The use of mobile applications and Web 2.0 interactive tools for students' German-language lexical competence improvement

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Abstract. The article focuses on the use of mobile applications and Web 2.0 interactive tools to improve students' German-language lexical competence. The composition and structure of lexical competence are described, the order of exercises for lexical competence formation is given, the didactic possibilities of using mobile applications, blogging technologies and other interactive tools to improve lexical skills are found out, examples of using mobile applications and Web 2.0 interactive tools in the learning process that prove their effectiveness are given. It is proved that the use of mobile applications and Web 2.0 interactive tools helps to organize students' work in and outside classrooms effectively for the formation and improvement of their lexical competence.

Keywords: mobile applications, interactive tools, Web.2 technology, communicative competence, lexical competence, foreign language, blog.

1 Introduction

1.1 The problem statement

The Internet offers a wide range of modern online tools and applications for learning a foreign language. Of course, everything is changing and updating very quickly in this area, so you should always be alert to avoid missing important information. But this does not mean that all teachers should be media experts as the principle of most applications' action is intuitive.

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Using mobile applications and Web 2.0 interactive tools in the learning process, foreign language teachers face some challenges, such as not having enough hours for classroom work or the use of mobile devices by students not for educational purposes, but for entertainment or communication. Therefore, heated discussions are taking place around the topic of using mobile devices in foreign language learning. Taking into account that there are few hours for classroom work, it becomes understandable that these hours are needed to form language skills and speech skills in the process of doing classical exercises and tasks without the involvement of mobile devices or computers. But on the other hand, mobile devices have become so entrenched in our lives that it is simply impossible to give up the learning opportunities they offer for learning a foreign language.

As to the use of Web 2.0 interactive tools, an important feature of which is engaging students in filling and using services, as well as accessibility, openness, interactivity and connectivism [31, pp. 9–10], they play an important role in learning foreign languages. The formation and improvement of students' lexical competence in German also happens faster and more efficiently with the use of mobile applications and Web 2.0 interactive tools as additional learning tools, so they need to take a valid place in the German language learning process.

1.2 Analysis of recent research and publications

Analyzing the work of native and foreign scientists on the problems of using mobile applications and Web 2.0 interactive tools in the educational process in order to form lexical competence, we have concluded that there has been an increasing interest in this topic in recent years. Scientists point out that the use of mobile applications and interactive tools not only contributes to the formation of foreign language communicative competence, but also to the improving students' media competence, the formation of research skills, increasing motivation to learn a foreign language.

The use of mobile devices, applications and Web 2.0 interactive tools in a foreign language learning process was studied by Ukrainian researchers Hanna M. Alekseeva [13], Oksana Ye. Bondar [32], Olga O. Gnedkova [18], Larysa V. Gorbatiuk [13], Darja A. Kassim [32], Nataliia V. Kravchenko [13], Hennadiy M. Kravtsov [18], Kateryna P. Osadcha [37], Viacheslav V. Osadchyi [37], Olena O. Pavlenko [32], Alona M. Prykhodko [34], Oksana O. Rezvan [34], Tetiana S. Rozumna [13], Ekaterina O. Shmeltser [37], Svitlana V. Symonenko [37], Stanislav T. Tolmachev [34], Nataliia S. Tymchenko-Mikhailidi [32], Olga M. Ustimenko [42], Nataliia P. Volkova [34], Nataliia V. Zaitseva [37], foreign scientists Nils Bahlo [2], Gunhild Berg [4], Johanna Chardaloupa [9], Albert L. Harris [15], Aimi Jõesalu [9], Choi Kwangoon [32], Alan Rea [15], Sarah Torres Cajo [2], Bae Gi Yon [32] and others. The works of Karin Aguado [1], Natalia F. Borisko [6], Rainer Bohn [5], Birgit Henriksen [16], Aleksandra Łyp-Bielecka [20], I. S. P. Nation [28], Jonathan Newton [29], Mattheus Wollert [43] and others are devoted to the problems of teaching vocabulary.

The use of smartphones in the educational process, the possibilities and prospects of such use for the creation of a mobile learning environment as well as their method of use were studied by both domestic (Mariia A. Kislova [39], Yevhenii O. Modlo [25],

Pavlo P. Nechypurenko [24], Olga G. Pronina [33], Serhiy O. Semerikov [23], Ekaterina O. Shmeltser [17], Kateryna I. Slovak [26], Vladimir N. Soloviev [38], Andrii M. Striuk [35], Viktoriia V. Tkachuk [40], Tetiana I. Zhylenko [44]) and foreign researchers (Earle Castledine [7], Max Wheeler [7], Myles Eftos [7], Philip Karsch [12], Henrike Friedrichs-Liesenkötter [12]).

