

ISSN: 1991-3494 (Print)
ISSN: 2518-1467 (Online)

**SCIENTIFIC JOURNAL OF
PEDAGOGY AND ECONOMICS**

**№2
2026**

ISSN 2518-1467 (Online),
ISSN 1991-3494 (Print)



CENTRAL ASIAN ACADEMIC
RESEARCH CENTER



SCIENTIFIC JOURNAL OF PEDAGOGY AND ECONOMICS

PUBLISHED SINCE 1944

2 (420)

March – April 2026

ALMATY, 2026

EDITOR-IN-CHIEF:

ABYLKASSIMOVA Alma Yesimbekovna, Doctor of Pedagogical Sciences, Professor, Academician of Central Asian Academic Research Center, Director of the Center for the Development of Pedagogical Education, Head of the Department of Methods of Teaching Mathematics, Physics and Computer Science at Abai KazNPU (Almaty, Kazakhstan), <https://www.scopus.com/authid/detail.uri?authorId=57191275199>, <https://www.webofscience.com/wos/author/record/2076124>.

DEPUTY EDITOR-IN-CHIEF:

SEMBIEVA Lyazzat Myktybekovna, Doctor of Economics, Professor of the Eurasian National University (Astana, Kazakhstan), <https://www.scopus.com/authid/detail.uri?authorId=57194226348>, <https://www.webofscience.com/wos/author/record/38875302>.

EDITORIAL BOARD:

RICHELLE Marynowski, PhD in Education, Professor, Faculty of Education, University of Lethbridge, (Alberta, Canada), <https://www.scopus.com/authid/detail.uri?authorId=57070452800>, <https://www.webofscience.com/wos/author/record/16130920>.

SHISHOV Sergey Evgenievich, Doctor of Pedagogical Sciences, Professor, Head of the Department of Pedagogy and Psychology of Professional Education, Moscow State University of Technology and Management named after K. Razumovsky (Moscow, Russia), <https://www.scopus.com/authid/detail.uri?authorId=57191518233>, <https://www.webofscience.com/wos/author/record/2443966>.

ABILDINA Saltanat Kuatovna, Doctor of Pedagogical Sciences, Professor, Head of the Department of Pedagogy, Karaganda University named after E.A. Buketov (Karaganda, Kazakhstan), <https://www.scopus.com/authid/detail.uri?authorId=56128026400>, <https://www.webofscience.com/wos/author/record/4131549>.

RYZHAKOV Mikhail Viktorovich, Doctor of Pedagogical Sciences, Professor, Academician of the Russian Academy of Education, Editor-in-Chief of the journal "Standards and Monitoring in Education" (Moscow, Russia), <https://www.scopus.com/authid/detail.uri?authorId=6602245542>, <https://www.webofscience.com/wos/author/record/13675462>.

BULATBAEVA Kulzhanat Nurymzhanovna, Doctor of Pedagogical Sciences, Professor, Chief Researcher of the National Academy of Education named after Y. Altynsarin (Astana, Kazakhstan), <https://www.scopus.com/authid/detail.uri?authorId=57202195074>, <https://www.webofscience.com/wos/author/record/40173122>.

PETR Hájek, PhD, Unicorn University, Associate Professor, Department of Finance, (Prague, Czech Republic), <https://www.scopus.com/authid/detail.uri?authorId=35726855800>, <https://www.webofscience.com/wos/author/record/672404>.

JUMAN Jappar, Doctor of Economics, Professor, Honorary Academician of Central Asian Academic Research Center, Honored Worker of Kazakhstan, Director of the Center for International Applied Research Al-Farabi Kazakh National University (Almaty, Kazakhstan), <https://www.scopus.com/authid/detail.uri?authorId=59238481900>; <https://www.scopus.com/authid/detail.uri?authorId=56658765400>, <https://www.webofscience.com/wos/author/record/60977874>.

LUKYANENKO Irina Grigorievna, Doctor of Economics, Professor, Head of Department of the National University of Kyiv-Mohyla Academy (Kyiv, Ukraine), <https://www.scopus.com/authid/detail.uri?authorId=57189348551>, <https://www.webofscience.com/wos/author/record/939510>.

YESIMZHANOVA Saira Rafihevna, Doctor of Economics, Professor of the University of International Business (Almaty, Kazakhstan), <https://www.scopus.com/authid/detail.uri?authorId=56499485500>, <https://www.webofscience.com/wos/author/record/45951098>.

Scientific Journal of Pedagogy and Economics

ISSN 2518-1467 (Online),

ISSN 1991-3494 (Print).

Owner: «Central Asian Academic Research Center» LLP (Almaty).

The certificate of registration of a periodical printed publication in the Committee of information of the Ministry of Information and Communications of the Republic of Kazakhstan

№ KZ50VPY00121155, issued on 05.06.2025

Thematic focus: «*publication of the results of new achievements in the field of fundamental sciences*»

Periodicity: 6 times a year.

<http://www.bulletin-science.kz/index.php/en/>

© «Central Asian Academic Research CenterB» LLP, 2026



БАС РЕДАКТОР:

ӘБІЛҚАСЫМОВА Алма Есімбекқызы, педагогика ғылымдарының докторы, профессор, ҚР ҰҒА академигі, Педагогикалық білім беруді дамыту орталығының директоры, Абай атындағы ҚазҰПУ математика, физика және информатиканы оқыту әдістемесі кафедрасының меңгерушісі (Алматы, Қазақстан), <https://www.scopus.com/authid/detail.uri?authorId=57191275199>, <https://www.webofscience.com/wos/author/record/2076124>.

БАС РЕДАКТОРДЫҢ ОРЫНБАСАРЫ:

СЕМБИЕВА Ләззат Мықтыбекқызы, экономика ғылымдарының докторы, Л.Н. Гумилев атындағы Еуразия ұлттық университетінің профессоры (Астана, Қазақстан), <https://www.scopus.com/authid/detail.uri?authorId=57194226348>, <https://www.webofscience.com/wos/author/record/38875302>.

РЕДАКЦИЯ АЛҚАСЫ:

РИШЕЛЬ Мариновски, білім беру саласындағы PhD, Летбридж университеті педагогика факультетінің профессоры, (Альберта, Канада), <https://www.scopus.com/authid/detail.uri?authorId=57070452800>, <https://www.webofscience.com/wos/author/record/16130920>.

ШИШОВ Сергей Евгеньевич, педагогика ғылымдарының докторы, профессор, К. Разумовский атындағы Мәскеу мемлекеттік технологиялар және басқару университетінің кәсіби білім беру педагогикасы және психологиясы кафедрасының меңгерушісі (Мәскеу, Ресей), <https://www.scopus.com/authid/detail.uri?authorId=57191518233>, <https://www.webofscience.com/wos/author/record/2443966>.

ӘБІЛДИНА Салтанат Қуатқызы, педагогика ғылымдарының докторы, профессор, Е.А. Бөкетов атындағы Қарағанды университетінің педагогика кафедрасының меңгерушісі (Қарағанды, Қазақстан), <https://www.scopus.com/authid/detail.uri?authorId=56128026400>, <https://www.webofscience.com/wos/author/record/4131549>.

РЫЖАКОВ Михаил Викторович, педагогика ғылымдарының докторы, профессор, Ресей білім академиясының академигі, «Білім берудегі стандарттар мен мониторинг» журналының бас редакторы (Мәскеу, Ресей), <https://www.scopus.com/authid/detail.uri?authorId=6602245542>, <https://www.webofscience.com/wos/author/record/13675462>.

БОЛАТБАЕВА Күлжанат Нұрымжанқызы, педагогика ғылымдарының докторы, профессор, Ы.Алтынсарин атындағы Ұлттық білім академиясының бас ғылыми қызметкері (Астана, Қазақстан), <https://www.scopus.com/authid/detail.uri?authorId=57202195074>, <https://www.webofscience.com/wos/author/record/40173122>.

ПЕТР Хайек, PhD, Юникорн университеті, Қаржы департаментінің қауымдастырылған профессоры (Прага, Чехия), <https://www.scopus.com/authid/detail.uri?authorId=35726855800>, <https://www.webofscience.com/wos/author/record/672404>.

ЖҰМАН Жаппар, экономика ғылымдарының докторы, профессор, Қазақстанның Еңбек сіңірген қайраткері, ҚР ҰҒА құрметті академигі, әл-Фараби атындағы Қазақ ұлттық университетінің Халықаралық қолданбалы зерттеулер орталығының директоры (Алматы, Қазақстан). <https://www.scopus.com/authid/detail.uri?authorId=59238481900>; <https://www.scopus.com/authid/detail.uri?authorId=56658765400>, <https://www.webofscience.com/wos/author/record/60977874>.

ЛУКЪЯНЕНКО Ирина Григорьевна, экономика ғылымдарының докторы, профессор, «Киево-Могилянская академия» ұлттық университеті кафедрасының меңгерушісі (Киев, Украина), <https://www.scopus.com/authid/detail.uri?authorId=57189348551>, <https://www.webofscience.com/wos/author/record/939510>.

ЕСІМЖАНОВА Сайра Рафиққызы, экономика ғылымдарының докторы, Халықаралық бизнес университетінің профессоры (Алматы, Қазақстан), <https://www.scopus.com/authid/detail.uri?authorId=56499485500>, <https://www.webofscience.com/wos/author/record/45951098>.

Scientific Journal of Pedagogy and Economics

ISSN 2518-1467 (Online),

ISSN 1991-3494 (Print).

Меншіктенуші: «Орталық Азия академиялық ғылыми орталығы» ЖШС (Алматы қ.).

Қазақстан Республикасының Ақпарат және коммуникациялар министрлігінің Ақпарат комитетінде 05.06.2025 ж. берілген № **KZ50VPY00121155** мерзімдік басылым тіркеуіне қойылу туралы куәлік.

Тақырыптық бағыты: *«іргелі ғылым салалары бойынша жаңа жетістіктердің нәтижелерін жариялау»*

Мерзімділігі: жылына 6 рет.

