

**THE ROLE OF MULTIMEDIA APPLICATIONS IN THE FORMATION OF FOREIGN
LANGUAGE COMMUNICATIVE COMPETENCE**

<https://doi.org/10.5281/zenodo.21515342>

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Abstract: *In the 21st century, informatization stands out as the most significant global trend in societal development. These processes are observable across all spheres of human activity, including education. Reforms in the education system, in accordance with the Law of the Republic of Uzbekistan "On Education" [1], and the ongoing modernization of the country's educational framework, designate informatization as a priority area. The implementation of computer technologies facilitates the effective development of educational software, enabling the successful resolution of numerous challenges within the modern educational system: diversifying the formats of educational material presentation, ensuring educational accessibility, enhancing pedagogical technologies, and advancing contemporary methods and forms of the educational process [2, 3].*

The State Educational Standard mandates the introduction of foreign language instruction from the first grade. For young learners, initial engagement with a foreign language involves, primarily, familiarization with the lives of their peers who speak the target language. Social experience is acquired through exposure to children's songs, the world of fairy tales, animated films, and children's literature.

The relevance of employing information and communication technologies—specifically, multimedia applications integrated with textbooks—is driven by pedagogical needs to enhance the effectiveness of foreign language teaching in primary school. This includes developing speaking skills, fostering independent learning, encouraging a creative approach to education, and cultivating critical thinking in young learners. The use of multimedia applications in English language teaching contributes to the formation of speaking skills and the development of foreign language communicative competence in primary school children, which constitutes the primary conceptual direction of the modern education system.

The purpose of this work is to review scientific research in this domain and monitor the effectiveness of using multimedia in foreign language lessons to form communicative competence in primary school. The article discusses research results obtained through

statistical analysis, comparison, and synthesis, as well as empirical methods including questionnaire surveys and the generalization of teaching experience.

Keywords: *multimedia application, foreign language communicative competence, teaching foreign languages, implementation of new technologies, foreign language speaking skill.*

INTRODUCTION

A defining feature of multimedia educational programs is undoubtedly their multifaceted application, which significantly distinguishes them from printed publications. In this regard, we consider the definition provided by S. Novoseltsev to be among the most comprehensive: "Multimedia is a complex of hardware and software that allows a user to work interactively with heterogeneous data (graphics, text, sound, video, and animation) organized as a unified information environment" [27, p. 69-74].

Scholarly research by both international and local scholars [13; 31; 35; 6; 14; 32] indicates that multimedia educational programs, in terms of their application across various academic contexts, can be conditionally classified into the following categories: multimedia educational programs, encyclopedic editions, reference books, electronic textbooks, artistic works in the form of audiobooks and e-books, travel guides to countries, cities, and museums, catalogs, interactive training courses, interactive games, and electronic presentations.

All types of multimedia programs possess several advantages over traditional teaching aids in terms of their capabilities and significance for enhancing the effectiveness of the educational process. Among the advantages of multimedia programs, the following can be highlighted: firstly, data is selected, stored, and used in digital form via computer. The property of multimediality allows these programs to include information in various formats, as previously mentioned—a feature absent in traditional textbooks; secondly, all multimedia programs are interactive and oriented toward interaction between the program and the learner, with the possibility of modifying the resource, working with it, and performing various actions. In this regard, a textbook is a static resource; thirdly, the presence of hypertext enables the viewing of additional resources without deviating from the core concept. A textbook may contain dictionaries, glossaries, and reference materials, but these are limited by its own content [20; 23].

According to B. Özkan, V. Prajapati, M. Razmia, A. Roncevic, and others, the use of multimedia educational tools allows the teacher to create conditions in foreign language lessons that closely approximate real speech communication occurring in a natural language environment [8; 9; 10; 12].