Although the topic is covered in a large number of papers, the emergence of new applications and tools requires new approaches to teaching German [10; 41], testing them in the learning process and examining their impact on learning outcomes. In view of this, the purpose of this article is to analyze the possibilities of using modern mobile applications and Web 2.0 interactive tools in the educational German language process in order to improve students' lexical competence and to describe examples of integrating individual tools into the German language learning process.

2 Importance of lexical competence formation

Lexical competence is one of the main components of a foreign language communicative competence, as no information can be reported or perceived without it. Foreign language communicative competence (FCC) is seen as a unity consisting of certain components (competences) in the modern method of teaching foreign languages. The authors of the Common European Framework of Reference for Languages [10, p. 108] distinguish the following components of FCC:

- linguistic competence, which includes lexical, grammatical, semantic, phonological, orthographic, orthoepic competences;
- sociolinguistic competence;
- pragmatic competence which consists of discursive (knowledge of the principles by which statements are organized, structured and concluded), functional (knowledge of the principles by which utterances are used to carry out communicative functions) and speech programming competencies.

Considering the fact that the listed components are unequal in importance and that the modern achievements in the methodology of teaching foreign languages and related sciences are not fully taken into account during the process of their determination, Sofiia Yu. Nikolaeva proposes to include in the structure of foreign language communicative competence the following competences: speech, language, linguosociocultural and strategic training [30, p. 12].

All components of the foreign language communicative competence are formed at each level of the university degrees, but the formation of one or another competence occupies a more or less important place in the educational process. Initially, for example, more attention is paid to the formation of linguistic (lexical, grammatical, phonetic, spelling and orthoepic) and speech (reading, listening, speaking and writing) competences, as well as mastering strategies of learning and using language, that is the formation of strategic training competence.

Lexical competence is defined in the Common European Framework of Reference for Languages as the knowledge of lexical units and the ability to use a vocabulary composed of lexical and grammatical elements. Lexical elements include persistent expressions (colloquial formulae, phrasal idioms, fixed frames, phrasal verbs, fixed collocations) and single words forms. The grammatical elements belong to the closed classes of words (articles, pronouns, prepositions, auxiliary words, conjunctions, particles) [10, p. 110–111]. Nevertheless, this definition does not fully reflect the composition and structure of lexical competence, so let us analyze the point of view of methodologists on this problem.

Questions about the components of lexical competence are being considered differently in the methodological literature. For example, Carol A. Chapelle proposes to distinguish three components of lexical competence, namely: 1) knowledge of the context (linguistic, cultural, situational) use of a word; 2) knowledge of mental vocabulary organization and word processing processes in memory; 3) metacognitive strategies for using words [8, p. 160–161].

According to Sergei F. Shatilov, the formation of lexical competence involves the formation of students' skills of intuitively correct derivation, use and understanding of a foreign language vocabulary on the basis of speech lexical connections between auditory speech-motor and graphic forms of the word and its meaning, as well as connections between words of a foreign language [36, p. 129].

In addition, the so-called "language awareness" should be included in the lexical competence, namely, a conscious reflexive approach to the phenomena of language and speech, as well as to one's own processes of learning and mastering of a foreign language communicative competence and its components. Language awareness in the field of vocabulary acquisition can be defined as lexical awareness, that is, a person's ability who masters a foreign language:

- to recognize foreign language lexical units, their peculiarities and patterns of their formation and use;
- to be aware of the socio-cultural stipulation of foreign language lexical units, especially non-equivalent vocabulary of a country, common phrases, phraseologisms, proverbs, sayings, etc.;
- to think over the processes of formation of one's own lexical competence, to ponder over the organization of mental vocabulary, the processes of processing of lexical information in memory, the peculiarities of memorizing lexical units;
- to analyze the lexical side of texts for reading and listening: to guess the meanings
 of international words, cognates, compound words, to pay attention to a context and
 means of interphrase communication, etc.

Therefore, summarizing all the above-mentioned, we can identify lexical skills, lexical knowledge and lexical awareness as the main components of lexical competence, which is shown in figure 1.

Lexical competence is traditionally divided into productive and receptive. The basis of productive lexical competence is active vocabulary – the lexical material that a student should use to express his/her thoughts orally or in writing, as well as understand other people's thoughts during listening and reading.

