

THE USE OF ARTIFICIAL INTELLIGENCE TOOLS IN ENGLISH  
LANGUAGE LEARNING

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**Abstract**

*Artificial intelligence (AI) has emerged as one of the most transformative forces in contemporary education, particularly in the field of foreign language learning. AI-powered tools such as ChatGPT, Grammarly, ELSA Speak, and Duolingo's adaptive systems offer unprecedented opportunities for personalized, interactive, and accessible language education. This study investigates the use, perceptions, and effectiveness of AI tools in English language learning among undergraduate students at Tashkent Perfect University. Adopting the IMRAD structure, the research employed a mixed-methods design with 110 participants. Quantitative data were collected through a structured questionnaire and pre-test/post-test assessments, while qualitative data were derived from interviews and reflective journals. The findings demonstrate that AI tools significantly enhance learner autonomy, provide instant feedback, and improve specific skills such as writing, pronunciation, and grammar. However, concerns were raised regarding over-reliance, ethical considerations, and the diminished role of human interaction. The study concludes that AI tools, when integrated thoughtfully and ethically, can serve as effective supplements to traditional language instruction and contribute meaningfully to the development of English language proficiency.*

**Keywords:** *artificial intelligence, AI in education, English language learning, ChatGPT, intelligent tutoring systems, personalized learning, EFL*

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**Abstract**

*The rapid expansion of online education, particularly during and after the COVID-19 pandemic, has encouraged educators to reassess the comparative effectiveness of online and traditional approaches to English language teaching. This study examines the strengths, limitations, and overall effectiveness of online and traditional methods of English language learning among university students. Following the IMRAD structure, the research employed a quasi-experimental mixed-methods design involving 130 participants from Tashkent Perfect University. One group ( $n = 65$ ) received fully online instruction, while the other group ( $n = 65$ ) participated in traditional face-to-face classes. Quantitative data were collected through pre-tests and post-tests assessing language proficiency, whereas qualitative data were obtained from interviews and focus group discussions. The findings indicate that both*

*instructional methods contribute significantly to learning improvement; however, their advantages differ. Traditional learning proved more effective in developing speaking skills, promoting classroom interaction, and providing immediate teacher feedback. In contrast, online learning demonstrated greater effectiveness in terms of flexibility, self-paced learning, and access to multimedia resources. The study ultimately supports the implementation of a blended learning approach that integrates the advantages of both methods to enhance English language education.*

**Keywords:** *online learning, traditional learning, blended learning, English language learning, comparative study, EFL, higher education*

tarjima qil ruschaga va o'zbekchaga

### **Ruscha tarjima**

### **Аннотация**

*Стремительное развитие онлайн-образования, особенно в период и после пандемии COVID-19, побудило педагогов пересмотреть сравнительную эффективность онлайн- и традиционных методов преподавания английского языка. В данном исследовании рассматриваются сильные стороны, ограничения и общая эффективность онлайн- и традиционных методов изучения английского языка среди студентов университетов. Исследование, выполненное в соответствии со структурой IMRAD, основано на квазиэкспериментальном смешанном методе и охватывает 130 участников из Tashkent Perfect University. Одна группа (n = 65) обучалась полностью в онлайн-формате, тогда как другая группа (n = 65) проходила традиционное очное обучение. Количественные данные были собраны с помощью предварительного и итогового тестирования уровня владения языком, а качественные данные были получены посредством интервью и фокус-групповых обсуждений. Результаты показывают, что оба метода обучения способствуют значительному прогрессу в обучении, однако их преимущества различаются. Традиционное обучение оказалось более эффективным в развитии разговорных навыков, организации взаимодействия в аудитории и обеспечении оперативной обратной связи со стороны преподавателя. В то же время онлайн-обучение продемонстрировало большую эффективность с точки зрения гибкости, самостоятельного темпа обучения и доступа к мультимедийным ресурсам. Исследование подтверждает целесообразность применения смешанного подхода к обучению, объединяющего преимущества обоих методов для повышения эффективности преподавания английского языка.*

