

Original paper

PROBLEMS OF DEVELOPING COMMUNICATIVE COMPETENCE THROUGH MOBILE APPLICATIONS IN THE EDUCATIONAL PROCESS



© Fazilat F. Norova¹✉

¹Bukhara State University, Bukhara, Uzbekistan

Annotation

INTRODUCTION: this article analyzes the issues of developing students' communicative competence through mobile applications. The rapid development of information and communication technologies requires the introduction of new methodological approaches in the educational process. In particular, the effectiveness of mobile platforms such as Duolingo, Google Classroom, Kahoot, and Telegram in engaging learners in interactive communication is discussed. Moreover, methodological, technical, pedagogical, and psychological challenges are examined, highlighting the lack of sufficient empirical research in the existing literature. The findings show that mobile applications can serve as an effective tool in enhancing students' communicative competence.

AIM: the aim of this study is to investigate the role of mobile applications in the development of students' communicative competence and to identify the challenges and opportunities of their integration into the educational process.

MATERIALS AND METHODS: the study is based on a review of scientific literature, comparative analysis of existing mobile platforms, and pedagogical observations conducted with undergraduate students. Surveys and interviews were applied to collect qualitative data regarding students' experiences and attitudes towards mobile learning tools. Descriptive and comparative methods were used to evaluate the effectiveness of mobile applications in fostering communication skills.

DISCUSSION AND RESULTS: the results indicate that mobile applications significantly contribute to improving students' communicative competence by providing interactive and learner-centered environments. Applications such as *Duolingo* and *Kahoot* enhance vocabulary and fluency, while platforms like *Google Classroom* and *Telegram* facilitate collaborative learning and peer interaction. However, the research also revealed several barriers, including insufficient digital literacy among teachers, limited technical resources, and methodological constraints. Despite these challenges, students reported increased motivation, autonomy, and confidence in using mobile tools for language learning and communication practice.

CONCLUSION: mobile applications represent an effective supplementary tool for the development of communicative competence in students. Their integration into the educational process promotes interactive learning, enhances motivation, and strengthens communication skills. At the same time, overcoming methodological and technical barriers

is essential for maximizing their pedagogical potential. Future studies should focus on large-scale empirical research and the development of teacher training programs for effective mobile-assisted learning implementation.

Keywords: mobile applications, communicative competence, information technologies, educational process, interactive methods, communication skills, methodological challenges

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ПРОБЛЕМЫ РАЗВИТИЯ КОММУНИКАТИВНОЙ КОМПЕТЕНТНОСТИ ЧЕРЕЗ МОБИЛЬНЫЕ ПРИЛОЖЕНИЯ В ОБРАЗОВАТЕЛЬНОМ ПРОЦЕССЕ

© Ф.Ф. Норова^{1✉}

¹Бухарский государственный университет, Бухара, Узбекистан

Аннотация

ВВЕДЕНИЕ: в данной статье анализируются вопросы развития коммуникативной компетентности студентов с использованием мобильных приложений. Быстрое развитие информационно-коммуникационных технологий требует внедрения новых методических подходов в образовательный процесс. В частности, рассматривается эффективность таких мобильных платформ, как *Duolingo*, *Google Classroom*, *Kahoot* и *Telegram* в вовлечении обучающихся в интерактивное общение. Кроме того, изучаются методические, технические, педагогические и психологические проблемы, что подчеркивает недостаток эмпирических исследований в существующей литературе. Полученные данные показывают, что мобильные приложения могут служить эффективным инструментом в повышении коммуникативной компетентности студентов.

ЦЕЛЬ: цель данного исследования – изучить роль мобильных приложений в развитии коммуникативной компетентности студентов, а также выявить трудности и возможности их интеграции в образовательный процесс.

МАТЕРИАЛЫ И МЕТОДЫ: исследование основано на обзоре научной литературы, сравнительном анализе существующих мобильных платформ и педагогических наблюдениях, проведенных со студентами бакалавриата. Для сбора качественных данных использовались анкеты и интервью, отражающие опыт и отношение студентов к мобильным образовательным инструментам. Для оценки эффективности мобильных приложений в формировании коммуникативных навыков применялись описательный и сравнительный методы.