The effectiveness of using educational technologies is corroborated by their contribution to solving such didactic tasks as: computer visualization of educational information; modeling and simulation of studied objects, processes, and phenomena; creation and use of information databases necessary for educational and research

activities; implementation of control with feedback and error diagnostics based on learning outcomes; implementation of control and self-control; development of specific types of thinking; formation of the ability to make optimal decisions in complex situations; and fostering a culture of learning activities and information culture among students [18].

Now let us examine the specific features of using multimedia applications (MMAs). MMAs are multimedia educational tools containing thematic training sections aligned with the textbook content. They are used as visual aids to increase student interest in studying the program material. The functions of a multimedia application allow for the optimization of information study through the use of so-called "logical accents"—psycho-hardware techniques aimed at attracting and focusing students' attention on a specific object [19].

Based on the results of scholarly research by Rakhimova K.N. and Abdujabbarova F.A. [30], Meshcheryakov A.S. and Dmitriev D.V. [23], Nazarova O.V., Nazarova T.S. and Polat E.S. [25], Roncevic A. [12], and Gilakjani A.P. [5], we have identified the core properties of multimedia applications, which are presented in Table 1.

Table 1

Core properties of multimedia applications

Properties	Description
<i>Visualization</i>	Presentation of educational material in text, video, audio, and other formats
<i>Rapid feedback</i>	Enabling control over material mastery in an interactive mode
<i>Versatility</i>	Applicability for developing all types of speech activities
<i>Material balance</i>	Use of different formats of materials when studying one topic to develop all types of speech activities
<i>Individualized approach</i>	Possibility of selecting the difficulty and sequence of tasks matching each student's level
<i>Authenticity of material</i>	Possibility of learning using authentic video, audio, and other materials
<i>Diverse content and forms of presentation</i>	Provision of tasks in various formats and the possibility of adding supplementary tasks

The properties outlined above are ensured by multimedia components that must be taken into account when developing multimedia applications. These include: text (narrative, instruction, presentation, etc.); animation (cartoon, special effects, etc.); video (song, clip, exercise, etc.); audio (music, voice, monologue, dialogue, etc.); and graphics (drawing, photograph, graph, diagram).

Higher cognitive mechanisms participate in information perception, processing the received information within the context of personal knowledge about the world and

previous experience. When using MMAs in the learning process, both vision and hearing are engaged.

Let us consider several psychological factors influencing the cognitive process: **Perception** – the ability to detect and interpret visual and auditory sensory input. The interactive capabilities of educational multimedia contribute to an increased volume of information perception and retention, as interactivity allows for expanding the received audiovisual information with the possibility of revisiting and repeatedly reviewing the material. **Imagination** – the mental creation of the proposed image, the ability to sequentially arrange the image by characteristics, and the capacity to transform this image into linguistic information. Multimedia contributes to a more detailed representation of an object in images, presenting it in various informational forms. **Attention** – the ability to concentrate on events. The interactive capabilities of multimedia programs focus young learners' attention on important details. **Memory** – the capacity of the mind to simultaneously focus and concentrate consciousness on several objects. Perception is inextricably linked with memory function. **Thinking** – higher-level cognitive activity. Multimedia programs allow for the transformation of acquired knowledge into a new concept. **Human intelligence** – the ability to acquire, understand, and utilize new ideas and knowledge [15].

As mentioned above, the application of MMAs is becoming increasingly active in various fields, including industrial production, medicine, commerce, scientific research, the arts, and the film industry. In education, MMAs are being introduced in the form of electronic textbooks, various types of reference materials, and training simulators.

Currently, multimedia applications containing educational resources composed of video and audio episodes, accompanying exercises, and additional didactic material are becoming popular. It should be noted that numerous scholars—B. Andersen et al. [14], N.V. Klemeshova [21], O.N. Morozova [24], A.A. Pribytkova [29], O.S. Saenko [32], E.V. Smirnova [33], L.N. Chuksina [34]—have investigated aspects, characteristics, properties, functions, and purposes of using multimedia programs.

