

## THE EXPERIENCE OF USING CLOUD-BASED TECHNOLOGIES IN FOREIGN LANGUAGE TEACHING

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**Keywords:** cloud-based technologies; distance learning; foreign language teaching; teaching methods; web platform.

**Abstract:** The digital era has firmly entered the modern educational process bringing a variety of distance learning platforms (technologies). The intensive use of web technologies has also affected the field of foreign language teaching. The introduction of modern methods based on cloud-based technologies in higher education is due to the fact that traditional learning process does not fully meet the requirements of the modern reality both in the forms of its organization and its methods. The aim of this paper is to describe cloud-based technologies used in foreign language classes at Tambov State Technical University and identify the advantages and drawbacks of using these technologies. In addition to the main university platform, which provides ample opportunities in the context of foreign language teaching, examples of additional web services, showing their effectiveness in working with students of non-linguistic universities, are presented.

Over the past 20 years, computer technology has made a huge leap forward. Due to the pandemic reality, a distant format of education, including online meeting platforms and various web technologies, is in demand because it allows to ensure a high level of learning accessibility. The introduction of modern methods based on cloud-based technologies in higher education is due to the fact that traditional learning process does not fully meet the requirements of the modern reality both in the forms of its organization and its methods; therefore, students are not able to acquire the necessary knowledge and skills [1, 2]. Undoubtedly, a complete transition to e-learning seems to be ineffective, especially in relation to assessment of students' knowledge; therefore, it is much more efficient and productive to use blended learning forms.

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The digital education ecosystem is currently under development and cannot yet be considered a finalized, looped system, while the digitalization process of education is gaining momentum and spreading rapidly among Russian educational institutions, including self-developing educational ecosystems, virtual academic mobility, choice of individual learning paths, a single digital platform for collaborative research, global educational platforms, etc. [3].

Today, it is hard to imagine a modern lesson, especially a foreign language lesson, without using a whiteboard, a projector, or a computer allowing to apply various web tools and authentic Internet resources, which, in turn, contribute to the development of students' communication skills and professionally significant competencies. The modern state of foreign language teaching is characterized by the constant search for new teaching forms and models combining well-chosen educational material, learning environment and modern information technologies which help the teacher activate students' thoughts, as well as develop their critical thinking, modeling and self-evaluation skills.

A large number of authentic, constantly updated materials allow students to get acquainted with authentic foreign language speech and use authentic patterns in students' own speech. Various types of authentic texts such as news feeds, newspaper and magazine articles, blogs, reviews, Ted talks, etc. allow choosing the most interesting and relevant educational material for students. Internet resources provide students with "an opportunity for intercultural communication, which contributes to overcoming stereotypes and develops their socio-cultural tolerance" [4]. Most students positively assess the opportunity to communicate with native speakers online, do additional individual assignments on web platforms, which develops the student autonomy and motivates students to take new steps in foreign language learning.

The aim of this study is to determine the importance of cloud-based technologies in the digital education ecosystem in higher education institutions, in particular, at Tambov State Technical University, and to identify the advantages and drawbacks of using these technologies in foreign language teaching.

Web technologies have been increasingly used in foreign language education. One of the varieties of such technologies is cloud-based computing, which, in fact, is another way to implement the declared skills of students, to expand the boundaries of information and communication competencies, as well as foreign language competencies [5]. In addition, cloud technologies are a convenient tool for a teacher that helps organize the pedagogical interaction of students.

The most widely used cloud-based technologies implemented in foreign language teaching are the Google services (Google Docs, Google Mail, Google Translate, Google Groups, Google Talk, Google Labs), Moodle, etc. The advantages of such kinds of technologies in the foreign language educational and cognitive process are the following:

- 1) interactivity – cloud-based technologies help create interaction between all participants of the educational process;
- 2) complementarity – cloud-based technologies penetrate all areas of the educational process and can be used both in foreign language classes and during out-of-class language learning such as individual work;
- 3) visibility – cloud-based services allow students and the teacher getting instant access to the results of both group and individual work, for example, when making a presentation;

4) lack of borders – due to their functionality cloud-based technologies allow performing group work on projects and distance learning with setting and performing assignments despite different locations of students and teachers and without any complex equipment or pre-installed software. Everything one needs to work with cloud-based technologies is a computer or a mobile device with an access to the Internet.