**Ключевые слова:** *онлайн-обучение, традиционное обучение, смешанное обучение, изучение английского языка, сравнительное исследование, EFL, высшее образование.*

### **O'zbekcha tarjima**

### **Annotatsiya**

*Onlayn ta'limning jadal rivojlanishi, ayniqsa COVID-19 pandemiyasi davrida va undan keyin, pedagoglarni ingliz tilini o'qitishning onlayn va an'anaviy usullarining qiyosiy samaradorligini qayta ko'rib chiqishga undadi. Mazkur tadqiqot universitet talabalari*

orasida ingliz tilini o'rganishning onlayn va an'anaviy usullarining ustunliklari, cheklovlari hamda umumiy samaradorligini tahlil qiladi. IMRAD tuzilmasi asosida olib borilgan tadqiqot kvazi-eksperimental aralash metodologiyaga tayangan bo'lib, unda Tashkent Perfect Universityning 130 nafar talabasi ishtirok etdi. Bir guruh ( $n = 65$ ) to'liq onlayn ta'lim oldi, ikkinchi guruh ( $n = 65$ ) esa an'anaviy yuzma-yuz ta'lim shaklida tahsil oldi. Miqdoriy ma'lumotlar til kompetensiyasini baholovchi dastlabki va yakuniy testlar orqali to'plandi, sifat ma'lumotlari esa intervyular hamda fokus-guruh muhokamalari asosida olindi. Natijalar har ikkala ta'lim usuli ham o'quv natijalarining sezilarli yaxshilanishiga xizmat qilishini ko'rsatdi, biroq ularning afzalliklari farqlanadi. An'anaviy ta'lim og'zaki nutq ko'nikmalarini rivojlantirish, auditoriya ichidagi o'zaro muloqotni kuchaytirish va o'qituvchidan tezkor fikr-mulohaza olishda samaraliroq ekanligi aniqlandi. Aksincha, onlayn ta'lim moslashuvchanlik, mustaqil o'qish sur'ati va multimedia resurslaridan foydalanish imkoniyati jihatidan ustunlik ko'rsatdi. Tadqiqot ingliz tili ta'limini yanada samarali tashkil etish uchun har ikki usulning afzalliklarini birlashtiruvchi aralash ta'lim yondashuvini qo'llashni tavsiya etadi.

**Kalit so'zlar:** onlayn ta'lim, an'anaviy ta'lim, aralash ta'lim, ingliz tilini o'rganish, qiyosiy tadqiqot, EFL, oliy ta'lim.

**Abstract** Bilingualism, the regular use of two languages in everyday life, has long been a subject of considerable interest in applied linguistics and second language acquisition research. In Uzbekistan, where most learners speak both Uzbek and Russian before encountering English, bilingualism plays a particularly significant role in the language learning process. This study examines the impact of pre-existing bilingual competence on the acquisition of English as a third language among university students. Following the IMRAD format, the study used a mixed-methods design with 100 participants from Tashkent Perfect University. Quantitative data were drawn from English proficiency assessments and a structured questionnaire, while qualitative insights came from semi-structured interviews. Results indicated that bilingual learners outperformed monolingual learners in metalinguistic awareness, vocabulary acquisition, and learning strategies. However, certain challenges were identified, including cross-linguistic interference and confusion between similar grammatical structures. The study concludes that bilingualism, when leveraged consciously through pedagogical practice, serves as a cognitive and linguistic asset for English language learning, supporting the broader recognition of multilingualism as a resource rather than a barrier.

