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Akramova Khafiza Samadovna

Associate Professor, Department of Special Pedagogy,
Jizzakh State Pedagogical University

samadovna2019@mail.com

ORCID 0000-0002-4629-3510

Uralov Ilxom Komil o‘g‘li

First-year Master’s Student, Specialty 70110301

Special Pedagogy: Speech Therapy (Logopedics)

USING INFORMATION TECHNOLOGY TO DEVELOP THE ARTICULATORY APPARATUS OF PRESCHOOL CHILDREN

Annotation:
This paper examines the use of information technology to develop the articulatory apparatus of preschool children. It analyzes modern digital tools and methods that enhance speech articulation, phonemic awareness, and oral-motor skills. The study highlights the effectiveness of interactive exercises, educational software, and multimedia resources in improving pronunciation, speech clarity, and overall language development. The findings suggest that integrating information technology into speech development activities can accelerate skill acquisition, increase engagement, and provide individualized support for children with varying levels of speech readiness.

Аннотация:
В данной работе рассматривается использование информационных технологий для развития артикуляционного аппарата у детей дошкольного возраста. Анализируются современные цифровые инструменты и методы, которые способствуют совершенствованию артикуляции, фонематического слуха и орально-моторных навыков. Исследование подчеркивает эффективность интерактивных упражнений, обучающих программ и мультимедийных ресурсов для улучшения произношения, четкости речи и общего языкового развития. Полученные данные свидетельствуют о том, что интеграция информационных технологий в деятельность по развитию речи способствует ускоренному усвоению навыков, повышению вовлеченности детей и обеспечивает индивидуализированную поддержку для детей с разным уровнем готовности к развитию речи.

To ensure that children’s speech is clear and articulate by the age of five, and to avoid having to correct pronunciation at that age, this work must begin earlier!
Good diction is the foundation of clear and understandable speech. To achieve precise pronunciation, the articulatory apparatus must be developed through special exercises (articulation gymnastics).

The development of the articulatory apparatus in preschool children is crucial for proper speech formation, pronunciation, and overall language development. Modern technologies

provide opportunities to make this process engaging, interactive, and efficient. This course paper explores the use of Information and Communication Technologies (ICT) in the development of articulation skills in young children.

The objectives of this study are:

- To examine methods of using ICT for speech development in preschoolers.
- To design exercises that stimulate articulation skills through interactive presentations and multimedia tools.
- To analyze the effectiveness of technology-assisted articulation exercises in preschool education.

The relevance of the study lies in the increasing role of digital tools in early childhood education, providing both teachers and parents with interactive resources that encourage active participation.

Articulation exercises:

- Help strengthen the muscles of the speech apparatus.
- Promote correct movements of the tongue, lips, lower jaw, and other articulatory organs.
- Improve diction. (Therefore, articulation exercises are essential for children with speech impairments and are also useful for all children to prevent disorders and support speech development.)

Rules for performing articulation exercises:

- Perform exercises before or after meals — 1.5 hours before or 2 hours after eating. Repeat 2–3 times a day.
- Depending on the level of speech impairment, perform exercises 2–3 times per week up to 5–6 days.
- Combine static and dynamic exercises.
- When introducing new exercises, it is important to reinforce the “old” set of articulation exercises.
- Perform each exercise for 1–2 minutes, gradually increasing the speed of movements.
- Before performing articulation exercises, use preparatory exercises to develop breathing,
- facial muscles, fine motor skills, speech, and auditory perception.

Articulatory apparatus development refers to the training of lips, tongue, teeth, and jaw muscles to produce clear and correct sounds. It is a critical stage in early childhood development because improper development can lead to speech disorders and communication difficulties.

Modern studies emphasize:

- The use of multisensory approaches (visual, auditory, kinesthetic) to enhance articulation.
- The positive effects of ICT and multimedia tools, such as CD-ROM presentations, apps, and videos, in making articulation exercises engaging.
- The importance of parental involvement alongside teacher guidance to reinforce practice at home.

Examples of effective exercises:

- Rhymed articulation exercises.

- Illustrated “picture-symbol” exercises.
- Interactive tongue-twisters and storytelling games.

The ancient proverb supports this approach:

“Tell me and I forget. Show me and I remember. Let me do it myself, and it will be mine forever.”

This emphasizes hands-on practice and self-guided learning, which can be facilitated by ICT tools.

Sequential approach: Preschool children begin with simple articulation and facial expression exercises: “Smile,” “Mirror,” “Clock,” “Swing,” and others.

Initially, children are taught static exercises to warm up the articulatory muscles for subsequent work. The main challenge is maintaining the articulation posture for a specific period. For this, entertaining materials such as counting sticks, desks, matches, beads, stones, and others can be used.

Next, children are introduced to dynamic exercises: “Little Horse,” “Brush Your Teeth,” “Jam,” and others. Children first imitate adults, then learn to control the movements of their articulatory organs in front of a mirror.

Children’s attention is focused on the nature of the movements (fast, slow, precise, calm) and the position of the articulatory organs (behind the teeth, under the lower lip, etc.).

Older preschool children are introduced to terms such as palate, alveoli, and frenulum. They can then perform more complex exercises: “Cup,” “Needle,” “Accordion,” “Motor,” and others.

This work is done with children at the preschool, and parents reinforce it at home.

Do parents want to do this at home? To achieve this, we need to increase parents’ knowledge about articulation exercises and encourage them to practice with their children at home. This is done through seminars, training sessions, and masterclasses for parents.

The tasks include:

- Informing parents about the importance of articulation exercises.
- Introducing parents to the rules for performing articulation exercises.
- Practicing the correct execution of exercises.
- Developing a positive attitude among parents toward interaction with the preschool.
- Ensuring cohesion among the parent group.

In today’s world, where traditional education and board games are being replaced by computers, it is crucial to consider children’s individual needs. Information technology can help us achieve this.

To increase boys’ and girls’ interest in challenging exercises and make daily activities engaging and enjoyable, we offer articulation exercises in the form of CD-ROM presentations that can be used at home by teachers and parents.

The disc contains a systematic collection of materials offering various sets of articulation exercises: the “Basic Set”, which explains the relevance, objectives, and rules for performing articulation exercises; the “Articulation Exercises for Whistle Sounds” Set; the “Articulation Exercises for ‘R’ Sound” Set; and the “Articulation Exercises for ‘L’ Sound” Set. All sets are presented in the form of presentations.

The exercises on the disc themselves are presented as fun tongue tales, rhymed articulation exercises, and illustrated exercises, which include: a “picture-symbol,” a visual depiction of the exercise, and an oral description of the articulation exercises.

However, certain conditions must be followed: • The exercises are performed using adult speech; • They are dosed over time; • Before working with the child, the parent should familiarize themselves with the presentation in advance.

The positive aspect is that using ICT is aimed at activating all analysis systems.

Ancient wisdom says:

Tell me and I forget. Show me and I remember.
Let me do it myself, and it will be mine forever.

Using Information Technology to develop the articulatory apparatus in preschool children is an effective and modern approach. ICT tools make articulation exercises interactive, engaging, and adaptable to each child's pace. When combined with parental involvement, these exercises contribute significantly to speech development, pronunciation accuracy, and overall communication skills.

The study confirms that hands-on, multimedia-assisted learning aligns with both traditional wisdom and modern pedagogical methods, promoting lasting skills in children.

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