



## Logopedic Training And Speech Development In Schoolchildren Using Innovative Technologies

**Gulkhan Egamnazarova.**

Teacher at Karshi city specialized boarding school No. 17.

**Abstract.** This article examines the use of innovative technologies in the development of speech in school-age children. The study analyzes the formation of articulation, phonemic awareness, and speech skills through digital tools, interactive platforms, and gamification-based exercises. The results show that the effectiveness of speech therapy classes increases with the use of technology, and students' motivation and activity increase. The article provides practical recommendations for the implementation of technology-based speech therapy programs in schools.

**Keywords:** speech therapy, innovative technologies, schoolchildren, speech development, digital tools, interactive exercises, gamification, phonemic awareness, articulation, speech skills.

**Introduction.** The development of speech skills is one of the important aspects of childhood education, as it ensures not only reading and writing abilities, but also social communication and cognitive development. Traditional speech therapy sessions were usually based on oral exercises and repetition, and they had certain limitations in increasing students' motivation and adapting to individual needs.

The rapid development of digital technologies has created opportunities to make speech therapy processes more effective and interactive. For example, through tablet applications, online platforms, and gamification elements, children can perform phonemic exercises in an engaging way, track their achievements, and be encouraged through rewards [1].

In schools, speech therapists have gained the opportunity to use innovative technologies in correcting various speech disorders, including



articulation difficulties, delays in phonemic awareness, and pronunciation problems. With the help of technologies, students' speech development can be significantly accelerated through an individual approach, immediate feedback, and interactive exercises. At the same time, an innovative approach encourages children to perform exercises independently and develops their creative thinking skills.

**Methods.** In the study, several scientific methods were used to determine the effectiveness of innovative technologies in speech therapy sessions. First of all, using the descriptive method, digital platforms and applications designed for school-age children were studied in detail. During this process, interactive programs such as Articulate It! and Speech Blubs, as well as gamification elements integrated into LMS systems, were analyzed. Through this method, the functional capabilities of each platform, the varying levels of difficulty of exercises, and their influence on students' engagement in the sessions were examined.

Using the analytical method, children's speech abilities, articulation accuracy, phonemic awareness, and sentence construction skills were assessed during the sessions. In addition, surveys were conducted among students and their parents in order to measure motivation and activity levels. This method made it possible to identify differences between children who worked with technology and those who participated in traditional sessions [2].

The experimental method was applied in a school setting. A total of 60 children aged 6–10 were involved in the study. Half of them participated in traditional speech therapy sessions, while the other half took part in interactive and gamification-based technological sessions. During the sessions, children's success in each exercise, their ability to correct mistakes, and their skills in finding independent solutions were continuously recorded.

Through the practical method, children developed their skills in performing articulation exercises, completing phonemic tasks, and constructing sentences. With the help of interactive platforms, each student monitored their individual progress and received personalized recommendations. Through the





LMS system, results were monitored weekly, while teachers analyzed students' mistakes and adapted the exercises accordingly. In this way, with the help of technology, children's speech development was adapted to their individual needs and abilities [3].

In addition, the combination of methods made it possible to analyze the speech therapy process, effectively apply innovative technologies, and develop students' speech skills to the fullest extent. At the same time, students' activity, motivation, and independent thinking skills were also continuously observed, which provided important information for developing pedagogical recommendations.

**Results.** Schoolchildren who participated in speech therapy sessions using innovative technologies demonstrated significant improvements in speech development. Through gamification elements, interactive exercises, and digital platforms, children mastered articulation exercises more quickly, improved their phonemic awareness, and developed their sentence construction skills. For example, in an experiment conducted with 60 children aged 6–10, the group that received technology-assisted sessions reached a 90% accuracy rate in performing speech exercises correctly, while the group working with traditional methods achieved 70%.

Through digital sessions, children had the opportunity to quickly identify and correct their mistakes. With the help of LMS platforms and interactive applications, students' achievements were tracked visually, which increased their motivation. At the same time, gamification elements such as points, badges, and leaderboards increased children's interest in the sessions and helped make repetitive exercises more engaging.

