



## PROFESSIONAL FOREIGN LANGUAGE COMPETENCE FORMATION USING EDUCATIONAL MULTIMEDIA TECHNOLOGIES

 Svetlana Evgenyevna Bobrova<sup>1</sup>  
 Elena Nikolaevna Popova<sup>2+</sup>  
 Yuliya Sergeevna Sizova<sup>3</sup>  
 Liubov Nikolaevna Orlova<sup>4</sup>  
 Irina Veniaminovna Polozhentseva<sup>5</sup>

<sup>1,2</sup>Peoples' Friendship University of Russia (RUDN University), Russia.

<sup>1</sup>Email: [dartasie@mail.ru](mailto:dartasie@mail.ru) Tel: 84954342012

<sup>2</sup>Email: [elenapopova59@yandex.ru](mailto:elenapopova59@yandex.ru) Tel: 84954346729

<sup>3</sup>Plekhanov Russian University of Economics, Moscow, Russia.

<sup>3</sup>Email: [ju-si@mail.ru](mailto:ju-si@mail.ru) Tel: 89166846393

<sup>4</sup>Financial University under the Government of the Russian Federation, Moscow, Russia.

<sup>4</sup>Email: [lyuba\\_orl@mail.ru](mailto:lyuba_orl@mail.ru) Tel: 89774239113

<sup>5</sup>K.G. Razumovsky Moscow State University of Technologies and Management (First Cossack University), Moscow, Russia.

<sup>5</sup>Email: [vipperh@yandex.ru](mailto:vipperh@yandex.ru) Tel: 84956405436\*144



(+ Corresponding author)

### ABSTRACT

#### Article History

Received: 27 October 2020

Revised: 4 January 2021

Accepted: 2 February 2021

Published: 8 March 2021

#### Keywords

Communicative tasks  
Multimedia teaching technologies  
Multimedia educational presentations  
Philology students  
Situational speech exercises.

The purpose of the study is to analyze the use of multimedia teaching technologies as a means of developing future linguists' professional foreign language competence and to substantiate the effectiveness of their use in professional training. A combination of modern methods of pedagogical research has been used to fulfil the set goals: theoretical methods, such as analysis, generalization, comparison, synthesis, and systematization of scientific, educational-methodological literature, to determine the current state of the research subject; empirical and diagnostic methods (observation, conversations, interviews, questionnaires, testing) to determine the effectiveness of using multimedia teaching aids and determine practical recommendations for their use; prognostic methods to ascertain and diagnose the level of professional foreign language competence in future linguists; pedagogical experiments to experimentally check the effectiveness of the application of multimedia teaching technologies (multimedia educational presentations) in the process of developing the professional foreign language competence of future linguists; and methods of mathematical statistics for quantitative and qualitative processing of research results and statistical verification of their objectivity using the Pearson  $\chi^2$  test. The usefulness of multimedia technologies in the development of future linguists' foreign language competence has been substantiated. The practical aspects of creating multimedia presentations aimed at developing professional foreign language competence have been described. It has been proved that the use of multimedia educational presentations to create a foreign-language communicative environment during future linguists' professional training will increase the level of linguists' independent acquisition of educational information, as well as provide positive motivation for educational and future professional activities.

**Contribution/Originality:** This study contributes to existing literature by analyzing the use of multimedia teaching technologies as a means of developing future linguists' professional foreign language competence and to substantiate the effectiveness of their use in professional training.

### 1. INTRODUCTION

The search for new ways to create a professionally oriented educational information and communication environment for future linguists requires training that allows the student to adequately navigate a communicative

situation, that is, to play the role of a real communicant within a specific fragment of communication. Consequently, students' training should take place in the form of communication between themselves and the teacher, in connection with activities that are personally significant to the communication of students (Dugalich et al., 2020). This characteristic of the educational process that brings about the motivated use of language as a means of speech interaction in the professional sphere of communication, and brings the goal, form, and means of implementation of future linguists' educational activity as close as possible to the real conditions of communication, requires the creation of special conditions in which speech interaction can be taught with specific goals, appropriate means of communication, and expected results (Kostyukova & Morozova, 2011). One of these special conditions is the use of multimedia technologies in the educational process (Dadashev, Muskhanova, Batchaeva, & Yahyaeva, 2020; Dolzhenkov, Maltzagov, Makarova, Kamarova, & Kukhtin, 2020).

Multimedia technologies are currently one of the most dynamically developing areas of information technology (Shirshova, Sizova, Gabazov, & Salynskaya, 2020; Skripak, Aynazarova, Ukhanova, Tkachenko, & Erina, 2020). In education, the use of multimedia materials and computer networks reduces learning time by almost three times; the simultaneous use of images, sound, and text increases the level of memorization by 30-40% (Kumar, Rose, & D'Silva, 2008).

However, as Qingsong (2012) notes, most multimedia software is created by commercial developers who do not always design programs based on existing language learning theories. A good software tool should be able to analyze the user's weaknesses and accordingly choose a strategy that will allow them to overcome that weakness, along with learning strategies such as revision, paraphrasing, slowing down, correcting, or directing the student to reference information.

The didactic and communicative potential of information and communication technologies (ICT) in the process of language education, as well as the effects of the implementation of ICT tools in teaching certain aspects of a foreign language, in particular vocabulary, grammar, and writing, have so far been insufficiently studied (Kochergina & Krivchenkova, 2020; Zhuchkova, 2020). In this context, Dong's (2013) remarks are relevant, that most teachers use computer technologies exclusively as a means of obtaining information and authentic language material, while the communicative capabilities of information technologies are not yet sufficiently utilized (Dolgova, Belikov, & Kozhevnikov, 2019; Tsapko, Valyarovskiy, Maiboroda, Khusainova, & Varnavskaya, 2018).

An examination of multimedia as a means of developing professional foreign language competence (PFLC), reveals some contradictions that are typical of the modern theory and practice of the professional training of future linguists. Specifically, these are the contradictions between the need for students to form a PFLC adequate to modern requirements and the insufficient level of development of the multimedia tools; the need of society to train specialists capable of acting professionally within the global information society, and the insufficient development of scientifically substantiated theories, technologies, and systems that ensure the formation of students' PFLC using multimedia tools; the significant potential of multimedia tools, and their insufficient use in systems aimed at developing future foreign language specialists; the presence of a large arsenal of education-oriented computer systems, and the insufficient development of technologies for their use in the formation of future linguists' PFLC; the existing communicative potential of multimedia, and its insufficient use in the process of developing future linguists' PFLC.