<http://www.bulletin-science.kz/index.php/en/>

© «Орталық Азия академиялық ғылыми орталығы» ЖШС, 2026

ГЛАВНЫЙ РЕДАКТОР:

АБЫЛКАСЫМОВА Алма Есимбековна, доктор педагогических наук, профессор, академик НАН РК, директор Центра развития педагогического образования, заведующая кафедрой методики преподавания математики, физики и информатики КазНПУ им. Абая (Алматы, Казахстан), <https://www.scopus.com/authorid/detail.uri?authorId=57191275199>, <https://www.webofscience.com/wos/author/record/2076124>.

ЗАМЕСТИТЕЛЬ ГЛАВНОГО РЕДАКТОРА:

СЕМБИЕВА Лязат Мыктыбековна, доктор экономических наук, профессор Евразийского национального университета им. Л.Н. Гумилева (Астана, Казахстан), <https://www.scopus.com/authorid/detail.uri?authorId=57194226348>, <https://www.webofscience.com/wos/author/record/38875302>.

РЕДАКЦИОННАЯ КОЛЛЕГИЯ:

РИШЕЛЬ Мариновски, PhD в области образования, профессор факультета педагогики Летбриджского университета, (Альберта, Канада), <https://www.scopus.com/authorid/detail.uri?authorId=57070452800>, <https://www.webofscience.com/wos/author/record/16130920>.

ШИШОВ Сергей Евгеньевич, доктор педагогических наук, профессор, заведующий кафедрой педагогики и психологии профессионального образования Московского государственного университета технологий и управления имени К. Разумовского (Москва, Россия), <https://www.scopus.com/authorid/detail.uri?authorId=57191518233>, <https://www.webofscience.com/wos/author/record/2443966>.

АБИЛЬДИНА Салтанат Куатовна, доктор педагогических наук, профессор, заведующая кафедрой педагогики Карагандинского университета имени Е.А. Букетова (Караганда, Казахстан), <https://www.scopus.com/authorid/detail.uri?authorId=56128026400>, <https://www.webofscience.com/wos/author/record/4131549>.

РЫЖАКОВ Михаил Викторович, доктор педагогических наук, профессор, академик Российской академии образования, главный редактор журнала «Стандарты и мониторинг в образовании» (Москва, Россия), <https://www.scopus.com/authorid/detail.uri?authorId=6602245542>, <https://www.webofscience.com/wos/author/record/13675462>.

БУЛАТБАЕВА Кулжанат Нурымжановна, доктор педагогических наук, профессор, главный научный сотрудник Национальной академии образования имени Ы. Алтынсарина (Астана, Казахстан), <https://www.scopus.com/authorid/detail.uri?authorId=57202195074>, <https://www.webofscience.com/wos/author/record/40173122>.

ПЕТР Хайек, PhD, университет Юникорн, ассоциированный профессор Департамента финансов, (Прага, Чехия), <https://www.scopus.com/authorid/detail.uri?authorId=35726855800>, <https://www.webofscience.com/wos/author/record/672404>.

ЖУМАН Жаппар, доктор экономических наук, профессор, заслуженный деятель Казахстана, почетный академик НАН РК, директор Центра Международных прикладных исследований Казахского национального университета им. аль-Фараби (Алматы, Казахстан), <https://www.scopus.com/authorid/detail.uri?authorId=59238481900>; <https://www.scopus.com/authorid/detail.uri?authorId=56658765400>, <https://www.webofscience.com/wos/author/record/60977874>.

ЛУКЪЯНЕНКО Ирина Григорьевна, доктор экономических наук, профессор, заведующая кафедрой Национального университета «Киево-Могилянская академия» (Киев, Украина), <https://www.scopus.com/authorid/detail.uri?authorId=57189348551>, <https://www.webofscience.com/wos/author/record/939510>.

ЕСИМЖАНОВА Сайра Рафикевна, доктор экономических наук, профессор Университета международного бизнеса (Алматы, Казахстан), <https://www.scopus.com/authorid/detail.uri?authorId=56499485500>, <https://www.webofscience.com/wos/author/record/45951098>.

Scientific Journal of Pedagogy and Economics

ISSN 2518-1467 (Online),

ISSN 1991-3494 (Print).

Собственник: ТОО «Центрально-азиатский академический научный центр» (г. Алматы).

Свидетельство о постановке на учет периодического печатного издания в Комитете информации Министерства информации и коммуникаций и Республики Казахстан

№ KZ50VPY00121155 выданное 05.06.2025 г.

Тематическая направленность: «публикация результатов новых достижений области фундаментальных наук».

Периодичность: 6 раз в год.

<http://www.bulletin-science.kz/index.php/en/>

© ТОО «Центрально-азиатский академический научный центр», 2026



CONTENTS

PEDAGOGY

Aitimbaev A., Issayev M., Apendiyev T. Scientific and methodological opportunities for using archival materials in teaching the history of Kazakhstan in higher education institutions.....	19
Akhmetova G., Kabdusheva A., Mussina A. A quantitative study on university students' academic writing challenges and learning needs.....	40
Akhmetova Zh.A., Nurgali S., Nurmetova D. Pedagogical foundations of using digital resources in teaching academic writing.....	57
Bekbolat Zh., Zholmakhanova A., Yildirim S. Theoretical foundations of teaching M. Shokai's letters through a research-based approach.....	72
Berdenkulova A.Zh., Zhandavletova R.B., Nazarova G.A. A pedagogical model for improving educational quality through the "comfortable school - society - university" partnership.....	88
Duisenova G., Shyndaliyev N., Shadiyev R. Comparative analysis of traditional and virtualized programming education.....	104
Yeskendirova A., Kassenova N., Nogoyev Y. Comparative analysis of texts created by AI and texts developed using quantization technology.....	121
Zhanysbekova Sh., Nurmakhanova Zh., Akasheva A. Actual problems of the formation of pragmatic competence: research based on the results of content analysis.....	136
Zulpykhar Zh.E., Kapanova D.E., Zhilmagambetova R.Z. Modern resources and technologies as a foundation for the development of teachers' professional competencies.....	153
Isaeva A., Ananyeva S. Axiological interpretation of the Kazakhstan theme in the works of K. Paustovsky: methodological approaches to teaching at the university.....	172
Kabzhalelov K.R., Korganbayeva Zh.K., Nurakhmetova A.R. Developing critical thinking through modern chatbots in chemistry education.....	190
Kazhenova Zh.S., Kydyralina L.M., Rakhmatullina Z.T. Problems of developing students' engineering skills.....	208

Kaldarova A., Vasquez M., Kulgildinova T. Developing students' profession-oriented speaking skills through ChatGPT.....	229
Kapbarova G.Sh., Gundogdu A., Baidalieva E.A. History teaching methodology: theoretical and practical foundations of the competency-based approach.....	243
Kozhakhanova L., Amirova A. Prospects for developing media literacy among primary school students.....	260
Kuzhagulova G., Sydykova R., Smailova M Features of education of national values in visually impaired students through Kazakh lyric songs.....	278
Markhmadova Zh.K., Kassymova G.K., Okenova B. Pedagogical aspects of developing and assessing the digital competence of pedagogy-psychologists.....	297
Mateyeva M., Yeralin K., Burkitbaev T. Training future teachers of artistic work for art-historical regional studies.....	318
Makhanov N., Nishanova K. Development of students' cognitive competencies through museum-based education: evidence from South Kazakhstan.....	333
Myrzagereikyzy G., Yermekova Zh.K., Aldzhambekova G.T. The use of action research in preparing future physics teachers for the development of functional literacy of students.....	348
Reginbayeva N., Nametkulova F. Methodological foundations of professionally-oriented physics education based on STEM education for future air transport specialists.....	365
Serikbayeva N., Orynbekova A., Tuyakova U. Methodology for developing digital competence of educational psychologists in modern education.....	385
Toiganbekova M.E., Kazhigalieva G.A. Aspects of creation and specification of educational texts for increasing the effectiveness of training.....	409
Shegebayeva G., Zhumasheva T., Nurbekova S. Prerequisites for the preparation of future educators for the creation of a health-educational environment based on nutriscology.....	422
Shishov S.E., Iovbak A.S., Verko Y.A. Integrated modular physics experiment as a means of organizing students' experimental activities in secondary school.....	443

ECONOMICS

Abdimoldayeva A., Madysheva A., Zhunussova G. Transformation of logistics cost accounting in the agro-industrial complex under digitalization.....	461
Abuova Zh., Duiskenova R., Kadyrbekova D. The concept of sustainable development of the hotel business based on digital transformation and environmental management.....	479
Amantay Mukhit, Kanabekova M., Oralbayeva Zh. Digitalization as a driver of Kazakhstan’s economic growth: econometric analysis and structural effects.....	494
Ashim N., Dzhrauova K., Kushenova M. Improving the management of agricultural subsidies: Kyzylorda region.....	511
Assemova R., Abdibekov S., Aitbayeva D. Energy efficiency and innovation in agriculture: empirical evidence from Southern Kazakhstan.....	535
Assanova Zh., Baimukhanova S., Konysbaeva G. Environmental accounting, ESG reporting and digitalization: impact on cost reduction and sustainable development.....	554
Baigelova A., Sadykova Zh., Epanchintseva S. Industrial economy transformation in Kazakhstan: structural shifts, digitalization and productivity growth.....	571
Beisekova Zh., Mutaliyeva A., Kunshigarova L. Transformation of entrepreneurial activity in Kazakhstan in 2000–2025.....	590
Beisenbayeva A., Kambarov B., Samenova N. Development of small and medium-sized enterprises in Almaty: ecosystem factors and structural dynamics.....	611
Bekisheva A., Beketova K., Dorohova N. Human resource management practices and employee perceptions in Kazakhstan’s civil service.....	629
Bissenbayeva S., Kireyeva A., Zhumaxanova K. Digitalization, government support and innovation activity: evidence from regional analysis in Kazakhstan.....	646
Em O.L., Kim D. Features of risk management in collective investment.....	665

