

**ICEST 2021****II International Conference on Economic and Social Trends for Sustainability of Modern Society****DIGITAL EDUCATIONAL RESOURCES IN TEACHING TO  
FOREIGN STUDENTS AT LANGUAGE UNIVERSITIES**

G. T. Gilfanova (a)\*, A. R. Petunina (b)

\*Corresponding author

(a) Philology department, Kazan (Volga Region) Federal University, Naberezhnye Chelny Institute, Naberezhnye Chelny, Russia, gulnara\_tav@mail.ru

(b) Philology department, Kazan (Volga Region) Federal University, Naberezhnye Chelny Institute, Naberezhnye Chelny, Russia, arrrtica91@gmail.com

**Abstract**

Digitalization of Higher Education (Digital Learning), updating traditional educational programs and curricula through digital platforms, educational mobile applications and Web 2.0 services have made their own adjustments to the process of teaching foreign languages in the teacher-student format. The actualization of these innovations contributes to the creation of a digital educational environment and a change in educational strategies and concepts of learning in foreign languages. This article summarizes the “digital” experience of using new technologies in teaching foreign students about the types of speech and writing activities at the initial stage of education. The authors presented innovative ways of teaching phonetics, vocabulary, and grammar of the German language to foreign students in the format of interactive educational platforms. The study of a second foreign (German) language by Turkmen-speaking students is very difficult for a number of reasons: the complexity of the perception and (imitation) of reproduction of the phonetics of the German (multi-structural) language; features of the grammatical structure of the German language; learning a foreign language according to the formula ‘Turkmen-Russian-German’. To implement a differentiated teaching approach, a comparative analysis of the systemic differences in the grammatical structure of the German and Russian languages was carried out and an interactive lesson was developed using digital educational technologies for foreign language students. The study is aimed at increasing the motivation for learning German as a second foreign language by non-Russian-speaking students in order to form adequate communicative behavior.

2357-1330 © 2021 Published by European Publisher.

*Keywords:* : Digital educational resources, Internet resources, MsTeams, Web 2.0 services



This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

## 1. Introduction

With the beginning of the new 21st century, electronic educational resources have become widespread, which are: 1. information sources; 2. information tools. The former include: sound, image, text, video materials, multimedia encyclopedias, maps, digital photos, animated videos, e-books and entire courses. The second group includes information tools that provide work with information sources (Datsun & Urazayeva, 2016). In terms of structure, electronic and digital educational resources are identical. The difference is that digital educational resources are implemented with information and telecommunications support for the education system. Information content support of the ITS of the education system includes two groups of digital educational resources. Information sources are: “original texts that do not repeat stable textbooks; static (visual) images; dynamic images (film and video fragments, animation models on CD, DVD); multimedia environments (information and reference sources, virtual constructors); simulators and test systems, programmed teaching aids ("electronic textbooks", virtual excursions)” (Sabitova, 2021, par.1).

The critical situation in the spring of 2019, associated with the spread of coronavirus infection, has made its own adjustments in all spheres of human life, including the higher education system. The issue of introducing new digital technologies and tools into the educational process was actualized: a blended learning model formation; transition to online learning; creation of a virtual (digital) educational environment; changing the approach to the management of educational organizations; creation of innovations in the field of educational relations ‘teacher-learner’ (Belozjorova & Belozjorov, 2018).

## 2. Problem Statement

According to the specifics of teaching speech activities and insufficient knowledge of the Russian language, the problem of adapting the material of the work program for the discipline "Practical Course of the Second Learned Language" with second-year students (not native Russian speakers) requires widespread use of digital teaching methods, multimedia technologies. Within the framework of our article, we analyze the working ‘information educational field’ in the higher education system, systematize the existing platforms, which have become widespread, and identify differentiated ways of developing foreign language thinking for effective teaching of the German language to the Turkmen students.