Receptive lexical competence is based on active and passive vocabulary, these are layers of vocabulary that a student must understand perceiving others' thoughts in oral

form (during listening) and in writing (during reading). It is obvious that productive vocabulary is always part of receptive vocabulary and the capacity of passive vocabulary is greater than active vocabulary. Batia Laufer proved in her experiments that the capacity of passive vocabulary is ten times bigger than the capacity of active vocabulary during the process of learning a foreign language. In addition, there are processes of regrouping, restructuring in lexical competence's composition, lexical units change their status over time, but the relation between active and passive vocabulary changes in favor of passive [19, p. 265]. Karin Aguado also notes that understanding a word does not necessarily provide its active use in speech, and vice versa, a word that belongs to learner's active vocabulary may not always be understandable during reading or listening [1]. In general, we agree with Birgit Henriksen's point of view, which defines the difference between productive and receptive lexical competence gradually but not as dichotomy "passive vocabularyactive vocabulary" [16, p. 309], that is, the learners' vocabulary is not divided into two parts that exist separately from each other, during the foreign language learning process lexical units pass from passive vocabulary to active and vice versa.

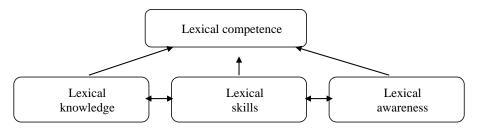


Fig. 1. The structure and composition of the foreign language lexical competence

Organizing an exercise phase for memorizing and further active use of vocabulary, the fact should be taken into account that lexical units are better remembered when they are processed using various channels of perception and information processing, among which visual perception takes an important place according to scientific researches, as it is proved that the parts of the brain, that are responsible for processing and storage of verbal and visual information, are very closely related [21, p. 16]. Therefore, the use of mobile applications and Web 2.0 interactive tools, most of which rely on visual perception of information, promotes faster and better memory of lexical material.

There is a classic order of types of exercises that are performed at the stage of automation of students' actions with lexical units, namely:

- 1. exercises on the recognizing of lexical units;
- 2. exercises on the choice of lexical units;
- 3. exercises on the ordering of lexical units;
- 4. exercises on the classification of lexical units;
- 5. exercises on the productive use of lexical units [21, p. 20–23].

You can improve your vocabulary skills with the help of tested classic techniques on the one hand and on the other with online tools and applications. In the following examples we will show how the vocabulary learning process is enriched with the use of digital technologies.

3 Mobile applications and Web 2.0 interactive tools for building and improving lexical competence in German

3.1 Mobile applications

The popularity of mobile apps for learning foreign languages has grown a lot lately. The mobile application is a standalone software product specifically designed for mobile devices to optimize a solution to a problem or a task in a user's life. It is necessary to distinguish between native and network web applications [7, p. 26]. The network application is available online through the device browser, in other words, it is a website that offers similar functionality to the application. In addition, the so-called native applications are developed specifically for a given platform (Android or iOS, for example) and is installed in the device. Native mobile applications that are of great interest in the context of foreign language learning are distributed through app stores: Apple App Store, Google Play and others.

We consider that the use of Bring Your Own Device (BYOD) model is the most effective way to learn foreign languages when students bring their own mobile devices to an educational establishment. In such a case, there is no need for an educational establishment to buy devices and that allows overcoming one of the main barriers to the introduction of information technology in the educational process – the issue of logistics. Many teachers and lecturers also point out the fact that teenagers prefer to use personal devices, even when an educational institution may offer an alternative because they feel psychologically more comfortable.

Let us consider the following network applications Memrise (https://www.memrise.com) and Quizlet (https://quizlet.com), that allow training lexical units during the phase of automation.

As we can see from the Table 1, the selected applications allow creating word groups, sharing them, and selecting existing ones. They offer a wide range of exercises: recognition, selection, ordering, sorting lexical units; translation exercises and reproductive exercises that can be used at the situational phase of the formation of lexical skills in order to automate them.

As we can see from the Table 1, both Memrise and Quizlet have many advantages, but the existence of the paid content indicates a limitation of features in the free version. For example, the function "keeping statistics" is not available in the free version.

The advantage of Memrise is that it offers to use memes for associative memorizing. These can be images, videos, voice recordings, examples of sentences that have been added on one's own or borrowed from other users. The disadvantage is the fact that Memrise users can only learn a foreign language using a clear, non-infringing algorithm. As for a mobile app, it can only be used with an Internet connection.

