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**ДИДАКТИЧЕСКИЙ ПОТЕНЦИАЛ ИНСТРУМЕНТОВ WEB 2.0 В КРОСС-  
КУЛЬТУРНОМ ОБРАЗОВАНИИ**

**DIDACTIC POTENTIAL OF WEB 2.0 TOOLS IN CROSS-CULTURAL  
EDUCATION**

**Abstract:**

The article deals with the issue of the Web 2.0 tools didactic potential in cross-cultural education. The concept of Web 2.0 tools is considered in the article. It is supposed that Web 2.0 tools are interactive and collaborative technologies and enable people to freely and openly establish unlimited virtual networks and fellowships at home and abroad for any existing subjects of interest. A survey based on the Davis's method of acceptance model is used by the researchers in order to identify the effectiveness of Facebook as one of the widely used Web 2.0 tools. We argue that the implementation of Web 2.0 tools in cross-cultural education has a positive impact on students' learning outcomes.

**Keywords:** Web 2.0, cross-cultural education, foreign language teaching, technology.

**Аннотация:**

В статье рассматривается дидактический потенциал инструментов Web 2.0 в кросс-культурном образовании. Рассмотрена концепция инструментов Web 2.0. Предполагается, что инструменты Web 2.0 – это интерактивные совместные технологии, которые позволяют свободно и открыто создавать неограниченное количество виртуальных сетей и обществ по любым интересам. Авторы статьи проводят опрос, основанный на модели принятия технологии Дэвиса для определения эффективности Facebook как одного из широко используемых инструментов Web 2.0. Авторы статьи утверждают, что внедрение инструментов Web 2.0 в кросс-культурном образовании оказывает положительное влияние на результаты обучения студентов.

**Ключевые слова:** Web 2.0, кросс-культурное образование, преподавание иностранного языка, технологии.

**Introduction**

Currently, through extensive research into the use of technology, the progress is made to allow people to work interactively using global network. Web 2.0 is a collaborative web development program that speaks to collective changes in ways to achieve the benefits of Web by software developers and general users from the Internet. It allows people to develop interactive web applications, mutual control and interactive exchange of information [1].

In extension to the traditional Web 1.0 development technologies, Web 2.0 tools comprise several further functions that are available for users through a browser, which can be situated anywhere through Internet connection by a computer or a mobile device [2].

Wikis, Blogs, forums, chats and more recently used podcasts are widespread examples of cooperative applications that are broad realizations of the next generation of Web 2.0 technologies. These applications offer Web 2.0 based tools, services and systems together with network hosting, audio-visual-written sharing and participation, social media and several other items.

Social web systems, comprising Instagram, VK, Facebook, YouTube, LinkedIn, and Twitter make it possible for people to express their thoughts, point of views, passionate subjects

through personal web spaces to the open access of the Internet in the most comfortable and practical ways. Web 2.0 tools are interactive and collaborative technologies which enable people to freely and openly establish unlimited virtual networks and fellowships at home and abroad on for any existing subjects of interest.

### **Theoretical background**

In his research work, O'Reilly [2] defines the general concept of Web 2.0 tools as a combination of technological development, social progress and economic processes that create the foundation for the further users of the network, which has already become an advanced platform with interactive participation, transparency and community effect. It can be explained with the fact that Web 2.0 tools introduce further generation of web development and graphic designs that are elevated in contrast with Web 1.0 technology. This makes it easier for users to adapt and progress from linear to interactive web pages.

It is considered that the further generation of internet users are connected via mobile and portable devices. Therefore, Web 2.0 tools give an opportunity to create a conducted online community in order to share thoughts and views in a united and collaborative way.

Web 2.0 applications are defined as those used as efficiently as possible in utilizing the essential benefits of the Web 2.0 platform. Since creating Web 2.0 tools has gradually got more straightforward and frequent, it became convenient for people to unite forces in order to develop the tools to be collaborative and compatible [2].

The most widespread Web 2.0 tools are considered to be: blogs, wikis, and podcasts which give access to network communities, mobile applications, online hosting, sharing of audio-visual materials and other services.