### **2.1. The role and active implementation of new educational services (platforms), ready-made multimedia products, interactive applications for learning foreign languages in Russian universities**

Aspects of the development of the digital educational environment are such technologies as Online learning, working with the "digital footprint" of students, the artificial intelligence use, learning outcomes psychometric analysis, proctoring methods and the institute of mentors (Ainoutdinova & Ainoutdinova, 2018). The use of new information technologies in teaching foreign languages contributes to the improvement and optimization of the educational process, the enrichment of a set of methodological tools and techniques that make it possible to diversify the forms of work and make classes interesting and

memorable for students. Digital educational resources on foreign languages can include according to their content and functional purpose: information - reference materials (encyclopedias, reference books, dictionaries, magazines, newspapers, almanacs); combined e-learning tools (training programs, e-textbooks, exercise books and educational games); movies on DVD; electronic visual aids libraries and databases; Internet resources; educational and methodological software tools for supporting the studies of foreign languages (demonstration materials, presentations, projects, computer development of classes). The integration of digital technologies (platforms, services) and applications into the foreign language teaching process in Russian language universities assumed at the initial level the submission of new material, current and intermediate control and assessment. This positively influenced both the interaction in the student-teacher format and the conduct of the lesson in general. Digital educational resources used by teachers in teaching foreign languages have great opportunities: the formation of the necessary language and speech skills and abilities; conducting standardized and formative testing; organization of independent work (Abdullaev, 2019).

## **2.2. The specifics of the implementation of digital educational platforms at the universities of the Russian Federation**

The emergence of the global network contributed to the opening of a cultural and educational environment with open access at the beginning of the third millennium, and, as a result, provided an open acquisition of knowledge and the development of online education. The first MOOCs (Massive Open Online Courses) appeared - online courses, during which both synchronous and asynchronous learning tools are used.

A feature of MOOCs is the presence of interactive user forums, which are created in order to solve problems that arise when studying the course (Shal'neva et al., 2017). The most suitable option for using mass courses in the educational process is open university courses, which are based on an institutional model of the educational process: the development of the course content is carried out by professional teachers and experts in a certain subject area, a clear schedule of the educational process is presented, the course contains specific tasks, provides certification of course participants. The idea of this course is quite similar to traditional teaching at universities, namely, stricter control, the presence of curators (teachers) of the course, a general specific goal, certification of participants. Now educational institutions independently develop, support more and more new courses and actively cooperate with MOOC-projects, placing their developments on ready-made platforms (Bolodurina et al., 2017). Among the Russian universities that have entered into cooperation with projects in the field of online education, the following are the most active: Moscow State University (almost all starting courses of the Universarium), St. Petersburg State University - cooperation with Coursera (the largest online education platform, a project of Stanford University) (Sipko, 2021). Two projects - Universarium and Eduson - strive to get closer to the world leaders in online education. The Universarium project was launched at the end of 2013 and plans to become a leading platform in the Russian-speaking segment of the Internet and promotes Russian universities in the international space. At the same time, it is planned that the courses for the project will be created by leading Russian universities.

### **3. Research Questions**

During the study, the following questions were posed:

- What is the role of digital educational resources (platforms) in the system of domestic higher education?
- To what extent are digital educational technologies developed and in demand in Russian universities?
- What is the experience of effective use of digital educational platforms (services) that contribute to the effective mastering of phonetics, vocabulary and grammar of the German language by foreign students?

### **4. Purpose of the Study**

Purpose of the study is to systematize the methodological experience of teaching students a second foreign language through digital educational technologies (platforms) in the Russian higher education system and to identify the degree of effectiveness of using the MsTeams platform with the involvement of interactive mobile applications, in particular, the Web 2.0 LearningApps.org application. It is assumed that the answers to the questions posed will help to achieve the goal and will contribute to the dissemination and active use of the developed methodological recommendations for the formation of pronunciation, lexical, grammatical skills and skills of the German language in foreign language students in the format of the digital educational platform MsTeams.

### **5. Research Methods**

The authors used both comparative historical and complex and systemic research methods.