Table 1. Comparison of mobile web applications

Criteria	Memrise	Quizlet
Possibility to create word groups yourself	+	+
Possibility to share created word groups	+	+
Possibility to select already created word groups	+	+
Possibility to add a voice recording	(it is possible to add audio files or to record a sound image of a lexical unit using a microphone)	(it is possible to add one's own sound recording in the paid version and there is an automatic sound system in the free version)
Possibility to add images	(the program offers memes for better memorization of words, it is also possible to create them yourself, a meme can be not only a picture but also a video, a word, a sentence)	images in the paid version and to can select images from an
Keeping	+	+
statistics	(in the paid version)	(in the paid version)
Paid content possibility	+	+
Lexical exercises	 exercise on word order; exercises on writing the word independently; multiple-choice tests 	 Flashcards (card view mode); Spell (printing the heard word); Learn (fitting into the translation of a word in a foreign language and choosing one of the four proposed); Write (insert word translation); Test (4 types of tests); Match (a combination of words); Gravity (a speed game, it is necessary to have time to type a word in the appropriate place before a meteorite falls); Live (a team play in a classroom is based on training card sets)

As for the advantages of the Quizlet resource, it has the function of an automatic sound system of lexical units; it is possible to select images from the Quizlet database. Like Memrise, this educational resource contains the paid content, that allows you to add your own images and voice words yourself, and it allows creating an unlimited number of classes, that is convenient for teachers, as they have the ability to monitor

students' activity and their results. Teachers can create not more than 8 classes in the free version. With the help of this educational resource, a teacher can track the lists of words created by students (Fig. 2), using them during vocabulary dictations' preparation, as well as make various types of control. Quizlet makes it possible to print a list of lexical units (Fig. 3), that is also quite convenient. Unlike Memrise, the Quizlet mobile application can be used without an Internet connection. The possibility to learn words not according to the algorithm is also a hallmark of Quizlet.

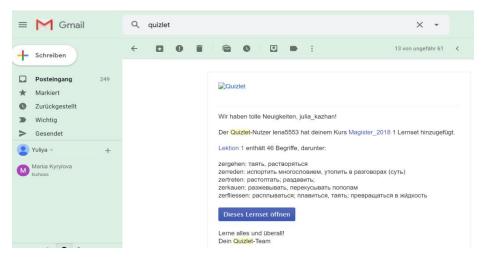


Fig. 2. Email message to a teacher of the creation and development of a new module by students

BACK TO SET

Print



Fig. 3. List of lexical units prepared for printing

Our experience of Memrise and Quizlet mobile applications' using has been quite successful. Quizlet is the most understandable and easy to use according to student feedback (some of them are given below in the table), and therefore the process of working with Quizlet is worth describing in more details.

A separate class was created for each academic group which included all students of the group who initially had to sign up for Quizlet. The main idea of using the resource was to systematize the lexical material in order to improve students' foreign language communicative competence. Due to the fact that the free version does not have keeping statistics function, a teacher is not able to check the students' activity and their doing of interactive exercises offered by the resource. But our idea of using the free version was to compile common lists of lexical units on the topics being studied. All students of the group were involved in the compilation of the lists; all of them had the right to edit the modules. In the classroom, we highlight those lexical units that make up the lexical minimum of a topic during the process of word processing. The students had to put the selected words into a common list of lexical units, distributing them among themselves (Fig. 4, 5, 6).

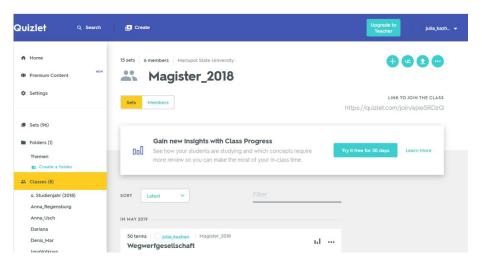


Fig. 4. A created class for masters in the speciality "Philology. Language and Literature (German)"

So, as we can see from the figures above, the students' teamwork was quite successful, they were actively involved in creating word lists and developing them. The teacher could not control the students' implementation of the interactive exercises, this was a facultative option that students were introduced to at the beginning of the resource. From our observations, we can say that most students did the exercises at the beginning of using Quizlet, but later this function was used only occasionally. Most students saw the main advantage in ability to practice vocabulary using flashcards at any convenient time for them and anywhere, as they always have a mobile phone at hand. We provide students' feedback on the use of the Memrise and Quizlet applications next (Table 2).

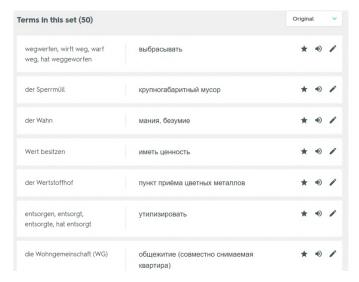


Fig. 5. List of lexical items on the topic "Consumer society"



Fig. 6. Module "Consumer society"

Table 2. Memrise Ta Quizlet Students' feedback on the use of Memrise and Quizlet

Positive feedback	Negative feedback		
1. It is possible to expand	1. After a while, the user's success of memorizing		
vocabulary significantly.	decreases.		
2. Scoring and gamification of the 2. The word can often be guessed without knowing it			
learning process motivate further	the method of exclusion).		
language learning.	3. Assessing of a user's level of knowledge is often not true,		
3. The free version has enough	users think that they have a large vocabulary, but in reality,		
features to use the application	they cannot formulate elementary sentences.		
successfully.	4. Applications can only be used as an additional language-		
	learning tool; you cannot learn to use words only with them.		