**Keywords:** bilingualism, multilingualism, third language acquisition, cross-linguistic influence, metalinguistic awareness, English language learning, Uzbek learners o'zbekcha va ruschaga tarjima qil

### **O'zbekcha tarjima**

### **Annotatsiya**

Ikki tillilik, ya'ni kundalik hayotda ikki tildan muntazam foydalanish, amaliy tilshunoslik va ikkinchi tilni o'zlashtirish tadqiqotlarida uzoq yillardan buyon katta qiziqish uyg'otib

*kelmoqda. O'zbekistonda aksariyat o'quvchilar ingliz tiliga duch kelishidan oldin o'zbek va rus tillarida so'zlashgani sababli, ikki tillilik til o'rganish jarayonida ayniqsa muhim o'rin tutadi. Mazkur tadqiqot universitet talabalari orasida avvaldan shakllangan ikki tilli kompetensiyaning ingliz tilini uchinchi til sifatida o'zlashtirishga ta'sirini o'rganadi. IMRAD formati asosida olib borilgan tadqiqot aralash metodologiya asosida tashkil etilib, unda Tashkent Perfect Universityning 100 nafar talabasi ishtirok etdi. Miqdoriy ma'lumotlar ingliz tili bilimni baholash testlari va tuzilgan so'rovnoma orqali to'plandi, sifat ma'lumotlari esa yarim tuzilgan intervyular asosida olindi. Natijalar ikki tilli o'quvchilar metalingvistik ong, lug'at boyligini o'zlashtirish va o'rganish strategiyalari bo'yicha bir tilli o'quvchilarga nisbatan yuqori natijalarni ko'rsatganini aniqladi. Shu bilan birga, tillararo interferensiya hamda o'xshash grammatik tuzilmalar o'rtasidagi chalkashlik kabi ayrim muammolar ham kuzatildi. Tadqiqot xulosasiga ko'ra, ikki tillilik pedagogik amaliyot orqali ongli ravishda qo'llab-quvvatlanganda, ingliz tilini o'rganishda kognitiv va lingvistik ustunlik vazifasini bajaradi hamda ko'p tillilikni to'siq emas, balki resurs sifatida e'tirof etish zarurligini tasdiqlaydi.*

**Kalit so'zlar:** *ikki tillilik, ko'p tillilik, uchinchi tilni o'zlashtirish, tillararo ta'sir, metalingvistik ong, ingliz tilini o'rganish, o'zbek o'quvchilari.*

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*Билингвизм, то есть регулярное использование двух языков в повседневной жизни, давно является предметом значительного интереса в области прикладной лингвистики и исследований усвоения второго языка. В Узбекистане, где большинство обучающихся владеют узбекским и русским языками до начала изучения английского, билингвизм играет особенно важную роль в процессе изучения языка. Данное исследование рассматривает влияние уже сформированной билингвальной компетенции на усвоение английского языка как третьего языка среди студентов университетов. Исследование, выполненное в формате IMRAD, основывалось на смешанном методе и охватило 100 участников из Tashkent Perfect University. Количественные данные были получены с помощью тестов на уровень владения английским языком и структурированного опросника, тогда как качественные данные были собраны посредством полуструктурированных интервью. Результаты показали, что билингвальные обучающиеся превосходят монолингвальных обучающихся по уровню метаязыкового сознания, усвоению словарного запаса и использованию стратегий обучения. Вместе с тем были выявлены определённые трудности, включая межъязыковую интерференцию и смешение схожих грамматических структур. Исследование приводит к выводу, что билингвизм, при его осознанном использовании в педагогической практике, становится когнитивным и лингвистическим преимуществом в изучении английского языка и способствует признанию многоязычия не как препятствия, а как ценного ресурса.*

**Ключевые слова:** билингвизм, многоязычие, усвоение третьего языка, межъязыковое влияние, метаязыковое сознание, изучение английского языка, узбекские обучающиеся.