Ibrayeva A., Kenesheva G., Arynova Zh. Qualification mismatch in the labour market of an industrial region: a conceptual model and measurement mechanism.....	684
Juman J., Mukhtarova K.S., Liao Z. The modern model of China's economic cooperation with Central Asian countries.....	701
Karakulova A., Bakirbekova A., Zhangirova R. Improving the efficiency of digital transformation of agricultural enterprises: an empirical analysis of Kostanay region.....	718
Kuralbayeva A.Sh., Issayeva G.K., Zhussipova E.E. Energy-saving technologies in irrigated agriculture of Southern Kazakhstan: economic and environmental effects.....	734
Naimanova Zh., Bakirbekova A., Kuralbayeva R. Digital inequality and agricultural productivity: evidence from Southern Kazakhstan....	749
Nartbayeva A., Dadabayeva D., Altuntas G. Economic resilience of single-industry towns in Kazakhstan: a dynamic analysis of socio-economic indicators.....	767
Nurlanuly A., Petrovčíková K., Shalbolova U.Zh. Comparative analysis of aviation market development models in Kazakhstan and Slovakia.....	785
Nyshanbayeva U., Moldashbayeva L., Urazbayeva Z. Accounting and valuation of investment projects in digital tourism: an integrated approach.....	801
Shegir G., Kerimova U., Kabi Sh. The transition of the agro-industrial complex of the Almaty region to the production of value-added products.....	819
Shiganbayeva N., Razakova D., Orlowska R. Trade turnover between China and Kazakhstan in the context of contemporary analytical studies: factors, challenges, and risks.....	840
Tuzubekova M., Zhunusova A., Kadirova N. Analysis of SME support incentives in the manufacturing industry of the Republic of Kazakhstan.....	857
Yeraliyeva Ya., Ruziyeva E., Alimbekova B. Trend and structure of research on digital financial literacy: bibliometric approach.....	877
Zhassan G., Taibek Zh., Imanova G. Climate risk management in the banking sector: ESG-based global and Kazakhstani experience.....	891

МАЗМҰНЫ

ПЕДАГОГИКА

Айтимбаев А.Т., Исаев М.С., Апендиев Т.А. Қазақстан тарихын жоғары оқу орындарында оқытуда архив материалдарын пайдаланудың ғылыми-әдістемелік мүмкіндіктері (1920–1950 жж. Оңтүстік Қазақстандағы саяси қуғын-сүргін құрбандары тағдырлары негізінде).....	19
Ахметова Г.С., Кабдушева А.Б., Мусина А.Б. Университет студенттерінің академиялық жазылымдағы қиындықтары мен оқу қажеттіліктеріне арналған сандық зерттеу.....	40
Ахметова Ж.А., Нұрғали С., Нурметова Д. Академиялық жазуды оқытуда сандық ресурстарды пайдаланудың педагогикалық негіздері.....	57
Бекболат Ж.Н., Жолмаханова А.Б., Сейфуллах Йылдырым Мұстафа Шоқай хаттарын зерттеушілік әдіс арқылы оқытудың теориялық негіздері.....	72
Берденкулова А.Ж., Жандавлетова Р.Б., Назарова Г.А. «Жайлы мектеп – қоғам – университет» серіктестігі негізінде білім сапасын арттырудың педагогикалық моделі.....	88
Ескендірова А.А., Касенова Н.Б., Ногоев Ю.Я. ЖИ арқылы жасалған мәтіндер мен кванттау технологиясы арқылы әзірленген мәтіндердің салыстырмалы талдауы.....	104
Жанысбекова Ш., Нурмаханова Ж., Акашева Ә. Прагматикалық құзіреттілікті қалыптастырудың өзекті мәселелері: контент-анализ нәтижелері бойынша зерттеу.....	121
Дүйсенова Г.А., Шындалиев Н.Т., Шадиев Р.Н. Дәстүрлі және виртуалды бағдарламалау білімінің салыстырмалы талдауы.....	136
Зулпыхар Ж.Е., Капанова Д.Е., Жилмагамбетова Р.З. Педагогтердің кәсіби құзыреттілігін дамытудың негізі ретінде қазіргі заманғы ресурстар мен технологиялар.....	153
Исаева А.А., Ананьева С.В. К. Паустовский шығармашылығындағы Қазақстан тақырыбының аксиологиялық интерпретациясы: жоғары оқу орнында оқытудың әдіснамалық тәсілдері.....	172
Кабжалелов К.Р., Қорғанбаева Ж.Қ., Нурахметова А.Р. Химияны оқыту барысында заманауи чат-боттар арқылы сыни ойлауды дамыту.....	190

Каженова Ж.С., Қыдыралина Л.М., Рахматулина З.Т. Оқушылардың инженерлік дағдыларын дамыту мәселелері.....	208
Калдарова А.К., Васкес М.А., Кульгильдинова Т.А. Студенттердің кәсіби-бағдарланған айтылым дағдыларын ChatGPT арқылы дамыту.....	229
Капбарова Г.Ш., Гюндогду А., Байдалиева Э.А. Тарихты оқыту әдістемесі: құзыреттілікке негізделген тәсілді қолданудың теориялық және практикалық негіздері.....	243
Кожыханова Л., Амирова А. Бастауыш сынып оқушыларының медиасауаттылығын дамыту перспективалары.....	260
Кужагулова Г.Е., Сыдыкова Р.Ш., Смаилова М.С. Көру қабілеті бұзылған білім алушыларды қазақтың лирикалық әндері арқылы ұлттық құндылықтарға тәрбиелеудің ерекшеліктері.....	278
Мархмадова Ж.Қ., Касымова Г.К., Өкенова Б. Педагог-психологтың цифрлық құзыреттілігін қалыптастыру және бағалаудың педагогикалық аспектілері.....	297
Матеева М.А., Ералин Қ., Буркитбаев Т. Болашақ көркем еңбек мұғалімдерін өнертанымдық өлкетануға даярлау.....	318
Маханов Н., Нишанова К. Музейлік білім беру негізінде оқушылардың танымдық құзыреттіліктерін дамыту (Оңтүстік Қазақстан мысалында).....	333
Мырзагерейқызы Г., Еркемова Ж.К., Алджамбекова Г.Т. Болашақ физика мұғалімдерін оқушылардың функционалдық сауаттылығын дамытуға даярлауда action research пайдалану.....	348
Регинбаева Н.А., Наметкулова Ф.Д. Болашақ әуе транспорты мамандарына физиканы STEM білім беру негізінде кәсіби-бағдарлы оқытудың әдістемелік негіздері.....	365
Серикбаева Н.Б., Орынбекова А.С., Туякова У.Ж. Қазіргі білім беруде педагог-психологтардың цифрлық құзыреттілігін дамыту әдістемесі.....	385
Тойғанбекова М.Е., Қажығалиева Г.А. Оқытудың тиімділігін арттыру үшін оқу мәтіндерін құру және нақтылау аспектілері.....	409

Шегебаева Г.У., Жумашева Т.С., Нурбекова С.М.

Болашақ тәрбиешілерді нутрициология негізінде денсаулық сақтау-білім беру ортасын құруға дайындаудың алғышарттары.....422

Шишов С.Е., Иовбак А.С., Верко Е.А.

Орта мектепте оқушылардың эксперименталдық қызметін ұйымдастыру құралы ретінде интеграцияланған модульді физика эксперименті.....443

ЭКОНОМИКА**Абдимолдаева А., Мадышева А., Жунусова Г.**

Цифрландыру жағдайында агроөнеркәсіптік кешендегі логистикалық шығындар есебін қайта құру.....461

Абуова Ж., Дүйсеннова Р., Кадырбекова Д.

Цифрлық трансформация және экологиялық басқару негізіндегі қонақ үй бизнесінің тұрақты даму тұжырымдамасы.....479

Әшім Н., Джрауова К., Кушенова М.

Ауылшаруашылығы субсидияларын басқаруды жетілдіру: Қызылорда облысы...494.

Мұхит Амантай, Кенабекова М., Оралбаева Ж.

Цифрландыру Қазақстанның экономикалық өсуінің драйвері ретінде: эконометрикалық талдау және құрылымдық әсерлер.....511

Асемова Р., Абдибеков С., Айтбаева Д.

Ауылшаруашылығындағы энергия тиімділігі және инновациялар: Оңтүстік Қазақстан бойынша эмпирикалық дәлелдер.....535

Асанова Ж., Баймуханова С., Қонысбаева Г.

Экологиялық есеп, ESG-есептілік және цифрландыру: шығындарды төмендетуге және орнықты дамуға әсері.....554

Байгелова А., Садыкова Ж., Епанчинцева С.

Қазақстандағы өнеркәсіп экономикасының трансформациясы: құрылымдық өзгерістер, цифрландыру және өнімділіктің өсуі.....571

Бейсекова Ж., Муталиева А., Куншигарова Л.

2000–2025 жылдары Қазақстандағы кәсіпкерлік қызметтің трансформациясы.....590

Бейсенбаева А., Қамбаров Б., Саменова Н.

Алматыда шағын және орта кәсіпкерлікті дамыту: экожүйелік факторлар және құрылымдық динамика.....611

Бекишева А., Бекетова К., Дорохова Н.

Қазақстанның мемлекеттік қызметіндегі адам ресурстарын басқару тәжірибелері және қызметкерлердің қабылдауы.....629

Бисенбаева С., Киреева А., Жұмаксанова К.

Цифрландыру, мемлекеттік қолдау және инновациялық белсенділік:
Қазақстан өңірлерінің талдауы.....646

Эм О.Л., Ким Д.

Ұжымдық инвестициялардағы тәуекелдерді басқарудың ерекшеліктері.....665

Ибраева А., Кенешева Г., Арынова Ж.