So, as we can see from the students' feedback, mobile apps can be used to memorize vocabulary and receptive having of vocabulary. In order to formulate a productive vocabulary, it is necessary to offer conventionally speech and speech exercises for students that would encourage them to express their own opinions about certain facts. These can be both classic exercises performed in a classroom or exercises developed by means of Web 2.0 resources, which are discussed below.

3.2 Interactive Web 2.0 tools

There are different points of view on how Web 2.0 can be used in the learning process, but it is undeniable that they allow students and teachers to collaborate, and students can individualize their own learning style using them. These interactive tools have the potential to transform learning into a fun process through the use of innovative learning tools that support a person-centered approach and offer interactive forms of work that contribute to learning motivation.

Olga G. Pronina outlines four main benefits of implementing Web 2.0 technologies into the educational process (Table 3), noting that the right column of the table reflects the cognitive aspects of learning and the left reflects social and interpersonal aspects [33, p. 96–97].

Table 3. Advantages of introducing Web 2.0 technologies into the educational process

Cognitive aspects of learning	Social and interpersonal aspects of learning
Organization of research	Organization of cooperation
Language literacy	Ability to publish information

From the point of view of our article's problem, we are interested in the aspect of language literacy, and we really agree that the use of Web 2.0 technologies can significantly improve students' language competence and lexical in particular. Due to the fact that during the process of working with interactive technologies, students do not passively absorb knowledge, but are engaged in collaborative work to obtain knowledge and have the opportunity to publish their own texts, videos, audio, they pay special attention to their own formulations, thus productive lexical competence is formed and improved.

If we talk about how web technologies can improve the learning process in general and students' lexical competence in particular, we should first consider the criteria by which foreign language classes can be attributed to high-quality classes. Hilbert Meyer proposes to distinguish 10 features of qualitatively conducted lessons in a foreign language:

- 1. a high percentage of real study time in a class;
- 2. a prepared classroom and materials;
- 3. clear structuring of a lesson;
- 4. atmosphere in a classroom which promotes learning;
- 5. meaningful clarity;
- 6. organization of the communication process;

- 7. an individual approach;
- 8. a variety of teaching methods and techniques;
- 9. transparency of control;
- 10. conscious management [22].

If we correlate these features with the characteristics of Web 2.0 technologies (Fig. 7), we can see that they allow to organize and conduct high-quality foreign language lessons.

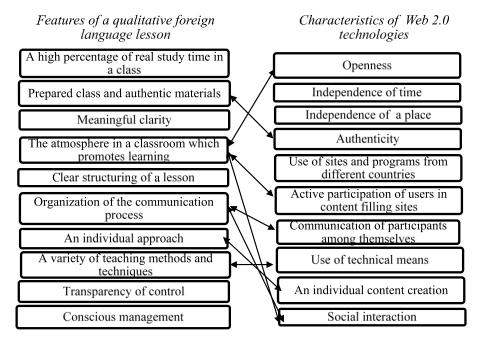


Fig. 7. Correlation between the features of a qualitative foreign language lesson and the characteristics of Web 2.0 technologies

So, as we can see from Fig. 7, the use of Web 2.0 technologies improves the quality of foreign language teaching and organizes students' work both in a class and in their own work.

Based on the classification of Elena I. Goroshko [14, pp. 557–558], we distinguish Web 2.0 technologies that are appropriate to use in the foreign languages learning process (Table 4).

Here are some examples of Web 2.0 technologies that can be used for the purpose of formation and improvement of students' lexical competence in German.