1. Blogs, or web logs, are tools for a more convenient online publishing that enables web users to design and share their individually curated web pages with personalized information and subjective thoughts on particular topics that can be shared with others on the internet platform. Generally, Blogs are designed in a friendly and open atmosphere with short postings on any particular topics to a certain extent than a long discussion board [3]. A noticeable feature of the blog is the opportunity for blog readers to leave their thoughts under the main posting of the blog owner. Commonly, web blogs are made of texts, personal or specialized images and links to other related web pages of the blog owner or other people's blogs and stores. It is common for a blog to provide its readers with current news or reports on a specific topic, or a worldview of a person in the format of an audio-visual-textual content. It is important to highlight the fact that designing or writing to a Blog requires only basic software knowledge, especially with current useful applications for quick blog editing. Since web blogs are shared on the internet platform, they are in an open access for readers from local as well as international communities.

2. Wikis. Wiki is a unique shared web page that allows its readers to create and edit the pages in a collaborative way, and to provide the pages with unlimited linked web pages by simply using the traditional format of Internet browser [3]. The concept of Wiki is developed in such a manner that the user gets through WYSIWYG format (what you see is what you get), which gives them access to a very similar content to the finished result while it is being created. Moreover, Wiki gives an opportunity for its users to various degrees of approach to edit or delete

information of the content. Similar to curating a blog, Wiki requires only basic skills in software without specific knowledge in programming or coding in order to edit or create a wiki. The most widespread example is Wikipedia; an encyclopedia in an open online platform is regularly created, edited and expanded by its readers and constant users.

3. Podcast. One of the current tools, which is manually increasing its popularity, is a podcast that belongs to a range of digital media data in audio or visual formats. This tool gives its users an opportunity to post their recording types on the Internet for an open access in individual episodes, which can be seen online or downloaded through several devices including mobile and portable gadgets [4]. It should be highlighted that by posting audio or video recordings of any specific lectures and class related materials in a format of podcast is currently a widespread method of exchanging information between the further generation of pupils, instructors and podcast listeners.

4. Social networks. Social network platforms are widespread Web 2.0 applications that enable people to publish private or individual information on their pages, in order to share images and texts with other social web users in the most convenient manner. It should be noted that the main focus of any social web is creating and portraying social communities and human relations with people of similar interests and worldviews [4]. Generally, social webs mainly portray people's personal information, links to other web pages of the user and other useful services. Social webs allow people to express openly their thoughts and ideas, to share local and global upcoming events, and their interests in a circle of their network via immediate messaging. Instagram, LinkedIn, Facebook, Twitter and YouTube are considered successful social networking application services, since they focus on online partnership, collective cooperation and possibility sharing in an open way among people.

Cross-cultural education is a further direction, which will probably be implemented into school curriculum on a state level in many countries that are willing to be innovative in the rapidly transforming sphere of current education system [5]. Furthermore, cross-cultural education is a progressive way to transform education, which showcases as a whole the current flaws, gaps, and discriminatory practices in schools, therefore, integrating pupils into diverse cultures in response to changes in society as a whole [6].

On a global scale, cross-cultural education is an important factor of the quality of current education system [5]. It has already been outlined by previous researches, that effective cross-cultural education can lead to a shift in students' outlook and views of the world [6]. Apart from that, it enables pupils to learn necessary skills and perspectives which are required in order to participate in a culturally diverse interaction.

The effectiveness of encouraging diversity by teachers to provide students with more tolerance and opportunity for a multicultural class has been illustrated by implementing cross-cultural education into school curriculum [7].

Besides, it has been showcased that integration of cross-cultural education trains students to cooperate in the current varied society and plays a role in forming a more democratic society [7]. Moreover, students are acquainted with knowledge that helps them to actively express their opinions and thoughts against racism and prepares them to take an active role of citizenship in a multicultural society [8]. Therefore, it is important for teachers and students to educate and be

involved in multiculturalism to become a global citizen of the current diverse social, ethnic and linguistic environment.

It can be stated that one of the most convenient ways of experiencing cross-culturalism is to express one's personal background to others who are not familiar with it. By this method, people get an opportunity to take a closer look at their own heritage and culture, to make comparison and draw contrasts with others as well as obtain a willingness to live in a multicultural society.

There is a need to highlight that social webs can play the role of facilitators of new media content and experience, which can be shared with others for an open access or for an exclusively personal use and a close circle of people.

