Application of Interactive Services During English Classes in a Non-Linguistic Institution of Higher Education

Iudashkina V.V.[1,*] Nurpeisova G.G.[1], Selivanova O.A.[2]

[1]*Industrial University of Tyumen, Tyumen, Russia*
[2]*Tyumen State University, Tyumen, Russia*
[*]*Corresponding author. Email: judashkinavv@tyuiu.ru*

ABSTRACT

Modern society is informative and crowded of all kinds of technologies and innovations, not only in everyday life, but also in the educational system, and requires the analysis and generalization of multimedia content that can be one of the auxiliary means of training in engineering University in the study of the discipline "foreign language". The authors reviewed some educational Internet resources; studied their functions and the possibility of their assimilation with social networks. We concluded that the rational application of electronic means could be the basis for effective employment. The aim of the research is to analyze some modern Internet technologies and the possibility of their use in distance teaching a foreign language. It has been analyzed which Internet platforms can be used as basic and which as auxiliary with the purpose of increasing the level of knowledge, motivation, getting rid of the language barrier, overcoming shyness, establishing new contacts and expanding horizons. The authors have also shared their experience of working in the local university educational platform.

Keywords: interaction, Internet resources, multimedia, motivation

1. INTRODUCTION

The process of introducing computer, interactive and multimedia technologies in the education system 10-15 years ago was spontaneous. Today, the use of a variety of electronic resources is a forced measure, the only way to continue teaching.

In the modern conditions of the spread of coronavirus infection, changes are taking place in higher education. An educational institution is a digital educational environment, which is a single communication space for all participants in new educational relations, and an effective tool for managing the quality of educational programs.

We have witnessed a massive transition of global education to an online format. Millions of students around the world moved from classrooms to computer screens and tablets overnight, and thousands of teachers were forced to switch lectures and seminars to distance learning.

But the transition to distance education showed how much teachers and students were not ready for this, and, probably, first of all, technical problems were identified.

Federal state educational standards present information technology as one of the conditions for becoming a competent graduate of a higher educational institution. At the same time, it was assumed that information technologies could not replace teachers and they are not able to replace the relations of the teacher-the student when they are face to face [1].

It is also necessary to take into account that multimedia courses are usually created by computer programmers without the involvement of teachers, therefore not all resources are adequate and identical to the current state of pedagogical and methodological science and do not always take into account the psycho-physiological characteristics of students.

In addition, computer programmers often do not accompany their product with training manuals and technical support. Potential users, along with the product, at best, receive instructions on how to install this product.

At the same time, the increased mobility of a modern student, expressed in the constant use of various devices and the applications installed on them, dictates the advisability of using various information technologies during a foreign language lesson [2].

Thus, there is appearing an imbalance between the traditional system and the multimedia products due to a number of problems, namely: the multimedia products offered by developers go against the tradition education ideas and that is why the chosen topic is the acutest and relevant now. Teaching the discipline "a foreign language" at an engineering university faces serious difficulties since it does not belong to the special subjects of the future engineer. Thus, this discipline loses its attractiveness, which inexorably leads to a decrease in cognitive activity, being directly proportional to the decrease in the educational motivation of students.

2. METHODS

There has been analyzed the methodical literature on the use of Internet technologies in teaching a foreign language at the university. There have been researched organizational forms, methods and techniques of training based on the use of interactive resources. There have also been summarized Internet resources with the purpose of choosing a platform for teaching a foreign language. As a result, the basis has been taken by the information system Educon (Moodle platform) and its capabilities when teaching a foreign language at a non-linguistic university.

3. RESULTS AND DISCUSSION

The structure of the educational interactive resource includes such basic components as obtaining information, practical exercises, creative assignments, and monitoring the material covered (figure 1).

The author have studied these components, have highlighted their elements and what interactive resources can be used:

- getting information - sites, video resources, online textbooks and manuals;

- practical classes - individual tasks (working with text, doing exercises, online classes, video and audio conferences on Zoom, Skype, ... platforms), interactive simulators, role-playing exercises;

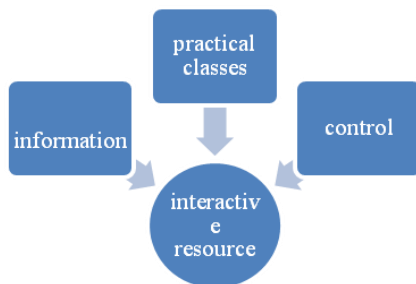- control - tests, creative assignments (essay writing)

Figure 1 Teaching Interactive Resource Structure

The leading component of teaching a foreign language is giving various types of speech activity: listening, reading, writing and speaking.

