ORIGINAL ARTICLE

INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE

ISSN: 2692-5206, Impact Factor: 12,23
American Academic publishers, volume 05, issue 10,2025

Journal: https://www.academicpublishers.org/journals/index.php/ijai

THE ROLE OF MOBILE APPLICATIONS IN EDUCATING EARLY CHILDREN

Alfraganus University Department of Social Sciences
3rd year student of the “Speech Therapy” specialization
Tiloverdiyeva Shokhzoda Shokirjon kizi
Scientific supervisor: **Utbasarova UmidaMekhmanovna**
(PhD)., Associate Professor

Abstract: This article analyzes the possibilities of mobile applications in teaching young students, the issues of developing a teaching model that is appropriate for their psychological and pedagogical characteristics. The advantages of mobile educational technologies, their effective use in the educational process, as well as their role in developing independent thinking and interactive learning skills in students are scientifically substantiated.
Keywords: Mobile education, teaching model, young students, digital pedagogy, interactivity, educational technologies.

Introduction. The importance of mobile applications in school education in children's education. In the era of modern technologies, smartphones have become an integral part of our daily lives. Especially in the field of children's education, mobile applications are becoming more and more popular every day. They complement traditional teaching methods and open up new opportunities for the learning process. Below we will analyze the main advantages of these applications and how they positively affect children's learning.

In today's era of globalization and digital transformation, the flow of information is spreading at an unprecedented speed. At a time when the Internet, social networks, online platforms and mobile applications have become an integral part of human life, the younger generation's ability to act consciously and critically in the media environment has become a pressing issue. In such conditions, the concept of "media literacy" includes not only the ability of students to correctly perceive and process information, but also such skills as independent thinking, choosing a reliable source, distinguishing false messages and expressing their ideas responsibly.

Teachers are now required to fulfill a new role, not only as educators, but also as people who guide young people in the digital world, who are reliable guides, who encourage critical thinking, who support creativity, and who shape information culture. Because developing media literacy is not just an additional skill, but an important foundation that provides students with future life competencies.

After all, if a modern teacher deeply understands the media field, effectively uses new technologies, and is able to educate young people as conscious consumers of information and responsible creators, the educational process will be more effective, meaningful, and purposeful. Therefore, the topic of “new roles of teachers in developing media literacy in students” is recognized as one of the most relevant issues in the education system today.

Teaching model for younger students. The proposed model consists of the following stages: Preparatory stage - the teacher selects a mobile application taking into account the age characteristics and interests of the students. Educational activity stage - children complete tasks in the application, mastering new knowledge through games. Monitoring and analysis stage - the application automatically records the results of the children, and the teacher monitors them. Reinforcement stage - knowledge is consolidated through additional exercises, application in the classroom or at home.

ORIGINAL ARTICLE
INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE
ISSN: 2692-5206, Impact Factor: 12,23
American Academic publishers, volume 05, issue 10,2025
Journal: https://www.academicpublishers.org/journals/index.php/ijai