Along with the changing priorities in the process of teaching foreign languages, there is an increasingly comprehensive implementation of electronic resources that help teachers equip their students with knowledge and skills that make them more autonomous and independent in learning. It is believed that students benefit the most from education when they take personal responsibility for their learning, both during and outside of practical classes (Kerimbaeva, Niyazova, & Kaya, 2017).

Students do not have the opportunity in all Russian educational institutions to improve their foreign language speaking skills by communicating with native speakers and visiting foreign educational institutions. Indeed, the lack

of a natural foreign language environment is one of the reasons for the low level of PFLC among future linguists. Thus, educational institutions face several tasks, which are aimed at creating an artificial foreign language environment that closely resembles real conditions and reflects the modern model of professionally oriented practical classes, in which future linguists can master PFLC. Modern advances in ICT offer many opportunities for this, in particular through the use of computer and Internet resources and enable students to take responsibility for their own learning.

The purpose of this study is to analyze the use of multimedia teaching technologies (MEP) as a means of developing future linguists' PFLC and to substantiate the effectiveness of their use in professional training.

The research is based on the following hypothesis: the use of MEP to create a foreign-language communicative environment in the process of future linguists' professional training will help to increase the level of linguists' independent acquisition of educational information and the efficiency of achieving PFLC, as well as providing positive motivation for educational and future professional activities.

Based on the results of the study, one can conclude that the goal set in the study was achieved.

## 2. LITERATURE REVIEW

Researchers (Krippel, McKee, & Moody, 2010; Lambert & Cuper, 2008; Mantiri, 2014; Omodara & Adu, 2014) define multimedia technologies as procedures for the development, operation, and application of media of different modalities. Multimedia tools can be either hardware (a computer with a processor, a multimedia monitor with built-in stereo speakers, TV tuners, sound cards), or software (programs and problem-oriented programming languages that take into account multimedia features). The following definition will be adopted in this study: "hardware and software that implement multimedia technology" (Neo, 2007).

An analysis of previous academic research reveals that the issue of using ICT tools in the educational process is generally considered in the context of reforming the modern system of education and allows for the identification of the following areas of scientific research in this field:

- General aspects of computer technology use in the educational process (Cuban, Heather, & Craig, 2001; Harris, 2002; Keengwe & Onchwari, 2008).
- Features and efficiency of using multimedia tools in the educational process (Gao, 2015; Lau, Yen, Li, & Wah, 2014; Tao, 2011).
- Multimedia systems as a means of interactive learning (Malik & Agarwal, 2012; Neo & Neo, 2009; Yan & Xiao, 2013).
- Integration of pedagogical and computer technologies into modern conditions of language teaching using ICT (Kranthi, 2017; Yunus, Lubis, & Lin, 2009).
- The issue of using ICT when teaching foreign languages (Fujimoto, 2012; Kern, 2006; Melor, Maimun, & Chua, 2009).
- However, as rightly noted in the study (Jayanthi & Kumar, 2016) no single systemic solution has yet been identified for these problems.

According to Ahmad (2012) the efficiency of the development of foreign language communication skills in future linguists largely depends on the focus and organization of the forms and methods of the educational process. The forms and methods with the highest priority include communicative and interactive teaching methods involving the use of multimedia technologies. These forms and methods are aimed at an independent search for the best possible solutions and contribute to the improvement of foreign language communication skills in future linguists, as well as to the development of their critical and logical thinking, their initiative, and creativity.

Research by England (2007) showed that training sessions conducted in specialized multimedia centers that included a computer class significantly increased the efficiency of PFLC development among future linguists. The activities included interactive sessions and the use of visual aids. Through audiovisual methods, optimal conditions

were created for the intensification of students' work on mastering and improving their foreign language speaking skills which are developed through practical activity, both in-class and independently, and on the individual and group levels.

According to [Young and Bush \(2004\)](#), an important area of information technology is the use of audio and video. Therefore, along with computer technologies, the researchers discuss audiovisual teaching technologies in which a significant part of the cognitive activity management is carried out through specially developed audiovisual educational programs.

According to [Gilakjani \(2012a\)](#), multimedia educational presentations (MEP) can be used as a powerful force for significantly improving the quality of future linguists' professional foreign language training, through the means of creating a foreign language communicative environment, and provide a tool that will contribute to the efficiency of developing the future linguists' PFLC. Researchers ([Gilakjani, 2012b](#); [Tabar & Khodareza, 2012](#)) have found that MEPs are characterized by significant educational potential and the ability to ensure the students' personal and professional development.

Taking together the results of numerous studies on the issue of designing MEP, the content of MEP must meet the following requirements:

1. For future linguists to achieve the PFLC level determined by the curriculum, the MEP content must include the optimal qualitative and quantitative composition of the educational material. It must be consistent with the objectives of the program, be available to all students, and provide an opportunity to satisfy their communicative intentions within the framework of professionally oriented topics. Further, it must offer the justified choice of means of mastering linguistic and speech material which effectively prepare one for professional foreign language communication and contribute to proficiency ([Dubois & Vial, 2001](#); [Mayer & Moreno, 2003](#)).

2. In order for students to master all types of speech activity in an integrated way, the content of the MEP must be balanced to ensure future linguists' interconnected mastery of productive (speaking, writing) and receptive (listening, reading) types of speech activity ([Joshi, 2012](#)).

3. The concentricity of the way the educational material is presented and its situationality will determine the gradual enrichment of students' personal communicative and educational experience on each topic, with the help of appropriately selected educational material in the MEP which supplements and enriches its content with new facts and speech units ([Susikaran, 2015](#)).

4. The professional focus of the educational material is ensured by using appropriate text, audio, and video materials aimed at developing a motivated readiness to master a foreign language, maintain interest and a positive attitude towards the future profession, and contribute to the development of the ability to obtain a foreign language experience in accordance with the students' personal and professional needs ([Huang & Liu, 2000](#)).

5. The communicative and activity-based nature of the educational material helps to create a communicative atmosphere, bringing it closer to real-life communication. This is achieved by using authentic non-adapted materials that are real products of native speakers' speech activity; the use of communicative exercises and tasks that give rise to speech interaction (verbal and non-verbal) in different forms of learning (individual, pair, group); the planned presence of problematic, creative tasks, ensuring the development of creative activity, the formation of mechanisms of independent cognitive activity, and the development of future linguists' technological skills, objective assessment, and consideration of their experience. These will help language learners to develop their strategies for learning and self-improvement, and cement their commitment to life-long learning ([Gong & Zhang, 2007](#)).