**Abstract** *Artificial intelligence (AI) has emerged as one of the most transformative forces in contemporary education, particularly in the field of foreign language learning. AI-powered tools such as ChatGPT, Grammarly, ELSA Speak, and Duolingo's adaptive systems offer unprecedented opportunities for personalized, interactive, and accessible language education. This study investigates the use, perceptions, and effectiveness of AI tools in English language learning among undergraduate students at Tashkent Perfect University. Adopting the IMRAD structure, the research employed a mixed-methods design with 110 participants. Quantitative data were collected through a structured questionnaire and pre-test/post-test assessments, while qualitative data were derived from interviews and reflective journals. The findings demonstrate that AI tools significantly enhance learner autonomy, provide instant feedback, and improve specific skills such as writing, pronunciation, and grammar. However, concerns were raised regarding over-reliance, ethical considerations, and the diminished role of human interaction. The study concludes that AI tools, when integrated thoughtfully and ethically, can serve as effective supplements to traditional language instruction and contribute meaningfully to the development of English language proficiency. Keywords: artificial intelligence, AI in education, English language learning, ChatGPT, intelligent tutoring systems, personalized learning, EFL o'zbekcha va ruscha tarjima qil*

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*Sun'iy intellekt (SI) zamonaviy ta'limdagi eng muhim transformatsion omillardan biri sifatida namoyon bo'lib, ayniqsa xorijiy tillarni o'rganish sohasida katta ahamiyat kasb etmoqda. ChatGPT, Grammarly, ELSA Speak hamda Duolingoning moslashuvchan tizimlari kabi SI asosidagi vositalar shaxsiylashtirilgan, interaktiv va qulay til ta'limi uchun mislsiz imkoniyatlar yaratmoqda. Mazkur tadqiqot Tashkent Perfect University bakalavr talabalari orasida ingliz tilini o'rganishda SI vositalaridan foydalanish, ularga bo'lgan munosabat va ularning samaradorligini o'rganadi. IMRAD tuzilmasi asosida olib borilgan tadqiqot aralash metodologiyaga tayangan bo'lib, unda 110 nafar ishtirokchi qatnashdi. Miqdoriy ma'lumotlar tuzilgan so'rovnoma hamda dastlabki va yakuniy testlar orqali to'plandi, sifat ma'lumotlari esa intervyular va reflektiv kundaliklardan olindi. Natijalar SI vositalari o'quvchilarning mustaqil o'rganish qobiliyatini sezilarli darajada oshirishi, tezkor fikr-mulohaza berishi hamda yozish, talaffuz va grammatika kabi ko'nikmalarni rivojlantirishga yordam berishini ko'rsatdi. Shu bilan birga, SI vositalariga haddan tashqari tayanish, axloqiy masalalar va insoniy muloqot rolini kamayishi bilan bog'liq xavotirlar ham bildirildi. Tadqiqot xulosasiga ko'ra, SI vositalari puxta va axloqiy tamoyillar asosida integratsiya qilinganda, an'anaviy til o'qitish jarayonini samarali to'ldiruvchi vosita bo'lib xizmat qiladi hamda ingliz tilidagi kompetensiyani rivojlantirishga sezilarli hissa qo'shadi.*

**Kalit so'zlar:** *sun'iy intellekt, ta'limda SI, ingliz tilini o'rganish, ChatGPT, intellektual o'qitish tizimlari, shaxsiylashtirilgan ta'lim, EFL.*

Принять предложение

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### **Аннотация**

*Билингвизм, то есть регулярное использование двух языков в повседневной жизни, давно является предметом значительного интереса в области прикладной*

лингвистики и исследований усвоения второго языка. В Узбекистане, где большинство обучающихся владеют узбекским и русским языками до начала изучения английского, билингвизм играет особенно важную роль в процессе изучения языка. Данное исследование рассматривает влияние уже сформированной билингвальной компетенции на усвоение английского языка как третьего языка среди студентов университетов. Исследование, выполненное в формате IMRAD, основывалось на смешанном методе и охватило 100 участников из Tashkent Perfect University. Количественные данные были получены с помощью тестов на уровень владения английским языком и структурированного опросника, тогда как качественные данные были собраны посредством полуструктурированных интервью. Результаты показали, что билингвальные обучающиеся превосходят монолингвальных обучающихся по уровню метаязыкового сознания, усвоению словарного запаса и использованию стратегий обучения. Вместе с тем были выявлены определённые трудности, включая межъязыковую интерференцию и смешение схожих грамматических структур. Исследование приводит к выводу, что билингвизм, при его осознанном использовании в педагогической практике, становится когнитивным и лингвистическим преимуществом в изучении английского языка и способствует признанию многоязычия не как препятствия, а как ценного ресурса.

