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The role of multimedia technologies in teaching foreign languages in an international context

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Abstract

Relevance. The research on the impact of multimedia technologies on international educational environments is primarily driven by the constant change in pedagogical strategies and the improvement of technical equipment that accompanies the educational process.

Purpose. The study aims to analyse the peculiarities of the use, role and effectiveness of multimedia technologies in modern education on the example of the experience of different countries.

Methodology. The comparative and contrastive, pedagogical, analytical and synthetic methods were used in this study. Based on the analysis of various educational environments, the following conclusions were drawn phonetic competence was developed through animated videos, presentations, and video and audio applications, lexical skills were developed through presentations, games, video and audio materials, web applications, grammatical and syntactic competences required the use of audio and video materials.

Results. Among the multimedia learning tools mentioned were applications: VLC Media Player, KMPlayer, GOM Player – for playing audio content, Moho, Boom Harmony, FlipaClip – for creating animations, Google Slides, Prezi, Microsoft PowerPoint – for creating presentations. In the international context, the most commonly used applications are Duolingo: Language Lessons, Babel – Learn Languages, AnkiDroid Flashcards, Quizlet: AI-powered Flashcards, and Memrise: speak a new language. According to the American experience, the greatest impact of multimedia use was on the development of phonetic, grammatical, and lexical skills. From the point of view of the French experience, the highest level of growth was recorded in information comprehension skills, followed by vocabulary, writing skills and argumentation.

Conclusions. Based on the Indian and Thai experience, it can be concluded that the growth in language skills was about 50%. This work can be used to analyse pedagogical experience in an international context, to build educational strategies for learning foreign languages through the use of multimedia, and to identify the main criteria that contribute to the improvement of language skills.

Keywords: phonetic and lexical competencies; grammar; media efficiency; digital education; listening.

Introduction

The study of multimedia teaching tools is currently relevant, as the world is constantly undergoing significant

changes in both technology and pedagogy in the context of active digitalisation and globalisation. After the coronavirus pandemic, the model of modern education not

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only began to actively incorporate multimedia into traditional methods of work but also was completely reoriented towards digital technologies and distance learning. Thus, to understand the effectiveness of certain multimedia resources, it is necessary to constantly conduct surveys, collect experimental data, study foreign and national experiences, and on this basis improve the technological support of the educational process.

The relevance of multimedia learning in the international context is driven by the need to adopt the best pedagogical strategies for using technology to effectively expand vocabulary, master grammatical and syntactic patterns, and improve communicative competence, including understanding, perception and speaking. The international context provides a wide scope for understanding which technologies can be introduced into the educational process and which innovations should not be used because their effectiveness is low. Consideration of the improvement of specific skills (phonetic, lexical, grammatical) is relevant as it provides a comprehensive view of how multimedia affects each level of language.

The use of mobile technologies significantly contributes to English language learning, which has been proven in the case of a public university in Thailand. R. Jeanjaroonsri [1] examined online dictionaries, language checkers, and machine translation resources, but did not indicate the effectiveness of these tools at different language levels.

A study by A. Thedpitak and M. Somphong [2] showed that students assessed the use of mobile applications for language support positively, while the difference between their attitudes to foreign language proficiency was insignificant. However, this study did not analyse the experience of foreign countries in the use of multimedia technologies.

Since the outbreak of the COVID-19 pandemic, the world has faced global challenges in education, as not all countries have been prepared for online learning. S. Aroonsrimarakot et al. [3] assessed the factors that cause problems in learning in Thailand and found pedagogical strategies to overcome the challenges but did not describe in detail the role of multimedia technologies in foreign language learning.

Communicative learning has become the most effective in learning English. In particular, P. Sukavatee and J. Khlaisang [4] showed that this approach demonstrated the highest results in improving listening, speaking, reading, and writing skills. This study did not focus on a detailed understanding of the effectiveness of multimedia learning tools.

The problem of using smartphone apps to learn English was addressed by H.P. Bui et al. [5]. This study examined Vietnamese students' attitudes towards SELLA-type apps for improving linguistic skills. In general, the results of the study showed a positive attitude of students towards the process of integrating smartphone apps in the classroom. However, the study focused on one app and the national experience of its use, so these results may not be relevant to the international context.

The study aimed to examine multimedia tools used to improve foreign language proficiency, in particular phonetic, lexical, grammatical, and syntactic skills, and to analyse international experience in the use of multimedia

technologies. The following objectives were set: to investigate the effectiveness of multimedia for improving skills at different language levels: phonetic, lexical, grammatical, and syntactic, and to study the international context of multimedia use in the process of learning a foreign language. The subject of this study is the Thai, Indian, French and American experience of learning foreign languages through multimedia.

