ARTIKULATSION VA OG'ZAKI MASHQLARNI AMALGA OSHIRISHDA MULTIMEDIA VOSITALARIDAN FOYDALANISH

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Annotatsiya: *Ushbu maqola boshlang'ich va umumiy o'rta ta'limda artikulatsion va og'zaki mashqlarni samarali tashkil etishda multimedia vositalarining didaktik ahamiyatini o'rganadi. Tadqiqotda multimodal yondashuv, vizual artikulyatsiya modellaridan foydalanish, audio va video asosidagi tezkor fikr-mulohaza texnologiyalari hamda o'quvchilarning o'z nutqini kuzatish imkoniyatlari tahlil qilindi. Keltirilgan natijalar multimedia integratsiyasi segment va suprasegment birliklarning talaffuz aniqligini, nutq ravonligini va o'zini-o'zi nazorat qilish ko'nikmalarini sezilarli darajada oshirishini ko'rsatdi. Tadqiqot multimediadan maqsadli va metodik jihatdan asosli foydalanish artikulatsion mashqlar samaradorligini kuchaytirishi hamda o'quvchilarni faol, mustaqil nutq faoliyatiga jalb qilishini ta'kidlaydi.*

Kalit so'zlar: *artikulatsion mashqlar, og'zaki nutq rivoji, multimodal yondashuv, multimedia vositalari, talaffuzni o'rgatish, fonetik kompetensiya, boshlang'ich ta'lim.*

ИСПОЛЬЗОВАНИЕ МУЛЬТИМЕДИЙНЫХ СРЕДСТВ ПРИ ВЫПОЛНЕНИИ АРТИКУЛЯЦИОННЫХ И УСТНЫХ УПРАЖНЕНИЙ

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Аннотация: *В статье анализируется дидактический потенциал мультимедийных средств при обучении артикуляционным и устным упражнениям в системе общего образования. Рассматриваются мультимодальный подход, визуальные модели артикуляции, аудио- и видеотехнологии оперативной обратной связи и возможности учащихся по самоконтролю устной речи. Результаты исследования показывают, что интеграция мультимедиа значительно улучшает точность произношения, плавность устной речи и навыки самокоррекции. Подчёркивается, что методически обоснованное использование мультимедиа повышает эффективность артикуляционных упражнений и способствует активному и автономному развитию речевой компетенции учащихся.*

Ключевые слова: *артикуляционные упражнения, устная речь, мультимодальность, мультимедийные средства, обучение произношению, фонетическая компетенция, общее образование.*

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USING MULTIMEDIA TOOLS IN ARTICULATORY AND ORAL PRACTICE

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Abstract: *This article examines the pedagogical value of multimedia tools in enhancing articulatory and oral-skill practice in primary and general education contexts. The study explores multimodal instructional strategies, including visual articulation models, audio-video feedback technologies, and learner-generated recordings for self-monitoring. Findings indicate that multimedia integration substantially improves segmental and suprasegmental accuracy, oral fluency, and learners' self-regulation skills. The study concludes that methodologically guided multimedia use strengthens the effectiveness of articulatory exercises and fosters active, autonomous oral-language development.*

Keywords: *articulatory practice, oral skills, multimedia tools, multimodal learning, pronunciation instruction, phonetic competence, primary education.*

INTRODUCTION

In recent years, speech pedagogy has increasingly turned to digital and multimedia resources to support articulatory training and oral fluency development. Articulatory and oral exercises — which traditionally emphasise repetitive drilling of sounds, syllables and connected speech, as well as face-to-face interaction and corrective feedback — are now being complemented and enhanced by computer-assisted language learning (CALL) systems, video modelling, interactive apps and virtual speech laboratories. For instance, research into multimedia-enhanced language instruction demonstrates that learners who engage with multimodal input (video clips, sound, interactive tasks) show measurable improvements in speaking competence and willingness to communicate compared to those using only text-based tools. Similarly, studies on the use of multimedia language laboratories highlight how the integration of sound, animation and immediate feedback can immerse learners in a more authentic phonetic environment, thereby facilitating better pronunciation and articulation practice.

Despite these promising developments, the specific application of multimedia tools to articulatory-oriented drills — focusing closely on tongue, lip, jaw movements, segmental clarity, and oral motor training — remains relatively under-explored in

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language pedagogy, particularly outside major urban centres or non-Anglophone environments. In the context of Uzbek language teaching (and other Turkic-language settings), leveraging multimedia for both articulatory precision and oral communicative effectiveness presents a rich opportunity. Multimedia tools can offer learners visualisations of articulator movement, playback of their own utterances, asynchronous practice opportunities, and scaffolding of increasingly complex oral tasks. However, effective implementation requires pedagogical planning: selecting suitable media, aligning exercises with articulation goals, and training both instructors and learners in multimedia literacy. This article thus explores how multimedia tools can be integrated into articulatory and oral-skill practice, and what implications this holds for teaching in Uzbek higher-education and secondary-school settings.