Analysis. Students participate in the learning process as active participants through a mobile application. In personalized education, each child learns at their own pace and the complexity of the tasks assigned is adjusted. In this case, game elements, especially gamification (scores, prizes, levels), increase the student's motivation in the formation of students. In this regard, multimedia tools such as animation, sound and color graphics develop children's perception.
Flexibility - for learning anywhere and at any time, it is necessary to quickly access information and resources. In this regard, interactivity - provides for making learning interesting through tests, games, multimedia. In personalized education, the student learns at his own pace and in a way that suits his interests.
The advantages of mobile applications in children's education are being used worldwide in the field of mobile technologies. There are many apps designed for educational purposes that make it easier for students to learn on the go. Students do not have to be in the classroom to learn.
There are many apps that can improve children's work and study activities, one of which is the Byju's app. This app gives children complete control over their studies. They look for ways to solve problems and use other learning materials. For example, after a certain class is over, children review the topics they have studied as many times as possible. This helps slow learners not to fall behind. The app shows students the results in small steps. In this way, each success is an incentive and motivation increases. In addition, there is an opportunity to personalize the learning process, so that each child can identify their own difficulties and choose exercises that suit them. This makes learning more effective.
Mobile apps help children make the most of their time Students use smartphones for non-school activities. Educational apps help them make the most of their time by browsing educational content. Instead of their favorite YouTube shows, educational apps allow students to listen to recorded lectures, view useful electronic pictures, mosaics, exercises, and complete various interactive exercises and tasks. It is important to remember that with apps, the learning part continues on the go. Children learn while on the go, while waiting, or while they are with others. This allows them to spend more time on learning than they would at home or in the classroom. It becomes easier for students to analyze their time, create a schedule, and achieve set goals. This process increases the sense of independence for each child.
Using educational apps helps children develop their technological skills. Tech-savvy children, students, and teachers are sought after by many businesses. Educational apps help children develop their technical skills at an early age and make them productive in the future. Apps like SoloLearn now offer courses for children in languages like Java, Python, and others. They teach children the basics of programming step by step. They explain difficult topics in chunks. Lessons are presented through videos, interactive exercises, and quizzes. The learning process is personalized to the extent that it suits them. Children develop at their own pace. This way, they also strengthen their self-assessment skills. Moreover, they develop the technical mindset necessary to be competitive in the future.
Mobile apps make learning fun for children. Educational apps make learning easier and more engaging. When faced with a difficult topic or subject, learning apps make it more interesting. Gamified elements make lessons more interesting. For example, tasks can be leveled up or achievements can be rewarded with audio or visual rewards. In this case, the child will work more patiently as the content becomes more interesting. Complex concepts are presented in a simple way using experiments, simulations, and short videos. Through personalized learning materials, each child grows at their own level and pace.
Mobile applications allow children to focus on learning If a teacher has to deal with 30-40 children in a classroom, this can often be a daunting task. Introducing mobile applications into

ORIGINAL ARTICLE
INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE
ISSN: 2692-5206, Impact Factor: 12,23
American Academic publishers, volume 05, issue 10,2025
Journal: https://www.academicpublishers.org/journals/index.php/ijai

the classroom makes their work easier. With the help of applications, the student can focus on the materials intended for each child towards the final results. The teacher provides information that meets the child's needs without taking up too much time to prepare for class activities. The applications analyze the content, adjust the level of difficulty, and indicate errors. In this way, each child develops at their own pace, in a way that suits them. The result is quality attention, and order and efficiency in the classroom increase. Boring or confusing topics are reduced, because each child receives the right material for him.

Mobile applications allow students to learn through video. Today, modern video content has opened up a wide range of avenues for education. Children are now more likely to be creative using their applications through video content. The use of pen and paper has decreased, and video content is becoming a central theme in the way of learning. Seeing, hearing and understanding images with videos allows for joint reading and learning. Students can download their files and, if necessary, take them home to review. This method makes the educational text more clear, vivid and memorable. Students create, edit, and submit their own video content and projects for in-class or home assessment. Educational videos cover a wide range of topics and allow students to practice new skills.

Mobile apps in education make things transparent Some students are shy about talking to their teachers when they have a problem. Apps bridge the communication gap and increase face-to-face interaction between students and teachers. They make instructions or announcements that a teacher can give to students more widely available through the app. Projects, assignments, and their grades are displayed in real time. In this case, parents also monitor the child's progress. With the help of the app, teachers monitor the learning process, monitor the student's strengths and needs. In this way, doubts are eliminated in the communication between teacher and student. Details, abilities, and intermediate stages are clearly visible. This creates confidence for both the student and the parent. Motivation and satisfaction for children increase.

Results. In 2021, one in three children aged eight to eleven had their own smartphone. This figure has made learning using apps much easier. One of the biggest advantages of mobile learning apps is the easy access to educational materials. This opportunity has removed traditional educational barriers and allowed children to learn outside the classroom. At home, on trips or during vacations, children have become the main task of solving math problems, learning languages or engaging in interactive lessons. In this regard, the absence of schools in some areas (mountainous areas), free time after school or waiting on the road are also useful for learning. If there is an Internet connection, distance learning is also possible. Children strive to learn even in unfamiliar places, which gives them a sense of independence. Young students want to actively participate in the learning process. Educational mobile apps are interactive and offer children a way to learn through play. Interactive learning not only improves concentration, but also develops thinking skills. Gamified learning is present in many apps, providing knowledge through tests, puzzles, and simulations. For example, there may be practical crossword puzzles or simulations to learn the laws of physics. Word-building games help with language learning. Providing immediate feedback quickly corrects mistakes and encourages success. This demonstrates the principle of "learning by doing."