Materials and Methods

This study used statistical data on the use of multimedia technologies in the international context posted on the websites [6; 7]. This information was used to analyse the pedagogical feasibility and effectiveness of multimedia learning tools for developing linguistic skills in an international context. In particular, these web resources provided materials on the use of applications for learning foreign languages in France, the United States, India, and Thailand. The results of the analysis of this information were presented in tables and figures.

The comparative and contrastive method was used in this study to understand which language levels are most affected by multimedia technologies and how phonetic, lexical, grammatical, and syntactic skills can be developed. The results of the comparative analysis of multimedia were based on the study of American, French, Thai, and Indian experience. Tables were presented with numerical data on the impact of multimedia learning on various language competencies, including phonetic, lexical, and grammatical, comprehension, argumentation and writing skills.

The pedagogical analysis in this paper was used to identify the key factors of multimedia's influence on the educational environment and to understand the impact on the development of linguistic skills at the phonetic, lexical, grammatical, and syntactic levels. The paper examines the experience of using multimedia technologies in educational environments in the USA, France, Thailand, and India, and provides statistical data on the impact on the development of students' language skills. The tables showed how multimedia tools affect phonetic, lexical, and grammatical skills, comprehension, writing and argumentation. The statistical data were visualised using figures and tables showing the correlation between learning outcomes before and after the use of multimedia technologies. The main multimedia tools considered were presentations (including video presentations), audio and video materials and applications, online games, animations, web applications.

The analytical and synthetic method was used to study the key theoretical concepts related to the problems of using multimedia learning tools in different educational environments in the context of technologisation and globalisation, and the effective development of skills and abilities through multimedia. The research of modern linguists who have studied the use of multimedia teaching and developed pedagogical strategies for teaching in different educational environments, including American, French, Indian and Thai, was also considered. Statistical data on the use of multimedia and its effectiveness in the international context, in particular in France, the USA, India and Thailand, were presented in tables and figures.

Thus, this study used the pedagogical and comparative analysis as primary research methods. Comparative and contrastive analysis was used to form an understanding of the effectiveness of multimedia in the educational process, and pedagogical analysis was used to demonstrate the impact of multimedia in the world in the era of globalisation. The analytical and synthetic method was used as an additional method for a comprehensive study of the role of multimedia learning tools in the educational process.

Results

Multimedia technologies are resources that use one or more media elements: text, graphics, photographs, audio and video recordings, and animation. Accordingly, all technologies can be divided into two types: 1) linear multimedia; and 2) interactive multimedia. Linear multimedia technologies do not provide for user controls, while interactive multimedia provides for the possibility of control, i.e., the user can choose forms of work (games, interactives) for future learning. The main functions of multimedia technologies are as follows [8]:

- teaching and practising skills;
- assessing and determining the scope of knowledge and skills;
- transmitting information through a range of means to improve its understanding;
- stimulating, engaging the maximum number of students in various types of work.

Among the main advantages of multimedia learning are the use of artificial intelligence, focus on the needs of the learner, authenticity of materials, autonomy, feedback, and the development of metacognitive skills [9]. The role of the

teacher in the use of multimedia is to create a connection and bridge the gap between texts and the contexts that accompany them (e.g., in graphic form) [10].

Multimedia resources can be divided into several groups:

- presentations that combine video materials, music and graphic elements in one learning space and have a structured structure for easy assimilation of information by students;
- animated videos that create the effect of a moving image by combining pictures;
- games, which are multimedia programs with interactive software to improve students' skills;
- video and audio applications, which are collections of images and players, respectively;
- web applications (web pages) that have menus, navigation, and special chats.

Thus, the range of multimedia is quite wide and diverse: from multimedia presentations, reports and slide shows to educational games, films, or multimedia simulators.

Based on the results of a survey of 153 students at University College Cork, Ireland, conclusions were drawn about the experience of using and attitudes towards multimedia resources. In general, students answered that the best strategy for the learning process is to use traditional methods of working with digital technologies (58.59%). It is worth noting that 16.4% indicated that most of the resources necessary for learning are not available, and 11.71% said they did not have time to work with multimedia resources during their studies [11]. A negative experience of using multimedia was reported by 1.56% (Figure 1).