The results of the learning process using cloud-based technologies are the ability to organize pair or group work taking into account interpersonal interaction among students, their ability to discuss different opinions and look for a compromise and an effective solution of the stated problem.

Although cloud-based technologies cannot be considered innovative in foreign language teaching, however, they provide an additional tool for the teacher and students, as well as bring a novelty effect of modern teaching technologies. It is getting easier for the teacher to create interactive assignments with services such as Learning Apps, Kahoot, Flipgrid, Tube Quizard, Quizlet, or Wizer.me, which allow teachers to create their own interactive assignments, access thousands of worksheets, give students one-click access to the materials they need, and create one-time classrooms for free.

Each institution of higher education follows the rules for organizing an integrated educational process, where, along with traditional classroom forms of education, elements of blended learning successfully coexist. Based on our experience of working with students of non-linguistic specialties, we will overview some of the cloud-based technologies used at Tambov State Technical University (TSTU).

The main web platform used at TSTU for organizing students' classroom or individual work is the Modular Object-Oriented Dynamic Learning Environment (Moodle), which allows the teacher to create various types of courses (lectures, seminars, practical or laboratory courses, tests, etc.) filling them with content according to the curriculum.

The main Moodle advantages are its flexibility, accessibility and openness [6, 7]. It uses the Internet as a medium; therefore, it is easily accessed at any place where there is an Internet connection. It also gives the students an opportunity to communicate with their teacher and review the course material at any time. The Moodle platform partially solves the problem of integrating various teaching forms into a single environment in order to control students' performance, evaluate their work, and what is the most important – whole groups and the teacher could work together.

Another positive feature of using Moodle is that the teacher can attach any texts, audio, video files or test tasks, while students have an opportunity to use multimedia tools and applications practicing and testing four basic language skills – speaking, listening, writing and reading.

Thus, to practise vocabulary or grammar, it is convenient to use a test element, where the teacher can choose between tasks with open answers, multiple choice, cloze, matching and other types of tasks. Another way of practising vocabulary is a game element implemented in the platform. The system can automatically generate a crossword puzzle from the words of the topical vocabulary created by the teacher, so the crossword grid looks different every time, and therefore the task can be performed an unlimited number of times.

To develop reading and listening skills, a test element in various forms of tasks can be used: multiple choice, cloze or matching tasks. The HTML editor allows attaching an audio recording or a video fragment to the task. With the help of settings, the teacher can limit students in time, which is very convenient, especially in groups of mixed-level students, when weaker students can listen to the audio recording and watch video clips several times.

To develop writing skills, an essay element is rather useful. When completing an essay assignment, students can send their works in the form of text or an attached file. In addition, students have an opportunity to submit their revised papers for re-assessment after correcting the mistakes, which helps develop their critical thinking and self-evaluation skills, as well as motivates them to prepare better answers. Our experience shows that this practice is even better than traditional work on mistakes, since the students' motivation to understand and correct their mistakes increases significantly.

The Moodle environment also provides assessment tools in the form of progress tests which can include various types of tasks. The test results can be seen immediately both by students and the teacher. While creating a test, the teacher can choose the number and type of tasks, the number of test attempts and the time needed for doing the test.

Apart from lectures, practical courses and tests, Moodle offers many useful tools such as Wiki projects, forums, chats, blogs which allow implementing the idea of collaborative work when the teacher divide students into subgroups, interact with each other synchronously in chat or asynchronously in Wiki projects and forums.

In the framework of foreign language teaching at TSTU, several courses were constructed, among which are Foreign Language courses (English, German, French), Foreign Language for Law Students, Theory and Practice of Translating International Documents, International professional communication, as well as various foreign language Olympiads and competitions. Each course consists of lecture and practice parts, which include language theory (grammar rules, syntax structures, speech patterns, etc.) and interactive worksheets on practising the studied language material, as well as glossaries and tests.