A teacher's (lecturer's) blog as a type of blog is created and moderated by a teacher, it may contain information about the course or subject (course syllabus, homework, information on the study material, links to additional sources, reading and listening materials, links to tests on the topics studied or topics are being studied, etc.). Let us describe the technology for creating a teacher's blog on Wordpress platform:

Categories	Internet addresses
	www.edublogs.com
Blogs and microblogging	www.blogger.com
	de.wordpress.com
Social networks	www.facebook.com
Social networks	www.linkedin.com
Wikiprojects	www.mediawiki.com
Wikipiojects	www.wikidot.com
Social bookmarks	www.bibsonomy.com
Social bookillarks	www.google.com/bookmarks
	www.youtube.com
Information dissemination multimedia systems	www.apple.com/itunes
	de.slideshare.net
Joint aditorial office systems	www.google.com/intl/de/docs
Joint editorial office systems	docs.google.com/spreadsheets
Dodoosts	www.podcastpeople.com
Podcasts	www.podomatic.com
Pletforms for the development of advectional materials	learningapps.org
Platforms for the development of educational materials	de.padlet.com

Table 4. Web technologies in the foreign languages learning process

Step 1. A teacher needs to determine whether the Wordpress online resource suits him or her, or whether the interface is easy to use and post the educational material. It is necessary to consider the structure of the site beforehand because it is considered inappropriate to offer students a content on one page or in one section in the practice of creating an educational blog. In addition, it should be considered that the content must be diverse: links to foreign resources, references, links for downloading materials, interactive tasks, tests, questionnaires, communication situations, information about events in German, contacts or widgets of other social networks, Web 2.0 resources (Padlet, Instagram, Facebook, etc.). A teacher is invited to do several sections for creating a site that will be used for educational purposes. The basic idea of the educational platform is placed in the first section and the content for the purpose of the use is in the others. As an example, here is a teacher's blog created as part of a master's project on the topic of "Blogging in the German language learning process" (by M. O. Yashkova, academic adviser Yu. M. Kazhan):

- (1) Hauptseite (home page);
- (2) Über uns (about us);
- (3) Kontakte (contacts);
- (4) Interessante Tatsachen (interesting facts);
- (5) Übungen und Tests (exercises and tests).

Step 2. Each section should be filled in with the following content:

- 1. Hauptseite (see Fig. 8, 9)
- 2. Über uns and Kontakte sections that will help students to learn more about a teacher, an educational institution, see information about the learning process, etc.



Fig. 8. Blog homepage "Mein Deutschunterricht"



Fig. 9. The main tasks of the educational blog

3. The main section – Interessante Tatsachen – includes interesting communication situations, problems that are constantly updated by a teacher. One of the tasks for students is to write comments on posts, which can be one of the tasks for organizing students' independent work in the discipline (Fig. 10, mistakes in student comments are saved).

When commenting on posts, of course, students make mistakes in their statements commenting on posts. The teacher's task is to correct mistakes or respond during a lesson or in comments expressing a personal opinion.

3 Gedanken zu "Europa ist bunt!"

Europa gefällt mir sehr. Dort gibt es sehr schöne Plätze für Leben, z.B die Ukraine. Aber für europäischen Leben fehlt uns Toleranz, Höfflichkeit und Geduld.

* Gefällt mir

Ja, ich stimme dazu. Die Ukraine kann in Europäischen Union sein, aber dafür sollen wir fertig sein. D.h. unsere Lebensweise ein bisschen zu verändern.

★ Gefällt dir

Europa ist wirklich sehr schön und bunt. Das Leben in Europa ist unterschiedlich. Sie hat viele bekannten Sehenswürdigkeiten und keine Gränze zwischen Ländern. Der zweite Punkt ist natürlich der wichtigste Vorteil. Fast alle Länder sehen so ausgezeichnet aus. Die meisten Europäer leben wohl uns sind mit alles Nötiges versorgen. Sie sind auch ein Naturfreunde und bereit eine Hälfte das Gelds für Naturschutz auszugeben.

★ Gefällt mir

Fig. 10. Students' comments

4. Students report their results to a teacher using the commenting function while performing exercises and tests in the tab (by links). In our example, we offer students a quiz on the topic "Europe" (see Fig. 11).

Du bist gut! Bist du etwa ein Reisefan wie wir, leicht verknallt in deine/n Geografie-Lehrer/in und wolltest sie/ihn mit Wissen beeindrucken oder bist du einfach gerne auf dem Laufenden? Wir freuen uns, wenn du unseren Roadtrip durch alle Länder Europas auf http://comewithus2.com verfolgst und vielleicht hast du ja sogar den einen oder anderen Reisetipp für uns?

Sie haben 11 von 15 Aufgaben richtig beantwortet.

★ Gefällt mir

Fig. 11. Quiz results

The peculiarities of the offered exercises are that they are related to the use of blogging technology, so it is advisable to develop notes that will help students and teachers better navigate and create the following exercises:

Recommendations to students on completing blog assignments

- Leave comments! This will help you to become a member of a real discussion.
- Do short but clear notes.

- Keep a close eye on the topic of a future message.
- Examples and cliches will help you with the task.
- Attach pictures or audio/video files! This will make your message vivid and individual.