Students learn the formation of phonetic skills in the aspect of "Listening". It is impossible to fully control the correct understanding of the text in distant. Only using certain tasks in which the teacher sees the result. "Reading" is the formation of skills for establishing sound-letter correspondences, learning the technique of reading aloud, reinforcing receptive lexical and grammatical reading skills. Mastering the skills of extracting from the text various kinds of semantic information leads to a partial understanding of the material without a teacher.

Such an aspect as "Speaking" requires the direct participation of the teacher (it is impossible to tell a dialogue, play a situational game, a monologue). Therefore, this aspect requires a live class.

When teaching grammar, control over the level of formation of grammatical skills can be carried out on the basis of test programs; the provision of reference and information support (automated reference books on vocabulary and grammar, systems for detecting grammatical mistakes).

After analyzing the application of various types of speech activity, it has been noted that not all of them can be implemented completely on the distance teaching platform.

The authors have analyzed some educational resources and their functions (Table 1):

- obtaining information;

- practical exercises and control;

- compatibility of the studied resources with different devices and social networks.

Table 1 Use of Internet resources [3], [4], [5], [6]

Internet Resource Components	Resource name	The use of the Internet resource	Resource Compatible Devices computer / smart phone	Social Media Assimilation
Information	Edmodo	The provision of training materials	+/+	+
	TED-Ed	Free access to information for teachers and students	+/+	+
	cK-12	Creation and distribution training materials over the Internet	+/+	+
	eduClipper	Accumulation of information found, the ability to share it on the Internet, writing a portfolio	+/-	-
	Educon 2.0	Sites, video resources, online tutorials and manuals.	+/-	-
Practical classes	Edmodo	Formation of interactive groups, administration and storage of training materials	+/+	+
	Animoto	Creation of audiovisual content adaptable to educational needs.	+/+	+
	Socrative	Compilation of multimedia presentations with dynamic slides	+/+	+
	eduClipper	Management of academic content found on the Internet, improving research methods	+/+	+
	Quizlet	Development of the study material in a game and test form	+/+	-
	Storybird	Developing writing and reading skills among students, creating interactive and fiction books online	+/+	+
	Thinglink	Creating interactive images with music, videos, interactive maps	+/+	+
	Educon 2.0	individual tasks (working with text, doing exercises, online classes on Zoom, Skype, Bigbluebutton platforms)	+/-	
Control	ZipGrade	Automatic test verification	-/+	-
	Quizlet	Checking vocabulary, grammar	+/+	-
	Kahoot!	Development of questionnaires, discussions or surveys,	-/+	-
	ClassDojo	Providing instant feedback, a more receptive attitude to the learning process.	+/+	+
	Educon 2.0	Test tasks, electronic sheet, electronic test book, student success portfolio	+/-	-

Internet resources are divided into blocks: getting information, practical exercises, and monitoring. The authors have systematized the stages of using one or another resource.

So, for example, the theoretical material included in the information module directs students to active cognitive activity using multimedia educational materials of varying degrees of complexity, makes it possible to encapsulate information in various forms: textual information; illustrations; multimedia information.

In the process of searching for information, students develop skills of algorithmic actions from simple to complex, from general to particular and vice versa (deductive and inductive methods), and this helps to involve search mastery, as well as it activates the development of analytical and synthetic proficiency.

Working with interactive resources of the information type, it is possible to organize such forms of work with students as, individual. This will allow you to regard the pace, rhythm, and features of each student. Students can work in pairs. In this case, the levels of cognitive development and the psychophysiological characteristics of each students are considered. The teacher in this case serves as the coordinator [7].

Separate educational elements can be introduced at a foreign language lesson (interactive diagrams, posters, illustrations, animated multimedia objects). Such elements provide a comfortable format for online learning, they find a wide response in the student group and the visualization of new material leaves a vivid picture of the learning process.

Practical modules help to apply and consolidate the acquired knowledge in practice, to develop skills and

abilities on their basis (virtual laboratory work, trainings, problem solving workshops).

Working with practical modules it is advisable to organize the work as follows: work in small groups formed with the distribution of roles: students are the coordinators, performers, experts; The teacher is the coordinator, assistant.

When working with a resource of a practical type, various assessment methods can be used: the first is the work of students under supervision and the second is a direct assessment of the teacher. If the group worked effectively and independently, the teacher can use the self-assessment technique [8].

Control modules make it possible to check the level of knowledge acquisition during the work of students under the guidance of a teacher. In standalone mode, they can act as auxiliary test materials in the teaching of the course in the form of tests, tests, quizzes, research projects. In control tasks, material similar to a resource of a practical type is presented, except that when performing these tasks there is no way to get a hint and make an additional attempt.

The events caused by the coronavirus pandemic around the world forced absolutely everyone to study without leaving their home, sitting in front of computer screens and tablets. Those institutes that had Moodle in their arsenal (a training platform with a diverse set of functions) turned out to be prepared in this situation. Tyumen Industrial University has been using the Educon project for a long time, which over time has been improved and updated by developers through feedback between teachers and developers. As a result, the teaching staff has received a new version of Educon 2.0, which allows training not to be interrupted in unforeseen situations and to follow the curriculum. Thanks to this system, it is possible to take advanced training courses, retraining and higher education in various fields from undergraduate to graduate school.