ОБСУЖДЕНИЕ И РЕЗУЛЬТАТЫ: результаты показывают, что мобильные приложения в значительной степени способствуют развитию коммуникативной компетентности студентов, обеспечивая интерактивную и ориентированную на обучающегося среду. Приложения *Duolingo* и *Kahoot* способствуют расширению

словарного запаса и беглости речи, а такие платформы, как *Google Classroom* и *Telegram*, создают условия для совместного обучения и взаимодействия между студентами. Однако исследование выявило ряд барьеров, включая недостаточный уровень цифровой грамотности преподавателей, ограниченные технические ресурсы и методические трудности. Несмотря на это, студенты отметили рост мотивации, самостоятельности и уверенности при использовании мобильных инструментов для изучения языка и развития навыков общения.

ЗАКЛЮЧЕНИЕ: мобильные приложения представляют собой эффективное дополнительное средство развития коммуникативной компетентности студентов. Их интеграция в образовательный процесс способствует интерактивному обучению, повышает мотивацию и укрепляет навыки общения. В то же время для максимального использования их педагогического потенциала необходимо преодоление методических и технических барьеров. В дальнейшем исследования должны быть направлены на проведение масштабных эмпирических работ и разработку программ подготовки преподавателей для эффективного применения мобильных технологий в обучении.

Ключевые слова: мобильные приложения, коммуникативная компетентность, информационные технологии, образовательный процесс, интерактивные методы, коммуникативные навыки, методические проблемы.

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TA'LIM JARAYONIDA MOBIL ILOVALAR ORQALI KOMMUNIKATIV KOMPETENSIYANI RIVOJLANTIRISH MUAMMOLARI

© Fazilat F. Norova¹✉

¹Buxoro davlat Universiteti, Buxoro, O'zbekiston

Annotatsiya

KIRISH: mazkur maqolada talabalarda kommunikativ kompetensiyani rivojlantirishda mobil ilovalardan foydalanish masalalari tahlil qilinadi. Axborot-kommunikatsiya texnologiyalarining jadal rivojlanishi ta'lim jarayoniga yangi metodik yondashuvlarni joriy etishni talab etmoqda. Xususan, *Duolingo*, *Google Classroom*, *Kahoot* va *Telegram* kabi mobil platformalarning o'quvchilarni interaktiv muloqotga jalb etishdagi samaradorligi ko'rib chiqiladi. Shuningdek, metodik, texnik, pedagogik va psixologik muammolar o'rganilib, mavjud adabiyotlarda yetarli empirik tadqiqotlarning mavjud emasligi ta'kidlanadi. Tadqiqot natijalari mobil ilovalar talabalarining kommunikativ kompetensiyasini oshirishda samarali vosita bo'lib xizmat qilishi mumkinligini ko'rsatdi.

MAQSAD: ushbu tadqiqotning maqsadi — talabalarining kommunikativ kompetensiyasini rivojlantirishda mobil ilovalarning o'rnini o'rganish hamda ularni ta'lim jarayoniga integratsiya qilishdagi imkoniyatlar va muammolarni aniqlashdir.

MATERIALLAR VA METODLAR: tadqiqot ilmiy adabiyotlarni tahlil qilish, mavjud mobil platformalarni qiyosiy tahlil etish va bakalavriat talabalari bilan o'tkazilgan pedagogik kuzatuvlarga asoslangan. Talabalarning tajribasi va mobil ta'lim vositalariga munosabatini o'rganish maqsadida so'rovnomalar va suhbatlardan foydalanildi. Kommunikativ ko'nikmalarni shakllantirishda mobil ilovalarning samaradorligini baholash uchun tavsifiy va qiyosiy metodlar qo'llanildi.