Blogging recommendations for teachers

Creating and maintaining a blog, you should pay attention to:

- content (filling with educational material);
- original design;
- convenient blog navigation;
- interactivity, feedback, students' evaluation of the blog.

Another type of blog is a collective blog created to inform others about certain events. According to the results of an American study [27, p. 225], the main motives for creating a blog are the following:

- to inform others about activities and what is happening around;
- to express one's own opinion and influence the opinion of others;
- to find like-minded people and to get feedback;
- to structure one's own thought by its verbalization on principle think when I write ("think by writing");
- to reduce emotional tension.

As for the use of blogs in the foreign language learning process, it is advisable to maintain them in order to improve writing skills, in such a case they become a tool for organizing real communication using a studied foreign language.

The idea of the blog, which we will describe below, was to develop students' communication skills of Mariupol State University, who participated in the study trip to the University of Göttingen in Germany from German Academic Exchange Service. The idea of creating a blog was, firstly, to make students, who participated in the trip, record their impressions in small texts, express their opinions about their stay at the University of Göttingen, attending lectures and seminars, communicating with students, etc. The purpose of this activity was to create a travel information page and to improve students' writing skills in German. Secondly, the blog was created in such a way that non-travelling students would also be able to get acquainted with interesting facts and cultural sites in Germany.

It is important to note that blogging was a new activity for all students, so we decided that structuring thinking could be achieved through daily group reflection. At the end of each day, we discussed the events that occurred and reflected on certain issues, such as the organization of seminars at the University of Göttingen and differences from our system, topics discussed by students in the classroom (hostility to foreigners, problems of migrants, etc.); about museums, we visited, etc. These reflection phases provided the basis for writing the blog texts. In addition, during the discussion, we trained new

lexical units that students wrote themselves during attending lectures and seminars, that is, there was an improvement of their lexical competence in oral speech. Thus, the preparatory work for writing blog texts contributed to the improvement of students' lexical skills.

We used Blogger tool (Google service) for this blog. You must create a Google account to use this service. Creating a blog takes little time; the process of creation is intuitive. In the window "Create a new blog", it was necessary to enter a blog name and come up with an address (Fig. 12).

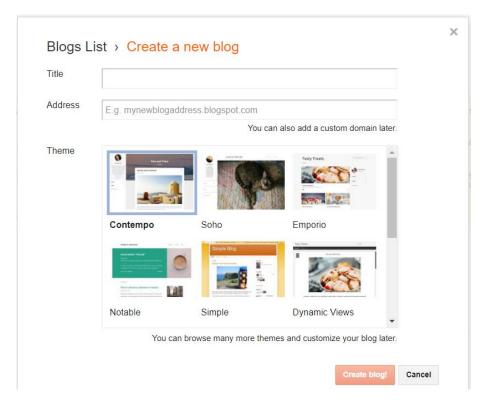


Fig. 12. Creating a blog using the service Blogger

Students called our blog "Göttingen: Traum und Wirklichkeit" (Göttingen: from dream to its realization) and set an address for the blog https://endlichingoettingen.blogspot.com/, chose a template "simple" and could already publish the first post (Fig. 13). Of course, we did not forget to customize the look of the blog by selecting the background, colors, the template, etc.

The study trip lasted 10 days, the group consisted of 12 students, so we established the order of writing posts; we have discussed also the structure and the form of writing blog texts. On the one hand, our goal was to fix impressions of the trip's and to inform the students who were not travelling; on the other hand, our goal was to improve students' competency in writing, which included such aspects as improving language

skills and teaching students how to write blog texts according to the requirements for this type of text. Therefore, we started by discussing the features of blog texts with students and looking at examples of such texts. We have also included some tips for organizing a blog [https://www.selbststaendig.de/10-tipps-gute-blogtexte]. When writing a text, it is necessary to take into account the fact that the reader's attention is drawn to a title and an introduction, as they are of primary interest to readers and cause desire to read a text further. The sentences should be clear and understandable they should be interconnected by means of interphase communication.



Fig. 13. The blog "Göttingen: Traum und Wirklichkeit"

Another feature of a blog is its multimedia – the simultaneous use of several semiotic systems in the communication process, such as visual and audio channel. Multimedia is also manifested as a combination of verbal text with non-verbal components such as graphics, photos, videos and more.

