

## Use of Web 2.0 technology tool – educational blog – in the system of foreign language teaching

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**Abstract.** This paper discusses the use of a Web 2.0 technology tool – educational blog – in the system of teaching foreign languages for enhancement of teaching effectiveness and optimization of students' performance. The authors describe the content, characteristics and didactic properties of an educational blog as an alternative or auxiliary educational environment, define its methodological objectives and list a number of advantages of this approach versus conventional teaching model. The effectiveness of the above-mentioned Web 2.0 technology tool was confirmed by the experiment which showed that an educational blog integrated in a foreign language teaching system contributed to optimization of the process of teaching and learning, development of foreign language communicative competence of students and thereby allowed them to acquire not only communicative but also technological skills.

**Keywords:** tools, Web 2.0 technology, optimization, training, foreign language, educational blog, communicative competence, communicative and technological skills, educational blogosphere.

### 1 Introduction

Nowadays, optimization of foreign language teaching and learning approaches is a relevant objective not only in the field of education, but also in other areas of modern human activities. Today, every person willing to master a foreign language always faces the task to accomplish the language learning within a short period of time and with minimal effort. Searching for the optimal way to solve this problem, the authors came to an idea that expedient and effective learning of a foreign language can be achieved in the environment that contributes to accelerated assimilation of language and speech units and overcoming of language barriers.

Development of effective tools for teaching foreign languages has been an objective of the education system over the past decades. However, each year this problem obtains new features due to the wide involvement of new ICT into our lives [7; 21]. In our opinion, to solve this problem such learning tools can be used, which, on one hand, require minimal effort in terms of their implementation but, on the other hand, require the most complex and time-consuming preparation for optimization of foreign language teaching and learning. Currently, the leading methodologies of foreign language teaching and learning implicate use of Internet with its rich resources including websites, e-mail and electronic encyclopaedias, telecommunication projects, Web 2.0 technologies, e.g. video conferences, podcasts (for example, Elementary Podcast from the British Council and 6 Minute English from the BBC), chat sessions, forums, blogs, and more [6; 17].

Our study showed that Web 2.0 technologies, in particular educational blogs provide the most complete solution to optimization of educational activities in the field of teaching foreign languages. We are convinced that integration of Web 2.0 technology tools in the educational process provides an effective teaching approach due to didactic properties of such tools, including ease of use and accessibility, efficiency of the information space organization, interactivity and multimedia interface, reliability and security, and will contribute to optimization of the system of teaching and learning a foreign language.

## **2 Description of an educational blog as a Web 2.0 technology tool**

Scientific substantiation of the theory of learning through an educational blog is implied by the studies published by Lisa Kim Bach [2], Joel Bloch [3], Rebecca Blood [4], Aaron Patric Campbell [5], Charles Lowe [14], Will Richardson [19], Terra Williams [14], and others. In turn, Maksim N. Evstigneev [22], Anna V. Filatova [8], Dmitrii A. Ivanchenko [9], Liliia K. Raitckaia [18], Pavel V. Sysoev [22], Svetlana V. Titova [23], and others established the modern theoretical basis for integration of blog technologies in the process of teaching foreign languages.

In this paper, we will focus on using an educational blog as a tool for optimization of the foreign language teaching process. The blog is one of the Web 2.0 technology services which creates conditions for improving all types of student's foreign language speech activities.

Web 2.0 technologies present an attractive educational tool due to, first of all, their availability, simplicity and possibility of independent and unsupervised work of students providing thereby more free time in the classroom. At present, an educational blog is used in teaching foreign languages with the aim to solve a whole range of methodological objectives, including: building and improving the listening comprehension skills (speech recognition), pronunciation, expanding and enriching a vocabulary, developing speaking and writing skills (Lisa Kim Bach [2], John Barger [20], Joel Bloch [3], Maksim N. Evstigneev [22], Liliia K. Raitckaia [18], Pavel V. Sysoev [22], Geoff Isaacs [15]).

Creating a blog as a part of the educational process, can solve such **tasks** as *forming informational, communicative, and sociocultural competencies of students, expanding information space of the educational process, organizing extracurricular work on the subject, publishing creative works, forming the bases for correct cultural and safe behaviour in the network, improving communicative and technological skills* [11].

The modern classification of educational blogs is widely described in methodological literature. A blog can be created for free on one of the blogging platforms, such as Blogger, LiveJournal or Tumblr, using ready-to-use layouts and templates. Blogs are usually dedicated to a certain topic and include entries on various subjects.

First of all, we should define the term “blog”. A blog (or web log) is an online journal or diary on a website, the main content of which is regularly updated with adding posts, images or multimedia. Blog pages can contain links to Internet resources and integrated external applications such as flash videos, news feeds, simulators, tests, gadgets, mini-applications, etc. Gadgets (widgets) are mini-applications created by software developers as support tools. There is a quite broad range of gadgets in the Internet, from which you can choose those that could be useful both for teachers (moderators) and students. Among those related to learning a foreign language are, for example, “Translator”, “Holiday Calendar”, “Aphorism of the Day”, “Useful Links”, Pinterest, Fluent U, Cramberry, BX language acquisition, Barabook, Urban Dictionary, Fluent U, Conversation Exchange, MosaLingua, etc. Characteristic features of blogs include short posts with time-sensitive content, sorted in reverse chronological order (the last entry on the top).