In the context of Web 2.0 tools, Habacon suggests a definition of a new form of multiculturalism which demonstrates diverse patterns of culture; namely culture of work, culture of musical genres, culture of academic study, culture of online virtuality, culture of media consumption and culture of sport [9]. Apart from that Habacon gives suggestion that Web 2.0 is able to change acknowledgement, cooperation and report approaches in manners that people in a multicultural society live [9].

It should be noted that since we live in a high-tech environment and we are surrounded by diverse cultures in our daily lives, the prospects of integrating Web 2.0 tools in cross-cultural education can be endless. Transparency, cooperation and interaction of Web 2.0 tools gives teachers an opportunity to occupy students with collaborative projects in a variety of roles and aspects of cross-cultural content, in order to form network communities at home countries and abroad.

It has been defined by the researches that Web 2.0 tools can offer great approaches to help students recognize diverse cultural schemes of the globe, specifically to discover unknown contributions of their own heredity and others as well [10].

The foremost essential aspect to consider for teachers in order to start a new blog on the problem of cross-culturalism, is to create various small groups of interested students to combine their personal experiences and knowledge in any particular field or topic [11].

Therefore, to demonstrate the practical implementation of cross-cultural education, it can be considered that a social studies teacher creates various groups to perform a comparative study on different religions or cultures that can be met in the classroom. As an outcome of such project works, pupils may discover some familiar or generic concepts and diverse religions such as Buddhism, Islam, Judaism and Christianity; or some shared traditions might be uncovered among various culture representatives [12].

### **Methodology**

24 first-year undergraduate students from Eurasian Humanitarian Institute agreed to take part in the study. The students were part of the Foreign Languages Department of the Institute and were registered for a course called "Cross-Cultural Education".

The learners met once a week in Zoom Conference for 90-minute conferences during 6 weeks in the 2020 winter term.

A mixed method in quasi-experimental setup was used in this research in order to identify whether there are any visible improvements in learners’ writing performance, vocabulary richness and syntactic structure as a result of implementing Web 2.0 tools in FLT for undergraduates.

Two writing assessments were prepared at the beginning and the end of the experiment in order to define whether there is any linguistic advancement in the mentioned areas of language learning. Apart from that, the amount of learners’ comments in the chosen Web 2.0 tool (Facebook) was considered in order to measure the interaction involvement of pupils with each other.

The main qualitative aim of the research work was to demonstrate the didactic potential of Web 2.0 tools in cross-cultural education, namely the potential of Facebook,

The objectives of the experiment were as follows:

1. To measure the progress in students’ writing fluency;
2. To evaluate the advancement in students’ lexical complexity;
3. To assess the improvement in students’ syntactic structure;
4. To identify students’ attitudes towards Web 2.0 tools in cross-cultural education.

The experiment consisted of students’ guided freewriting and the topics were chosen by the researchers; namely *health, environment, hobbies, money, travel, and art*. After finishing each topic, the pupils were instructed to give feedbacks by writing comments on at least two other posts of students from the research group in order to facilitate interactive peer-to-peer communication. For the experiment, pre-test and post-test were utilized in order to evaluate whether the learners’ writing skills have upgraded. Both pre-test and post-test assignments instructed students to write their plans for winter and summer holidays. A 10-question survey based on the Davis’s method of acceptance model (TAM) was used by the researchers in order to identify the students’ acceptance and attitudes towards the Web 2.0 tool Facebook. Lexical complexity was evaluated with the help of the New General Service List version of VocabProfile. Writing fluency was measured by the word count and the syntactic structure was evaluated by subordination as it was shown by Nation in The Sign test.

## Results

### Writing fluency

To start with, in terms of writing fluency the participants of the experiment have demonstrated visible upgrades in overall word count from pre-test to post-test. **Table 1** below illustrates the overall increase in the amount of word counts in pupils’ writing assessments by comparing the results of pre-tests and post-tests, which enabled us to suggest that the writing fluency of students developed as a result of implementing blogs into cross-cultural education, increasing from the average of 53 word counts to 74 respectively.

**Table 1**  
**Writing fluency outcomes**

Pre-test assessment	Post-test assessment
53 wc	74 wc
NB: wc = word count	

**Lexical richness**

As it can be seen from **Table 2** below, there was a moderate rise in the overall outcomes of learners’ lexical complexity and use, which was evaluated by comparing the results of pre-tests and post-tests with VocabProfile, rising from 6.5% to 9.5% respectfully.