6. The personal orientation of the educational material of MEP takes into account future linguists' individual characteristics and capabilities (cognitive abilities, cognitive learning style, level of foreign language proficiency, interests, educational and life experience) by using multilevel educational material, providing a choice of assignments, personally significant and emotionally charged material, independent cognitive tasks, and

individualization of homework that contributes to the development of the student's personality, independence, formation of values, and critical thinking (Smith & Woody, 2000).

7. The arrangement of linguistic, speech, information, and illustrative material in the MEP is clearly distributed across the slides: the material should be presented in portions that are convenient for perception (Astleitner & Wiesner, 2004).

Researchers (Bartsch & Cobern, 2003) identify the following ideal structure for MEP content: 1) presentation of the meaning and form of a linguistic unit at the level of a word or phrase; 2) mastering similar actions with the linguistic unit at the level of a sentence or micro-utterance (substitution, transformation, addition, creation by analogy); 3) mastering a comprehensive activity, that is, performing various types of speech activity with the new linguistic unit at the receptive and productive levels.

According to researchers (Sharma, 2016), the content of the presentations provides for the selection of educational material according to the requirements determined by modern approaches to the organization of future linguists' professional foreign language training. The content of multimedia presentations directs future linguists towards the acquisition of professionally significant knowledge and the related formation of corresponding skills and abilities of professional foreign language communication in the four types of speech activity, in addition to the acquisition of personal experience, personal development, and self-development.

According to Kumar and Patil (2013), the system of exercises and tasks in the MEP should include the necessary educational materials and the corresponding means to understand them: speech and situational speech exercises and communicative tasks. While performing the professionally oriented communicative tasks, students revise the studied educational material, improve their speech skills, master various strategies of professional foreign language communication (the ability to cooperate, find a compromise, adapt, sacrifice one's interests for the sake of others, avoid conflict situations, etc.), ensuring the realization of their communicative needs.

We should note that, according to Wang (2008), preference should be given to authentic professionally oriented materials with sociocultural and cultural-linguistic content. In view of this, the use of visual, textual, and combined presentations that include specially selected educational information in the form of texts, audio, and video materials helps to create educational situations that encourage students to express their own opinions, whether the student agrees or disagrees with the interlocutor's opinion.

### 3. METHODS

In conducting this research, a combination of modern methods of pedagogical research was used: theoretical – analysis, generalization, comparison, synthesis, and systematization of scientific and educational-methodological literature to determine the current state of the issue under investigation; empirical and diagnostic (observation, conversations, interviewing, questionnaires, testing) to determine the effectiveness of multimedia teaching aids and provide practical recommendations for their use; prognostic methods to ascertain the level of future linguists' PFLC; pedagogical experiments to experimentally check the effectiveness of MEP in the process of developing the PFLC of future linguists; and finally, mathematical statistics for quantitative and qualitative processing of research results and statistical verification of their objectivity using the Pearson  $\chi^2$  test.

Since the subject of the research is the development of PFLC in future linguists, let us take a closer look at this concept and define it more clearly.

In a generalized form, professional competency includes the following components: 1) professional knowledge, skills, and abilities; 2) the individual's personal attitude towards these; 3) professionally significant qualities; 4) work and life experience that will allow one to quickly perform tasks and solve problems that arise in professional activity – all these are formed to a great extent during university studies. In the context of the issue under consideration, we consider PFLC the general goal of the professional foreign language training of university language learners and, at

the same time, the result of the educational process, modeling the graduate's qualities, the level of manifestation (formation), and the zone of proximal development.

Thus, the term "PFLC of a future linguist" is understood as personal education based on the totality of linguistic, speech, and sociocultural competencies acquired by the student in the process of studying at university. This education encompasses the student's theoretical and practical readiness to use the foreign language in social and work-related activities and professional cognition, improving the acquired level according to their own professional needs.

To assess the influence of MEP on the level of students' PFLC development, a pedagogical experiment was carried out that focused both on acquiring new knowledge and on checking and solving practical problems and tasks related to improving the MEP activities and increasing the level of future linguists' PFLC.

The goal of the experiment was to test the effectiveness and feasibility of using MEP to create a computer-oriented foreign language communicative environment and the influence of the MEP on the development of PFLC in future linguists.

To thoroughly assess the effectiveness of the proposed activities based on the educational institution, a control (CG) and an experimental (EG) group were established that included year 3-4 students. Specifically, the CG consisted of 58 students and the EG included 67 students. Therefore, a total of 125 students took part in the final stage of the experiment.

The comparative analysis was carried out within the framework of existing academic groups. The same teachers worked in the EG and CG; the students' performance and quality of knowledge and, consequently, their levels of PFLC development were almost identical, as shown in [Table 1](#). The only difference was the learning process, namely: in the CG, the training was carried out according to the traditional methodology (teachers worked independently, carrying out training according to standard curricula for specialized disciplines) and in the EG, the emphasis in the teachers' work was transferred to the use of materials that motivated students to form and develop foreign language communication skills. The achievement of this goal was facilitated by the use of MEP to develop, control, and correct these skills.

Therefore, when teaching students from the EG, a complex of interrelated components was used to integrate multimedia technologies into the process of developing the future linguists' PFLC and provided an organization of education in which the professional foreign language training of the student took place by means of a simulated professionally-oriented communication activity through the use of multimedia presentations.

We tested the functionality of the system of exercises and tasks (quantitative and qualitative composition, rational organization) in the MEP and the features of their application using the results of experimental training that was carried out using specially prepared training materials in the form of thematic modules. Subsequently, these materials were corrected, which made it possible to gradually design and improve the content of the MEP. The efficiency of the quantitative and qualitative composition of the presentations was assessed by the teachers and students participating in the experiment.

#### 4. RESULTS

It was decided to determine the level of the future linguists' PFLC at the beginning of the study. To assess the level of students' skills in foreign language communication and sociocultural knowledge, a set of control measures (questionnaires, interviews, testing, etc.) was carried out aimed at testing the knowledge, skills, and abilities in foreign language communication achieved by students during their studies at the university.

Using the Pearson  $\chi^2$  test, we tested the hypothesis concerning the equality of the probabilities of students achieving low, medium, and high levels of PFLC development, according to certain indicators in the CG and the EG. The summarized results of these tests are presented in [Table 1](#).