The main and the most significant difference between a blog and a website is its interactivity. In a blog, students can communicate with each other and with the teacher in the extracurricular time via external applications integrated on a gadget page through a chat or video conference. Communication can be further performed through publication of comments, which, in fact, resembles forums. Blog readers (students and teacher’s colleagues) can write comments to each message posted by the blog moderator on blog pages. In addition, the moderator can provide online tutorial or give advices, organize a joint online work on a project or study. We should further note that a blog differs from a classic website primarily by the ease of its creation, since the user does not require any knowledge of HTML-layout, design, or network marketing skills needed for a website promotion. It is very easy to make changes to a blog, even though a smartphone, as well as to add new modules due to an “open source” philosophy. According to Steve Lee and Melis Berry, the occurrence of web 2.0 technologies allowed to shift the focus from the technology and media to communication and cooperation, which by itself is the goal of education [13].

### **3 Integration of an educational blog as a Web 2.0 technology tool in a foreign language teaching system**

Since today an educational blog, as was noted above, presents an innovative teaching/learning resource, at the stage of learning a foreign language (local language

of the country of study) we conducted a teaching experiment in groups of foreign students at technical higher education institutions (<http://rusdiliukraina.blogspot.com>). The experiment demonstrated effectiveness of this approach as an optimal way of teaching electronic communication to foreign students, as a new form of their self-actualization. In view of the fact that a blog also provides tools of synchronous and asynchronous communication [16], such technological environment of learning also contributes to overcoming the communicative barrier that a foreign student faces in interpersonal communication. Exemplary screenshots of educational blogs are provided in Figure 1.

Integration of this educational environment into the process of foreign language teaching includes a number of advantages, as was shown by the results of our teaching experiments. Introduction of educational blogs in the educational process also contributes to optimization of this process, enhancement of foreign student's motivation and development of cognitive activities, formation of skills of independent/unsupervised work and creative thinking [1]. Optimization of foreign language teaching and learning is achieved through the use of special functions of an educational blog which allow not only to realize the general didactic principles, including *visual aids, accessibility, systematicity and consistency, developmental and educational character of education*, but also the special functions of teaching: *social, communicative, informative and administrative*.

The teacher who also performs the blog moderator functions, works with students remotely, posting on the page a number of tasks for independent and group work, tests for self-examination.

In the course of the teaching experiment, it was observed that one of the main advantages of using an educational blog in foreign language teaching is the possibility to place a set of educational documents for the student in a separate section of the blog. Such documents include the curriculum on the subject, individual and grade-based educational programs, system of grades, teacher's consultation schedule, homework assignments, supplementary materials for specific classes, recommended sources for independent student's learning (reading and listening, for example, podcasts and feature stories), links to information, reference and educational online resources, links to online tests on the topics studied within the scope of an independent student's work (for example, after finishing some topics on Grammar, students have the opportunity to check their knowledge by passing an online test).

An important role in a blog-based learning belongs to the use of google-forms based on which questionnaires or tests can be created, to reinforce the material studied. Students can answer the proposed questions both offline and online. Comments of group members in this format help the teacher to quickly respond by making changes, corrections and adjustments to the educational material. Publication of questionnaires and on-line tests allows to track the learning success of each individual student and the entire group within a scope of the topic studied.

A significant part of a blog is allocated to additional, supplementary materials designed to enhance lesson materials. Thus, for example, within the scope of the teaching experiment, use of educational films and cartoons, audio files, and video clips caused a lively and active discussion in the group of students.



Fig. 1. Exemplary screenshots of educational blogs

It was observed that the educational blog contributed to the formation of student's skills of independent work, enhanced student activity, increased motivation, activated self-control during the learning process, student's motivation to independently find the necessary information. Accordingly, the level of student's interest correlates with the amount of time spent on homework, projects, etc. Thus, improvement in the quality of tasks performed was observed, since the student was not limited by the timeframe of the lesson.

In our opinion, an educational blog helps to expand the educational space, as during the lesson there was not enough time to pay attention to each student and answer all students' questions, while the "blog lesson" allows students to work in a free mode, without any strict time limits, and to learn material at own pace.

In addition, an educational blog provides an opportunity to reorganize extracurricular activities of the educational process participants. Various slide-shows, summaries and discussions of conference talks, thematic evenings and concerts, presentations, reports about events happened in a student group or during classes, writing essays, exchange of useful links – all this improves the skills of working with information and communication technologies, promotes the development of communicative and technological skills and broadens student's mind.

The teacher works with students offline, giving them freedom in performing their tasks, but at the same time directing, controlling and correcting the process of their foreign language learning which undoubtedly contributes to intensification of the educational process.

In addition, blogging leads to optimization of organization of students' independent work [10; 12], because blog sections contain necessary for students information in the form of links, texts, finished educational materials, databases, based on which students can accomplish both independent and individual work.