Өнеркәсіптік өңірдің еңбек нарығындағы біліктілік сәйкессіздігі:
тұжырымдамалық модель және өлшеу тетігі.....684

Жұман Ж., Мұхтарова К.С., Ляо Чжан

Қытайдың Орталық Азия елдерімен экономикалық ынтымақтастығының
заманауи моделі.....701

Қаракұлова А., Бакирбекова А., Жангирова Р.

Ауыл шаруашылығы кәсіпорындарының цифрлық трансформациясының
тиімділігін арттыру: Қостанай облысының эмпирикалық талдауы.....718

Құралбаева А.Ш., Исаева Г.К., Жусипова Э.Е.

Оңтүстік Қазақстанның суармалы ауыл шаруашылығындағы энергия үнемдеу
технологиялары: экономикалық және экологиялық тиімділік.....734

Найманова Ж., Бакирбекова А., Құралбаева Р.

Цифрлық теңсіздік және ауыл шаруашылығының өнімділігі:
Оңтүстік Қазақстан деректері.....749

Нартбаева А., Дадабаева Д., Алтунташ Г.

Қазақстан моноқалаларының экономикалық резиленттілігі: әлеуметтік-
экономикалық көрсеткіштердің динамикалық талдауы.....767

Нұрланұлы А., Петровчикова К., Шалболова У.Ж.

Қазақстан мен Словакияның авиациялық нарықтарының даму модельдерін
салыстырмалы талдау.....785

Нышанбаева Ұ., Молдашбаева Л., Уразбаева З.

Цифрлық туризмдегі инвестициялық жобаларды есепке алу және бағалау:
интеграцияланған тәсіл.....801

Шегір Г., Керимова У., Қаби Ш.

Алматы облысының агроөнеркәсіптік кешенінің қосылған құны бар өнім
өндіруге көшуі.....819

Шиганбаева Н., Разакова Д., Орловска Р.

Қытай мен Қазақстан арасындағы тауар айналымы: факторлар, мәселелер
және тәуекелдер.....840

Тузубекова М., Жунусова А., Кадирова Н.

Қазақстан Республикасының өңдеу өнеркәсібіндегі шағын және орта бизнесті
ынталандыруды талдау.....857

Ералиева Я., Рузиева Э., Алимбекова Б.

Цифрлық қаржылық сауаттылық бойынша зерттеулердің тенденциялары
мен құрылымы: библиометриялық тәсіл.....877

Жасан Г.Ж., Тайбек Ж.Қ., Иманова Г.А.

Банк секторындағы климаттық тәуекелдерді басқару: ESG негізіндегі әлемдік
және қазақстандық тәжірибе.....891

СОДЕРЖАНИЕ

ПЕДАГОГИКА

Айтимбаев А.Т., Исаев М.С., Апендиев Т.А.

Научно-методические возможности использования архивных материалов при преподавании истории Казахстана в высших учебных заведениях (на примере судеб жертв политических репрессий в Южном Казахстане в 1920–1950 гг.).....19

Ахметова Г.С., Кабдушева А.Б., Мусина А.Б.

Количественное исследование проблем академического письма и образовательных потребностей студентов университета.....40

Ахметова Ж.А., Нурғали С., Нурметова Д.

Педагогические основы использования цифровых ресурсов в обучении академическому письму.....57

Бекболат Ж.Н., Жолмаханова А.Б., Сейфуллах Йылдырым

Теоретические основы обучения письмам М. Шокая исследовательским методом.....72

Берденкулова А.Ж., Жандавлетова Р.Б., Назарова Г.А.

Педагогическая модель повышения качества образования на основе партнёрства «комфортная школа – общество – университет».....88

Дуйсенова Г.А., Шындалиев Н.Т., Шадиев Р.Н.

Сравнительный анализ традиционного и виртуализированного обучения программированию.....104

Ескендирова А.А., Касенова Н.Б., Ногоев Ю.Я.

Сравнительный анализ текстов, созданных ИИ и текстов, разработанных с помощью технологии квантования.....121

Жанысбекова Ш., Нурмаханова Ж., Акашева А.

Актуальные проблемы формирования прагматической компетенции: исследование по результатам контент-анализа.....136

Зулпыхар Ж.Е., Капанова Д.Е., Жилмагамбетова Р.З.

Современные ресурсы и технологии как основа развития профессиональных компетенций педагогов.....153

Исаева А.А., Ананьева С.В.

Аксиологическая интерпретация казахстанской тематики в творчестве К. Паустовского: методологические подходы к преподаванию в вузе.....172

Кабжалелов К.Р., Корганбаева Ж.К., Нурахметова А.Р. Развитие критического мышления с помощью современных чат-ботов при обучении химии.....	190
Каженова Ж.С., Кыдыралина Л.М., Рахматуллина З.Т. Проблемы развития инженерных навыков учащихся.....	208
Калдарова А.К., Васкез М.А., Кульгильдинова Т.А. Развитие профессионально ориентированных навыков устной речи студентов с использованием ChatGPT.....	229
Капбарова Г.Ш., Гюндогду А., Байдалиева Э.А. Методика преподавания истории: теоретические и практические основы применения компетентностного подхода.....	243
Кожуханова Л., Амирова А. Перспективы развития медиаграмотности среди учащихся начальной школы.....	260
Кужагулова Г.Е., Сыдыкова Р.Ш., Смаилова М.С. Особенности воспитания национальных ценностей у слабовидящих обучающихся через казахские лирические песни.....	278
Мархмадова Ж.К., Касымова Г.К., Окенова Б. Педагогические аспекты формирования и оценки цифровой компетентности педагогов-психологов.....	297
Матеева М.А., Ералин К., Буркитбаев Т. Подготовка будущих учителей художественного труда к искусствоведческому краеведению.....	318
Маханов Н., Нишанова К. Развитие познавательных компетенций учащихся на основе музейного образования (на примере Южного Казахстана).....	333
Мырзагерейкызы Г., Еркекова Ж.К., Алджамбекова Г.Т. Использование action research в подготовке будущих учителей физики к развитию функциональной грамотности учащихся.....	348
Регинбаева Н.А., Наметкулова Ф.Д. Методические основы профессионально-ориентированного обучения физике на основе STEM образования для будущих специалистов воздушного транспорта.....	365
Серикбаева Н.Б., Орынбекова А.С., Туякова У.Ж. Методика развития цифровой компетентности педагогов-психологов в современном образовании.....	385

Тойганбекова М.Е., Кажигалиева Г.А.

Аспекты создания и спецификации учебных текстов для повышения эффективности обучения.....409

Шегебаева Г.У., Жумашева Т.С., Нурбекова С.М.

Предпосылки подготовки будущих воспитателей к созданию здоровьесберегающей образовательной среды на основе нутрициологии.....422

Шишов С.Е., Иовбак А.С., Верко Е.А.

Интегрированный модульный физический эксперимент как средство организации экспериментальной деятельности учащихся в средней школе.....443

ЭКОНОМИКА**Абдимолдаева А., Мадышева А., Жунусова Г.**

Трансформация учета логистических затрат в агропромышленном комплексе в условиях цифровизации.....461

Абуова Ж., Дуйскенова Р., Кадырбекова Д.

Концепция устойчивого развития гостиничного бизнеса на основе цифровой трансформации и экологического менеджмента.....479

Ашим Н., Джрауова К., Кушенова М.

Совершенствование управления агросубсидиями: Кызылординская область.....494

Мухит Амантай, Канабекова М., Оралбаева Ж.

Цифровизация как драйвер экономического роста Казахстана: эконометрический анализ и структурные эффекты.....511

Асемова Р., Абдибеков С., Айтбаева Д.

Энергоэффективность и инновации в сельском хозяйстве: эмпирические данные Южного Казахстана.....535

Асанова Ж., Баймуханова С., Конысбаева Г.

Экологический учет, ESG-отчетность и цифровизация: влияние на снижение издержек и устойчивое развитие.....554

Байгелова А., Садыкова Ж., Епанчинцева С.

Трансформация промышленной экономики Казахстана: структурные сдвиги, цифровизация и рост производительности.....571

Бейсекова Ж., Муталиева А., Куншигарова Л.

Трансформация предпринимательской деятельности в Казахстане в 2000–2025 годах.....590

Бейсенбаева А., Камбаров Б., Саменова Н. Развитие малого и среднего предпринимательства в Алматы: экосистемные факторы и структурная динамика.....	611
Бекишева А., Бекетова К., Дорохова Н. Практики управления человеческими ресурсами и восприятие сотрудников в государственной службе Казахстана.....	629
Бисенбаева С., Киреева А., Жумаксанова К. Цифровизация, государственная поддержка и инновационная активность: региональный анализ Казахстана.....	646
Эм О.Л., Ким Д. Особенности управления рисками в сфере коллективных инвестиций.....	665
Ибраева А., Кенешева Г., Арынова Ж. Несоответствие квалификации на рынке труда промышленного региона: концептуальная модель и механизм измерения.....	684
Жуман Ж., Мухтарова К.С., Ляо Чжан Современная модель экономического сотрудничества Китая со странами Центральной Азии.....	701
Каракулова А., Бакирбекова А., Жангирова Р. Повышение эффективности цифровой трансформации сельскохозяйственных предприятий: эмпирический анализ Костанайской области.....	718
Куралбаева А.Ш., Исаева Г.К., Жусипова Э.Е. Энергосберегающие технологии в орошаемом сельском хозяйстве Южного Казахстана: экономические и экологические эффекты.....	734
Найманова Ж., Бакирбекова А., Куралбаева Р. Цифровое неравенство и продуктивность сельского хозяйства: данные из Южного Казахстана.....	749
Нартбаева А., Дадабаева Д., Алтунташ Г. Экономическая резилиентность моногородов Казахстана: динамический анализ социально-экономических показателей.....	767
Нурланулы А., Петровчикова К., Шалболова У.Ж. Сравнительный анализ моделей развития авиационных рынков Казахстана и Словакии.....	785
Нышанбаева У., Молдашбаева Л., Уразбаева З. Учет и оценка инвестиционных проектов в цифровом туризме: интегрированный подход.....	801

Шегир Г., Керимова У., Каби Ш.