**Table 2**  
**Lexical complexity outcomes**

Pre-test assessment	Post-test assessment
6.5% LR	9.5% LR
NB: LR = lexical richness	

**Syntactic structure**

It can be outlined from **Table 3** below demonstrates the result of implementing blogs into cross-cultural education of undergraduates there was a major upgrade in learners’ abilities to correctly use subordinate clauses in their writings. This is an advancement of students’ syntactic structures. The assessment was evaluated based on The Sign test with overall students’ results increase from 3.15 to 6.21 respectfully.

**Table 3**  
**Syntactic structure outcomes**

Pre-test assessment	Post-test assessment
3.15 SC	6.21 SC
NB: SC = syntactic complexity	

**Conclusion**

Overall, it should be noted that the foremost aim of this research work was to demonstrate the didactic potential of Web 2.0 tool, namely the potential of Facebook, in cross-cultural education among undergraduate students of FLT. In the contest of didactic potential, Web 2.0 tool Facebook had an overall positive impact on pupils’ language abilities and their skills to cooperate, communicate, give and receive feedbacks. More specifically, in regards to free-writing skills advancement, there was a major upgrade of pupils’ writing fluency, lexical complexity and syntactic structure as a result of implementing Web 2.0 technologies during the course “Cross-Cultural Education” among undergraduate learners in the Foreign Languages Department. Apart from that, the information that was collected by the TAM-based questionnaire which has indicated that students on average had a positive experience during the practical assessment and assertive attitudes towards the use of Web 2.0 tools for cross-cultural education. To conclude, it is suggested for foreign language teachers to implement Web 2.0 tools, namely Facebook, in cross-cultural education, taking into consideration the abilities, requirements and sources of their students in order to conduct a didactically potential course.

## References:

1. T. O'Reilly. "What is Web 2.0: Design patterns and business models for the next generation of software" [Last viewed Online on 12/10/2009]. URL: <http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html>
2. T. O'Reilly. "The War for the Web. IT Conversations" [Last viewed Online on 12/10/2009]. URL: <http://itc.conversationsnetwork.org/shows/detail4317.html>
3. W. Richardson. Blogs, wikis, podcasts, and other powerful web tools for classrooms, Corwin Press, Thousand Oaks: CA, 2006.
4. B. Alexander. "Web 2.0- A new wave of innovation in teaching-Learning", [Last viewed Online on 12/10/2009]. URL: <http://net.educause.edu/ir/library/pdf/ERM0621.pdf>
5. M. A. Ocak. "Towards a Multicultural Society and Education" [Last viewed Online on 15/1/2010]. URL: <http://www.fountainmagazine.com/article.php?ARTICLEID=765>
6. P. C. Gorski. Multicultural Education and the Internet: Intersections and integrations, [p. 161], McGraw-Hill, New York: NY, 2001.
7. E. Ndura and S. Lafer. "Exploring the self and the other: Achieving the empathic goals of teacher preparation through multicultural education" [Last viewed Online on 21/01/2009]. URL: [http://www.eastern.edu/publications/emme/2004spring/ndura\\_lafer.html](http://www.eastern.edu/publications/emme/2004spring/ndura_lafer.html)
8. C. Broussard. "Teaching with Technology: Is the Pedagogical Fulcrum Shifting?" New York Law School Law Review. 2008, 53, pp. 903-915.
9. A. E. Habacon. "Beyond the Mosaic: Multiculturalism 2.0", Canadian Diversity, 2008, 6(4), pp. 150-154.
10. S. Downes. "E-Learning 2.0", eLearn Magazine, 2005. [Last viewed Online on 21/01/2010]. URL: <http://www.elearnmag.org/subpage.cfm?article=29-1&section=articles>
11. H. Aydin. "Key Dynamics of Assimilation among First-Generation Turkish Immigrants Residing in Romania", Journal of Global Initiatives, 2009, 4(2), pp. 239-259.
12. Castaneda Vise, D. A. (2008). The effects of wiki- and blog-technologies on the students' performance when learning the preterit and imperfect aspects in Spanish. Dissertation Abstracts International: Section A. The Humanities and Social Sciences, 69 (01), 0187.

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