O‘ZBEKISTON RESPUBLIKASI OLIY TA’LIM, FAN VA INNOVATSIYALAR VAZIRLIGI

MIRZO ULUG‘BEK NOMIDAGI O‘ZBEKISTON MILLIY UNIVERSITETINING JIZZAX FILIALI

KOMPYUTER ILMLARI VA MUHANDISLIK TEXNOLOGIYALARI

mavzusidagi Xalqaro ilmiy-texnik anjuman materiallari to‘plami

2026-yil 25-26-sentabr

(2-qism)

JIZZAX-2026

Kompyuter ilmlari va muhandislik texnologiyalari. Xalqaro ilmiy-texnik anjuman materiallari to‘plami – Jizzax: O‘zMU Jizzax filiali, 2026-yil 25-26-sentabr. 315-bet.

Xalqaro miqyosidagi ilmiy-texnik anjuman materiallarida zamonaviy kompyuter ilmlari va muhandislik texnologiyalari sohasidagi innovatsion tadqiqotlar aks etgan.

Globallashuv sharoitida davlatimizni yanada barqaror va jadal sur’atlar bilan rivojlantirish bo‘yicha amalga oshirilayotgan islohotlar samarasini yaxshilash sohasidagi ilmiy-tadqiqot ishlariga alohida e’tibor qaratilgan. Zero iqtisodiyotning, ijtimoiy sohalarni qamrab olgan modernizatsiya jarayonlari, hayotning barcha sohalarini liberallashtirishni talab qilmoqda.

Ushbu ilmiy ma’ruza tezislari to‘plamida mamlakatimiz va xorijlik turli yo‘nalishlarda faoliyat olib borayotgan mutaxassislar, olimlar, professor-o‘qituvchilar, ilmiy tadqiqot institutlari va markazlarining ilmiy xodimlari, tadqiqotchilari, magistr va talabalarning ilmiy-tadqiqot ishlari natijalari mujassamlashgan.

Mas’ul muharrirlar: DSc.prof. Turakulov O.X., t.f.n., dots. Baboyev A.M.

Tahrir hay’ati a’zolari: p.f.d.(DSc), prof. Turakulov O.X., t.f.n., dots. Baboyev A.M., t.f.f.d.(PhD), prof. Abduraxmanov R.A., p.f.f.d.(PhD) Eshankulov B.S., p.f.n., dots. Aliqulov S.T., p.f.n., dots. Alimov N.N., p.f.f.d.(PhD), dots. Alibayev S.X., т.f.f.d.(PhD), dots. Abdumalikov A.A, p.f.f.d.(PhD) Hafizov E.A., f.f.f.d.(PhD) dots., Norbekova B.Sh. p.f.f.d.(PhD) dots. Sindorov L.K., t.f.f.d.(PhD), dots. Nasirov B.U., b.f.f.d. (PhD) O‘ralov A.I., p.f.n., dots. Aliqulov S.T., t.f.f.d.(PhD) Kuvandikov J.T., i.f.n., dots. Tsoy M.P., Sharipova S.F., Jo‘rayev M.M.

Mazkur to‘plamga kiritilgan ma’ruza tezislarining mazmuni, undagi statistik ma’lumotlar va me’yoriy hujjatlarning to‘g‘riligi hamda tanqidiy fikr-mulohazalar, keltirilgan takliflarga mualliflarning o‘zlari mas’uldirlar.

ENHANCING UNIVERSITY STUDENTS’ ACADEMIC WRITING SKILLS THROUGH AI-ASSISTED FORMATIVE FEEDBACK

G‘aybullayeva Zilola Muzaffar qizi
Mirzo Ulug‘bek nomidagi O‘zbekiston Milliy universiteti Jizzax filiali
gaybullayevazilola@jbnuu.uz

Abstract: Artificial intelligence is becoming increasingly common in university education and is changing the way students develop their academic writing skills. This article explores how AI-assisted formative feedback can support university students in improving their English academic writing. AI tools can provide timely and personalized suggestions related to grammar, vocabulary, organization, coherence, and academic style. Such feedback allows students to recognize their mistakes, revise their texts more effectively, and take greater responsibility for their learning. However, AI should not replace the teacher’s role in the writing process. Teacher guidance remains essential for helping students evaluate automated suggestions, express their own ideas, and use AI responsibly. The article also discusses possible challenges, including inaccurate feedback, overreliance on technology, academic integrity, and data privacy. It argues that AI-assisted feedback is most effective when combined with teacher support, peer feedback, and regular revision activities. When used thoughtfully and ethically, AI can help create a supportive learning environment and contribute to the development of students’ academic writing competence.