**Ключевые слова:** билингвизм, многоязычие, усвоение третьего языка, межъязыковое влияние, метаязыковое сознание, изучение английского языка, узбекские обучающиеся.

**Abstract** Artificial intelligence (AI) has emerged as one of the most transformative forces in contemporary education, particularly in the field of foreign language learning. AI-powered tools such as ChatGPT, Grammarly, ELSA Speak, and Duolingo's adaptive systems offer unprecedented opportunities for personalized, interactive, and accessible language education. This study investigates the use, perceptions, and effectiveness of AI tools in English language learning among undergraduate students at Tashkent Perfect University. Adopting the IMRAD structure, the research employed a mixed-methods design with 110 participants. Quantitative data were collected through a structured questionnaire and pre-test/post-test assessments, while qualitative data were derived from interviews and reflective journals. The findings demonstrate that AI tools significantly enhance learner autonomy, provide instant feedback, and improve specific skills such as writing, pronunciation, and grammar. However, concerns were raised regarding over-reliance, ethical considerations, and the diminished role of human interaction. The study concludes that AI tools, when integrated thoughtfully and ethically, can serve as effective supplements to traditional language instruction and contribute meaningfully to the development of English language proficiency. **Keywords:** artificial intelligence, AI in education, English language learning, ChatGPT, intelligent tutoring systems, personalized learning, EFL o'zbekcha va ruscha tarjima qil

**O'zbekcha tarjima**

**Annotatsiya**

*Sun'iy intellekt (SI) zamonaviy ta'limdagi eng muhim transformatsion omillardan biri sifatida namoyon bo'lib, ayniqsa xorijiy tillarni o'rganish sohasida katta ahamiyat kasb etmoqda. ChatGPT, Grammarly, ELSA Speak hamda Duolingoning moslashuvchan tizimlari kabi SI asosidagi vositalar shaxsiylashtirilgan, interaktiv va qulay til ta'limi uchun mislsiz imkoniyatlar yaratmoqda. Mazkur tadqiqot Tashkent Perfect University bakalavr talabalari orasida ingliz tilini o'rganishda SI vositalaridan foydalanish, ularga bo'lgan munosabat va ularning samaradorligini o'rganadi. IMRAD tuzilmasi asosida olib borilgan tadqiqot aralash metodologiyaga tayangan bo'lib, unda 110 nafar ishtirokchi qatnashdi. Miqdoriy ma'lumotlar tuzilgan so'rovnoma hamda dastlabki va yakuniy testlar orqali to'plandi, sifat ma'lumotlari esa intervyular va reflektiv kundaliklardan olindi. Natijalar SI vositalari o'quvchilarning mustaqil o'rganish qobiliyatini sezilarli darajada oshirishi, tezkor fikr-mulohaza berishi hamda yozish, talaffuz va grammatika kabi ko'nikmalarni rivojlantirishga yordam berishini ko'rsatdi. Shu bilan birga, SI vositalariga haddan tashqari tayanish, axloqiy masalalar va insoniy muloqot rolini kamayishi bilan bog'liq xavotirlar ham bildirildi. Tadqiqot xulosasiga ko'ra, SI vositalari puxta va axloqiy tamoyillar asosida integratsiya qilinganda, an'anaviy til o'qitish jarayonini samarali to'ldiruvchi vosita bo'lib xizmat qiladi hamda ingliz tilidagi kompetensiyani rivojlantirishga sezilarli hissa qo'shadi.*