However, despite numerous advantages and advanced learning methods, the Moodle platform meets negative reactions of students and teachers. Some technical problems (bad Internet connection, lack of digital literacy and IT skills) and pedagogical challenges (the choice of educational content, students' motivation and self-discipline, lack of face-to-face contact) must not be ignored while using this platform. The most frequent complaints of students when working on the platform were slow interaction with their teacher, when they did not receive an immediate feedback, and impossibility to participate in group discussion from the platform. The general attitude of students and teachers towards English language learning via the Moodle platform came down to the fact that this method of e-learning is easier, but less efficient than physically attended classes, still it has numerous advantages.

The analysis of students' acquisition of the language material provided via the Moodle platform at TSTU proves the effectiveness of using this platform; however, we cannot ignore the weak points of this system. The results of the analysis are shown in Table 1.

Table 1

**The analysis of Moodle effectiveness in terms  
of developing foreign language aspects/ communication skills**

Foreign language aspect / communication skill	Material acquisition, %	
	in the classroom	via the Moodle platform
Vocabulary acquisition	82	85
Grammar acquisition	79	77
Developing:		
reading skills	85	80
listening skills	69	56
writing skills	72	69
speaking skills	73	51
cultural awareness	78	73

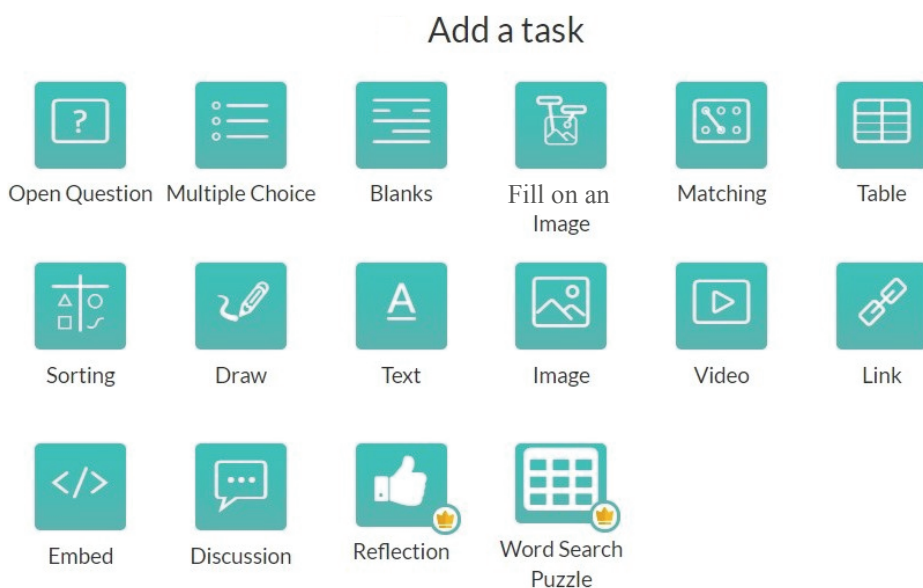
Table 1 shows that there is a slight increase in vocabulary acquisition while using the Moodle platform, however, we can notice a significant decrease in developing students' speaking skills, which once again emphasizes the need for face-to-face learning when students develop their speaking skills through various forms discussions, case study tasks, group work or individual talks. Other skills show a slight decrease, which can be explained by lack of instruction from the teacher before doing particular assignments and by lack of self-discipline and outside control.

To supplement the university Moodle platform, we use various online platforms and services, like the Wizer.me service which allows to create interactive tasks using texts, images, video and audio podcasts. These kinds of services help the teacher to add variety to foreign language classes and increase students' motivation and involvement.

Once registered at the site, the teacher can choose a ready-made worksheet or create their own worksheet providing interactive tasks for reading, practising lexical and grammatical material in different forms: multiple choice, cloze tasks, drop-down lists, etc. The service allows to combine different forms in one task and limit the time for their implementation.