Переход агропромышленного комплекса Алматинской области к производству продукции с добавленной стоимостью.....819

Шиганбаева Н., Разакова Д., Орловска Р.

Товарооборот Китая и Казахстана: факторы, проблемы и риски.....840

Тузубекова М., Жунусова А., Кадирова Н.

Анализ стимулирования малого и среднего бизнеса в обрабатывающей промышленности Республики Казахстан.....857

Ералиева Я., Рузиева Э., Алимбекова Б.

Тенденции и структура исследований цифровой финансовой грамотности: библиометрический подход.....877

Жасан Г.Ж., Тайбек Ж.Қ., Иманова Г.А.

Управление климатическими рисками в банковском секторе: стандарты ESG в мировом и казахстанском опыте.....891

SCIENTIFIC JOURNAL OF PEDAGOGY AND ECONOMICS

ISSN 1991-3494

Volume 2.

Number 420 (2026), 229-242

<https://doi.org/10.32014/2026.2518-1467.1156>

UDC: 378.147

IRSTI: 14.07.19

© **Kaldarova A.K.**^{1,2*}, **Vasquez M.A.**², **Kulgildinova T.A.**¹, 2026.

¹Ablai Khan Kazakh University of International Relations and World Languages, Almaty, Kazakhstan;

²International Information Technology University, Almaty, Kazakhstan.

E-mail: a.kaldarova@iitu.edu.kz

DEVELOPING STUDENTS PROFESSION-ORIENTED SPEAKING SKILLS THROUGH CHATGPT

Kaldarova Aissulu — PhD student of the specialty “8D01721 - Foreign Language Teacher Training”, Ablai Khan Kazakh University of International Relations and World Languages, Almaty, Kazakhstan; Assistant professor, International Information Technology University, Almaty, Kazakhstan,

E-mail: a.kaldarova@iitu.edu.kz, ORCID ID: <https://orcid.org/0000-0002-7128-5731>;

Vasquez Marco — Assistant professor, International Information Technology University, Almaty, Kazakhstan,

E-mail: m-a.vasquez@iitu.edu.kz, ORCID ID: <https://orcid.org/0000-0003-2609-3009>;

Kulgildinova Tulebike — Doctor of Pedagogical Sciences, Professor at Ablai Khan Kazakh University of International Relations and World Languages, Almaty, Kazakhstan,

E-mail: tulebike@mail.ru, ORCID ID: <https://orcid.org/0000-0002-7758-0758>.

Abstract. This study addresses the growing need to develop profession-oriented speaking skills in foreign language education within the context of rapid digital transformation. The relevance of the research is determined by the increasing demand for integrating artificial intelligence tools, particularly ChatGPT, into the educational process to enhance students’ communicative competence in information technology contexts. In modern higher education, students are expected to demonstrate not only linguistic accuracy but also the ability to communicate effectively in professional situations related to their future careers. The study employed experimental design conducted at the International Information Technology University with 60 second-year students divided into control and experimental groups. Pre/posttest methods were used to assess students’ speaking proficiency. The control groups practiced speaking through traditional audio-based activities and self-assessment techniques, while the experimental groups engaged in structured, profession-oriented speaking tasks using ChatGPT. The tasks were based on contemporary IT topics, including the digital age, cybercrime, data storage, computer networks, and

current trends in information technology. The use of AI tools allowed students to receive immediate feedback and engage in interactive dialogue-based learning. The results demonstrated statistically significant improvement in the speaking skills of students in experimental groups compared to those in the control groups. The findings highlight the effectiveness of interactive AI-supported learning, immediate criterion-based feedback, and contextualized professional communication practice in enhancing speaking performance, fluency, and confidence. The study confirms the pedagogical value of ChatGPT and suggests its practical application as an innovative tool for developing profession-oriented speaking skills in foreign language education, particularly in IT-focused academic programs, contributing to modern educational practices and student-centered learning approaches.

Keywords: teaching; learning, English language, speaking, artificial intelligence, ChatGPT

For citations: Kaldarova A.K., Vasquez M.A., Kulgildinova T.A. Developing students profession-oriented speaking skills through ChatGPT. Scientific journal of pedagogy and economics, 2026. — No.2. — P. 229-242. DOI: <https://doi.org/10.32014/2026.2518-1467.1156>

© Калдарова А.К.^{1,2*}, Васкез М.А.², Кульгильдинова Т.А.¹, 2026.

¹Абылай хан атындағы Қазақ халықаралық қатынастар және әлем тілдер университеті, Алматы, Қазақстан;

²Халықаралық ақпараттық технологиялар университеті, Алматы, Қазақстан.
E-mail: a.kaldarova@iitu.edu.kz

СТУДЕНТТЕРДІҢ КӘСІБИ-БАҒДАРЛАНҒАН АЙТЫЛЫМ ДАҒДЫЛАРЫН СНАТGPT АРҚЫЛЫ ДАМУ

Қалдарова Айсұлу — “8D01721- Шетел тілі педагогтарын дайындау” мамандығы бойынша докторант, Абылай хан атындағы Қазақ халықаралық қатынастар және Әлем тілдері университеті, Алматы, Қазақстан; Ассистент-профессор, Халықаралық ақпараттық технологиялар университеті, Тілдер кафедрасы, Алматы, Қазақстан,
E-mail: a.kaldarova@iitu.edu.kz, ORCID ID: <https://orcid.org/0000-0002-7128-5731>;

Васкез Марко — ассистент-профессор, Халықаралық ақпараттық технологиялар Университеті, Тілдер кафедрасы, Алматы, Қазақстан,
E-mail: m-a.vasquez@iitu.edu.kz, ORCID ID: <https://orcid.org/0000-0003-2609-3009>;

Кульгильдинова Түлебике — педагогика ғылымдарының докторы, профессор, Абылай хан атындағы Қазақ халықаралық қатынастар және әлем тілдері университеті, Алматы, Қазақстан,
E-mail: tulebike@mail.ru, ORCID ID: <https://orcid.org/0000-0002-7758-0758>.

Аннотация. Бұл зерттеу цифрлық трансформация жағдайында шетел тілін оқыту барысында кәсіби бағытталған айтылым дағдыларын дамыту мәселесіне арналған. Зерттеудің өзектілігі студенттердің ақпараттық технологиялар саласындағы коммуникативтік құзыреттілігін арттыру мақсатында, атап айтқанда ChatGPT сияқты жасанды интеллект құралдарын білім беру

үдерісіне енгізу қажеттілігінің артуымен негізделеді. Қазіргі жоғары білім беру жүйесінде студенттерден тек тілдік дұрыстық қана емес, сонымен қатар болашақ кәсіби қызметімен байланысты жағдайларда тиімді кәсіби коммуникацияны жүзеге асыру қабілеті талап етіледі. Зерттеу барысында эксперименттік әдіс қолданылды. Зерттеуге Халықаралық ақпараттық технологиялар университетінің екінші курсында оқитын 60 студент қатысып, олар бақылау және эксперименттік топтарға бөлінді. Айтылым дағдыларының қалыптасу деңгейін бағалау үшін алдын ала және қорытынды тестілеу әдістері пайдаланылды. Бақылау топтары дәстүрлі аудио тапсырмалар мен өзін-өзі бағалау элементтерін қолданса, эксперименттік топтар ChatGPT көмегімен кәсіби бағытталған айтылым дағдыларын дамытуға арналған құрылымдалған тапсырмаларды орындады. Тапсырмалар ақпараттық технологиялар саласының негізгі бағыттарын қамтыды, атап айтқанда цифрлық дәуір, киберқылмыс, деректерді сақтау, компьютерлік желілер және ақпараттық технологиялардың дамуының заманауи үрдістері. Жасанды интеллект құралдарын қолдану жедел кері байланыс алуға мүмкіндік беріп, интерактивті оқыту үдерісін ұйымдастыруға ықпал етті. Зерттеу нәтижелері эксперименттік топ студенттерінің айтылым дағдылары деңгейінің бақылау топтарына қарағанда статистикалық тұрғыдан айтарлықтай артқанын көрсетті. Жасанды интеллект негізіндегі интерактивті тапсырмалар, жедел критериялды кері байланыс және кәсіби бағытталған тілдік тәжірибенің тиімділігі анықталды. Сонымен қатар, сөйлеу жылдамдығының, сенімділіктің және кәсіби коммуникацияға дайындығының артқаны байқалды. Алынған нәтижелер ChatGPT құралын қолданудың педагогикалық тұрғыдан тиімділігін және оны шетел тілін оқыту үдерісіне, әсіресе ақпараттық технологияларға бағытталған білім беру бағдарламаларында енгізудің орындылығын дәлелдейді, сондай-ақ заманауи білім беру тәсілдері мен студентке бағытталған оқытуды дамытуға ықпал етеді.

Түйін сөздер: оқыту, үйрену, ағылшын тілі, айтылым, жасанды интеллект, ChatGPT

© Калдарова А.К.^{1,2*}, Васкес М.А.², Кульгильдинова Т.А.¹, 2026.

¹Казахский университет международных отношений и мировых языков имени Аблай хана, Алматы, Казахстан;

²Международный университет информационных технологий, Алматы, Казахстан.

E-mail: a.kaldarova@iitu.edu.kz

РАЗВИТИЕ ПРОФЕССИОНАЛЬНО ОРИЕНТИРОВАННЫХ НАВЫКОВ УСТНОЙ РЕЧИ СТУДЕНТОВ С ИСПОЛЬЗОВАНИЕМ CHATGPT

Калдарова Айсулу — обучающийся докторантуры по специальности “8D01721- Подготовка педагогов иностранного языка”, Казахский университет международных отношений и

мировых языков имени Абылай хана, Алматы, Казахстан; Ассистент-профессор Кафедры языков, Международный университет информационных технологий, Алматы, Казахстан, E-mail: a.kaldarova@iitu.edu.kz, ORCID ID: <https://orcid.org/0000-0002-7128-5731>;

Васкез Марко — ассистент-профессор Кафедры Языков, Международный университет информационных технологий, Алматы, Казахстан

E-mail: m-a.vasquez@iitu.edu.kz, ORCID ID: <https://orcid.org/0000-0003-2609-3009>;

Кульгильдинова Тулебике — доктор педагогических наук, профессор, Казахский университет международных отношений и мировых языков имени Абылай хана, Алматы, Казахстан, E-mail: tulebike@mail.ru, ORCID ID: <https://orcid.org/0000-0002-7758-0758>.