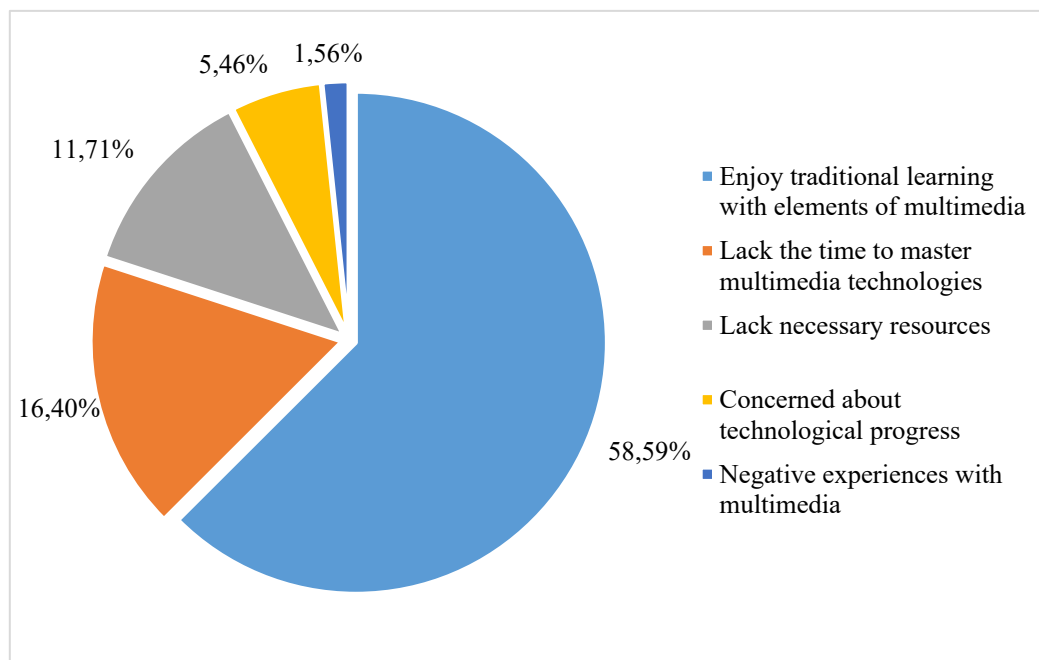


Figure 1. Students' experience of using multimedia (Ireland)

Source: compiled by the authors based on T. Vagg et al. [11].

Phonetic skills involve the ability to perform reproductive or receptive actions that ensure the sound and intonation of one's speech and the understanding and perception of other people's speech. To develop students' phonetic competence, multimedia technologies such as animated videos with voice acting, online games for

learning English, and video and audio applications can be used. Phonetic skills are most often developed through listening, which is a rather creative and interactive process and involves the obligatory use of audio or video recordings, which students listen to and then answer questions about the material. The source of information can

be the media, including recordings of news, investigations, and entertainment programmes [8]. The ELSA: AI Learn

& Speak English also improves spelling skills through the speaking activity (Figure 2).

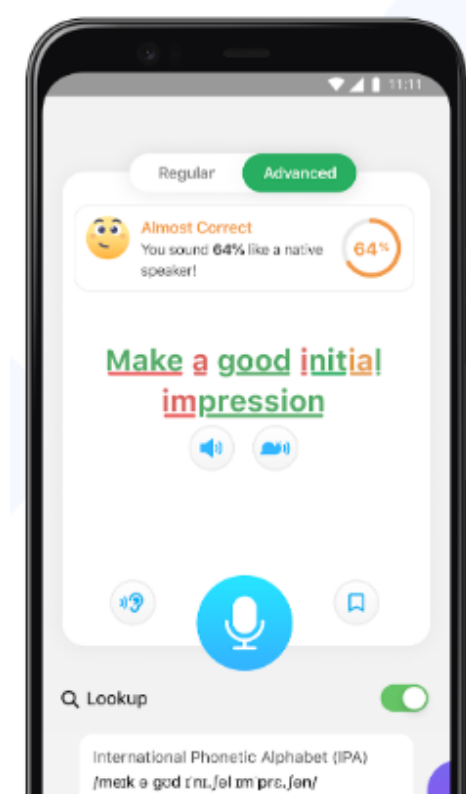


Figure 2. ELSA screenshot: AI Learn & Speak English
Source: compiled by the authors.

To play audio content, such programs as VLC Media Player, PotPlayer, KMPlayer, GOM Player, SMPlayer can be used, while YouTube can be a source of videos with simultaneous audio and visual information, which contains various interesting materials in foreign languages, including English. The subtitle function can also be used to improve reading and writing skills at the same time. To create animated videos, web resources such as Autodesk Maya, Moho, Toon Boom Harmony, Adobe Animate, Pencil2D, Adobe Animate, and FlipaClip are used. To teach English, for example, teachers can use excerpts from the following cartoons: Dora the Explorer, Sesame Street, Ugly Americans, The Simpsons, BoJack Horseman, and Peppa Pig. Static visualisation displays graphs, charts, and drawings, while dynamic visualisation uses animation to allow teachers to change the frames as needed.

