cgscholar (Common Ground Scholar) платформасы арқылы Урбана-Шампейндегі Иллинойс университетінің (UIUC) дизайн және көшбасшылықты оқыту бағдарламасы (LDL) ұсынатын онлайн курстар арқылы мультимедиялық интеграциясы мен ЖИ кері байланысының академиялық жазудың анықтығына, тереңдігіне және жалпы сапасына әсерін зерттейді. LDL ұсынатын онлайн курстар қатысушылардан жазбаша тапсырманы орындауды талап етеді және әрбір жоба негізгі компонент ретінде кемінде жеті мультимедиялық элементті қамтуы керек. EPOLE 580 FA 24 қатысушылары қауымдастығының таңдалған бес жазбаша жобасына назар аудара отырып, біз бейнелер, кестелер, инфографика және кескіндер (соның ішінде жасанды интеллект арқылы жасалған) сияқты мультимедиялық элементтерді талдадық. Біз мультимедиялық элементтердің мәтіннің анықтығына, тереңдігіне және жалпы сапасына қалай ықпал ететінін зерттеу үшін кодтау жүйесін қолдана отырып, сапалы мазмұнды талдау жүргіздік. Бұған медианы пайдалану картасын жасау, олардың мәтіндегі рөлдерін санаттау және қайталанатын үлгілер мен тақырыптарды анықтау кірді. Зерттеу нәтижелері мультимедиялық интеграциясы мен ЖИ кері байланысы күрделі тұжырымдамаларды жеңілдету, дәлелдеу үшін көрнекі дәлелдер беру және оқырманның

қызығушылығын арттыруды қамтамасыз ету арқылы академиялық жазу сапасын жақсартатынын көрсетеді. Бұл зерттеу CGScholar-дың мультимодальды сауаттылықты дамытудағы, академиялық қатаңдықты арттырудағы және мультимедияны цифрлық оқыту ортасына енгізуді көздейтін оқытушылар мен оқу құралдарын құрастырушыларға құнды ақпарат берудегі әлеуетін көрсетеді.

Кілтіні сөздер: жасанды интеллект көмегімен жазу, мультимедияны біріктіру, академиялық жазу, тіл мамандығы емес студенттер, мультимодальды сауаттылық, CGScholar платформасы, білім беру технологиялары.

**Р. С. Желдибаева*

Жетысуский университет имени И. Жансугурова,
Республика Казахстан, Талдықорған,
Университета Иллинойса в Урбана-Шампейн,
США, Шампейн.

Поступило в редакцию 19.06.25.

Поступило с исправлениями 17.02.26.

Принято в печать 18.02.26.

ПОВЫШЕНИЕ УРОВНЯ АКАДЕМИЧЕСКОГО АНГЛИЙСКОГО ЯЗЫКА С ПОМОЩЬЮ МУЛЬТИМЕДИА И ИИ-ОБРАТНОЙ СВЯЗИ: ИССЛЕДОВАНИЕ НА ПЛАТФОРМЕ CGSCHOLAR СРЕДИ СТУДЕНТОВ НЕЯЗЫКОВЫХ СПЕЦИАЛЬНОСТЕЙ

Это исследование рассматривает совмещённое влияние интеграции мультимедиа и обратной связи, основанной на искусственном интеллекте (ИИ), на ясность, глубину и общее качество академических письменных работ, выполненных студентами неязыковых специальностей в рамках онлайн-курсов, предлагаемых программой Learning Design and Leadership (LDL) Университета Иллинойса в Урбана-Шампейн (UIUC) через платформу CGScholar (Common Ground Scholar). Онлайн-курсы LDL требуют от всех участников выполнения письменной работы, причём каждый проект должен содержать не менее семи мультимедийных элементов как ключевую составляющую. Мы сосредоточили внимание на пяти выбранных письменных проектах сообщества курса EPOL 580 FA 24, анализируя, как такие мультимедийные элементы, как видео, таблицы, инфографика и изображения (в том числе сгенерированные ИИ), влияли на качество письма. Мы использовали качественный контент-анализ

с применением кодирования для изучения того, как мультимедиа способствуют ясности, глубине и вовлечённости в написании. Это включало картографирование мультимедийных элементов, категоризацию их роли в тексте, а также выявление закономерностей и тем. Наши выводы показывают, что интеграция мультимедиа и ИИ усиливает академическое письмо, облегчая восприятие сложных концепций, предоставляя визуальные доказательства аргументов и поддерживая интерес читателя. Ключевые слова: письмо с поддержкой ИИ, интеграция мультимедиа, академическое письмо, студенты неязыковых специальностей, мультимодальная грамотность, CGScholar, образовательные технологии.

Теруге 18.02.2026 ж. жіберілді. Басуға 23.03.2026 ж. қол қойылды.

Электронды баспа

9,42 Кб RAM

Шартты баспа табағы 42,87

Таралымы 300 дана. Бағасы келісім бойынша.

Компьютерде беттеген З. Ж. Шоқубаева

Корректорлар: А. Р. Омарова, Д. А. Қожас

Тапсырыс № 4516

Сдано в набор 18.02.2026 г. Подписано в печать 23.03.2026 г.

Электронное издание

9,42 Кб RAM

Усл.п.л. 42,87. Тираж 300 экз. Цена договорная.

Компьютерная верстка З. Ж. Шоқубаева

Корректоры: А. Р. Омарова, Д. А. Қожас

Заказ № 4516

«Toraighyrov University» баспасынан басылып шығарылған

Торайғыров университеті

140008, Павлодар қ., Ломов к., 64, 137 каб.

«Toraighyrov University» баспасы

Торайғыров университеті

140008, Павлодар қ., Ломов к., 64, 137 каб.

8 (7182) 67-36-69

e-mail: kereku@tou.edu.kz

www.pedagogic-vestnik.tou.edu.kz