#### **5.1. Microsoft Teams is a universal educational platform**

Microsoft Teams is a service integrated with other Microsoft products for creating a learning space with chats, tests, and various learning content (Vatunsky, 2018). The learning process in the Meeting format (video call) involves the use of the necessary applications and tools. In one interface, you can create classes for collaborative learning, keep in touch with students, share files, submit and grade assignments. The platform not only simplifies the distance learning process, but also provides a space for successful teacher-student interaction. Microsoft Teams opens endless possibilities for the implementation of the educational process, regularly updates and improves its multitasking potential, provides access and the opportunity to use the entire Microsoft 365 ecosystem.

The educational platform Microsoft Teams allows the teacher to work effectively and receive feedback in the online distance learning mode: conduct full-fledged classes in the videoconference format; create teams (classes); open shared access in the "Files" tab and send students educational files from a personal computer (device) or One Drive; send messages and announcements in private / general chat or Meeting chat; create test tasks to control the passed material; put down marks (saved in the system) for

completed tasks; use virtual notebooks OneNote Class Notebooks to exchange notes, materials and feedback; Leverage select popular education apps directly in Teams like Kahoot, Nearpod, Quizlet, and Flipgrid; store files, projects and tasks in the cloud; use tools such as Word, Power Point, Excel and OneNote built right into the Microsoft Office platform.

The Microsoft Teams educational platform includes a virtual classroom, a unified interface for accessing sites and applications, and other innovative tools to increase motivation for online learning, which makes this universal educational resource one of the most popular in the educational space of Russia.

## **5.2. Functionality of the interactive digital service LearningAapps.org.**

LearningAapps.org is a Web 2.0 application for supporting the educational process through interactive modules (applications, exercises): use, free exchange of applications between the initiators of the modules, organization of training for students to create new modules. The peculiarity of the web service is that the working language of the online service is German. You need to go to the 'explanations' tab, explore the options, understand the navigation and move along the 'Next' or 'Back' arrows to find the menus and sections of the site with an explanation of the capabilities of each of them.

The structurally interactive modules available on this site are divided into templates and tools. With the help of templates, the teacher develops a set of exercises (tasks) with performance conditions. This form of interactive interaction requires proficiency, correct answers and clearly defined actions on the part of the student. The templates are grouped according to their structural and functional characteristics: Selection - exercises for choosing the correct answers; Assignment - assignments to establish compliance; Sequence - to determine the correct sequence; Filling in - exercises in which you need to insert the correct answers in the right places; Online games are competition exercises in which a student competes against a computer or other students.

The tools are used to prepare and apply demonstration material, to organize interaction with students. The LearningAapps.org service provides the following tools that allow the teacher to prepare high-quality electronic visual aids, audio / video materials, as well as remotely teach and communicate with colleagues: Notebook; Pinboard; Etherpad; Mindmap; Audio / video content; calendar for scheduling in the form of a table; a grid of applications; chat for chatting on the network.

## **6. Findings**

### **6.1. Digital Education Platforms: MsTeams, Learnings.apps.org**

As a result of our research, we came to the conclusion that digital educational tools (MsTeams platforms, Learnings.apps.org online service) are effective ways to teach Turkmen-speaking students the German language at the initial stage. When teaching the pronunciation of German vowels, consonants, umlauts, a comparison is made with the sound structure of the native language, taking into account the fact that some sounds, for example "ts", are absent. Listening in groups and pronouncing speech formulas (sentences, phrases) through the Youtube application in the Meeting (in the video call mode) is of great importance for setting the pronunciation of the German language. It is impossible to replenish the vocabulary and analyze the morphological composition of a sentence without the formation of

pronunciation skills and abilities of students (Sidorov, 2021). To control the assimilation of lexical and grammatical material by foreign students, the MsTeams platform has access to the Forms application (form of test tasks). The test is created, assigned and published at the scheduled time in the team (class) chat. The test form of control allows you to identify "gaps" in the knowledge of students and, if necessary, repeat (schedule the test again), but first carry out an analytical correction of the mistakes. The listed digital products of this platform contribute to the achievement of the set goal and the solution of the tasks of the practical lesson, as well as to motivate students to further study a second foreign language. If Online learning in the MsTeams format is initiated by a teacher, then a student can work in the LearningApps.org educational application independently (create 'remote' classes, exercises for classmates). The advantages of the LearningApps.org service for learners of the German language are that it has the following capabilities: use of ready-made and new tasks-simulators based on existing templates and tools for collaboration in a virtual classroom; receiving text links to assignments and in the form of a QR code (code to be inserted into a web page). All options are available without registration. It should be noted that in the LearningApps.org mobile application, the students completed their homework to consolidate the lexical material in the 'My exercises' tab: creating a crossword puzzle on the topic "Talking about my family" using a template.