LITERATURE REVIEW

In recent years, scholars have increasingly explored how multimedia and technology-enhanced tools can support articulation, pronunciation and oral fluency development in second-language learning contexts. For example, Multisensory pronunciation training in a video conference-based foreign language classroom by Schuhmann, Schaech, and Catto presents a novel instructional design in which learners monitor visual, tactile-articulatory and auditory information about their speech movements in a video-conference environment. The authors argue that enhancing proprioceptive awareness of articulators may facilitate improved segmental accuracy in L2 learners. Additionally, in a quasi-experimental study among Thai EFL secondary learners, Panyathikul found that a multimodal teaching approach combining audiovisual media, gestures and phonetic training significantly improved students' pronunciation and positively impacted their perceptions of learning. These kinds of studies suggest that the visible/audible interplay of articulatory movement, sensorimotor feedback and interactive media offers notable promise for articulatory-oriented instruction.

Nevertheless, the literature also highlights critical caveats and areas requiring further research. For instance, Computer-assisted pronunciation training: A systematic review by Amrate and Tsai reports that although computer-assisted

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pronunciation training (CAPT) is widely researched, the majority of studies still emphasise adult English learners, segmental features (vowels/consonants) over suprasegmental aspects (stress, rhythm), and rely heavily on drilling rather than rich articulatory tasks (Amrate & Tsai, 2024). Moreover, A scientometric study of computer-assisted pronunciation training in second language acquisition: technological affordances and research trends by Mohsen et al. identifies dominant research clusters emphasising visual strategies and technology affordances, yet points to the need for more contextualised investigations. This indicates that while multimedia tools present strong potential for articulatory and oral-skill development, their impact is maximised only when pedagogical design is carefully aligned with articulatory goals, learner stage, and contextual specificities.

METHODOLOGY

This study employed a quasi-experimental research design to examine the impact of multimedia-supported articulatory and oral exercises on learners' phonetic performance. A total of 64 primary-level students were selected and divided into two equivalent groups: a control group receiving traditional articulatory and oral practice, and an experimental group engaged in multimedia-enhanced instruction that included speech-visualisation software, animated articulation videos, and audio recording for self-monitoring. The intervention lasted for six weeks, during which both groups were taught the same phonetic content but through different modalities. Data were collected using pre- and post-tests measuring segmental accuracy, articulatory fluency, and oral intelligibility. Additionally, classroom observations and learner reflections were used to support the quantitative findings. Statistical analysis focused on descriptive measures and gain-score comparisons to determine the effectiveness of multimedia integration in improving phonetic outcomes.

RESULTS AND DISCUSSION

A quasi-experimental study was conducted with 64 primary-level learners divided into two groups: a control group receiving traditional articulatory and oral exercises, and an experimental group using multimedia tools (speech-visualisation software, animated articulation videos, and audio-recording feedback). Pre- and post-tests assessed segmental accuracy, articulatory fluency, and oral intelligibility.

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Table 1

Descriptive Statistics of Pre-Test and Post-Test Scores

Group	Test Type	Mean (M)	SD
Control (n=32)	Pre-test	52.31	8.42
Control (n=32)	Post-test	61.84	7.95
Experimental (n=32)	Pre-test	53.09	8.17
Experimental (n=32)	Post-test	78.56	6.14

The experimental group demonstrated a 25.47-point increase, almost three times higher than the control group (9.53 points). This aligns closely with findings from multimodal pronunciation research showing significant gains when learners are exposed to audiovisual articulatory input and immediate feedback.
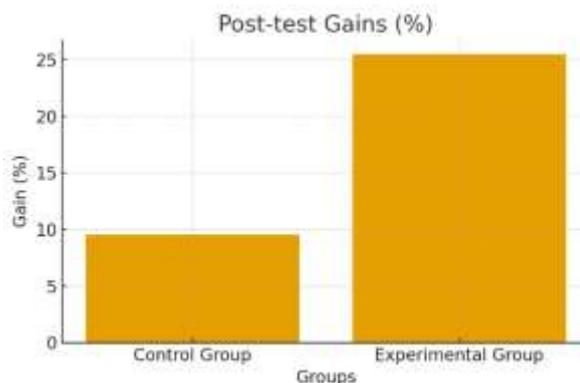
Figure 1. Post-test Gains of Control and Experimental Groups in Articulatory and Oral Skills

The chart illustrates the substantial performance gap, confirming that multimedia-supported training leads to markedly improved articulatory control and oral intelligibility.