While creating a new interactive worksheet or editing an existing one, the teacher can add a description of the worksheet, upload or attach a link of a photo or video, choose the level for which the tasks are intended, and enter keywords that will help students easily find the necessary worksheet. Tasks of various types can be constructed (Fig. 1). Instructions for each of these tasks can be given in text or audio recordings.

Open Question tasks give the student the opportunity to reflect on the question that can be responded with text, pictures, audio or video. Multiple Choice tasks offer multiple choice questions. Blank tasks add white space for the student to fill out. When choosing the Fill on an Image task, students should label pictures with the studied vocabulary. Doing matching tasks students should match pairs of words or sentences, pictures or audio. In Table worksheets, the teacher can create a table with the ability to choose the number of rows and columns, while students can be given the option to answer in text



**Fig. 1. Types of tasks on Wizer.me service**

or choose an answer from the list provided. Sorting worksheets provide assignments, where students should group objects, which can be in the form of words, images, or audio recordings.

The service allows using videos to do tasks based on them and discussion panels to create a chat room for discussing a specific topic with students, which provides students the opportunity to do teamwork and learn how to work as a team. After completing the task, if automatic feedback is enabled, students are able to immediately see their mistakes. Otherwise, the teacher checks the answers and gives feedback to each student separately.

Another service often used in foreign language classes at our university is the podcast service which allows listening, creating and distributing audio and video broadcasts on the Internet. The learning process is implemented through the three-phase model: 1) pre-listening, 2) while-listening and 3) post-listening.

Possibilities of using podcasts include:

- 1) listening to podcasts as an independent work followed by their discussion in the classroom;
- 2) podcasts with listening to preliminary comments and familiarization, which makes authentic podcasts available for weaker students;
- 3) listening to podcasts with a script;
- 4) using individual excerpts of the podcast for dictation followed by exercises on phrases, grammar rules, etc.

Using podcasts allows listening to authentic audio texts on the Internet, refreshing students' vocabulary, acquainting students with regional geographic realities, including speech etiquette, peculiarities of speech behavior in various communication conditions, cultural features of the foreign country they study, forming students' sustainable motivation based on using authentic material and adherence to real life communication.



In conclusion, it should be noted that being an effective tool, cloud-based technologies significantly affected the educational process, in particular, foreign language teaching, since they help create a more student-centered language learning environment. Today, teachers follow the rules of digital didactics, where it is not enough to know exclusively, for example, a foreign language or computer technology, it is also necessary to have knowledge of various tools and applications, to be able to apply them directly in order to achieve professional goals. The active and motivated use of these technologies undoubtedly contribute to improvement of teaching methods activating the formation of professional foreign language communicative competencies, fostering student-centered approach, increasing students' level of foreign language proficiency, as well as increasing their motivation and decreasing anxiety. The teaching experience proves the fact that these technologies allow performing various tasks for developing main language aspects and four basic skills as well as cultural awareness and motivation using authentic educational video resources, authentic video resources, podcasts and various reference applications.

The Moodle platform certainly represents a necessary additional tool for English language learning since it enables students to learn independently and offers transparency, good organization of students' individual work and self-evaluation. However, the lack of interaction and personal contact between students and the teacher and the lack of speaking activities seems to be the main drawback. Therefore, it should be part of the educational process, where the main role is given to face-to-face learning, supplemented with additional teaching resources in order to organize successful foreign language training. Cloud-based technologies can become a useful tool in language teaching only if they help achieve the lesson objectives and meet the pedagogical needs of the educational environment.

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### **Опыт применения облачных технологий в преподавании иностранного языка**

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**Ключевые слова:** облачные технологии; дистанционное образование; преподавание иностранного языка; методы обучения; веб-платформа.

**Аннотация:** Дано описание облачных технологий, используемых на занятиях по иностранному языку в ФГБОУ ВО «Тамбовский государственный технический университет», и выявление преимуществ и недостатков их использования. Помимо основной университетской платформы, предоставляющей широкие возможности в рамках обучения иностранному языку, приведены примеры дополнительных веб-сервисов, показывающих свою эффективность в работе со студентами неязыковых вузов.

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