Table -1. Distribution of students by level of PFLC development (establishing review)

Groups	Levels of PFLC development (%)						T <sub>emp.</sub>
	Low		Medium		High		
	Number of students	%	Number of students	%	Number of students	%	
CG	16	27.59	34	58.62	8	13.79	1.17
EG	20	29.85	38	56.72	9	13.43	

Mathematical processing yielded  $T_{emp.} = 1.17$  (with  $T_{crit.} = 5.991$ ); therefore,  $T_{emp.} < T_{crit.}$ . This provided the starting point for conducting the formative stage of the experiment. See Figure 1.

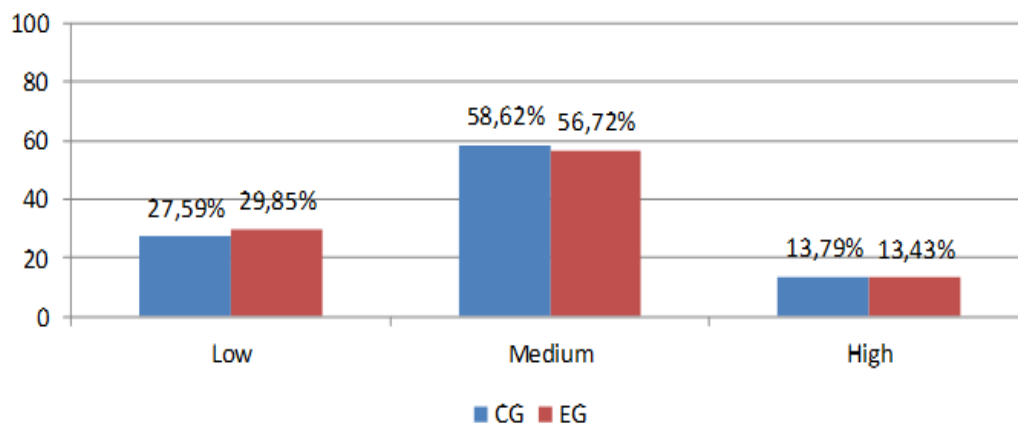


Figure-1. Results of the establishing experiment.

The students from both the CG and the EG were almost at the same level of training: low and average levels of PFLC development varied within 2%, the high level was within 0.36%. These indicators showed that the students' skills in foreign language communication and sociocultural knowledge were not fully adequate to modern educational and qualification requirements. Thus, there was a clear need to improve the training of future linguists in certain directions by introducing MEP into the educational process in a way that would contribute to the effective development of PFLC in future linguists.

The next step of the experiment was to test the feasibility and effectiveness of using the aforementioned MEP to develop the students' positive motivation for learning and future professional activities, as well as to improve their PFLC during practical and seminar classes in specialized subjects, in particular, the practice of oral and written speech. To achieve this goal, it was necessary to conduct a formative experiment, during which it was planned:

- To establish the level of PFLC development among students from the EG.
- To establish the presence or absence of a difference in the levels of PFLC development between students from the EG and the CG.
- To process the results obtained using the methods of mathematical statistics.
- To assess the efficiency of PFLC development in future linguists.

The same students of years 3 -4 (CG and EG) were involved in the formative experiment. The MEP were used in the experimental groups during experimental research work and in the process of studying professional subjects, in particular during practical exercises, providing a framework for independent and individual work.

Five teachers were involved in the experimental study who also took part in the establishing stage, which allowed us, to a certain extent, to trace the influence of various teaching methods on the results of students' understanding of professional subjects and, consequently, the development of their PFLC. During the formative experiment, over 40 experimental classes were held on the subjects of oral and written speech, practical grammar and phonetics, and sociocultural, linguistic, and regional historical subjects.

According to the results of the formative experiment during which the students from the EG were trained according to the methodology that provided for the use of MEP, a control review was carried out to identify the results of the influence of this method on the development of PFLC in future linguists.

To objectively prove the effectiveness of the proposed method, we again used the method of quantitative analysis to determine whether there were significant differences between the level of PFLC development among future linguists from the CG and the EG, according to the results of the formative experiment.

Statistical processing of the obtained data using the Pearson  $\chi^2$  test confirmed the effectiveness of the proposed measures for the development of the PFLC level in future linguists. After checking the feasibility of the null hypothesis at the accepted level of confidence probability, it was revealed that for students from the EG and CG,  $T_{emp.} = 9.45$  with  $T_{crit.} = 5.991$ , that is, the first indicator was greater than the second ( $T_{emp.} > T_{crit.}$  (9.45 > 5.991)), as evidenced by the results presented in Table 2.

Table-2. Distribution of students by level of PFLC development (formative review)

Groups	Levels of PFLC development (%)						Temp.
	Low		Medium		High		
	Number of students	%	Number of students	%	Number of students	%	
CG	14	24.14	35	60.34	9	15.52	9.45
EG	9	13.43	43	64.18	15	22.39	

This means that the null hypothesis is rejected and, therefore, the hypothesis that we stated is accepted. Consequently, the differences between the results obtained in the EG and the CG are significant, which is due to the influence of the experimental methodology of PFLC development in future linguists.

The analysis of the effectiveness of the experimental methodology would have been incomplete if we had not traced the dynamics of development and the development levels of the PFLC among future linguists, as illustrated in Figure 2.

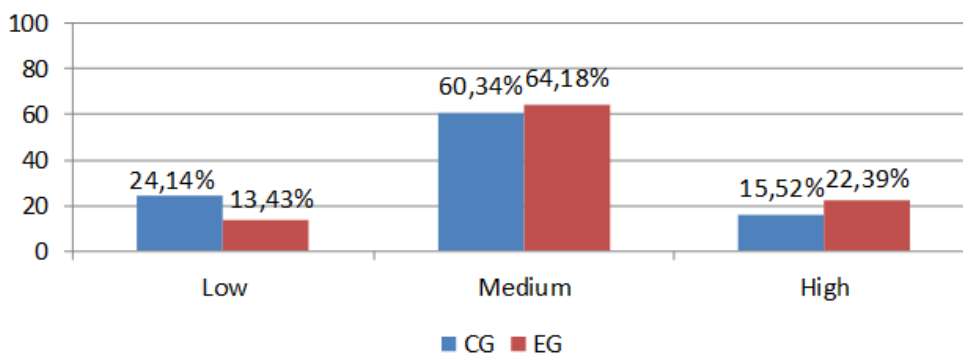


Figure-2. The results of the formative stage of the experiment.

Thus, the analysis of the PFLC level development trend of students from the EG and CG indicates an increase in the corresponding indicators in the EG and an insignificant increase in the CG which is confirmed by the data presented in Table 3.