Scholars Saenko [32] and Agudo [3] examine various objectives for using MMAs in teaching young learners. Among the primary goals, they highlight the application of audiovisual information to enhance learning effectiveness, formation of components of foreign language communicative competence, use of graphic images in studying foreign language and culture, and ensuring interactivity in the educational process.

Now let us examine, according to their purpose, what types of multimedia are classified as functional and methodological tools by B. Andersen, K. Van den Brink [14], T.P. Barteneva and A.P. Remontova [17], A.N. Nekrasova and N.M. Semchuk [26]. Functional multimedia consists of: **administrative** – aimed at computerizing the educational process; **instrumental** – used for developing new multimedia resources; **diagnostic** – developed to determine students' knowledge levels; **educational** – corresponding to

students' knowledge and skills levels; **game-based** – created as a tool for educational game activities.

Methodological multimedia consists of: **instructional** – representing a manual or educational recommendations for working with the provided information; **training** – created using interactive functions for practical application and reinforcement of the material; **controlling** – determining the degree of information mastery achieved at a certain point; **reference** – including specific information, typically outside the curriculum; **simulation** – facilitating the creation and study of situations as close to reality as possible; **demonstration** – contributing to the visual presentation of material; **game-based** – aimed at recreating a situation for consideration, solution, and presentation of results; **leisure** – created as an additional tool intended for extracurricular use to form and develop students' critical, logical, and creative thinking.

The formation of foreign language communicative competence (FLCC) in students, aimed at functioning in a multicultural world in everyday, scientific, and professional spheres, is the foundational goal of foreign language education at all levels of the Republic of Uzbekistan.

S.A. Arapova [16], N.V. Klemeshova [21], and a number of other scholars, considering the formation of FLCC using multimedia, believe that the unique properties of the multimedia environment undoubtedly contribute to the development of a plurilingual and pluricultural personality, ready "for the effective implementation of foreign language communication in the context of multimedia-mediated intercultural communication, aimed at self-development and self-realization of its participants through the conscious and active appropriation of new social experience."

We concur with Yu.V. Kohenderfer [22] that the formation of FLCC can be effectively achieved on the basis of multimedia programs, as they offer wide opportunities for fulfilling the goals and objectives of the educational process, taking into account the age characteristics of students.

S.A. Arapova [16] demonstrated in her dissertation research that educational multimedia contribute to the development of students' abilities related to foreign language intercultural communication and the acquisition of social experience aimed at self-realization of participants in the communicative process.

We also agree with B. Andersen [14] that multimedia teaching aids, specifically multimedia applications used in the educational process to form foreign language communicative competence, are an effective tool for stimulating students' independent work. Visual and auditory forms of information presentation create effective cognitive-emotional conditions for understanding educational material, thus contributing to holistic verbal-imagery retention.

Undoubtedly, the basic conditions for the successful introduction of multimedia educational technologies into the educational process are: accessibility of educational technologies; computer literacy of the teacher and students; willingness and readiness for

teaching (on the teacher's part) and learning (on the student's part) a foreign language using multimedia educational technologies.

In his literature review, B. Rivas [11] examines research by Durán, who asserts that the use of technologies in language and literacy learning should go beyond basic skills to a higher level of literacy and communicative competence. Technologies are viewed as a tool that promotes literacy by providing material from various sources.

Cummins, in his analysis, suggests that there are great prospects for using multimedia to assist in the early stages of developing conversational speech, noting that multimedia technologies have the potential to create an effective learning environment (cited in [11]).

Kaste and her colleagues explore the potential of the Internet to facilitate language and literacy learning for multilingual children, understanding that the ability to fully utilize the educational potential and information provided by the Internet requires new skills and strategies (Kaste et al., cited in [11], p. 111).

The global perspective acknowledges that language and literacy learning occur both within and beyond the school setting, and the technologies available to students now allow them to constructively interact with native speakers of both their first and additional languages[11].

Researchers Zhao and Lai offer unique insights into modifications that can best serve the needs of young English language learners. One of the fundamental issues they raise is that educators must view technology in terms of its capabilities and how it can best meet the learner's needs (cited in [11]).