The technological approach also contributed to the development of children's independent problem-solving and analytical thinking skills. For example, students solved phonemic tasks using different approaches and evaluated their own solutions. In this process, children strengthened not only their speech abilities but also their self-monitoring and critical thinking skills.



Through group activities and interactive tasks, children learned to cooperate with one another. For instance, during group exercises, children actively participated in identifying and correcting each other's speech mistakes, which helped develop both technical and communication skills. In this way, speech therapy sessions served not only to improve individual knowledge but also to develop teamwork and social skills [4].

The results of the statistical analysis showed that children in the group that worked with the technological approach performed speech exercises 25–30% faster and more accurately than those in the group that used traditional methods. This confirms the effectiveness of applying innovative technologies in the speech therapy process.

**Discussion.** The results show that innovative technologies are an effective tool for developing schoolchildren's speech in speech therapy sessions. Interactive exercises, gamification elements, and digital platforms engage children in the learning process, enable them to identify and correct mistakes through immediate feedback, and increase their motivation.

Gamification is important not only for motivation but also for developing independent thinking and critical decision-making skills. For example, by solving phonemic tasks through different approaches and evaluating their own solutions, children improved their analytical abilities. This was especially effective in complex articulation and pronunciation exercises [5].

The technological approach made it possible to individualize the speech therapy process. With the help of LMS systems, each student's progress was monitored and individual recommendations were provided. This ensured an approach adapted to children's needs and strengthened their self-regulation skills.

In addition, group activities and interactive tasks helped children develop communication and cooperation skills. Leaderboards and group exercises encouraged children to exchange ideas with one another, solve tasks together, and compare their achievements. This made it possible to use the speech





therapy process not only as a means of improving individual knowledge but also as a tool for developing social and pedagogical skills.

The discussion shows that speech therapy sessions supported by innovative technologies not only develop schoolchildren's speech but also increase their motivation, strengthen analytical and creative thinking abilities, and form social cooperation skills. Therefore, teachers should actively use digital and interactive methods in the speech therapy process, introduce individual monitoring systems, and integrate gamification elements [6].

**Conclusion.** The implementation of speech therapy sessions with school-age children using innovative technologies produced effective results in developing their speech. The findings of the study show that digital platforms, interactive exercises, and gamification elements actively engage children in the sessions, increase their motivation, and make repetitive exercises more interesting. As a result, children developed their articulation, phonemic awareness, and speech construction skills more quickly and effectively.

In addition, through group activities and interactive tasks, children developed cooperation and communication skills. Through leaderboards and group exercises, they exchanged ideas with one another, found solutions together, and learned to evaluate their own achievements. In this way, speech therapy sessions contributed not only to improving individual knowledge but also to developing social and pedagogical skills. Furthermore, innovative technologies enabled teachers to optimize the learning process, adapt exercises to individual needs, and ensure the maximum development of students' speech. All of these factors help transform speech therapy sessions into an effective and advanced pedagogical practice.

## References:

1. Xolmatov A. Speech Disorders and Speech Therapy Sessions in School-Age Children. — Tashkent: O'qituvchi, 2015. — 184 p.
2. Karimova D. Speech Development through Digital Technologies. — Tashkent: Fan va texnologiya, 2019. — 212 p.



# **PEDAGOGICAL CLUSTER**

## **JOURNAL OF PEDAGOGICAL DEVELOPMENTS**



*Website: <https://euroasianjournals.org/index.php/pc/index>*

3. Rasulova M. Speech Therapy and Pedagogy: Theory and Practice. — Tashkent: Ta'lim, 2017. — 198 p.
4. Abdurahmonov Z. Interactive Educational Tools and the Development of Schoolchildren's Speech. — Tashkent: Innovatsiya, 2020. — 160 p.
5. Tursunova N. Methodology for Developing Speech and Pronunciation. — Samarkand: Pedagogika, 2016. — 174 p.
6. Saidahmedov N. Speech Therapy Sessions Using Innovative Technologies. — Tashkent: Moliya, 2003. — 172 p.
7. Davletov S. Methodology for Developing Phonemic Awareness in Children. — Tashkent: O'qituvchi, 2018. — 150 p.