Lexical skills consist of the competent choice of lexical items that most accurately convey the idea and meet linguistic norms, ensuring the productivity of communication. The most commonly used multimedia technologies for developing lexical skills are presentations,

games, video applications, and web-based programs, and the types of speech activities are reading, writing, and speaking. To create multimedia presentations, such programs as Microsoft PowerPoint, Google Slides, Canva, Keynote, Prezi, and Powtoon are used. It is important to note that the presentation uses as many channels as possible to obtain information, including the optical, tactical, auditory, and emotional levels. Depending on the method of support, verbal, pictorial or graphic (with diagrams and pictures) slides can be used. Video presentations, in addition to the use of audio and video elements, appeal to the emotional experience of students who are fascinated by interesting stories and sympathise with the characters [8]. Multimedia games used in foreign language learning include the following: “Name this object”, “Matching game”, “Bingo”, “Charades”. Vocabulary skills are developed through the visualisation of a word in a picture, i.e., by combining verbal and graphic elements. Figure 1 shows an example of the game “Name this object” (Figure 3).

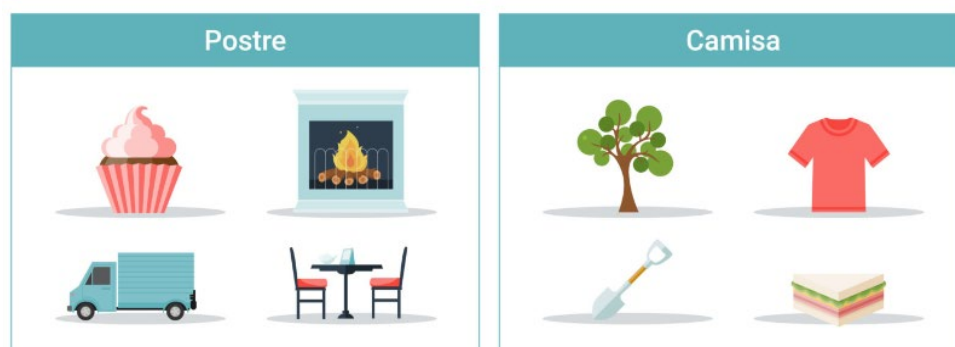


Figure 3. “Name the object” game

Source: compiled by the authors based on A. Heinz [12].

Among the most popular online applications in the world are Duolingo: Language Lessons, AnkiDroid Flashcards, Quizlet: AI-powered Flashcards, Babbel – Learn Languages, which are mostly used to improve vocabulary skills, but there are also applications for phonetic competence, such as ELSA: AI Learn & Speak English, Memrise: speak a new language. Table 1 shows the most popular web resources for learning foreign languages, with Duolingo taking the first place in all the countries under consideration: Language Lessons.

AnkiDroid Flashcards is popular in Thailand, the USA, and France, as well as Babbel – Learn Languages and Quizlet: AI-powered Flashcards, Memrise: speak a new language – in European countries and the USA, ELSA: AI Learn & Speak English – in Thailand. In India, the multimedia system is not as extensive and diverse, so online dictionaries rather than online games occupy the main positions in the field of foreign language learning (Table 1).

Table 1. The most popular apps for learning foreign languages in the world

Thailand	USA	France	India
(1) Duolingo: Language Lessons	(1) Duolingo: Language Lessons	(1) Duolingo: Language Lessons	(1) Duolingo: Language Lessons
(6) ELSA: AI Learn & Speak English	(9) AnkiDroid Flashcards	(8) AnkiDroid Flashcards	(12) Hindi-English Translator
(7) AnkiDroid Flashcards	(17) Quizlet: AI-powered Flashcards	(15) Quizlet: AI-powered Flashcards	(16) U Dictionary Translator
(8) Drops: Language Learning Games	(37) Babbel – Learn Languages	(27) Babbel – Learn Languages	(19) Hindi English Translator
(9) THAI DICT	(42) Memrise Easy Language Learning	(29) Memrise: speak a new language	(25) Hi Dictionary – Learn Language

Note: the ranking number in brackets.

Source: compiled by the authors based on Top apps ranking [6].

According to Duolingo: Language Lessons, the most popular languages to learn in the world in 2022 were English, Spanish, French, German, Korean, Italian, Japanese, and others. Figure 4 shows a map with the distribution of foreign language learning by country. In

particular, English was most often studied through multimedia in Eurasia, Africa, and South America, Spanish in North America, and French in Australia, North America, and Africa.