Table -3. The trend of PFLC development levels in future linguists (according to the results of experimental work)

Level	EG (67 people)				CG (58 people)			
	Before the experiment		After the experiment		Before the experiment		After the experiment	
	people	%	people	%	people	%	people	%
High	9	13.43	15	22.39	8	13.79	9	15.52
Medium	38	56.72	43	64.18	34	58.62	35	60.34
Low	20	29.85	9	13.43	16	27.59	14	24.14



Upon completion of the formative stage of the experiment, conversations, discussions, and round tables were held with the students from the EG to discuss the effectiveness of the proposed measures for their PFLC development. The students noted that the use of multimedia presentations had a positive effect on their motivation for learning and future professional activity and contributed to a significant improvement in general educational skills and abilities. The future linguists also noted that, as a result of experimental training, they managed to significantly enrich and systematize their foreign language knowledge, as well as their socio-cultural, linguistic and cultural knowledge, which contributed to a deeper understanding of the essence of PFLC as an integral quality of a linguist's personality.

Finally, we should note that, according to the results of the teacher questionnaire, the use of MEP received positive feedback: 91% of teachers and 93% of students had a positive impression of using MEP in the learning process. Well over half of the respondents (85%) noted the rational distribution of educational material, as well as the professional orientation of the exercises and tasks. The overwhelming majority (81%) of teachers indicated the feasibility of creating guidelines to help plan and conduct classes using presentations.

During the group lessons, teacher-student interactions had an upbeat tone; relations were built on the principles of cooperation, mutual assistance, and goodwill; and the team members enjoyed participating in common actions (preparing presentations, web collages, projects, web quests, record audio and video monologues, etc.).

## 5. DISCUSSION

As the results of the formative experiment showed, the central place in the professionally oriented foreign language learning environment was given to MEP, the content of which involved the selection of educational material according to the curriculum requirements and was determined by modern approaches to organizing the professional foreign language training of future linguists.

In accordance with the requirements for the design of the MEP content set out in the literature review, we opted for professionally oriented authentic materials of a socio-cultural, linguistic and regional historical nature. Information obtained during reading or listening is usually used in oral speech and writing when carrying out post-text situational speech tasks, speech exercises, and communication tasks. Situational speech exercises involve the development and improvement of students' application of phonetic, lexical, and grammatical material in four types of speech activity through the performance of speech actions in situational conditions in the presence of a communicative task (Shchukin, 2004; Susikaran, 2015).

The communicative task is focused on revision of previously studied educational material, and improving speech skills, as well as stimulating the personal and professional development of future linguists. In view of this, the use of visual, textual and combined presentations that include specially selected educational information in the form of texts, audio, and video materials (Bartsch & Cobern, 2003; Shamov, 2008) allows for the creation of educational situations that encourage students to express their own opinions, whether the student agrees or disagrees with the interlocutor's opinion.

For example, an MEP on "Exams and qualifications" with a lexical focus allows for the presentation of new professionally oriented lexical material as well as the development of appropriate skills and abilities to use the material in speech. This can be achieved by presenting the new lexical material in a video file, as well as in the text, and by performing a series of pre-speech and speech exercises (speech exercises: choice according to certain attributes, substitution, construction, determine the relationship between the word and its meaning; situational speech exercises: listen or read a text to obtain information and express an attitude towards it; building utterances in the form of a monologue or dialogue in accordance with the situation or without it) and communicative tasks. Here are some examples of the latter:

- Complete the sentences with the words from the box. Check your answers.
- While watching, complete the sentences. Check your answers.

- In groups, discuss the following questions: How to pass tests successfully?

Thus, as the examples demonstrate, work with MEP requires the completion of exercises and tasks aimed at the interconnected development of future linguists' skills and abilities of professional foreign language communication in four speech activity types.

The act of learning using MEP involves a number of stages which are subordinate to the logic of understanding the educational material. Thus, at the stimulating and motivational stage, which involves the actualization of previous experience and the motivation of students to study the new professionally-oriented foreign language material, as well as elimination of certain phonetic, lexical and grammatical difficulties associated with understanding the presented information, visual, textual, and combined presentations-demonstrations of an informative or problematic type are used (Koryakovtseva, 2010).

The goal of these presentations is to create an appropriate atmosphere for communication, remove phonetic, lexical, and grammatical difficulties, prompt students to discuss the issues raised, and to prepare for the main part of the lesson and inform students about its goals. This ensures students' motivation for the learning process and stimulates the study of new foreign language material, as illustrated with the following example exercises:

- Look through the pictures. What do they have in common?
- Discuss in pairs: What makes a philologist good?

The presentation stage is associated with the introduction of new linguistic and speech material with the help of visual, textual, or combined presentations-demonstrations, i.e., communicative MEP with a lexical or grammatical focus.

Taking into account the activity-based nature of the presentation of educational material and its communicative orientation, we believe that the use of these types of multimedia presentations is characteristic of and conditioned by the communicative and activity-based approach and provides a practical form of presenting the educational material.

Considering the structural features of communicative presentations and topics, it is necessary to incorporate them into the appropriate stage of the lesson.

Thus, the implementation of MEP during the linguistic-cognitive stage is aimed at developing students' language skills and speech abilities which ensure the error-free use of acquired knowledge in communication. For example:

- Substitute the underlined expressions in the extract with their synonyms.
- Choose the necessary word to fill in the gap in the sentence.
- Put the words into the correct order to make sense of the sentence.

It becomes clear that language exercises are, in the first place, a means of developing linguistic and sociocultural skills based on the knowledge gained. Without mastering these skills, it is impossible to carry out proper foreign language communication.

These exercises provide the structural elements of the cognitive and activity-based component of education. At the same time, the completion of language exercises is aimed at the development of PFLC according to other indicators: personal and professional skills (development of independence, competence), reflexive ability (the ability to assess and correct one's activities), and motivation (the desire to master foreign language material).

The creative-situational stage comprises the development of future linguists' ability to actively use the studied material in various communication situations. The use of communicative presentations at this stage involves the implementation of professionally oriented situational speech exercises and communicative tasks. These types of work require the manifestation of skills of working independently, as well as interacting with other project participants, they stimulate creativity, the ability to think critically, and the ability to evaluate, select, and combine the necessary information.

This ensures the future linguists' acquisition of educational and communicative experience, stimulates the development of professionally significant qualities (independence, competence, perception, social skills), the ability

to evaluate and regulate their activities, and also increases interest in the learning process and future specialty. The implementation of MEP at this stage creates favorable conditions for the personal and professional development of future linguists.