Analyzing the difficulties experienced by young learners in the process of learning a foreign language, we have proposed possible ways to overcome these difficulties [7, 30] (see Table 2).

Table 2

Difficulties, consequences, and possible solutions

Difficulty experienced	Consequence and possible solutions
Difficulties in communicating in a foreign language	Loss of confidence, fear of using unfamiliar language, fear of making mistakes. Possible solution: It is necessary to limit the use of the native language in class. The use of a multimedia application with short and clear video and audio files will allow the teacher to introduce foreign language vocabulary into the learning process, engaging all students in active work. Joint efforts of the teacher and parents contribute to the development of foreign language speaking skills outside the classroom as well.
Need for immediate switching of the speech apparatus	Intensive brain activity occurs to process the received information. The student remains silent and shows no speech activity. Possible solution: The teacher should allow time for mental processing, without rushing, using prompting phrases. During the

to a different linguistic system	so-called "silent" period, active teacher support is necessary, and a joint speaking process between teacher and student is acceptable.
Difficulties in mastering foreign language pronunciation, using speech patterns, maintaining intonation	Loss of interest in learning due to insecurity and dissatisfaction. Possible solution: From the first lessons, it is necessary to develop in young learners skills of understanding and reproducing foreign language speech. To develop correct pronunciation and overcome difficulties with mastering foreign language speech, it is necessary to include phonetic exercises in the educational process, as well as the use of songs and chants with repeated speech patterns.
Difficulties with varying task difficulty levels that do not match the student's abilities and level	1. Students who are ahead of their peers in terms of speech competence lose interest when repeatedly using exercises of lower difficulty. 2. Students without sufficient preparation lose confidence, motivation, and interest in more complex exercises. Possible solution: When selecting exercises, the teacher should remember that, despite the unified lesson topic, the types of activities in the lesson should be varied and take into account the individual abilities of the students. Teacher support and timely assistance with more complex tasks contribute to increased motivation and sustained interest among young learners.
Difficulties with independent work	Loss of motivation, interest in learning, self-confidence, lack of self-assessment skills. Possible solution: Teaching independent work skills with regular use of project work and oral presentations in the learning process to develop critical thinking skills, contributing to the development of motivation and interest in learning a foreign language.
Difficulties with time management for task completion	Limited time for completing a task puts young learners in a state of stress and loss of motivation. Possible solution: The foreign language teacher should consider the capabilities and abilities of the class as a whole and each student individually. It is important to instill a sense of responsibility in young learners, while remembering that the allocated time should correspond to the difficulty level of the proposed task.
Difficulties in memorizing new lexical units	Reduced activity in class, slowed perception of new material, and, consequently, a decline in the development of foreign language speaking skills. Possible solution: It is advisable to include songs and games using video/audio exercises to create associative series in order to facilitate the process of understanding and memorizing information.

Today, the effective use of multimedia applications in the educational process contributes to solving a number of current issues arising in teaching at the primary level. Analysis of the results of an empirical method—a questionnaire survey conducted among English teachers in Uzbek primary schools and 4th-grade students—corresponds to the findings of many researchers who have identified students' interest in lessons using multimedia. The survey of primary school students showed that songs, video instructions, cartoons, interactive and animated tasks presented in multimedia applications are systematically introduced into the learning process. However, it should be noted that despite their popularity among students, these tasks require additional time for completion, as well as computer literacy skills on the part of both students and, primarily, teachers [7].

Teacher training and professional development programs should include the development of computer literacy and the ability to effectively use computer technologies in the learning process. The integration of technology into foreign language teaching requires the acquisition of practical skills with the implementation of context appropriate to the specific program or subject matter [4].

The primary methods for forming FLCC in foreign language lessons are active methods, prominent representatives of which are Presentations and Competitive Games, and interactive methods, represented by Brainstorming and the Project Method. It should be emphasized that the integration of audio and video materials contributes to enhancing the effectiveness of these methods in the formation of FLCC.

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