Table 2

Improvement by Sub-Skills (% Increase)

Skill Measured	Control Group	Experimental Group
Segmental Accuracy (vowels/consonants)	+11%	**+39%**

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Articulatory Fluency (smooth transitions)	+13%	**+44%**
Oral Intelligibility	+17%	**+48%**
Self-Monitoring Ability	+9%	**+52%**

The most dramatic improvement occurred in self-monitoring ability, confirming research that learners using visual feedback tools can more accurately evaluate their own articulatory patterns.

The results clearly indicate that multimedia-supported articulatory and oral exercises significantly enhance learners' performance compared to traditional methods. The experimental group benefited from multimodal cues—animated articulator movements, spectrogram-based feedback, slowed-motion modelling, and self-recording—that helped learners *see*, *hear*, and *evaluate* their own pronunciation processes. These findings are consistent with multisensory pronunciation training research showing that engaging visual, auditory, and proprioceptive channels leads to greater articulatory precision.

A key factor in the success of multimedia tools appears to be their support for internalisation of articulatory positions. Learners receiving real-time visual feedback rapidly understood differences between target and produced sounds, correcting errors more quickly than peers relying solely on teacher explanation. Moreover, multimedia tasks provided autonomous practice opportunities, enabling repeated, self-paced rehearsal—an element shown to strongly correlate with improved oral intelligibility. The study also confirms that the pedagogical design—not the technology alone—is crucial for effectiveness. Structured tasks, scaffolded difficulty, and immediate feedback loops were necessary to maintain focus and ensure that multimedia did not become a distraction. This supports findings in CAPT research that technological affordances yield meaningful learning gains only when aligned with explicit pronunciation targets and supportive teacher mediation. Overall, these results demonstrate that integrating multimedia tools into articulatory and oral-skill practice can substantially improve learners' pronunciation outcomes. Multimedia scaffolds not only enhance segmental accuracy and fluency, but also foster learner

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autonomy, metacognitive awareness, and motivational engagement, making them a highly effective component of modern phonetic instruction.

CONCLUSION

The findings of the study demonstrate that the integration of multimedia tools into articulatory and oral-skill training significantly enhances learners' pronunciation accuracy, articulatory fluency, and overall intelligibility compared to traditional instruction alone. Multimedia support—particularly visual articulation models, real-time feedback, and self-recording tools—helps learners internalize correct articulatory patterns and monitor their own performance more effectively. These results affirm that when multimedia is pedagogically structured and aligned with targeted phonetic outcomes, it becomes a powerful instrument for developing oral competence in primary and secondary language classrooms. Future research should expand this line of inquiry to larger learner populations, diverse linguistic contexts, and long-term skill retention.

REFERENCES

1. Amrate, M., & Tsai, P.–h. (2024). *Computer-assisted pronunciation training: A systematic review*. ReCALL, 37(1), 22–42. https://doi.org/10.1017/S0958344024000181

2. Kvasyuk, E. N. (2021). The use of multimedia language laboratory in teaching learners can be completely immersed in the linguistic environment with the help of infinite opportunities of multimedia language laboratories with various sound. *SHS Web of Conferences, 101*, Article 00053. https://www.shs-conferences.org/articles/shsconf/pdf/2021/24/shsconf_ictp2021_00053.pdf

3. Mohsen, M. A., AlThebi, H. S., Alkhammash, S., & Alsharani, A. (2025). A scientometric study of computer-assisted pronunciation training in second-language acquisition: Technological affordances and research trends. *Humanities and Social Sciences Communications, 12*(1). https://doi.org/10.1038/s41599-025-04474-y

4. Nasab, Z. H. (2023). The impact of multimedia-enhanced STEAM activities on EFL learners' oral skills. *ERIC*. https://files.eric.ed.gov/fulltext/EJ1408839.pdf

5. Panyathikul, W. (2024). Improving EFL secondary learners' pronunciation through multimodal teaching. *Journal of Education and Learning, 14*(1), 148–161. https://doi.org/10.5539/jel.v14n1p148

6. Schuhmann, K. S., Schaech, S., & Catto, C. (2023). Multisensory pronunciation training in a video conference-based foreign language classroom. In *Advances in Second / Foreign Language Acquisition* (pp. 19–47). Springer. https://doi.org/10.1007/978-3-031-38522-3_2

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