The situational speech exercises presented in the content of the MEP prepare future linguists for speech activity. Accordingly, the exercises allow for the transfer of acquired knowledge and skills into speech activity for their improvement. The purpose of these exercises is to develop future linguists' speech activities in situational conditions when faced with a certain communicative task. See the following example.

- Look through the following useful expressions and sort them out into three groups. Which of them are used for a) referencing the source of information, b) comparison, c) generalization?

We should note that the presence of a multiple choice in the exercise instructions is the implementation of a personality-oriented approach. Moreover, the features of the educational situation are professionally oriented, as are most of the exercises of the tasks presented in the content of the MEP, and contribute to the acquisition of both communicative and educational experience by future linguists.

Considering the above, we believe that working with situational speech exercises prepares future linguists for carrying out professionally oriented communication activities, namely: it promotes the formation of future linguists' speech skills, the development of their technological and cognitive skills, and stimulates an increased interest in their future profession and obtaining professional experience. It also stimulates the development of professionally significant qualities (competence, sociability, dynamism, independence, etc.) of future linguists.

Among the MEP aimed at future linguists' mastering the skills and abilities of professional foreign language communication, an important role is given to the presentations that provide feedback on the level of mastering the educational material. The use of control presentations is focused primarily on the development of future linguists' evaluative and regulatory skills, as well as the corresponding professionally significant qualities (independence, self-criticism). Typically, control presentations are used at the analytical and evaluative stage or during a special final lesson devoted to diagnostics, self-diagnostics, assessment, and self-assessment of learning results. At the same time, we should note that the control MEP is designed for group work followed by a common discussion of the results, although it is possible to work through it individually, for example outside the classroom. Here is an example.

- Check yourself. Choose the right answer.

Despite the personality-focused and communicative and activity-based orientation of the content of the future linguists' professional foreign language training, there is an increased priority for those methods and forms of organizing educational activities through MEP that provide social interaction of future linguists in the process of professionally directed communication. In this context, interactive methods (role play, business games, conversation, creative work) can be used that allow students to perform professionally-oriented communication tasks (Dolgova et al., 2019; Galskova, 2003) provided for in the content of the MEP.

They are aimed at developing in future linguists the readiness to work in a team, appeal to personal experience and form a tolerant attitude towards all participants in the interaction, foster responsibility for the efficiency of the task performed, as well as a critical attitude towards oneself and the results of one's activities. Researchers (Rolgaizer, 2011) believe (and we agree) that these methods of work motivate learning, making it more pragmatic, and demonstrating to students the possible professional and social forms of interaction that require appropriate professional communicative behavior.

MEP can be divided into individual and group work categories. Most of the presentations prepared by the teacher are used within practical lessons, however, linear or hypermedia MEP (Jacobson & Archodidou, 2000; Mayer, 2003) can be useful for independent study of educational material at home. Hypermedia presentations contain more information since their content is made up of additional materials and explanations provided in the

form of hyperlinks. The use of these presentations, in our opinion, ensures the implementation of a personality-oriented approach in the content of future linguists' professional foreign language training.

Another use of MEP that deserves special attention are presentations prepared by students. Presentations can be prepared either individually or in groups. The opportunity to choose the presentation topic and its form ensures the implementation of a personality-oriented approach to the organization of professional foreign language training for future linguists. However, this type of work requires some coordination on the part of the teacher: the selection of a topic, the collection of material for presentation, the provision of information on a single structure, the duration of demonstrations and number of slides, and the criteria for evaluating the work. The use of presentations in the form of independent work ensures the development of the creative potential of future linguists, whereas, if the presentation is made by a group, it encourages the ability to work and interact in a team. Students learn to be dynamic, sociable, tolerant, and independent. Moreover, these types of activities require the ability to work with information, to critically evaluate, process, and present it. This means that the preparation of the presentation and its demonstration stimulate the development of future linguists' practical skills, the ability to evaluate and regulate their activities and their results, which is relevant in the context of developing the future linguists' PFLC.

The use of MEP still allows for the comprehensive use of traditional teaching aids. The didactic value of the textbook as the main means of realizing the content of education is in no way denied. However, a comparison between the content of multimedia presentations and educational material presented in traditional media shows a decrease in the volume of text information, its structuredness and distribution over time, and a simultaneous increase in visual material. For this reason, the teacher, when planning a lesson, should take into account the time and volume of educational material that is presented with the help of the MEP, its division into slides, the number of slides, and the time required to work with each of the slides. The teacher's ability to combine presentations with traditional means, thereby avoiding the monotony of presenting educational information to achieve the goals of the lesson is important.

## 6. CONCLUSION

Multimedia teaching aids in higher education cannot completely replace the teacher. However, their use contributes to the improvement and diversification of the educational activities, which undoubtedly increases their efficiency. The use of modern technologies for foreign language teaching, in particular multimedia technologies, allows one to solve the problem of the absence of a natural foreign language environment, helps to increase the positive motivation of students for future professional activities and, in this way, allows the creative potential of both the teacher and each student to be more widely and fully revealed.

The results obtained give grounds to say that the use of MEP in the educational process of learning a foreign language is accompanied by positive trends, specifically, it significantly increases the level of development of the future linguists' PFLC. The observation of the students of the experimental group showed that they felt comfort and pleasure while learning according to the methodology. This positive experience can help to ensure the acquisition of knowledge and the development of the necessary professional skills and skills of foreign language communication. While working with MEP, teachers had the opportunity to apply an individual approach to students, which significantly increased their motivation to learn a foreign language. The study also showed that the use of MEP in the learning process of such aspects of PFLC as listening and speaking created conditions for the actualization of knowledge and its development, as well as the effective development of skills and abilities that involved group activities and cooperation. This resulted in a significant increase in the students' PFLC level in speaking and listening to authentic and contextual materials which, in turn, served as a great incentive for them to consider their educational and future professional activities.

## 7. LIMITATION AND FURTHER RESEARCH

The results of the study confirmed the hypothesis that the use of MEP to create a foreign language communicative environment in the educational process of future linguists' professional training helps to increase their level of independent acquisition of educational information, the efficiency of PFLC development, as well as creating a positive motivation for educational and future professional activity.

Consequently, the creation of a professionally oriented educational foreign language information and communication environment, through the introduction of MEP in the classroom, ensures the understanding of knowledge, the accumulation of personal experience, and stimulates the personal and professional development of future linguists.

We see the creation of a digital database of MEP for future linguists as a prospect for further research. Moreover, it would be feasible to study foreign experiences to further develop digital educational and methodological support in a foreign language for higher education.