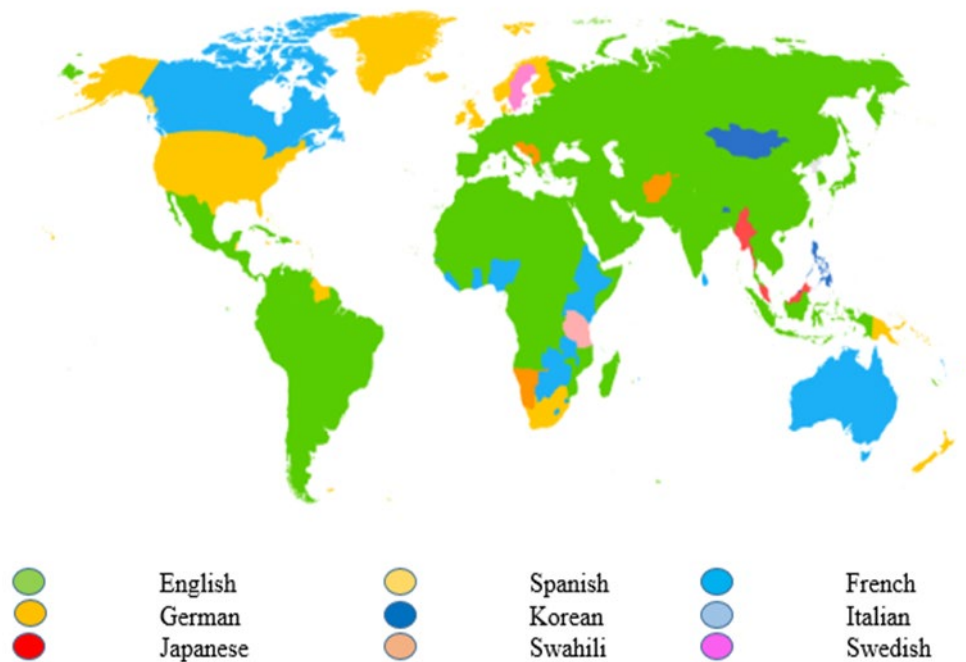


Figure 4. Languages most often studied at Duolingo: Language Lessons in 2022

Source: compiled by the authors based on Duolingo Language Report: Global Overview by Cindy Blanco [7].

Grammatical skills involve understanding grammatical phenomena in spoken and written language, as well as predicting grammatical structures in a text, while syntactic skills form an understanding of the use of syntactic structures, the correct construction of sentences and phrases, tense agreement. When learning foreign languages, these two language levels can be combined into grammatical and syntactic competence. However, grammatical skills are developed mainly through writing, while syntactic skills are developed through speaking. To develop grammatical and syntactic competence, a combination of presentations, audio, and video applications, watching films or listening to music is necessary. As a rule, grammatical and syntactic patterns of speech behaviour in oral or written form are learnt by listening to other people's speech or producing.

The experience of learning Chinese as a foreign language in Northern California showed that lexical skills were developed mainly through the use of images (29%), presentations (27%), audio and video files and online games (12%) were used equally. Audio files (49%) and video files (19%) were most often used to develop phonetic and orthoepic skills, while grammatical skills were developed through the use of presentations (44%) and images (19%). Thus, based on the results of the survey of 75 teachers from North Carolina, presented in Table 2, it can be concluded that multimedia technologies had the greatest impact on phonetic and orthoepic skills, followed by grammatical skills and then lexical skills. In other words, the use of digital technologies is not as important in vocabulary development as it is in pronunciation and correct grammatical patterns [13].

Table 2. The impact of multimedia technologies on foreign language learning (USA)

Language level	Lexical knowledge	Phonetic and orthographic skills	Grammar knowledge
Image	29%	6%	19%
PowerPoint presentation	27%	10%	44%
Animation	7%	7%	8%
Audio files	12%	49%	8%
Video files	12%	19%	11%
Online games	12%	5%	7%
Social media	2%	3%	1%
Overall result	89%	99%	98%

Source: compiled by the authors based on O. Gao [13].

The experience of 27 French students showed the following results in terms of foreign language learning: students' comprehension improved by an average of 105% from the baseline, comprehension and listening skills by 19%, vocabulary by 24%, writing skills by 18%, and argumentation and opinion skills by 18%. Overall, the

average improvement in language skills was 24%. However, it is worth noting that the impact of multimedia technologies was very different for each student: from 1350% to 33% for comprehension skills, from 300% to 19.4% for vocabulary improvement, and from 300% to 25% for writing skills (Figure 5).