MUHOKAMA VA NATIJALAR: natijalar shuni ko'rsatdiki, mobil ilovalar talabalarning kommunikativ kompetensiyasini sezilarli darajada rivojlantiradi, chunki ular interaktiv va talaba markazli muhitni yaratadi. *Duolingo* va *Kahoot* kabi ilovalar so'z boyligini kengaytirish va nutq ravonligini oshirishga yordam beradi, *Google Classroom* va *Telegram* esa hamkorlikda o'qish va o'zaro muloqotni ta'minlaydi. Shu bilan birga, tadqiqot bir qator to'siqlarni ham aniqladi, jumladan, o'qituvchilarning raqamli savodxonlik darajasining yetarli emasligi, texnik resurslarning cheklanganligi va metodik qiyinchiliklar. Shunga qaramay, talabalar mobil vositalardan foydalanish natijasida motivatsiya, mustaqillik va o'ziga ishonchning ortganini qayd etdilar.

XULOSA: mobil ilovalar talabalarda kommunikativ kompetensiyani rivojlantirishning samarali qo'shimcha vositasi hisoblanadi. Ularning ta'lim jarayoniga integratsiyasi interaktiv o'qitishni qo'llab-quvvatlaydi, motivatsiyani oshiradi va muloqot ko'nikmalarini mustahkamlaydi. Shu bilan birga, ularning pedagogik salohiyatini to'liq ro'yobga chiqarish uchun metodik va texnik to'siqlarni bartaraf etish zarur. Kelgusida olib boriladigan tadqiqotlar keng ko'lami empirik izlanishlarga va o'qituvchilarni mobil ta'lim texnologiyalaridan samarali foydalanishga tayyorlash dasturlarini ishlab chiqishga qaratilishi lozim.

Kalit so'zlar: mobil ilovalar, kommunikativ kompetensiya, axborot texnologiyalari, ta'lim jarayoni, interaktiv metodlar, muloqot ko'nikmalari, metodik muammolar.

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In recent years, the rapid development of information and communication technologies has led to the introduction of radically new approaches to the educational process. In particular, the issue of teaching using mobile applications, increasing the efficiency of students' learning and developing their communicative competence has become an urgent scientific problem. Computerization processes began in the second half of the 20th century, and at the beginning of the 21st century, mobile technologies and smartphones became widely popular and became one of the main tools used in the educational process. At the same time, communicative competence - that is, a person's ability to communicate, express his opinion clearly, and work effectively with others - is considered the main factor of success in today's globalization era.

This article discusses the development of communicative competence using mobile applications in the context of historical stages, views of scientists, and current problems.

Research methodology. Even before the use of mobile applications in the educational process, there were different approaches to the development of communicative competence. It is worth noting that research in this regard can be considered in several historical stages:

1960–1980s In the early period of information technology, computer technology entered education. B.F. Skinner, J. Piaget, L.S. Vygotsky. Scientists such as Vygotsky conducted research on the psychology of education, technical tools in teaching, and socio-psychological aspects of communication. In particular, Vygotsky emphasized communicative activity as an important factor in the development of a person.

1990s E-learning systems began to form during the widespread use of the Internet. For example, M. Warschauer and K. Beauvois studied the role of computer technologies in the development of communicative competence in foreign language teaching.

2000s - By the era of mobile technologies, with the popularity of smartphones, new opportunities have arisen in the educational process. J. Traxler (2007) described mobile learning as "an innovative model that frees the educational process from the boundaries of place and time." During this period, many scientists proved with practical studies that it is possible to develop communication skills of students using mobile applications. From 2010 to the present, that is in the period of digital transformation, various mobile applications (Duolingo, Quizlet, Kahoot, Google Classroom, Telegram, etc.) are widely used in the educational process. Interactive platforms, social networks and artificial intelligence technologies are actively used in the development of communicative competence. For example, S. Kukulska-Hulme and A. Shield (2010) noted that through mobile language learning applications, students are expanding their opportunities for interaction.

Today, the use of mobile applications in the educational process is becoming more and more widespread. In particular, various mobile platforms are used as an effective tool in the development of students' communicative competence. Each of them has its own capabilities and serves to develop students' communication, cooperation and creative thinking skills at various stages of the educational process.

1. **Language learning applications** (Duolingo, Memrise, LinguaLeo). These apps allow users to learn foreign languages with interactive exercises, pronunciation checks, vocabulary building, and sentence construction. For example, Duolingo organizes language learning through step-by-step exercises, allowing the user to repeat and consolidate language materials. Memrise and expands students' vocabulary through visual images, mnemonics, and live videos. As a result, the student can form the ability to freely express his opinion, hold a dialogue and communicate in the language he is learning.