Initially, the platform was used by foreign educational institutions, for which it was developed. Since recently, the platform has gained popularity among Russian universities. Educational institutions organize both individual training programs based on this platform, and corporate courses. Moodle provides the ability to independently manage the curriculum selected for development [9]. The educational institution independently carries out the registration of the student, after which he is provided him with the necessary information to access the system. The student only needs a unique login and password to access the personal account. With the help of login and password, the student enters the system of his personal account and the educational process is activated. The work of the platform can be carried out using any Internet browser installed on the student's personal computer

Materials of the required discipline are available for download in several formats, which gives the student the opportunity to study them, regardless of the Internet network. For the convenience, the format of presentations and tables is often used, which makes it easy to learn the necessary material. In the absence of additional programs

necessary for the study of lecture material on the student's computer, such programs are installed automatically at the beginning of the study of the discipline. The platform is aimed at minimizing the time required for the organization of the student learning process [10]. The material is divided into topics of various complexity categories. Each topic contains a control test task. Tests are performed online (in real time) with the possibility of synchronization, that is, the availability of the test in a certain time with the number of attempts set by the teacher. In the practical block there is the possibility of commenting on completed tasks. Teachers require to fulfil the assignments in time, and they react negatively if the student delays the implementation of tasks. Even when using the distance learning system, it is not possible to postpone the exam.

The quality of higher education depends on the ability to possess certain digital skills. Therefore, now, other requirements are imposed on teachers. If before the pandemic, teachers conducted classes in classrooms and there was a "live" communication "teacher-student", but now everything is different. The teacher should be able to organize online classes, form courses on the university platform. He needs skills to constantly update the training course; he must be creative at his lessons. Even a form of communication such as chat can be helpful in group learning a language. Participants can exchange messages in real time, but it is difficult to fully learn the language in this way.

Students playing an active role in the university life are more prepared for digital communication. It is important whether they can communicate with their peers; whether there is any contact with the teacher, how comfortable the student can feel in these conditions. A positive aspect is the reduction of training costs: road costs, methodological literature. Using video and audio lectures, students with different types of perception effectively absorb educational information [11]. If we talk about the advantages of this development, one important positive point should be noted: the translation of such material into digital format is a laborious work, but the plus is that it can be used repeatedly. In addition, having studied the material, the student can send the teacher for verification. Also, in distance learning, the student is given more time to complete tasks, thereby this makes it possible to work at a free pace and better absorb material. And besides, students are not limited by distance and can study regardless of their place of residence.

But there are also negative aspects: such a training system requires high motivation and discipline for the student, and not everyone has these qualities. Then, the student has a huge amount of independent work. In addition, the lack of contact with the teacher does not give proper practice, especially when learning a foreign language. Sometimes, tests "crash", electronic guidelines disappear. Then, placing a huge amount of information on subjects in various files sometimes leads to confusion of material. In addition, the inability to use other platforms due to the need for registration. And as a result, constant work in

front of the screen leads to impaired vision and minimizes physical activity.

Despite this, some people are forced to receive education only remotely. These include:

- students who live in remote areas and are not able to get to an educational institution;
- persons with disabilities;
- seriously ill students;
- students who often move from one district to another (children of geologists, military);
- people who want to deepen their knowledge are going to enter a university or want to get a second or third foreign language on their own.

On the part of the educational institution, we note that there are problems with storages, server capacities do not withstand large information volumes. But thanks to modern technology, the system quickly adapts to new conditions.

4. CONCLUSION

In the distance learning format the authors have analyzed various Internet resources (IR) and methods of their application at foreign language lessons. IR data allow us to diversify the types of tasks and exercises, to increase students' activities and their interest in learning foreign languages, to encourage creative potential of the individual and to stimulate the study of academic material. Furthermore, the practice has showed that the use of Internet resources fosters interest in the subject, makes it more attractive, and, as a result, increases the level of educational motivation. However, it is important to note that distance teaching does not replace, but effectively complements the traditional education system, making it possible to teach what the learner needs, when and where he is comfortable. Apart from, distance learning is aimed at organizing a productive independent, educational and cognitive activity of a student. The authors have noted that the process of teaching foreign languages in a remote form does not fully allow to implement a personality-oriented approach to learning. Besides, a student with this approach should be considered as a person ready for the continuous process of education and improvement of his abilities. Moreover, one needs to say that regularity is one of the most important factors that determine success in learning foreign languages. Therefore, the authors have concluded that Internet resources and Internet technologies can diversify the lesson but cannot replace classroom lessons with a teacher.

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