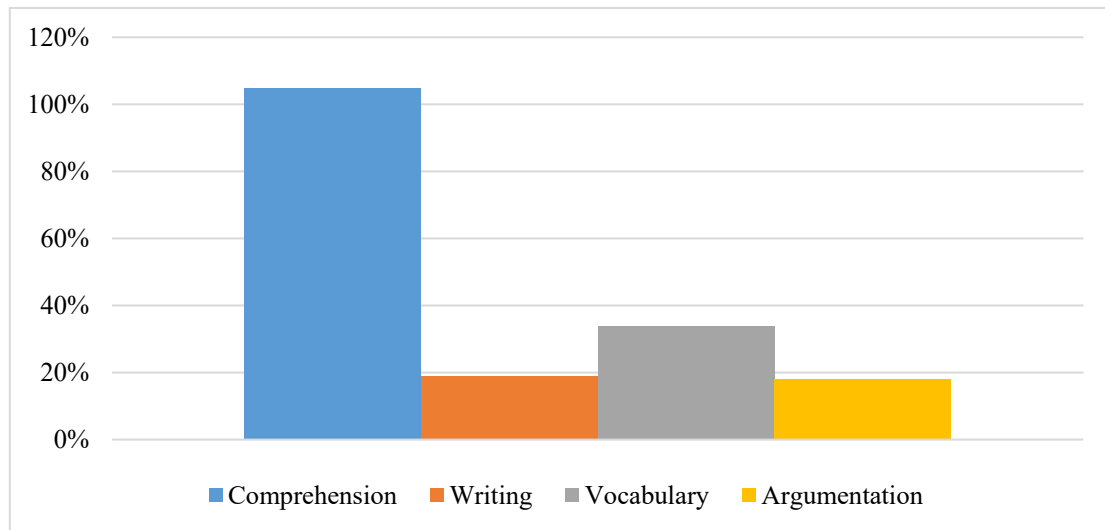


Figure 5. Experience of using multimedia (France)

Source: compiled by the authors based on M. Pothier et al. [14].

A study of improving vocabulary skills in a junior high school in Pattani, Thailand, showed an increase in test scores (from 142 to 282), with an effectiveness of 54.26%. The minimum increase in vocabulary was from 4% to 10%, and the maximum was from 13% to 18%, with an average of 7.1% and 14.1%. As for the role of multimedia in the modern learning system, it is possible to state that most of

the criteria were highly successful. In particular, students rated the motivation to learn at 4.5 out of 5, ease of access at 4.6, interest in use at 4.7, and usefulness of content at 4.8 [15]. The results of the student survey on the quality of learning when using multimedia technologies are presented in Table 3.

Table 3. Survey results on multimedia learning

Criteria			
Accessibility	Interesting	Motivating	Useful content
4.6	4.7	4.5	4.8

Source: compiled by the authors based on M. Yusoh et al. [15].

The Indian experience of using multimedia technologies revealed an increase in the average score of secondary school students from 26.77 to 47.14, i.e., an increase of 14.03 positions. In the absence of the introduction of multimedia, the test results increased by

7.89 points: before the use of multimedia, it was 27.28, and after it, it was 35.17. Thus, the pilot study found that the use of multimedia teaching tools improves students' knowledge by about 50%. The visualisation of the study results is presented in Figure 6.

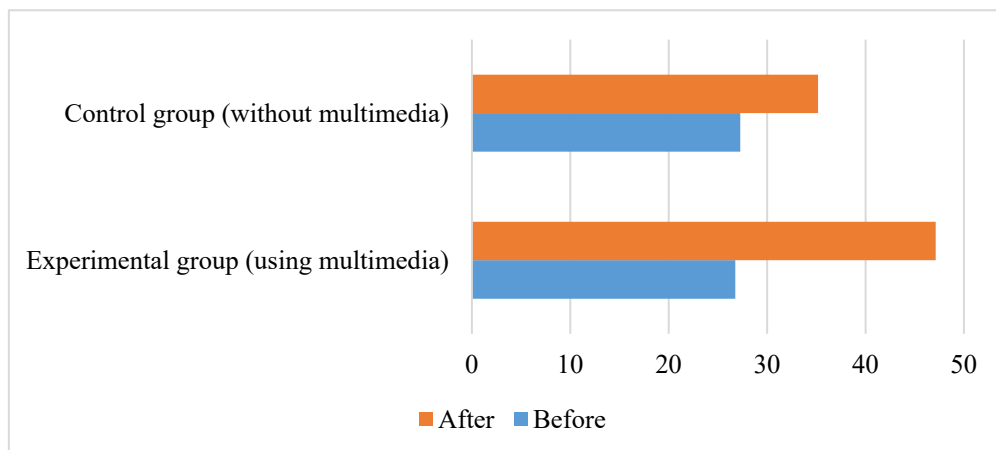


Figure 6. Results of the growth of foreign language proficiency (India)

Source: compiled by the authors based on C. Vasanthakumari and H.N. Vishwanath [16].

Thus, the role of multimedia technologies in the international context is to improve phonetic and orthoepic skills, followed by lexical, grammatical, and syntactic skills. It should be noted that lexical skills are formed primarily through the use of presentations and online card games, grammatical skills – are based on presentations and

watching videos, syntactical skills – by preparing own presentations and oral presentations with demonstration of video materials, phonetic skills – by listening to audio and watching videos, animated videos.

Discussion

The use of mass media in foreign language lessons is necessary because it provides access directly to authentic sources, while the involvement of mass media in the process of learning a foreign language is also one of the elements of digital learning. According to N. Oroujlou [17], it is authentic media that can not only improve students' knowledge but also have a positive impact on their consciousness. The study analysed the ideological factors influencing the representation of structural elements of news and lexical and grammatical patterns used in the texts that can help in language learning. Thus, the author emphasised that ideology is transmitted to the reader or listener along with an understanding of the use of lexical and grammatical structures in speech. The researcher provides important practical conclusions on the use of authentic sources, including the press, video, and audio content in the original language, which are a necessary component of foreign language learning, as they form not only speech but also social behaviour patterns.