Our study showed that blog-based learning provided students with the opportunity to manage their learning activities, publish their own thoughts and demonstrate understanding of educational material. It also broadened the tasks to be performed beyond the educational process and the "teacher-student" relationships, allowing everyone to rate and comment on their activities. Blogs also provide students with an opportunity for individualization, increase their interest in the learning process, as novel technologies belong to motivating factors in the learning process. In our study, such motivation was not only the result of technological opportunities, but was also related to the fact that students could write about what was important for them personally.

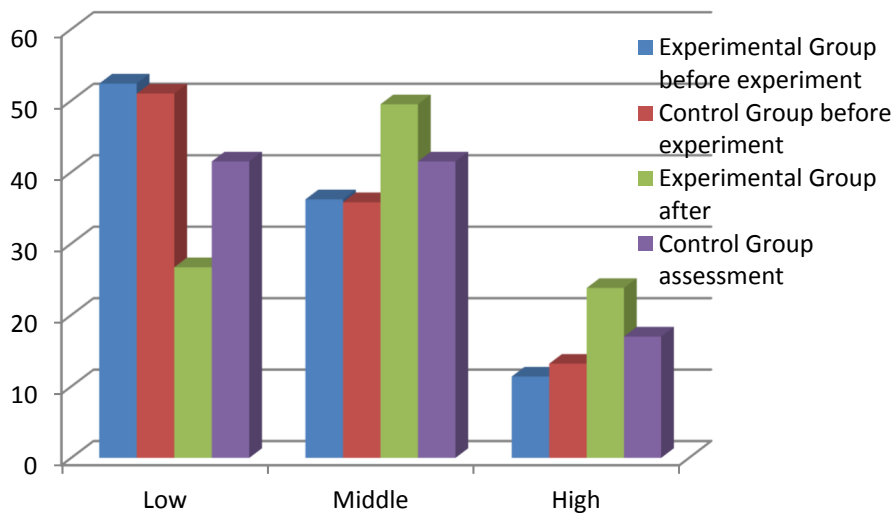
Thus, after organizing and preparing the teaching experiment supported by dedicated pedagogical technologies, we conducted a survey of the level of foreign language communicative competence of foreign students at a number of technical higher education institutions. The data obtained during this experiment were analysed statistically using Pearson's chi-squared test and Fisher's exact test. Table 1 and Figure 2 show improvements in the learning success in the experimental group vs. control.

The results obtained show significant changes achieved in the experimental group compared with the background level. The experimental group achieved a high level of foreign-language communication and technological skills and developed professionally

significant personal qualities. In the control group, which learned foreign language according to the standard scheme, the level of foreign language communicative competence increased by only 4.28%, compared to 14% in the experimental group.

**Table 1.** Changes in the level foreign language communicative competence of foreign students in the experimental and control groups (% of the total)

Level	Control group (106 participants)				Experimental group (105 participants)			
	Stage of the experiment							
	Ascertaining		Control		Ascertaining		Control	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
High	14	13.2	18	17.0	12	11.4	25	23.8
Satisfactory	38	35.8	44	41.5	38	36.2	52	49.5
Low	54	51.0	44	41.5	55	52.4	28	26.7



**Fig. 2.** Comparative histogram of changes in the level of foreign language communicative competence of foreign students at technical higher education institutions in the experimental and control groups

These results suggest that an educational blog creates an alternative, auxiliary learning environment providing beneficial effects for student success.

## 4 Conclusions

In conclusion, we must emphasize that the above mentioned Web 2.0 technology tool – an educational blog – proved to be effective in optimizing foreign language teaching, in view of its multiple features and advantages, such as:

- hierarchical structure of the blog providing comfort and availability of work in the blog environment;
- function of translation of information in foreign language posted in sections of the blog, which allows students to view information in their native language;
- widgets and gadgets placed on the blog pages (various external applications – blog chat, calendar of events, etc.), links to information and reference Internet resources (online dictionaries, Google translator), links to training Internet resources (Webquests, optional distance education courses, podcasts, etc.) helping foreign students to navigate while working on a blog;
- creation of a micro-social environment contributing to the establishment of a trustful, accommodating relationships between the teacher – moderator of the blog – and students from different national groups and of different temperaments;
- opportunity to conduct consultations in different communication modes (both online and/or offline);
- co-authoring of the blog enhancing the level of motivation of students with this form of education;
- opportunity to use forms, methods and techniques of cooperative learning during the learning process, as well as integrate tests into the relevant sections of the blog by the moderator;
- technical possibility to place the most optimal for the modern educational process form of presentation of the educational content (“three in one”: text, audio/video, graphics), etc.

Therefore, didactic properties of Web 2.0 technology tools, in particular the educational blog, contribute to organization of innovative management of educational activities of students, allowing to create a new, alternative, auxiliary educational environment taking into account individual capabilities and characteristics of each participant in the educational process. In our opinion, integration of open educational blogs in the process of education, should lead to the creation of a unique learning blogosphere, in which all participants of the educational process will be able to obtain necessary information, communicate, jointly create a database, exchange ideas, improve communication and technological skills.

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