Keywords: artificial intelligence, academic writing, formative feedback, university students, English language teaching, writing skills, learner autonomy, teacher guidance.

Academic writing in the context of higher education is an essential component of university education. Students use writing not only to demonstrate their knowledge but also to analyse information, develop arguments, communicate research findings, and participate in academic discussions. The ability to write clearly and logically is therefore closely connected with students’ overall academic success. For learners who study English as a foreign language, however, academic writing can be particularly challenging because it requires both linguistic competence and an understanding of academic conventions. Many students understand academic concepts but find it difficult to express them effectively in English. Their writing may contain relevant ideas, but these ideas are sometimes presented without a clear sequence. Other common problems include limited academic vocabulary, direct translation from the first language, excessive repetition, incorrect citation, and inconsistent use of formal language.

Formative feedback as part of the writing process is information given to students with the purpose of improving their current and future performance. Unlike final evaluation, which mainly measures the quality of a completed assignment, formative feedback helps students understand what they are doing well, where difficulties remain, and what practical steps they can take to improve.

In academic writing instruction, effective formative feedback should be clear, timely, specific, and connected with the learning objectives.

Objective, tasks, and research questions. The main objective of this study is to examine the pedagogical value of AI-assisted formative feedback in developing university students' English academic writing skills. The study considers how artificial intelligence can be integrated into the writing process while preserving students' authorship, critical thinking, and responsibility for their work.

The following tasks are established:

- To identify the most common linguistic and organisational difficulties experienced by university students in academic writing.
- To examine the forms of formative feedback that AI tools can provide.
- To develop a structured model for integrating AI feedback into academic writing lessons.
- To explore how AI-assisted revision can support learner autonomy and feedback literacy.

Research methods. The study uses descriptive, analytical, comparative, and classroom-oriented methods. The descriptive method is employed to explain the main characteristics of academic writing, formative assessment, and AI-assisted learning. The analytical method is used to examine the functions and limitations of AI-generated feedback. Particular attention is given to grammar, vocabulary, coherence, organisation, academic style, and argumentation. A comparative method can be applied to students' initial and revised drafts.

FEEDBACK ON GRAMMATICAL ACCURACY. GRAMMAR IS ONE OF THE AREAS IN WHICH AI TOOLS CAN PROVIDE IMMEDIATE ASSISTANCE. THEY CAN IDENTIFY PROBLEMS INVOLVING VERB TENSE, SUBJECT–VERB AGREEMENT, ARTICLES, PREPOSITIONS, SENTENCE FRAGMENTS, AND PUNCTUATION. THIS CAN BE USEFUL FOR STUDENTS WHO NEED REGULAR PRACTICE WITH RECURRING LANGUAGE PROBLEMS.

Feedback on vocabulary and academic style. Students often believe that academic writing requires unusually complex words. As a result, they may use vocabulary that is formal in appearance but inaccurate in context. AI tools can suggest alternative expressions, identify informal language, and draw attention to repetition. However, students must check whether the suggested word preserves their intended meaning.

Feedback on organisation and coherence. AI tools can help students examine whether an essay has a recognisable introduction, body, and conclusion. They may also identify paragraphs that lack a clear central idea or transitions between sentences. Such feedback can be helpful when students know what organisational features they

are expected to examine. Nevertheless, coherence cannot be assessed fully through the presence of linking words. A paragraph containing “however,” “therefore,” and “in addition” is not automatically coherent. The underlying ideas must have a meaningful relationship. Teacher guidance remains necessary to help students recognise the difference between mechanical cohesion and genuine logical development.

FEEDBACK ON ARGUMENTATION. AI CAN ASK QUESTIONS THAT ENCOURAGE STUDENTS TO DEVELOP AN ARGUMENT. IT MAY INDICATE THAT A CLAIM REQUIRES EVIDENCE OR THAT AN ALTERNATIVE POSITION HAS NOT BEEN CONSIDERED. HOWEVER, THE TOOL MAY ALSO GENERATE GENERAL OR MISLEADING SUGGESTIONS. FOR THIS REASON, STUDENTS SHOULD USE AI TO TEST THE CLARITY OF THEIR REASONING RATHER THAN TO CREATE THE ARGUMENT FOR THEM. ONE PRODUCTIVE TECHNIQUE IS TO ASK THE AI TOOL TO ACT AS A CRITICAL READER. A STUDENT MAY REQUEST THREE QUESTIONS THAT A READER COULD ASK AFTER READING A PARAGRAPH. THE STUDENT THEN DECIDES WHETHER THE PARAGRAPH NEEDS CLARIFICATION OR ADDITIONAL EVIDENCE. THIS KEEPS RESPONSIBILITY FOR CONTENT DEVELOPMENT WITH THE WRITER.