The study of the experience of multimedia learning in Bosnia and Herzegovina by S. Becirovic et al. [18] showed that high school students have a positive attitude towards the use of digital technologies and teacher support in the classroom, and the level of the class significantly affects the understanding of the need for teacher support but is not significant in determining the usefulness of technology use. The paper proposes the implementation of systemic reforms as a form of educational struggle in the context of the COVID-19 pandemic and other contemporary challenges. It is worth adding that at the current stage of development of pedagogical science, there is a need to raise teachers' awareness of multimedia technologies, in particular for their further involvement in students' self-directed learning. However, it remains important for teachers to balance the use of multimedia learning tools, such as online games or video applications, with traditional methods of learning a foreign language (notetaking, teacher lectures).

The main principles of multimedia learning, as presented in A.M. Nobre [19], are student-centeredness, digital inclusion, flexibility, and the principle of interaction, which allows for self-regulated learning at the required individual pace. The study also assessed the impact of multimedia technologies on the implementation of student's oral and written competence. The development of the concept of interactivity in foreign language lessons was based on the CEFR (Common European Framework of Reference for Languages). The study by the researcher is a thorough work that uses international experience in the use of digital technologies, in particular, focusing on German, French and English oral and written practices of using digital technologies in online learning.

A tool for measuring teachers' multimedia knowledge was proposed in the study by D. Ginting et al. [20], which considered such factors as gender, nationality, type of educational institution, and academic qualifications. According to the author, increasing multimedia literacy among teachers can stimulate innovative teaching practices, i.e., make it more effective and interesting. It is worth noting that the model proposed by the researchers measurement model needs to be improved since due to the small number of respondents and the lack of consideration

of the national factor as one of the key ones, it cannot be used to assess international teaching experience.

When studying the modern Chinese education system, Y. Nie [21] concludes that its development requires a reasonable combination of multimedia technologies, the use of special software and an increase in the number of Chinese language materials. The author proposes to use a multimodal learning strategy, which involves a combination of multimedia technologies with the use of physical demonstration, facial expressions, and teacher's movements that help to activate auditory, visual, and tactile senses. The article by the researcher is relevant in terms of its practical value, in particular, it can serve as a basis for developing a model that will improve teaching in integrated secondary school classes, but its main drawback is the lack of empirical data on the use of multimodal mode in the educational process.

The use of multimedia technologies for learning English, according to M. Pun [22], is important if it is not the mother tongue. The author focuses on the strategies of effective use, in particular, on increasing the orientation and reducing the labour intensity of the learning process, supporting communicative competence with the help of multimedia technologies, and developing language skills. The author's vision of foreign language teaching is interesting and innovative, as evidenced by the following theses:

- if students do not depend much on their mother tongue, they should be motivated to communicate in a foreign language in class;
- the educational process should be more focused on the individual needs of students and less labour-intensive;
- multimedia is necessary in the classroom primarily to improve communication skills.

Today, traditional methods of work are not enough to fully learn a foreign language, so it is necessary to involve multimedia, including newspapers, radio, and television, which actively use audio and visual components. The concept of didactic teaching proposed by G. Barbulet [23] was developed based on aligning CEFR principles with classroom practice to ensure effective foreign language teaching and learner assessment. This work reflects one of the approaches to the implementation of multimedia technologies that can best meet the needs of a large number of learners. Although there is no universal methodology for multimedia teaching, each development makes a significant contribution to the development of pedagogical science and expands the possibilities of education in the future.

The issue of integrating digital technologies and overcoming the pedagogical crisis in India after the outbreak of the COVID-19 pandemic was discussed in S. Dhawan [24]. Globalisation challenges have taught students critical thinking and adaptability, and educational institutions – sustainability in educational terms. The author drew attention to proposals for improving online learning. In particular, the opinion of the researcher that the effectiveness of the educational process depends on several factors, including the minimum cost of purchasing hardware, and the pros and cons of e-learning. To introduce a particular educational technology, it is necessary to analyse all the advantages and disadvantages, purpose, and

context, as the choice depends primarily on factors such as security, number and quality of laboratories, Internet access and speed. This work has a special role in the modern educational process, given the analysis of inclusive education, in particular, it is assumed that online technologies can provide a continuous educational process for all students, including inclusive ones.

To create effective cooperation and a relaxed atmosphere in the classroom, different methods of work and various multimedia technologies are used. The study of the transition from Chinese traditional education to multimedia technologies is focused on Y. Lin [25]. The study also shows how multimedia can influence situational learning. For example, when using multimedia, it is possible to imitate voice or intonation, which is a manifestation of situational learning and has a positive effect on communication skills. The combination of situational learning and multimedia technologies can significantly stimulate the educational process. In this regard, the work of Yu. Lin is a valuable methodological development, but a significant disadvantage of this work is that it did not provide statistical data on the implementation of the above educational concept.