**Funding:** This study received no specific financial support.

**Competing Interests:** The authors declare that they have no competing interests.

**Acknowledgement:** All authors contributed equally to the conception and design of the study.

## REFERENCES

- Ahmad, J. (2012). English language teaching (ELT) and integration of media technology. *Procedia - Social and Behavioral Sciences*, 47,924-929. Available at: <https://doi.org/10.1016/j.sbspro.2012.06.758>.
- Astleitner, H., & Wiesner, C. (2004). An integrated model of multimedia learning and motivation. *Journal of Educational Multimedia and Hypermedia*, 13(1),3-21.
- Bartsch, R. A., & Cobern, K. M. (2003). Efficiency of power point presentations in lectures. *Computers and Education*, 41,77-86. Available at: <https://doi.org/10.1016/S0360-1315%2803%2900027-7>.
- Cuban, L., Heather, K., & Craig, P. (2001). High access and low use of technology in high school classroom: explaining an apparent paradox. *American Educational Research Journal Winter*, 38(4),813-834. Available at: <https://doi.org/10.3102/00028312038004813>.
- Dadashev, R. K., Muskhanova, I. V., Batchaeva, H. H. M., & Yahyaeva, A. H. (2020). The ethnic system of the chechens in the context of modern synergetics. *Revista Inclusiones*, 7(Sp),701-715. Available at: <https://doi.org/10.15405/epsbs.2019.03.02.286>.
- Dolgova, V. I., Belikov, V. A., & Kozhevnikov, M. V. (2019). Partnership as a factor in the effectiveness of practice-oriented education of students. *International journal of education and practice*, 7(2),78-87. Available at: <https://doi.org/10.18488/journal.61.2019.72.78.87>.
- Dolzhenkov, V. N., Maltzagov, I. D., Makarova, A. I., Kamarova, N. S., & Kukhtin, P. V. (2020). Software tools for ontology development. *International Journal of Advanced Trends in Computer Science and Engineering*, 9(2),935-941. Available at: <https://doi.org/10.30534/ijatcse/2020/05922020>.
- Dong, J. (2013). Application research of computer multimedia technology. *Journal of Chifeng University*, 18,25-26.
- Dubois, M., & Vial, I. (2001). Multimedia design: The effects of relating multimodal information. *Journal of Computer Assisted Learning*, 16,157-165. Available at: <https://doi.org/10.1046/j.1365-2729.2000.00127.x>.
- Dugalich, N. M., Alontseva, N. V., Vasilieva, Y. A., Rubannikova, I. A., Mikheeva, M. I., & Kudryashova, N. V. (2020). Increasing efficiency of foreign-language teaching: Gamification technologies in education. *Revista Inclusiones*, 7(Sp),151-163.
- England, L. (2007). Technology applications in english language teaching in Egyptian universities: A developing relationship. *CALICO Journal*, 24(2),381-406. Available at: <https://doi.org/10.1558/cj.v24i2.381-406>.
- Fujimoto, C. (2012). Perceptions of mobile language learning in Australia: How ready are learners to study on the move? *The Jalt Call Journal*, 8(3),165-195. Available at: <https://doi.org/10.29140/jaltcall.v8n3.140>.
- Galskova, N. D. (2003). Modern methods of teaching foreign languages: Teacher's manual (2nd ed., pp. 192). Moscow: ARKTI.

- Gao, P. (2015). Application research on multimedia information technology in the universities physical teaching. *The Open Cybernetics & Systemics Journal*, 9,2122-2127. Available at: <https://doi.org/10.2174/1874110x01509012122>.
- Gilakjani, A. P. (2012a). The significant role of multimedia in motivating EFL learners' interest in English language learning. *Modern Education and Computer Science*, 4(4),57-66. Available at: <https://doi.org/10.5815/ijmecs.2012.04.08>.
- Gilakjani, A. P. (2012b). A study on the impact of using multimedia to improve the quality of english language teaching. *Journal of Language Teaching and Research*, 3(6),1208-1215. Available at: <https://doi.org/10.4304/jltr.3.6.1208-1215>.
- Gong, W., & Zhang, W. (2007). Thinking on the application of multimedia into college english teaching. *US-China Foreign Language*, 43(5),36-38.
- Harris, S. (2002). Innovative pedagogical practices using ICT in schools in England. *Journal of Computer Assisted Learning*, 18,449-458. Available at: <https://doi.org/10.1046/j.0266-4909.2002.00256.x>.
- Huang, S. J., & Liu, H. F. (2000). Communicative language teaching in a multimedia language lab. *Internet TESL Journal*, 6(2),57-66.
- Jacobson, M., & Archodidou, A. (2000). The design of hypermedia tools for learning: Fostering conceptual change and transfer of complex scientific knowledge. *Journal of the Learning Sciences*, 9(2),145-199. Available at: [https://doi.org/10.1207/s15327809jls0902\\_2](https://doi.org/10.1207/s15327809jls0902_2).
- Jayanthi, N. S., & Kumar, R. V. (2016). Use of ICT in English language teaching and learning. *Journal of English Language and Literature*, 3(2),34-38.
- Joshi, A. (2012). Multimedia: A technique in teaching process in the classroom. *Current World Environment*, 7(1),33-36. Available at: <https://doi.org/10.12944/CWE.7.1.05>.
- Keengwe, J., & Onchwari, G. (2008). Computer technology integration and student learning: Barriers and promise. *Journal of Science Education and Technology*, 17,560-565. Available at: <https://doi.org/10.1007/s10956-008-9123-5>.
- Kerimbaeva, B. T., Niyazova, G. T., & Kaya, K. (2017). The role of computer technology in teaching English language. *RUDN Journal of Informatization Education*, 14(1),108-113. Available at: <https://doi.org/10.22363/2312-8631-2017-14-1-108-113>.
- Kern, R. (2006). Perspectives on technology in learning and teaching languages. *TESOL Quarterly*, 40(1),183-211. Available at: <https://doi.org/10.2307/40264516>.
- Kochergina, V. V., & Krivchenkova, I. V. (2020). Landscape and floral emblems as a key to comprehending artistic secrets of the postmodern novels "the magus" by John Fowles and "rare earths" by Vasily Aksyonov. *Revista Inclusiones*, 7(1),229-234.
- Koryakovtseva, N. F. (2010). The theory of learning foreign languages: Productive educational technologies: A study guide for students of linguistic departments of universities (pp. 192). Moscow: Akademiya.
- Kostyukova, T. A., & Morozova, A. L. (2011). Development of foreign-language competence of students from non-linguistic universities: A monograph (pp. 119). Tomsk: Izd-vo TPU.
- Kranthi, K. (2017). Technology enhanced language learning (TELL). *International Journal of Business and Management Invention*, 6(3),30-33.
- Krippel, G., McKee, A. J., & Moody, J. (2010). Multimedia use in higher education: promises and pitfalls. *Journal of Instructional Pedagogies*, 2,1-8.
- Kumar, N., Rose, R. C., & D'Silva, J. L. (2008). A review on factors impinges computer usage in education. *Journal of Social Sciences*, 4(2),146-157. Available at: <https://doi.org/10.3844/jssp.2008.146.157>.
- Kumar, K., & Patil, S. S. (2013). Efficiency of multimedia presentation for teaching english grammar to rural secondary school students. *Indian Streams Research Journal*, 3(1),1-5.
- Lambert, J., & Cuper, P. (2008). Multimedia technologies and familiar spaces: 21stcentury teaching for 21st-century learners. *Contemporary Issues in Technology and Teacher Education*, 8(3),264-276.
- Lau, R. W. H., Yen, N. Y., Li, F., & Wah, B. (2014). Recent development in multimedia e-learning technologies. *World Wide Web*, 17(2),189-198. Available at: <https://doi.org/10.1007/s11280-013-0206-8>.