Аннотация. Исследование посвящено актуальной проблеме развития профессионально-ориентированных навыков говорения при обучении иностранному языку в условиях цифровой трансформации образования. Актуальность обусловлена возрастающей необходимостью интеграции инструментов искусственного интеллекта, в частности ChatGPT, в образовательный процесс с целью повышения уровня коммуникативной компетенции студентов в сфере информационных технологий. В современных условиях высшего образования от обучающихся требуется не только языковая корректность, но и способность эффективно осуществлять профессионально-ориентированную коммуникацию в контекстах будущей профессиональной деятельности. В исследовании применён экспериментальный метод. В нём приняли участие 60 студентов второго курса Международный университет информационных технологий, распределённых на контрольные и экспериментальные группы. Для оценки уровня сформированности навыков говорения использовались методы пред- и посттестирования. Контрольные группы выполняли традиционные аудиозадания с элементами самооценки, тогда как экспериментальные группы работали с ChatGPT, выполняя структурированные задания, направленные на развитие профессионально-ориентированной речи. Тематика заданий охватывала ключевые направления в области информационных технологий, включая цифровую трансформацию, киберпреступность, хранение данных, компьютерные сети и современные тенденции развития IT-сферы. Использование инструментов искусственного интеллекта обеспечивало возможность получения мгновенной обратной связи и способствовало организации интерактивного обучения. Результаты исследования продемонстрировали статистически значимое повышение уровня владения навыками говорения у студентов экспериментальных групп по сравнению с контрольными. Установлена эффективность применения интерактивных заданий на основе искусственного интеллекта, мгновенной критериальной обратной связи и контекстуализированной профессионально-ориентированной речевой практики. Зафиксировано также повышение беглости речи, уровня уверенности и готовности к профессиональной коммуникации. Полученные результаты подтверждают педагогическую целесообразность использования ChatGPT и его потенциал для эффективного внедрения в процесс обучения иностранным языкам, особенно в рамках

информационно-технологически ориентированных образовательных программ, способствуя развитию современных образовательных подходов и принципов студентоцентрированного обучения.

Ключевые слова: обучение, изучение, английский язык, говорение, искусственный интеллект, ChatGPT

Introduction. Speaking competence has become a central objective of English language education in higher education. This emphasis reflects universities' growing focus on preparing graduates for effective academic and professional communication. For English as a Foreign Language (EFL) learners, developing speaking skills is often challenging due to limited exposure to authentic interaction, anxiety, insufficient feedback, and a lack of opportunities to practice profession-oriented discourse. These challenges are especially evident at the pre-intermediate level, where learners possess basic linguistic knowledge but struggle to express ideas coherently, accurately, and fluently in real-life and professional contexts. As a result, educators continue to search for innovative, technology-driven approaches that can provide sustained practice, individualized feedback, and realistic communicative scenarios to support speaking development.

Recent advances in artificial intelligence (AI), particularly large language models such as ChatGPT, have generated growing interest in language education research. ChatGPT offers interactive, dialogic, and adaptive features that simulate human-like conversation, making it a promising tool for speaking practice in EFL settings. Unlike traditional digital tools, ChatGPT enables learners to engage in extended dialogue, receive instant responses, and practice language use in context-specific situations. These features align well with the needs of learners aiming to develop professional-oriented speaking skills, which require not only grammatical accuracy but also coherence, appropriate vocabulary, fluency, and content relevance.

Empirical studies conducted in diverse educational contexts have begun to explore the effectiveness of ChatGPT in enhancing speaking skills. Ratnaningsih (2025) examined the use of ChatGPT in English for Specific Purposes (ESP), specifically maritime English, and found that structured interaction with the application significantly enhanced students' speaking performance. The study highlights that ChatGPT-supported tasks enabled learners to practice profession-related dialogues, improve vocabulary accuracy, and organize ideas more effectively. These findings suggest that AI-based conversational tools can bridge the gap between classroom instruction and the communicative demands of specific professional fields. Importantly, the value of integrating ChatGPT into speaking activities that are aligned with learners' future occupational needs, reinforcing the relevance of professional-oriented speaking instruction.

Similarly, Zulianingrum and Manggolo (2025) proposed a Human-AI Interaction Model that positions ChatGPT as a collaborative partner in EFL speaking development. Their model underscores the importance of guided interaction, where learners actively negotiate meaning with AI while teachers maintain a facilitative

role. The study demonstrates that when ChatGPT is used strategically, it can support learners in practicing turn-taking, elaborating responses, and maintaining coherence in spoken discourse. The authors argue that such interaction models enhance learner autonomy and confidence, both of which are critical for effective speaking. This perspective is particularly relevant for pre-intermediate learners, who often require structured yet flexible environments to develop fluency without fear of negative evaluation.

Learners' perceptions of AI-assisted speaking practice further support the pedagogical potential of ChatGPT. Pushpakumara (2025), in a study conducted at a Sri Lankan university, investigated students' perceptions of using ChatGPT to enhance English speaking skills. The findings reveal that learners generally viewed ChatGPT as a supportive and motivating tool that allowed them to practice speaking-related tasks without the pressure of face-to-face interaction. Students reported improvements in vocabulary use, sentence formation, and confidence when expressing ideas orally. These perceptions are significant, as positive learner attitudes toward technology are closely linked to engagement and learning outcomes. The study also indicates that ChatGPT can function as a supplementary practice environment, particularly beneficial in contexts where classroom speaking time is limited.

Beyond general EFL contexts, ChatGPT has also been examined in relation to professional and global communication demands. Mustafa, Siminto, and Ausat (2024) explored implementation strategies of ChatGPT in enhancing students' communication skills within a global business context. Their study highlights that AI-driven conversational practice can expose learners to professional registers, negotiation language, and task-oriented communication commonly used in international business settings. The authors argue that ChatGPT enables repeated rehearsal of professional scenarios, thereby improving learners' ability to convey content clearly, maintain cohesion, and use appropriate vocabulary. These findings reinforce the relevance of ChatGPT for developing professional-oriented speaking skills, particularly in higher education programs that aim to prepare students for globalized workplaces.

The integration of ChatGPT through mobile platforms has further expanded its accessibility and pedagogical impact. Behforouz et al. (2025) investigated the use of ChatGPT-4o in EFL classrooms, focusing on mobile interaction and AI tutoring. Their study demonstrates that mobile-based AI interaction provides flexible opportunities for speaking practice beyond classroom boundaries. Learners were able to engage in simulated conversations, receive immediate corrective feedback, and practice fluency at their own pace. The results indicate noticeable improvements in speaking performance, particularly in fluency and vocabulary usage. The study highlights the role of mobility and personalization in AI-supported speaking instruction, suggesting that ChatGPT can effectively complement formal teaching practices.

While empirical findings generally support the effectiveness of ChatGPT

in speaking development, it is equally important to consider learners' perceived benefits and challenges. Okwin Hitokdana (2025) conducted a systematic review examining students' perceptions of using ChatGPT for English speaking. The review identifies several perceived benefits, including increased confidence, reduced speaking anxiety, and enhanced opportunities for practice. At the same time, challenges such as overreliance on AI responses and concerns about accuracy were also noted. These insights highlight the need for well-designed instructional frameworks that ensure ChatGPT is used as a pedagogical support rather than a replacement for human interaction. The review emphasizes that structured tasks and clear assessment criteria are essential to maximize learning outcomes.

Despite the growing body of research, several gaps remain. First, many studies focus on learners' perceptions or qualitative outcomes, while fewer employ strictly quantitative research designs to measure speaking improvement across defined criteria. Second, although professional and ESP contexts have been explored, there is limited research examining the development of professional-oriented speaking skills among pre-intermediate university students over a sustained instructional period. Third, while existing studies acknowledge improvements in speaking, fewer explicitly assess multiple speaking criteria such as content, cohesion, grammar, vocabulary, and fluency within a controlled pre/posttest framework.

Addressing these gaps is critical for establishing stronger empirical evidence regarding the instructional value of ChatGPT in higher education. Quantitative research designs, particularly those employing pre/posttest measures, allow for objective evaluation of learning gains and provide clearer insights into the effectiveness of AI-assisted interventions. Furthermore, focusing on professional-oriented speaking aligns with current educational priorities that emphasize employability, communication competence, and real-world language use.

In response to these needs, the present study investigates the development of professional-oriented speaking skills through ChatGPT among pre-intermediate university students using a quantitative research method only. Conducted over a 15-week semester, the study systematically examines changes in students' speaking. Building on prior research that highlights the pedagogical potential of ChatGPT, this study seeks to contribute robust empirical evidence to the growing discourse on AI-assisted speaking instruction. Ultimately, the findings aim to inform educators, curriculum designers, and researchers about the effective integration of ChatGPT for enhancing professional speaking skills in university EFL contexts.

Literature review. The rapid emergence of ChatGPT has generated significant scholarly interest in its applications for English language teaching, particularly in oral and speaking instruction. Existing literature emphasizes that ChatGPT represents a shift from traditional computer-assisted language learning tools toward more interactive, dialogic, and adaptive systems capable of simulating authentic communication. Researchers generally agree that its conversational capacity positions it as a potentially powerful resource for developing oral English skills, while also raising pedagogical, ethical, and practical considerations.