2. **Virtual classes** (Google Classroom, Moodle, Edmodo). These platforms facilitate continuous communication between teacher and student, submission of assignments and assessment. For example, Google Classroom through which the teacher can place

educational materials, answer students' questions and monitor their activities. Moodle and the system is widely used to manage the educational process, create tests and organize online courses. Such virtual classes develop responsibility, cooperation and reasoning skills in students.

3. Interactive game platforms (Kahoot, Quizizz). Educational activities in the form of games increase the interest of students, and the competitive environment encourages them to communicate more actively. Kahoot with the help of the teacher organizes various tests and quizzes, and students answer questions in real time and observe the results. Quizizz and allows you to do independent training and homework in the form of a game. In this way, students not only check their knowledge, but also develop the skills of working in a team, giving opinions and freely expressing themselves.

4. Social networks and messengers (Telegram, WhatsApp, Microsoft Teams). These platforms are used not only as a quick communication tool, but also for group projects, discussions and information sharing. For example, Telegram through groups, students can discuss topics, exchange additional materials and conduct question-and-answer sessions. Microsoft Teams and provides video lessons, online meetings and joint document editing. Such a collaborative environment strengthens communicative competence, that is, students' ability to clearly express their opinion, listen to others and make joint decisions.

These tools teach not only to acquire knowledge, but also to work cooperatively, to make group decisions, and to exchange ideas. As a result, students develop speech culture, effective communication and critical thinking skills.

Although the development of communicative competence with the help of mobile applications today has great opportunities, there are a number of problems in practice. The process of solving them is of great importance in increasing the effectiveness of mobile education.

1. Technical problems. Effective use of mobile applications in the educational process depends in many cases on technical conditions. In some regions, low internet speed, lack of a stable communication network, or insufficient devices (smartphones, tablets, laptops) limit the effectiveness of education. In addition, the high cost of software or the unavailability of licensed versions always hinders the provision of equal opportunities in the educational process.

2. Pedagogical problems. One of the current problems is that teachers do not have enough knowledge and skills to use mobile applications. Due to the fact that many pedagogues do not fully understand the educational potential of mobile technologies, the possibilities of using them effectively in the course of the lesson are limited. Also, the lack of special training programs for teachers makes it difficult to form a culture of using mobile applications.

3. Psychological problems. Using mobile apps also has its own risks. Instead of using their phones for educational purposes, students can often indulge in social networks, games or various entertainment content. This distracts them, leads to inefficient

use of time and lowers learning motivation. Also, excessive use of mobile technologies can cause health problems (eyestrain, nervousness, insomnia).

4. The problem of inequality. Mobile learning opportunities are not equally available to all students. Due to lack of mobile internet or insufficient distribution of modern devices in some regions, students cannot have equal opportunities. This can increase social injustice in education, as well as create disparity in learning.

5. Methodological problems. Uniform standards and methodological guidelines for using mobile applications have not yet been fully developed. Therefore, scientific research today should be focused not only on the study of the advantages of mobile applications, but also on their effective use, development of methodological bases and provision of equal opportunities in the educational environment.

Results. The above problems show that today scientific research should be focused not only on the study of the advantages of mobile applications, but also on their effective use, development of didactic and methodical bases, and provision of equal opportunities in the educational environment. This, in turn, increases the effectiveness of the use of mobile technologies in education, opens a wide path to the development of communicative competence among pupils and students.

A number of scientific studies on the introduction of information and communication technologies into the educational process have been carried out in the Republic of Uzbekistan. Among them, A. Abdukadirov, N. Sodikov, Sh. Toshpulatov and other scientists (Abduqadirov, 2018; Sodikov, 2019; Toshpulatov, 2020) in their research paid special attention to studying the possibilities of mobile education, electronic textbooks and distance education. In their studies, it was emphasized the need to adapt the educational process to modern information technologies, to facilitate the interaction between the teacher and the student, and to form independent learning skills.