Thus, most studies focus on the functions and effectiveness of multimedia learning tools, in particular, the focus is on individual skills. Studies also often present data on the development of multimedia technologies on the example of educational institutions around the world. It is worth noting that studies rarely show the impact of digital technologies on the acquisition of different language levels, such as lexical, phonetic, or grammatical.

Conclusions

The study of international experience in the use of multimedia technologies has shown that in the context of modern globalisation and technologisation of the world, not only technical means of learning but also pedagogical strategies are constantly being rethought and improved. In particular, among the multimedia technologies that are being actively implemented in the field of education are the following: presentations, animations, online games, video and audio applications, web applications.

Animated videos, video and audio materials, and online games are most often used to improve phonetic skills, which involve the perception and understanding of information. Lexical competence is developed through the

use of presentations, games, video and audio applications, and web applications, and grammatical and syntactic competence is developed through the use of audio and video applications, including watching films and listening to music. The most commonly used programs for playing audio content are VLC Media Player, SMPlayer, KMPlayer, PotPlayer, and GOM Player, for creating animation – Moho, Toon Adobe Animate, Boom Harmony, FlipaClip, Pencil2D, for creating presentations – Google Slides, Prezi, Powtoon, Google Slides, Microsoft PowerPoint. The most frequently used web resources are Duolingo: Language Lessons, AnkiDroid Flashcards, Babbel – Learn Languages, Memrise: speak a new language, Quizlet: AI-powered Flashcards, Memrise: speak a new language, ELSA: AI Learn & Speak English.

The experience of learning Chinese in the United States showed the following results: lexical skills were developed through the demonstration of images and presentations, phonetic skills – through the use of audio and video files, and grammatical skills – through presentations and images. The experience of learning a foreign language in France demonstrated the highest level of growth in students' comprehension and perception skills, followed by an increase in vocabulary, writing and argumentation skills. A study in Thailand recorded a more than half improvement in vocabulary skills, while the Indian experience of using multimedia contributed to a 50% increase in students' average scores.

Priority tasks in the future may include visualising and rethinking the experience and achievements of different countries in the use of multimedia teaching tools, developing pedagogical strategies to improve the professional and educational level of teachers, and using artificial intelligence to effectively develop language skills, including phonetic, lexical, grammatical, and syntactic skills.

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None.

Conflict of Interest

None.

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Роль мультимедійних технологій у викладанні іноземних мов у міжнародному контексті

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Анотація

Актуальність. Дослідження впливу мультимедійних технологій на міжнародний освітній простір зумовлене, насамперед, постійною зміною педагогічних стратегій та вдосконаленням технічного оснащення, що супроводжує навчальний процес.

Мета. Метою дослідження є аналіз особливостей використання, ролі та ефективності мультимедійних технологій у сучасній освіті на прикладі досвіду різних країн.

Методологія. У дослідженні використано порівняльно-зіставний, педагогічний, аналітичний та синтетичний методи. На основі аналізу різних освітніх середовищ були зроблені наступні висновки: фонетична компетенція розвивалася за допомогою анімаційних відеороликів, презентацій, відео- та аудіододатків, лексичні навички розвивалися за допомогою презентацій, ігор, відео- та аудіоматеріалів, веб-додатків, граматична та синтаксична компетенції вимагали використання аудіо- та відеоматеріалів.

Результати. Серед мультимедійних засобів навчання були згадані додатки: VLC Media Player, KMPlayer, GOM Player - для відтворення аудіоконтенту, Moho, Boom Harmony, FlipaClip - для створення анімації, Google Slides, Prezi, Microsoft PowerPoint - для створення презентацій. У міжнародному контексті найпоширенішими додатками є Duolingo: Уроки мови, Babbel - Вивчайте мови, AnkiDroid Flashcards, Quizlet: Flashcards на основі штучного інтелекту та Memrise: розмовляй новою мовою. Згідно з американським досвідом, найбільший вплив використання мультимедіа мало на розвиток фонетичних, граматичних та лексичних навичок. З точки зору французького досвіду, найвищий рівень зростання зафіксовано у навичках розуміння інформації, за ними йдуть словниковий запас, навички письма та аргументації.

Висновки. На основі досвіду Індії та Таїланду можна зробити висновок, що зростання мовних навичок склало близько 50%. Ця робота може бути використана для аналізу педагогічного досвіду в міжнародному контексті, для побудови освітніх стратегій вивчення іноземних мов з використанням мультимедійних засобів, а також для визначення основних критеріїв, які сприяють покращенню мовних навичок.

Ключові слова: фонетичні та лексичні компетенції; граматики; ефективність медіа; цифрова освіта; аудіювання.