## **6.2. Development of a training lesson (fragment) on the discipline "PK2IYA" for foreign language students using educational online platforms MsTeams, LearningApps.org**

Students have the opportunity to 'log in' with an individual username and password to their MsTeams account from any device and join the Meeting, as they are members of the team in the discipline. All tasks in the virtual classroom are performed in the format of a video call, the duration of which corresponds to two academic hours (90 minutes).

The purpose of the practical lesson is the formation of pronunciation, lexical and grammatical skills of the German language on the topic "Talking about my family."

Begrüßung (greeting). The teacher greets on camera. The students present are checked into the Meeting chat. The organizational moment of the lesson is 5 minutes.

Task 1. / Aufgabe 1. Listen to the audio track on the YouTube channel link (was attached to the team as a new app) "05 German lessons, Talking about family" / "05 Deutsche Stunden, Gesprächüber die Familie" (sound track link opens and sounds in real time), repeat after the announcer - 15 minutes;

Task 2. / Aufgabe 2. Write down a thematic dictionary (5a), a short dialogue (5b) a. in a notebook; b. publish a file in a private chat; c. distribute the material among the students and ask them to type in the nouns and phrases they heard in the Meeting chat. Then the instructor shares the screen (starts the demo) to check spelling. If students find it difficult to write individual words, then the teacher, by clicking on the arrow in the upper right corner of the screen (computer, laptop), opens an interactive whiteboard and writes in the correct answers himself. The written assignment is given 25 minutes.

1) Spelling control (correct spelling) of the lexical minimum, interrogative and narrative sentences is carried out by the teacher. The content of the audio track (file) is attached to the Meeting chat. The teacher starts showing the screen, opens the file, turns on the audio track again, pauses and asks the students to repeat after the announcer and the characters of the dialogue. Then the students turn off the sound of the Meeting and read themselves for 5-7 minutes. To control (written and oral) the task is given 15 minutes.

2) Control of reading. Students turn on the "camera" icon and "sound" and alternately read the active vocabulary and dialogue by role. If necessary, the teacher corrects inaccuracies in the pronunciation of sounds. Reading control in the virtual lesson mode is carried out for 10 minutes.

Task 3. / Aufgabe 3. Complete the grammar tasks:

- 1) The teacher turns on the audio recording by the following link (5c) The announcer names all the ways of forming the plural nouns and gives examples: pronounces in a pair the noun singular and the plural form formed from it, then follows a pause, during which the students repeat aloud what they have heard. The teacher pauses the audio track, during which students write down in notebooks / type in the chat of the Meeting (for example: die Mutter (Sg.) - die Mütter (Pl.)) all nouns on the topic "Family" / "Die Familie". After completing the joint work, students pronounce the recorded pairs of words aloud repeating after the teacher. For this task, 10 minutes are allocated.
- 2) Students listen to the final part of the audio recording (5d). The announcer inflects possessive pronouns and use them with nouns on the topic "Die Familie". Students listen and repeat. Then the teacher demonstrates the possessive pronouns inflection table in the Meeting chat, and the students one by one, using a dictionary on the topic, inflect them aloud. If necessary, the teacher corrects the grammatical mistakes. 10 minutes are allocated to complete the final task.

Homework / Hausaufgabe (published in the Meeting chat and explained by the teacher): 1. Use the material covered, compose a story about your family (in electronic form) and send it to a private chat; 2. Create in the Web application. 2 exercise-crossword on the topic "Talk about the family" / "Gesprächüber die Familie" on the basis of a ready-made template.