Shi (2023) provides one of the earliest focused discussions on the role of ChatGPT in oral English teaching by examining its advantages, challenges, and future prospects. A major advantage of ChatGPT lies in its ability to provide unlimited speaking opportunities, which is particularly valuable in EFL contexts where classroom interaction time is limited. The study highlights that learners can engage in simulated conversations, practice sentence construction, and receive immediate responses, which supports fluency development. However, it also identifies challenges such as potential inaccuracies in AI-generated responses and the risk of reduced human interaction. The author concludes that ChatGPT should be integrated as a supplementary tool rather than a replacement for teacher-led instruction, emphasizing the importance of pedagogical guidance in oral English teaching.

Expanding on classroom integration, Kostka and Toncelli (2023) explore a wide range of applications of ChatGPT in English language teaching, including speaking, writing, grammar, and vocabulary development. Their analysis underscores that ChatGPT offers opportunities for personalized learning, allowing students to practice oral language at their own pace and according to their individual needs. In terms of speaking skills, ChatGPT can support dialogue practice, role-plays, and pronunciation-related tasks through text-based interaction that scaffolds spoken production. At the same time, they caution against overreliance on AI outputs and stress the need for critical evaluation of generated language. Their recommendations highlight the importance of teacher mediation to ensure that speaking practice remains meaningful and aligned with instructional goals.

From a theoretical perspective, the alignment between language learning theories and the practical use of ChatGPT in English language teaching. Their work argues that ChatGPT aligns well with constructivist and communicative language teaching principles, as it encourages active learner engagement and meaning-focused interaction. In speaking instruction, ChatGPT enables learners to negotiate meaning, rehearse responses, and experiment with language forms in a low-anxiety environment. Hatmanto and Sari (2023) emphasize that effective implementation requires careful task design so that AI-mediated interaction supports communicative competence rather than mechanical repetition. This theoretical grounding reinforces the idea that ChatGPT's value in speaking development depends largely on how it is pedagogically framed.

Teacher perspectives on ChatGPT integration provide further insight into its classroom role. Mimi Li et al. (2025) examine world language teachers' reported practices of integrating ChatGPT through a positioning analysis. Their findings indicate that teachers adopt varied stances toward ChatGPT, ranging from enthusiastic adopters to cautious users. Many teachers reported using ChatGPT to support speaking-related activities such as conversation modeling, prompt generation, and role-play design. Teachers who positioned ChatGPT as a collaborative assistant rather than an authoritative source were more likely to integrate it effectively into

oral language instruction. This study highlights the central role of teacher beliefs and agency in shaping how ChatGPT is used to enhance speaking skills.

Systematic reviews offer a broader synthesis of research findings related to ChatGPT and language skill development. Ar-Rahmah, Azkia, and Tarihoran (2025) conducted a systematic review examining the role of ChatGPT in enhancing English language skills across multiple studies. Their review identifies speaking as one of the skills most positively influenced by ChatGPT use, particularly in terms of fluency, vocabulary range, and learner confidence. The authors report that ChatGPT-supported speaking practice allows learners to rehearse responses repeatedly, which contributes to improved oral performance. Nevertheless, recurring concerns related to the authenticity of interaction and the need for clear assessment frameworks. These findings suggest that while ChatGPT is beneficial for speaking development, its effectiveness is maximized when combined with structured evaluation criteria.

While systematic reviews provide a macro-level synthesis of ChatGPT's effectiveness in language learning, recent classroom-based empirical studies offer more contextualized evidence of its impact on speaking skill development. Supporting these findings, Muniandy and Selvanathan (2024) investigated the use of ChatGPT as a partnering tool to improve ESL learners' speaking skills in a Malaysian public university. The study found that ChatGPT functions effectively as a conversational partner, enabling learners to practice oral production, reduce speaking anxiety, and improve fluency through continuous interaction. Students benefited from the opportunity to rehearse responses, experiment with language use, and receive immediate text-based feedback, which contributed to increased confidence in speaking tasks. However, the authors also emphasize that ChatGPT cannot fully replace authentic human interaction, particularly in developing spontaneous communication and pragmatic competence. Therefore, they recommend its integration as a supplementary tool alongside teacher-led speaking activities to maximize its pedagogical value.

In addition to AI-assisted speaking practice, technology-mediated learning tools have been shown to enhance broader aspects of skill development in higher education. For example, Daineko, Dmitriyev, and Ipalakova (2016) illustrate how virtual laboratories in physics courses allow students to interact with complex concepts through software simulations, promoting experiential learning and independent problem-solving. Similarly, Kaldarova, Vasquez, Baisbay, and Altayeva (2024) report that Quizlet supports vocabulary acquisition by enabling interactive and repeated practice, resulting in significantly higher retention among experimental groups compared to traditional instruction. Both studies demonstrate that technology can extend learning opportunities beyond conventional classroom limitations, offering structured, repeatable, and self-directed practice that enhances both knowledge and applied skills. These findings parallel the affordances of ChatGPT for speaking development, where learners can engage with guided oral tasks and receive immediate textual feedback, thereby reinforcing both micro-

level language features such as pronunciation and macro-level communicative competence.

Pronunciation and oral accuracy represent another important dimension of speaking skills addressed in literature. Ahmed and Lima (2025) explore innovative approaches to pronunciation and skill development using ChatGPT. Their study demonstrates that ChatGPT can support learners' awareness of pronunciation features by providing explanations, examples, and guided practice prompts. Although ChatGPT does not directly assess spoken output in real time, it can indirectly enhance pronunciation by strengthening learners' phonological knowledge and encouraging self-monitoring. This contribution expands the understanding of how AI tools can support speaking development beyond fluency and content, addressing micro-level aspects of oral proficiency.

Across the reviewed studies, several recurring themes emerge. First, ChatGPT is consistently viewed as a tool that increases access to speaking practice, particularly outside the classroom. This aligns with assertion that AI-mediated interaction can compensate for limited instructional time. Second, learner autonomy is frequently highlighted, as ChatGPT allows students to control the pace, topic, and complexity of speaking-related tasks. Third, teacher guidance remains a critical factor, that effective integration depends on how educators position and frame the technology.

Despite these strengths, the literature also points to notable limitations. Concerns regarding accuracy, overdependence, and reduced human interaction are repeatedly mentioned. Additionally, while systematic reviews report positive outcomes, they also reveal a lack of consistency in research design and assessment methods. Many studies rely on qualitative perceptions rather than objective measurements of speaking improvement, indicating a need for more quantitative investigations with clearly defined speaking criteria.

The existing literature suggests that ChatGPT holds considerable potential for enhancing speaking skills in EFL contexts by providing interactive, flexible, and learner-centered practice opportunities. Studies highlight improvements in fluency, vocabulary, confidence, and overall communicative competence when ChatGPT is pedagogically integrated. However, scholars consistently emphasize that its effectiveness depends on thoughtful instructional design, teacher mediation, and alignment with learning objectives. The reviewed research establishes a strong conceptual and empirical foundation for further quantitative studies that systematically measure speaking development, particularly in professional-oriented contexts and across specific assessment criteria.

Hypothesis.

This study hypothesizes that integrating ChatGPT into speaking instruction will significantly improve professional-oriented speaking skills of pre-intermediate university students. It is expected that posttest scores will be statistically higher than pretest scores after a fifteen-week intervention using ChatGPT-based speaking activities implemented during the first academic semester within a quantitative pretest-posttest research design framework only applied.

Methods and materials.

The study employed a quasi-experimental pre/posttest control group design to investigate the effectiveness of ChatGPT in developing profession-oriented speaking skills among pre-intermediate English learners. The experiment was conducted over one academic semester (15 weeks).

The participants were 60 second-year university students enrolled in a pre-intermediate English course. At the time of the experiment, students were in their third semester of English language instruction. The participants were divided into four groups, each consisting of 15 students. Thus, the total sample included 30 students in experimental groups and 30 students in control groups.

All groups followed the same syllabus and studied identical profession-oriented topics related to Information Technology: Digital Age, Cybercrime, Data Storage, Networks, Current Trends in IT.

English classes were held twice a week, with a total of 3 academic hours per week (2 hours on one day and 1 hour on the following day). Classroom instruction was identical for all groups; the difference lay in the out-of-class speaking practice method.

Students in the experimental groups practiced speaking through individual out-of-class tasks supported by ChatGPT. The teacher created structured speaking tasks aligned with syllabus topics and shared clear instructions with students. Learners interacted with ChatGPT by speaking on assigned profession-oriented topics. After each speaking task, ChatGPT provided automated feedback based on predefined assessment criteria, focusing on content, cohesion, grammar, vocabulary, and fluency.

Students in the control groups practiced speaking using traditional instructional methods. Their speaking practice involved recording their oral responses, listening to the recordings, and conducting self-assessment based on the same evaluation criteria applied in the experimental groups. No AI-based tools or automated feedback systems were used in the control groups.

To measure speaking performance, a speaking pretest was administered in Week 1, followed by a posttest conducted in Week 15. The same criteria were used by the teacher during testing and by ChatGPT when providing feedback to experimental group students. This ensured consistency and reliability in evaluation.

Results. The analysis of the pretest results indicated that the experimental and control groups had generally comparable levels of speaking proficiency at the beginning of the study (Table 1). Although Experimental Group STEM #1 demonstrated a slightly higher initial score, the overall pretest data suggest that the groups started the intervention at a relatively similar proficiency level.

Following the 15-week instructional period, all groups demonstrated improvement in their speaking performance, as reflected in the posttest results. However, the experimental groups showed higher overall gains compared to the control groups. Experimental Group STEM #1 achieved the greatest improvement, with a gain of 5,1%, while Experimental Group STEM #2 showed a gain of 4,5%.

In the control groups, Control Group STEM #3 demonstrated a gain of 4,4%, whereas Control Group STEM #4 showed a more moderate improvement of 3,6%. Although progress was observed in both instructional conditions, the magnitude of improvement was more consistent and pronounced in the experimental groups.