**Kalit so'zlar:** *sun'iy intellekt, ta'limda SI, ingliz tilini o'rganish, ChatGPT, intellektual o'qitish tizimlari, shaxsiylashtirilgan ta'lim, EFL.*

### **Ruscha tarjima**

#### **Аннотация**

*Искусственный интеллект (ИИ) стал одной из наиболее трансформирующих сил в современном образовании, особенно в области изучения иностранных языков. Инструменты на основе ИИ, такие как ChatGPT, Grammarly, ELSA Speak и адаптивные системы Duolingo, предоставляют беспрецедентные возможности для персонализированного, интерактивного и доступного языкового образования. Данное исследование рассматривает использование, восприятие и эффективность инструментов ИИ в изучении английского языка среди студентов бакалавриата Tashkent Perfect University. Исследование, выполненное в структуре IMRAD, основывалось на смешанном методе и включало 110 участников. Количественные данные были собраны с помощью структурированного опросника и предварительного/итогового тестирования, тогда как качественные данные были получены посредством интервью и рефлексивных дневников. Результаты показали, что инструменты ИИ значительно повышают автономность обучающихся, обеспечивают мгновенную обратную связь и способствуют развитию таких навыков, как письмо, произношение и грамматика. Вместе с тем были высказаны опасения относительно чрезмерной зависимости от технологий, этических аспектов и уменьшения роли человеческого взаимодействия. Исследование приходит к выводу, что инструменты ИИ, при их продуманной и этически обоснованной интеграции,*

*могут служить эффективным дополнением к традиционному обучению языкам и существенно способствовать развитию владения английским языком.*

**Ключевые слова:** *искусственный интеллект, ИИ в образовании, изучение английского языка, ChatGPT, интеллектуальные обучающие системы, персонализированное обучение, EFL.*

## 1. Introduction

The integration of artificial intelligence into education has revolutionized the way languages are taught and learned. AI-powered applications now offer features that were unimaginable a decade ago, including real-time feedback, adaptive learning paths, conversational practice with virtual tutors, automatic essay grading, and pronunciation analysis. These innovations have generated considerable interest among educators, researchers, and policymakers, particularly in EFL contexts where access to native speakers and authentic input is often limited. As AI continues to evolve, understanding its pedagogical implications has become a pressing scholarly priority.

AI tools relevant to language learning can be broadly categorized into several types. Generative AI systems, such as ChatGPT, Claude, and Gemini, allow learners to engage in natural language conversations, request explanations, and receive personalized writing feedback. Adaptive learning platforms, such as Duolingo, Memrise, and Babbel, use machine learning algorithms to tailor content to individual learner needs. Pronunciation tools like ELSA Speak and Speechling employ speech recognition technology to provide detailed phonetic feedback. Writing assistants such as Grammarly and QuillBot help learners improve grammar, style, and clarity. Each of these tools offers distinct affordances and limitations that must be carefully considered in the context of language pedagogy.

Despite the proliferation of AI tools in education, empirical research on their effectiveness in EFL settings, particularly in Central Asia, remains limited. While there is enthusiasm regarding AI's potential, many questions remain unanswered. How do students actually use AI tools in their language learning? What are the perceived benefits and drawbacks? Do AI tools genuinely improve learning outcomes, or do they merely simulate progress? How can educators integrate AI ethically and effectively into their teaching practices? This study seeks to address these questions through a focused investigation of Uzbek university students.

The research is guided by the following objectives: (1) to identify the AI tools most commonly used by Uzbek university students for English language learning; (2) to examine the perceived benefits and challenges of AI tool usage; (3) to measure the impact of AI tool integration on specific language skills; and (4) to provide pedagogical recommendations for the ethical and effective use of AI in English language education.