Multimedia content is increasingly making its way to blogs and there are currently 4 options for presenting text and multimedia information:

- 1. only text information is provided;
- 2. textual information prevails, but there is an interspersion of multimedia information (audio, video, graphics);
- 3. text and multimedia information are presented equally;
- 4. multimedia information prevails [3, p. 128]

We used the third version of information presentation in our blog: every published text was necessarily accompanied with photographs taken by students during a day. Here is an example from a student's text who, in our opinion, took into account the above requirements for writing a blog text (the text is saved in the author's version, the mistakes were not corrected) https://endlichingoettingen.blogspot.com/2016/11/das-wetter-spielt-keine-rolle.html

Das Wetter spielt keine Rolle

Der Morgen. Grau. Regnerisch. Man will in die Uni nicht gehen, aber es geht nicht um uns. Wir sind in Göttingen – die Stadt für Studenten, hier leben und studieren 32 Tausend Studenten.

Wir haben uns gefreut über die Möglichkeit mit der Professorin Middeke noch einmal zu treffen, bei ihr waren wir schon am Montag im Seminar für Grundlagen der Sprachachvermittlung. Aber heute war es der Besuch der FaDaF-Geschäftsstelle (der Fachverband Deutsch als Fremd- und Zweitsprache). Aber was macht der FaDaF? Im Großen und Ganzen der FaDaf fördert Initiativen zur Integration und Mehrsprachigkeit und unterstützt die berufs- und arbeitsplatzbezogene Aus- und Weiterbildung DaF. Wenn Sie Lust haben mehr darüber zu wissen, könnten Sie die Website besuchen www.fadaf.de.



Das Mittagessen. Endlich! Mmm, was soll man auswählen? Suppe? Würstchen? Alles sieht so lecker aus! Und danach kommt der Besuch des Internationales Schreibzentrums. Es ist das erste Schreibzentrum in Deutschland, wo gibt es verschiedene Worskshops zu verschiedenen Themen, bei denen es um akademisches Schreiben geht.

Und die letzte Doppelstunde für heute – Projektseminar mit Professorin Meißner. Es war angenehem die bekannten Gesichter der Studenten zu sehen. Wir haben ziemlich produktiv in den Gruppen gearbeitet und es war spannend einander besser kennen zu lernen. Es spielt keine Rolle, dass wir aus verschiedenen Ländern sind, weil Witze die Leute näher machen.

Schließlich kommt der Ukrainische Abend – alles was man über die Ukraine wissen möchte: Lieder, Tanzen, Live Musik und Präsentationen über die Ukraine, Mariupol, unsere Uni. Und danach beim Büffet haben wir uns mut den Gästen wunderbar unterhalten. Ein ereignisreicher Tag!

This example also takes into account such a blog parameter as hypertextuality, that is, the use of hyperlinks that connect separate elements of a blog structure. In this example, the link www.fadaf.de is given to an association of German teachers and lectures which students were able to get acquainted with during their study tour.

4 Conclusions

Use of mobile applications and Web 2.0 interactive tools through such features as: accessibility (ability to work remotely, regardless of location), openness (ability to express your views, comment), interactivity (get comments on your own publications in real time, or asynchronous) and collectivism (teamwork, team responsibility, team spirit) have become an integral part of the foreign language learning process. Especially effective is the use of Internet services in the development of lexical competence, which is confirmed by the practice of using mobile applications and interactive Web 2.0 tools in learning German.

Given that lexical competence consists of lexical knowledge, lexical skills and lexical awareness, we believe that its development is due primarily to the rich lexical stock and the ability to recognize lexical units and their structural components through linguistic awareness. Because of this, the task is to maximize the vocabulary of learners. We consider the use of mobile applications and Web 2.0 interactive tools that combine the use of different channels of information perception (visual and auditory) as an effective means of developing lexical competence.

Mobile devices have several advantages in the learning process: each student has a smartphone, as well as the mobile Internet; mobile applications can be downloaded in their free version. Even in the free version, Memrise and Quizlet mobile applications are effective in the automation of lexical units. They offer different types of exercises: recognition, selection, ordering and translation, allow creating your own instructional content that can be used by the teacher to complete the test tasks. Both applications are effective at memorizing and automating the vocabulary.

Web 2.0 technologies allow you to individualize the learning process, to transfer it from passive mastering of vocabulary into the format of its active use. In addition, these technologies allow you to produce your own texts, videos and audio materials, which diversify the learning process, make it interesting, encourage students to be creative. This improves the quality of teaching in the classroom and allows you to optimize your work. Teacher blogs or community blogs have proven effective in practice. Teacher blogs aim to organize the work of a group or class, while collective blogs are created specifically to organize real communication in a foreign language that promotes foreign language competence. Blogs make it possible to train vocabulary but through context, to combine text and multimedia information that attracts students, thus creating a virtual learning environment.

The possibilities of using mobile applications and Web 2.0 technologies are not limited to the above. The next step in the study is to explore other resources for developing communicative competence.

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