Table 1 – Pre/posttest results

Groups	Pretest results 100%	Posttest results 100%	Gain %
Experimental group STEM #1	80,1	85,2	5,1
Experimental group STEM #2	74,2	78,7	4,5
Control group STEM #3	74,4	78,8	4,4
Control group STEM #4	74,5	78,1	3,6

Discussion. The results confirm that ChatGPT-supported speaking practice contributes positively to the development of profession-oriented speaking skills among pre-intermediate STEM students. The higher gains observed in the experimental groups can be attributed to the interactive nature of AI-mediated speaking tasks and the availability of immediate, criterion-based feedback.

ChatGPT provided students with individualized feedback aligned with the same assessment criteria used in formal testing, which likely enhanced learners' metacognitive awareness of their speaking performance. This continuous formative feedback may have facilitated more focused improvement in content organization, grammatical accuracy, vocabulary use, and fluency.

Moreover, the use of profession-oriented topics derived directly from the syllabus ensured that speaking practice was contextually relevant and professionally meaningful. Repeated engagement with IT-related themes may have strengthened students' ability to articulate ideas using appropriate technical vocabulary and cohesive discourse structures.

While the control groups also demonstrated improvement, differences in the consistency of progress were observed. Traditional recording-based speaking practice relies heavily on learners' ability to self-diagnose errors, which may limit the effectiveness of feedback for pre-intermediate students.

The findings suggest that integrating ChatGPT as a supplementary instructional tool can enhance speaking outcomes when combined with regular classroom instruction. AI-supported speaking practice appears to increase practice opportunities, support learner autonomy, and promote measurable improvement in profession-oriented speaking skills.

Conclusion. The findings of this study demonstrate that the integration of ChatGPT into speaking instruction positively contributed to the development of professional-oriented speaking skills among pre-intermediate university students. Quantitative analysis of pretest and posttest results indicates measurable improvement in students' speaking skills. These results align with prior research

suggesting that AI-supported conversational tools provide increased opportunities for structured practice, immediate feedback, and reduced anxiety, all of which facilitate speaking development. The study further confirms that systematic integration of ChatGPT into a semester-long instructional framework enables it to function as an effective pedagogical support tool. This approach contributes to the development of oral communication skills that are essential for both academic and professional contexts. Overall, the findings provide empirical support for the educational value of ChatGPT in EFL speaking instruction.

Recommendations:

Based on the study results, it is recommended that higher education institutions consider integrating ChatGPT into speaking courses, particularly those emphasizing professional communication. Teachers should design guided, task-based speaking activities that align AI interaction with clear learning objectives and assessment criteria. Professional-oriented prompts, role-plays, and scenario-based discussions should be prioritized to enhance relevance and transferability of speaking skills. Teacher training is also essential to ensure effective and ethical use of AI tools, supporting the positioning of ChatGPT as a learning assistant rather than a replacement for instruction. Future classroom implementation should maintain a balance between AI-supported practice and human interaction to maximize learning outcomes.

Limitations:

Despite its contributions, this study has several limitations. First, the research employed a quantitative method only, which limits deeper insight into learners' perceptions, attitudes, and experiences with ChatGPT, as highlighted in previous reviews. Second, the sample size was limited to 60 pre-intermediate university students, which may restrict the generalizability of the findings to other proficiency levels or educational contexts. Third, the study focused exclusively on short-term outcomes within a single 15-week semester, and therefore does not capture long-term retention or transfer of speaking skills. Finally, reliance on AI-generated interaction may pose risks if not carefully monitored, underscoring the need for pedagogical control and critical evaluation in future research.

References

- Ahmed S., & Lima E. (2025) Empowering language learners and teachers with ChatGPT: Innovative approaches to pronunciation and skill development. In J. M. Levis, M. Duris, S. Sonaat-Hegelheimer, & I. Na (Eds.), *Proceedings of the 15th Pronunciation in Second Language Learning and Teaching Conference*. — P. 1–15. Iowa State University, September 2024. <https://doi.org/10.31274/psllt.18689> (in Eng.)
- Ar-Rahmah S.Z., Azkia A.H., & Tarihoran N. (2025) The role of ChatGPT in enhancing English language skills: A systematic review. *International Journal of Teaching and Learning (INJOTEL)*, 2(11). — P.1106–1127. <https://injoqast.net/index.php/INJOTEL/article/view/297/252> (in Eng.)
- Behforouz B., Al Maqbali A., Al Ghaithi A., & Afrooz P. (2025) Mobile interaction meets AI tutoring: Using ChatGPT-4o to boost speaking skills in EFL classrooms. *International Journal of Interactive Mobile Technologies*, 19(22). — 34 p. <https://doi.org/10.3991/ijim.v19i22.57447> (in Eng.)

Daineko Y., Dmitriyev V., & Ipalakova M. (2016) Using virtual laboratories in teaching natural sciences: An example of physics courses in university. *Computer Applications in Engineering Education*, 25. — P. 39–47. <https://doi.org/10.1002/cae.21777> (in Eng.)

Hatmanto E. D., & Sari M.I. (2023). Aligning theory and practice: Leveraging ChatGPT for effective English language teaching and learning. *E3S Web of Conferences*, 440, 05001. <https://doi.org/10.1051/e3sconf/202344005001> (in Eng.)

Hitokdana K.O. (2025) Students' perceptions of the benefits and challenges of using ChatGPT for English speaking: A systematic review. *ELS Journal on Interdisciplinary Studies in Humanities*, 8(4). — P. 1209–1221. <https://journal.unhas.ac.id/index.php/jish/article/view/48815> (in Eng.)

Kaldarova A., Vasquez M., Baisbay N., & Altayeva A. (2024) The effects of Quizlet on International Information Technology University first-year students' vocabulary acquisition. *CEUR Workshop Proceedings*. <https://www.scopus.com/pages/publications/85192522819?inward> (in Eng.)

Kostka I., & Toncelli R. (2023) Exploring applications of ChatGPT to English language teaching: Opportunities, challenges, and recommendations. *The Electronic Journal for English as a Second Language*, 27(3). <https://doi.org/10.55593/ej.271107int> (in Eng.)

Li M., Belpoliti F., Taha G., & Zhang M. (2025) World language teachers' reported practices of integrating ChatGPT into instruction: A positioning analysis. *Foreign Language Annals*, 58(4), 995–1017. <https://doi.org/10.1111/flan.70041> (in Eng.)

Muniandy J., & Selvanathan M. (2024) ChatGPT, a partnering tool to improve ESL learners' speaking skills: Case study in a public university, Malaysia. *Heliyon*. <https://doi.org/10.1177/01447394241230152> (in Eng.)

Mustafa F., Siminto & Ausat A.M.A. (2024) Implementation strategies of ChatGPT in enhancing students' communication skills in the global business context. *Technopreneurship and Educational Development Review (TENDER)*, 1(2), 60–67. <https://doi.org/10.61100/tender.v1i2.186> (in Eng.)

Pushpakumara S.L., & P.B. (2025) Use of ChatGPT to enhance English speaking skills: Learners' perception in a Sri Lankan university. <http://repo.lib.jfn.ac.lk/ujrr/handle/123456789/11684> (in Eng.)

Ratnaningsih D. (2025) Enhancing students' speaking skills using ChatGPT application in ESP maritime English learning. *JEES (Journal of English Educators Society)*, 10(2), 186–197. <https://doi.org/10.21070/jees.v10i2.1964> (in Eng.)

Shi X. (2023) Advantages, challenges and prospects of ChatGPT in oral English teaching. *Transactions on Social Science, Education and Humanities Research*, 4. ISSN: 2960-1770, eISSN: 2960-2262 (in Eng.)

Zulianingrum A., & Manggolo N.S.K.H. (2025) A human–AI interaction model for improving speaking skills in EFL learning using ChatGPT. *Nusantara Journal of Artificial Intelligence and Information Systems*, 1(2). — P. 77–84. <https://doi.org/10.47776/nuai.v1i2.1752> (in Eng.)

Publication Ethics and Publication Malpractice in the journals of the Central Asian Academic Research Center LLP

For information on Ethics in publishing and Ethical guidelines for journal publication see <http://www.elsevier.com/publishingethics> and <http://www.elsevier.com/journal-authors/ethics>.

Submission of an article to the journals of the Central Asian Academic Research Center LLP implies that the described work has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis or as an electronic preprint, see <http://www.elsevier.com/postingpolicy>), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. In particular, translations into English of papers already published in another language are not accepted.

No other forms of scientific misconduct are allowed, such as plagiarism, falsification, fraudulent data, incorrect interpretation of other works, incorrect citations, etc. The Central Asian Academic Research Center LLP follows the Code of Conduct of the Committee on Publication Ethics (COPE), and follows the COPE Flowcharts for Resolving Cases of Suspected Misconduct (http://publicationethics.org/files/u2/New_Code.pdf). To verify originality, your article may be checked by the Cross Check originality detection service <http://www.elsevier.com/editors/plagdetect>.

The authors are obliged to participate in peer review process and be ready to provide corrections, clarifications, retractions and apologies when needed. All authors of a paper should have significantly contributed to the research.

The reviewers should provide objective judgments and should point out relevant published works which are not yet cited. Reviewed articles should be treated confidentially. The reviewers will be chosen in such a way that there is no conflict of interests with respect to the research, the authors and/ or the research funders.

The editors have complete responsibility and authority to reject or accept a paper, and they will only accept a paper when reasonably certain. They will preserve anonymity of reviewers and promote publication of corrections, clarifications, retractions and apologies when needed. The acceptance of a paper automatically implies the copyright transfer to the Central Asian Academic Research Center LLP.

The Editorial Board of the Central Asian Academic Research Center LLP will monitor and safeguard publishing ethics.

Requirements for articles design for publication in the journal are available on the websites:

[www: nauka-nanrk.kz](http://www.nauka-nanrk.kz)

ISSN 2518–1467 (Online),

ISSN 1991–3494 (Print)

<http://www.bulletin-science.kz/index.php/en>

Managing Editor: A.Shormakova

Editors: D.S. Alenov, M.Konyrbekov

Computer layout: G.D. Zhadyranova

Подписано в печать 27.04.2026.

46,0 п.л.

Заказ 2.