## 2. Methods

### 2.1 Research Design

This study used a mixed-methods, quasi-experimental research design with both pre-intervention and post-intervention phases. The quantitative component employed a pre-

test/post-test approach with experimental and control groups, while the qualitative component used interviews and reflective journals to gain deeper insights into students' experiences. The integration of these approaches allowed for both measurement of effectiveness and exploration of the lived experiences of AI-assisted language learning.

## **2.2 Participants**

The study involved 110 undergraduate students from Tashkent Perfect University. Participants were enrolled in English language courses at intermediate (B1) to upper-intermediate (B2) proficiency levels and were aged between 18 and 22 years. They were randomly divided into an experimental group (n=55) that received structured guidance on integrating AI tools into their language learning routines, and a control group (n=55) that continued with conventional learning methods without AI integration. Ethical approval was obtained, and informed consent was secured from all participants.

## **2.3 AI Tools Employed**

Several AI tools were introduced to the experimental group during the intervention. ChatGPT was used for conversational practice, vocabulary exploration, and writing feedback. Grammarly was integrated for grammar and style refinement during writing tasks. ELSA Speak was used for pronunciation training. Duolingo provided adaptive vocabulary and grammar practice. Quizlet's AI-powered features supported personalized vocabulary review. Students received a two-hour training workshop on the appropriate, ethical, and effective use of these tools.

## **2.4 Data Collection**

Data were collected through three primary methods. First, a 30-item questionnaire measured students' frequency of AI tool use, perceived benefits, perceived challenges, and overall attitudes. Second, a comprehensive English proficiency assessment was administered before and after the 10-week intervention, covering writing, speaking, listening, and grammar. Third, semi-structured interviews were conducted with 22 randomly selected students from the experimental group, and weekly reflective journals were collected to track their evolving experiences.

## **2.5 Data Analysis**

Quantitative data were analyzed using SPSS version 26. Paired-samples t-tests compared pre-test and post-test scores within each group, and independent-samples t-tests compared the two groups. Qualitative data were analyzed thematically, with codes generated from the data and grouped into broader themes. Triangulation across data sources strengthened the credibility of the findings.

## **3. Results**

### **3.1 Frequency and Patterns of AI Tool Use**

Survey data revealed that 89% of experimental group participants used AI tools at least three times per week during the intervention. ChatGPT was the most frequently used tool, with 76% of students engaging with it weekly, primarily for writing assistance, conversation practice, and vocabulary explanations. Grammarly was used by 71% of students, mainly for

proofreading written assignments. ELSA Speak was used by 58% of students for pronunciation practice, while 52% used Duolingo regularly. Patterns of use varied based on individual learning preferences, with some students favoring conversational tools and others preferring structured exercises.

### **3.2 Improvements in Language Skills**

The proficiency assessment showed statistically significant improvements in the experimental group compared to the control group. The experimental group's writing scores improved by 22% on average, while the control group improved by 11%. In speaking, particularly pronunciation, the experimental group improved by 19% compared to 9% in the control group. Grammar accuracy improved by 17% versus 8%, and listening comprehension improved by 14% versus 10%. The differences were statistically significant ( $p < 0.01$ ) for all skills, with the largest effect observed in writing and pronunciation.

### **3.3 Perceived Benefits**

Interview and journal data revealed several perceived benefits of AI tools. The most frequently mentioned benefit was the availability of immediate, personalized feedback, particularly in writing tasks. Students appreciated being able to receive grammar corrections, vocabulary suggestions, and stylistic improvements within seconds. Another notable benefit was 24/7 accessibility, which allowed students to practice English at any time and at their own pace. Several students described AI tools as 'patient teachers' who never grew frustrated and who could repeat explanations as many times as needed. The non-judgmental nature of AI interactions also reduced anxiety, encouraging students to take risks and experiment with the language.