- Malik, S., & Agarwal, A. (2012). Use of multimedia as a new educational technology tool—a study. *International Journal of Information and Education Technology*, 2(5),468-471.Available at: <https://doi.org/10.7763/ijiet.2012.v2.181>.
- Mantiri, F. (2014). Multimedia and technology in learning. *Universal Journal of Educational Research*, 2(9),589-592.Available at: <https://doi.org/10.13189/UJER.2014.020901>.
- Mayer, R. E. (2003). The promise of multimedia learning: Using the same instructional design methods across different media. *Journal of Educational Psychology*, 83,484-490.Available at: <https://doi.org/10.1016/S0959-4752%2802%2900016-6>.
- Mayer, R., & Moreno, R. (2003). Nine ways to reduce cognitive load in multimedia learning. *Educational Psychologist*, 38(1),43-52.Available at: [https://doi.org/10.1207/s15326985ep3801\\_6](https://doi.org/10.1207/s15326985ep3801_6).
- Melor, M. Y., Maimun, A. L., & Chua, P. L. (2009). Language learning via ICTs: Uses, challenges and issues. *WSEAS Transactions on Information Science and Applications*, 9(6),1453-1467.
- Neo, M. (2007). Learning with multimedia: Engaging students in constructivist learning. *International Journal of Instructional Media*, 34(2),149-158.
- Neo, M., & Neo, T. K. (2009). Engaging students in multimedia-mediated Constructivist learning – Students perceptions. *Educational Technology & Society*, 12(2),254-266.
- Omodara, O. D., & Adu, E. I. (2014). Relevance of educational media and multimedia technology for effective service delivery in teaching and learning processes. *IOSR Journal of Research & Method in Education*, 4(2),48-51.Available at: <https://doi.org/10.9790/7388-04214851>.
- Qingsong, L. (2012). The application of multimedia technology in web education. *Physics Procedia*, 33,1553-1557.Available at: <https://doi.org/10.1016/j.phpro.2012.05.252>.
- Rolgaizer, A. A. (2011). Ways to increase students' motivation for foreign language learning. *Socio-Humanitarian Journal*, 6,13-17.
- Shamov, A. N. (2008). The methodology of teaching foreign languages: A general course (2nd ed., pp. 253). Moscow: AST.
- Sharma, H. L. (2016). Enhancing students interest in English language via multimedia presentation. *International Journal of Applied Research*, 2(1),275-281.
- Shchukin, A. N. (2004). Foreign language learning: theory and practice: A teaching aid for teachers and students (pp. 416). Moscow: Filomatis.
- Shirshova, I., Sizova, Y. S., Gabazov, T. S., & Salynskaya, T. V. (2020). English language learning software. *Revista Inclusiones*, 7(Sp),237-248.
- Skripak, I. A., Aynazarova, S. N., Ukhanova, E. V., Tkachenko, A. E., & Erina, L. S. (2020). Digital virtualization technologies in distance learning. *International Journal of Advanced Trends in Computer Science and Engineering*, 9(2),1808-1813.Available at: <https://doi.org/10.30534/ijatcse/2020/138922020>.
- Smith, S. M., & Woody, P. C. (2000). Interactive effect of multimedia instruction and learning styles. *Teaching of Psychology*, 27,220-223.Available at: [https://doi.org/10.1207/s15328023top2703\\_10](https://doi.org/10.1207/s15328023top2703_10).
- Susikaran, R. S. (2015). The use of multimedia in english language teaching. *The Journal of Technology for ELT*, 7(2),53-57.
- Tabar, H., & Khodareza, M. (2012). The effect of using multimedia on vocabulary learning of pre-intermediate and intermediate Iranian EFL learners. *Journal of Basic and Applied Scientific Research*, 2(12),12879-12891.
- Tao, S. (2011). Application of computer multimedia technology. *Journal of Changchun University of Science and Technology*, 4,191-192.
- Tsapko, M. I., Valyarovskiy, F. I., Maiboroda, E. T., Khusainova, E. N., & Varnavskaya, O. O. (2018). Language identity as a unifying identity: Linguistic, ethnopolitical and international legal aspects. *Space and Culture, India*, 6(2),121-129.Available at: <https://doi.org/10.20896/saci.v6i2.360>.
- Wang, C. R. (2008). A comparative study on the traditional model of English teaching and multimedia computer aided English teaching. *Journal of Hunan First Normal College*, 8(3),56-58.
- Yan, J., & Xiao, W. (2013). Design and implementation of 3D teaching system based on multimedia technology. *Electronic Design Engineering*, 21(11),56-58.

- Young, C. A., & Bush, J. (2004). Teaching the english language arts with technology: A critical approach and pedagogical framework. *Contemporary Issues in Technology and Teacher Education*, 4(1),1-22.
- Yunus, M. M., Lubis, M. A., & Lin, C. P. (2009). language larning via ICT: Uses, challenges and issues. *WSEAS Transactions on Information Science and Applications*, 6(9),1453-1467.
- Zhuchkova, I. I. (2020). Thesaurus modelling of English and Russian educational terms. *Revista Inclusiones*, 7(2),345-354.

*Views and opinions expressed in this article are the views and opinions of the author(s), International Journal of Education and Practice shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.*