## **7. Conclusion**

The results of the study point to the promise of active use of digital learning platforms (MsTeams, LearningsApps.org). Teaching German as a second foreign language (A1) to non-native Russian students is very difficult. It's connected with the fact that the discipline "Practical course of a second foreign language" is taught by Russian-speaking teachers. However, conducting classes in the classrooms of the digital platform MsTeams, using the LearningsApps.org service, and other multimedia tools, as the practical part of our research confirms, allows us to overcome the language barrier 'foreign language student - Russian-speaking teacher' and implement the following tasks: to present the program material more clearly, in less time, with more understanding from the learners; use interconnected teaching of various types of speech and writing and teach to speak in the form of a monologue / dialogue on the topics of the course in German; use applications (audio tracks / videos) integrated into the platform for the perception of phonetic / lexical / grammatical material; develop German-speaking thinking and contribute to the formation of a culture of verbal communication; Thus, the digitalization of the educational process, the use of online platforms and services can improve the quality of teaching German to foreign language students and their motivation to learn a second foreign language.

## References

- Abdullaev, F. A. (2019). *Integratsia tsifrovyyh obrasovatel'nyh resursov v obrazovanije: pedagogicheskiye usloviya modelirovaniya elektronnoj*. Text: neposredstvennyj. *Molodojuchjonyj*, 5(243), 152-154. <https://moluch.ru/archive/243/56102/>
- Ainoutdinova, I. N., & Ainoutdinova, K. A. (2018). Implementation of the concept of Massive Open Online education at university by means of the virtual learning system MOODLE. [Realizatsiya kontseptsii massovogo otkrytogo onlayn obucheniya v vuze sredstvami virtual'noy obuchayushchey sredy MOODLE]. *Kazanskiy lingvisticheski yzhurnal*, 1(2) (1), 72-79.
- Belozjorova, S. I., & Belozjorov, S. I. (2018). Organizatsia kontrolja znanij studentov v LMS MOODLE. *Sovremennyye problem nauki obrazovaniya*, 6. <http://www.science-education.ru/ru/article/view?id=28270>
- Bolodurina, I. P., Zaporozhko, V. V., Parfënov, D. I., & Antsiferova, L. M. (2017). Massovyie otkrytye onlayn-kursy v formirovanii edinogo informatsionnogo obrasovatel'nogo prostranstva universiteta [Massive open online courses in the formation of a single information educationalspace of the university]. *Vestnik Orenburgskogo gos. un-ta*, 10(210), 24-28.
- Datsun, N. N., & Urazayeva, L. Yu. (2016). MOODLE kak platforma massovykh otkrytykh onlayn kursov //Innovatsionnyeprotsessy v nauke i tekhnike XXI veka [MOODLE as a platform for mass open online courses]. *Mat-ly XIV Vseros. nauchno-prakt. konferentsii*. Tyumen': TIU, 269-273.
- Sabitova, D. A. (2021). *Sozdaniye i ispol'sovaniye tsifrovyyh obrasovatel'nyh resursov i interaktivnyh tehnologiy v uchebnom protsesse*. <https://studbooks.net/2036088/>
- Shal'neva, N. V., Polunina, O. A., Startseva, N. A., Krutskaja, N. M., & Kertman, A. V. (2017). Primeneniye sistemy MOODLE pri ochnoj, ochno-saochnoj i saochnoy formah obucheniya. *Sovremennyye problem nauki obrazovaniya*, 3. <http://science-education.ru/ru/article/view?id=26493>
- Sidorov, S. V. (2021). *Instrumenty LearningApps.org*. <http://si-sv.com/blog/2013-0802-47>
- Sipko, S. (2021). *Metodiki primeneniya tsifrovyyh obrasovatel'nyh resursov v inaormatsionno-telekommunikatsionnom s oprovozhdenii regional'noj sistemy obrasovaniya*. <https://pandia.ru/text/77/275/19539.php>
- Vatunsky, A. A. (2018). Sovremennyye innovatsionnyye tehnologii v professional'nom obrazovanii. *Mir nauki, kul'tury, obrazovaniya*, 3(70). <https://cyberleninka.ru/article/n/sovremennyye-innovatsionnyye-tehnologii-v-professionalnom-obrazovanii>