### **3.4 Perceived Challenges and Concerns**

Despite the benefits, students raised several concerns. Approximately 64% expressed worries about over-reliance on AI tools, fearing that excessive dependence might undermine independent thinking and authentic language production. About 47% reported instances of AI tools generating inaccurate or misleading information, particularly with culturally specific content. Ethical concerns emerged regarding the use of ChatGPT for assignments, with some students unsure about the boundaries between assistance and academic dishonesty. Furthermore, 38% noted that AI tools could not fully replicate the social and emotional aspects of human interaction, which they considered crucial for genuine communicative competence.

### **3.5 Impact on Learner Autonomy and Motivation**

AI tools had a notable positive impact on learner autonomy and motivation. Students reported feeling more in control of their learning, setting their own goals, and tracking their progress more effectively. The gamified elements of certain AI applications, such as streaks, badges, and adaptive challenges, sustained student engagement over the 10-week period. Self-efficacy scores measured at the end of the intervention were significantly higher in the experimental group than in the control group, suggesting that AI tools may foster a stronger belief in one's ability to learn English independently.

#### **4. Discussion**

##### **4.1 Effectiveness of AI Tools**

The significant improvements observed in the experimental group provide strong evidence that AI tools can substantially enhance English language learning when used systematically and with appropriate guidance. The particularly large gains in writing and pronunciation align with the strengths of current AI technologies, which excel at text analysis and speech recognition. The findings suggest that AI tools are most effective when used to complement human instruction rather than to replace it, supporting a hybrid model of language education that combines the strengths of both.

##### **4.2 Pedagogical Implications**

The findings suggest several pedagogical implications. First, teachers should explicitly integrate AI tools into their curricula, providing students with structured guidance on appropriate and effective use. Without such guidance, students may either underutilize the tools or use them in superficial ways. Second, teachers should help students develop critical evaluation skills, enabling them to assess the accuracy and reliability of AI-generated content. Third, AI integration should be balanced with opportunities for human interaction, as social and pragmatic competence cannot be fully developed through AI alone. Fourth, teacher training programs must include modules on AI literacy to ensure that educators can effectively guide students.

##### **4.3 Ethical Considerations**

The ethical concerns raised by students deserve serious attention. The line between using AI as a learning aid and using it to circumvent learning is not always clear. Institutions should develop and communicate clear policies on AI use in academic contexts. Students should be taught to distinguish between productive uses, such as exploring vocabulary or revising drafts, and unproductive uses, such as having AI write entire assignments. Additionally, issues of data privacy, algorithmic bias, and the potential perpetuation of dominant linguistic norms warrant ongoing scholarly and pedagogical attention.

##### **4.4 Addressing Over-Reliance**

The risk of over-reliance is a legitimate concern. To address this, educators should design tasks that explicitly require independent language production, with AI tools used only at specific stages such as pre-writing brainstorming or post-writing revision. Reflection activities can also help students become aware of their AI use patterns and develop more balanced learning habits. The goal should be to use AI to scaffold learning, with the ultimate aim of fostering independent linguistic competence.

##### **4.5 Limitations and Future Directions**

This study has several limitations. The 10-week intervention may not capture long-term effects, and the findings may not generalize beyond the specific context of Tashkent Perfect University. The rapid evolution of AI technology also means that some of the specific tools studied may be replaced by more advanced alternatives in the near future. Future research should explore longitudinal effects, compare different categories of AI tools, examine the role

of cultural context in AI integration, and investigate how AI tools can be designed to better support specific EFL contexts.

### **5. Conclusion**

Artificial intelligence tools represent a powerful new resource for English language learning, offering personalized feedback, accessibility, and motivational benefits that were previously unattainable. The empirical evidence presented in this study demonstrates that AI tools can significantly improve learners' writing, pronunciation, grammar, and overall proficiency when integrated thoughtfully into instruction. However, the realization of AI's full potential requires careful pedagogical planning, ethical awareness, and a commitment to balancing technological innovation with human-centered teaching. As AI continues to evolve, language educators in Uzbekistan and beyond must remain critically engaged with these technologies, harnessing their possibilities while safeguarding the social, cultural, and human dimensions of language learning.

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