Feedback based on assessment criteria. When students are given a clear rubric, they may ask an AI tool to review a draft according to its categories. These categories may include task achievement, organisation, language use, evidence, citation, and academic style. This can help students become more familiar with the assessment criteria before submitting their work. However, an AI-generated score should not be treated as an official grade. Automated evaluation may be inconsistent, especially when a task involves creativity, discipline-specific knowledge, or complex interpretation. The primary value of rubric-based AI feedback lies in encouraging self-assessment.

Conclusion. The growing use of artificial intelligence in higher education has created new possibilities for teaching academic writing. AI-assisted tools can respond to student texts quickly, identify recurring language problems, suggest improvements, and provide opportunities for repeated revision. These functions are particularly valuable in university English classes where students have different levels of proficiency and teachers may not always have sufficient time to provide extensive individual feedback at every stage of the writing process. AI-assisted formative feedback should therefore be viewed as a pedagogical resource rather than a substitute for human knowledge and judgment. Its greatest contribution is not the automatic correction of errors but the creation of additional opportunities for students to examine, discuss, and revise their writing. Used thoughtfully, it can help teachers provide more differentiated support and allow students to take a more active role in their development.

In conclusion, a balanced human–AI approach can strengthen university students’ academic writing competence, learner autonomy, critical thinking, and digital literacy. The central principles of this approach are independent authorship,

focused feedback, critical evaluation, teacher supervision, and reflective revision. When these principles are maintained, artificial intelligence can become a useful part of modern English language pedagogy while preserving the intellectual effort and human voice at the heart of academic writing.

References

1. Carless, D., & Boud, D. (2018). The development of student feedback literacy: Enabling uptake of feedback. *Assessment & Evaluation in Higher Education, 43*(8), 1315–1325.
2. Cotton, D. R. E., Cotton, P. A., & Shipway, J. R. (2024). Chatting and cheating: Ensuring academic integrity in the era of ChatGPT. *Innovations in Education and Teaching International, 61*(2), 228–239.
3. Escalante, J., Pack, A., & Barrett, A. (2023). AI-generated feedback on writing: Insights into efficacy and English language learner preference. *International Journal of Educational Technology in Higher Education, 20*, Article 57.
4. Ferris, D. R. (2006). Does error feedback help student writers? New evidence on the short- and long-term effects of written error correction. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing: Contexts and issues* (pp. 81–104). Cambridge University Press.
5. Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research, 77*(1), 81–112.
6. Hyland, K., & Hyland, F. (Eds.). (2006). *Feedback in second language writing: Contexts and issues*. Cambridge University Press.

INGLIZ TILINI O‘QITISHDA GENERATIV SUN’IY INTELLEKTDAN PEDAGOGIK MAQSADGA MUVOFIQ FOYDALANISH

Begmatova Sarvinoz Shavkat qizi
Mirzo Ulug‘bek nomidagi O‘zbekiston Milliy Universiteti Jizzax filiali
Sarvinozshavkatovna3003@gmail.com

Annotatsiya: Maqolada generativ sun’iy intellekt vositalarini ingliz tilini xorijiy til sifatida o‘qitishga integratsiya qilish imkoniyatlari va cheklovlari tahlil qilinadi. Ilmiy manbalarni qiyosiy o‘rganish asosida kommunikativ kompetensiya, yozma nutq va mustaqil o‘rganish ko‘nikmalarini rivojlantirish yo‘llari aniqlashtiriladi. O‘qituvchi nazoratida qo‘llanadigan besh bosqichli pedagogik model taklif etilib, unda maqsad, so‘rov, tekshirish, qayta ishlash va refleksiya jarayonlari bog‘lanadi. Akademik halollik, ma’lumotlar himoyasi va texnologik qaramlik xavflarini kamaytirish mezonlari ham yoritiladi.

Kalit so‘zlar: ingliz tili ta’limi, generativ sun’iy intellekt, kommunikativ kompetensiya, raqamli savodxonlik, mustaqil ta’lim, formativ baholash, akademik halollik.

Raqamli transformatsiya sharoitida ingliz tili o‘qituvchisining vazifasi tayyor axborotni yetkazish bilangina cheklanmaydi. O‘quvchi raqamli manbalardan