Each child learns in their own way and at their own pace. Augmented Learning: Using artificial intelligence and adaptive algorithms, apps respond to the needs of each child. The level of difficulty allows the child to move on to the next level if they understand the topic easily. If they have difficulty, they offer additional explanations or repeated exercises. An individual approach requires apps to create a program that is child-friendly. The app identifies the child's

ORIGINAL ARTICLE
INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE
ISSN: 2692-5206, Impact Factor: 12,23
American Academic publishers, volume 05, issue 10,2025
Journal: https://www.academicpublishers.org/journals/index.php/ijai

strengths and weaknesses and provides appropriate materials. This approach also helps children who have difficulty following along in a traditional classroom.

Multimedia content is endless through educational apps. Videos, images, and audio recordings enrich the learning experience. Enhanced Learning: Multimedia is a great way to accommodate different learning styles. Knowledge is reinforced through sight, hearing, and touch. Animated videos help simplify complex concepts. Visual and audio cues are used for better memorization. Topics such as ancient history or animal sounds capture the child's attention. These topics are connected to real life.

Educational apps build essential skills in children. Apps not only provide children with information, but also develop skills that support them. They offer rigorous problem-solving training, sequential exercises, and independent work. Children evaluate their own results. It teaches self-control, planning, and time management. Personalized exercises help, and failures are seen as a concept. As a result, the child becomes more independent. All of the above points indicate that education with the help of mobile applications is more effective. They accelerate the learning process, increase curiosity, expand skills, and create new routines for teachers. Thus, mobile applications create a way for children to learn: on the go, at home, and in the classroom.

The disadvantages of mobile learning technologies include:

1. Technical difficulties - if the internet quality or device capabilities are insufficient, the effectiveness of learning decreases.
2. Distractions - social networks, games on phones and tablets can distract attention.
3. Eye and health problems - sitting in front of a screen for a long time can damage the eyes, spine and nervous system.
4. Decreased personal communication - face-to-face communication between the teacher and the student is less than in traditional education.
5. Difficulty in monitoring - it is difficult to determine whether the student is completing the task independently or not.
6. Security problems - there is a possibility of encountering incorrect or harmful information via the internet.

So, although the benefits of mobile learning are many, internet quality, control, health and concentration are important for its effective use.

Conclusion. Psychological and pedagogical aspects. Mobile education for young students serves the following purposes: developing concentration, supporting creativity, forming independent learning skills, making the educational process interesting and easy.

Experience of Uzbekistan. Mobile educational resources for young children are also being created in Uzbekistan. For example, mobile applications such as Bilimdon Kids, Ilm Ziyo, Kitobim Kids are designed for preschool and primary school students, through which the opportunities for learning their native language, mathematics, English and other subjects through games are expanding. The mobile application-based learning model for young students serves to make the educational process more interesting, convenient and effective. With the help of mobile applications, it is possible to attract the attention of children, involve them in interactive activities and provide knowledge through games. This helps to develop independent thinking, quick information reception, and creative approach of students.

All of the above points indicate that education using mobile applications is more effective. They accelerate the learning process, increase curiosity, expand skills and create new procedures for teachers. Thus, mobile applications create a path for children to learn: on the go, at home and in the classroom.

ORIGINAL ARTICLE

INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE

ISSN: 2692-5206, Impact Factor: 12,23

American Academic publishers, volume 05, issue 10,2025

Journal: https://www.academicpublishers.org/journals/index.php/ijai

Also, teaching based on mobile applications allows you to take into account the individual abilities of young students, adjust the pace of learning and effectively organize the learning process, involving many senses. However, for its effective use, it is important to take into account parental and pedagogical control, as well as health restrictions. In general, the mobile application-based learning model is an important innovative direction that complements traditional education, increases the motivation of young students and improves the quality of education.

REFERENCES

1.UNESCO (2021). Education and Mobile Learning: New Approaches for the Digital Era. Paris: UNESCO Publishing.

2.Kukulska-Hulme, A. (2020). Mobile-Assisted Language Learning (MALL) for Young Learners. Oxford: Routledge.

3.Sharipov, A. (2022). “The Use of Mobile Applications in Primary Education.” Journal of Pedagogy of Uzbekistan, No. 4.

4.Lingokids Research Center (2023). Gamification and Early Learning Outcomes. Madrid.

5.The Concept of the President of the Republic of Uzbekistan “Digital Education” (2021).