Also, A. Kadyrov, M. Karimov and other researchers (Kadirov, 2020; Karimov, 2021) analyzed the importance of interactive methods in the development of communicative competence. Their research revealed the pedagogical foundations of interactive approaches in ensuring active participation of students, strengthening mutual cooperation and developing effective communication skills. This aspect is especially relevant in the fields of foreign language teaching and development of communicative competence.

However, a number of problems are observed in existing scientific research. First of all, most scientific works remain at the level of general theoretical recommendations, and practical applications and experimental tests have not been carried out enough (Sadikov, 2019). For example, evaluation of the effectiveness of mobile applications such as Duolingo, Quizlet, and Telegram platforms, which are widely used in the educational process, is not sufficiently organized based on empirical research. As a result, although the issue of developing communicative competence using mobile applications is theoretically based, its practical aspects have not yet been fully revealed.

In addition, special criteria and diagnostic methods for measuring and evaluating students' communicative competence have not been developed (Karimov, 2021). This limits the possibility of evaluating the real effectiveness of mobile applications and interactive methods used in the educational process based on specific indicators. Therefore, it remains one of the urgent tasks to further develop scientific research in this direction, to enrich it with experimental tests, and to develop clear criteria for evaluating communicative competence.

ADABIYOTLAR RO'YXATI | СПИСОК ЛИТЕРАТУРЫ | REFERENCES

4. Abduqodirov, A.A. Axborot-kommunikatsiya texnologiyalarini ta'lim jarayonida qo'llash asoslari. – Toshkent: O'zbekiston Milliy universiteti nashriyoti, 2018.
5. Sodiqov, N. Elektron ta'lim muhitida talabalar kompetentligini rivojlantirish. – Toshkent: Fan va texnologiya, 2019.
6. Toshpulatov, Sh. Mobil ilovalarning ta'lim jarayonida qo'llanilishi. – "Ta'lim texnologiyalari" ilmiy jurnali, 2020, №2.
7. Karimov, M. Kommunikativ kompetentlikni shakllantirishda innovatsion yondashuvlar. – Toshkent: TDPU ilmiy axborotlari, 2021.
8. Полат, Е.С. Новые педагогические и информационные технологии в системе образования. – Москва: Академия, 2009.
9. Андреев, А.А. Дистанционное обучение и мобильные технологии. – Москва: Изд-во МГУ, 2012.
10. Абдуллина, А., Сейткасымова, Р. Мобильное обучение иностранным языкам: опыт Казахстана. – Алматы: "Қазақ университеті", 2017.
11. Солдаткин, В.И. Мобильное образование: перспективы и проблемы. – Москва: Вузовская книга, 2015.
12. Traxler, J. Defining, Discussing and Evaluating Mobile Learning: The Moving Finger Writes and Having Writ... – The International Review of Research in Open and Distance Learning, 2007.
13. Kukulska-Hulme, A., & Shield, A. An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction. – ReCALL, 2010.
14. Warschauer, M. Computer-Assisted Language Learning: An Introduction. – In Fotos, S. (Ed.), Multimedia Language Teaching, Tokyo: Logos International, 1996.
15. Beatty, K. Teaching and Researching: Computer-Assisted Language Learning. – Routledge, 2010.
16. Chen, C.M., & Hsu, S.H. Personalized Intelligent Mobile Learning System for Supporting Effective English Learning. – Educational Technology & Society

MUALLIF HAQIDA MA'LUMOT [ИНФОРМАЦИЯ ОБ АВТОРЕ] [AUTHORS INFO]

✉ **Norova Fazilat Fayzulloyevna**, axborot tizimlari va raqamli texnologiyalar kafedrası doktoranti, Buxoro davlat universiteti, Buxoro, O'zbekiston; e-mail: f.f.norova@buxdu.uz, **[Норова Фазилат Файзуллоевна]**, докторант кафедры информационных систем и цифровых технологий, Бухарский государственный университет, Бухара, Узбекистан; эл. почта: f.f.norova@buxdu.uz], **[Fazilat F. Norova]**, Doctoral Student, Department of Information Systems and Digital Technologies, Bukhara State University, Bukhara, Uzbekistan; e-mail: f.f.norova@buxdu.uz].