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## “Paperless” Foreign Languages Teaching

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### Abstract

The paper is focused on the integration of the “paperless” technology in English for Specific Purposes and General English teaching-learning process of power engineering students. This technology is an efficient way to realize the functions of the e-learning environment (Moodle, blogs, etc.) of a modern institution of higher education. It creates the conditions for independent acquisition and quality mastering of necessary learning information which can be used at foreign language lessons. The use of electronic teaching materials based on hypertext and multimedia tools clearly demonstrated the advantages of this technology compared with traditional textbooks since it allows revealing the didactic potential of information technologies.

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**Keywords:** “Paperless” teaching; hypertext; hypertext technologies; Internet; e-learning environment; information technologies; educational blog.

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### 1. Introduction

Informatization and computerization are phenomena inherent to all spheres of modern society. The use of information and communication technologies is becoming an integral part of the program of any educational institution. E-learning environment of an educational institution is a system which equips the students with a new tool for competence formation and development of a modern specialist (Bakalo & Shishkovskaya, 2012). Polat (1999) defines the e-learning environment “as a combination of conditions providing the teaching”. From our point of view the principal function of the e-learning environment is the arrangement of conditions for independent acquisition and quality mastering of necessary information which can be used at foreign language lessons. Others but not less significant functions are information-methodical, communication-training, motivational and monitoring-evaluation ones. For successful implementation of the mentioned above functions of the e-learning environment in

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the conditions of foreign language training of students studying at an engineering institute of higher education we suggest the integration of “paperless” technology in the current educational process.

Modern students can't imagine their daily life without using different digital devices such as personal computers, mobile phones, iPads and tablets since they have become the main sources used to obtain and store information. Therefore, the main objective of the teachers is to find ways and tools which allow them to maximize the potential of these devices to improve the efficiency of the educational process. The “paperless classroom” technology is a relatively old one widely spread abroad which supposes to use only computer-based devices by complete absence of teaching paper materials. Thus, the main objective of the article is to study and show the advantages of “paperless” education compared to the conventional EFL teaching.

## 2. Methodology

The following advantages of the “paperless” classroom were revealed by Carley (2014): flexibility and adaptability of the lessons (students can start and complete their tasks at any time convenient for them; the availability of various resources (unlimited number of people can use the same source of information); effort and time minimization (students are able to send their home tasks on-line, paper and time-saving and etc.); cooperative students work (by the use of chats, forums, team projects and etc.); self-assessment and self-control (self-checking, self-test, self-testing, self-verification).

It is rather often when the teachers are dependent on the paper books. However, there is a tendency when the information in these paper books gets superseded and the students can find necessary and new information in the Internet. Moreover, the majority of publishing houses sell electronic versions of their published books and it is easier, cheaper, eco-friendly, and more convenient to buy these versions. It is to be noted that first of all by the organization of educational process with the use of “paperless” educational technology it is necessary to take into consideration the principle of pedagogical applicability concerning the use of information-communication techniques in education. The majority of teachers have come to the conclusion that “reasonability of computerization is determined by the level of the achievement of pedagogical, methodical and economic efficiency compared with the traditional forms of education” (Reeves, 1994, p. 5). It means that every teacher who is going to use modern information technologies within the framework of his/her discipline should, firstly, know their application technique, secondly, have satisfactory and clear methodical grounds of such integration, thirdly, be able if necessary to vary and adapt the existing techniques of information technologies taking into account the specific of his/her training course.

“Paperless” EFL teaching technology includes different methods of foreign language teaching. These are mainly structural methods (audio-lingual method) and interactive methods (communicative language teaching, community language learning, language immersion, etc.). The subjective of the teaching, besides excellent knowledge of English, is to get rid of drags such as dependence on the place, time, and paper textbooks, thus, increasing the students' motivation to English learning. The use of the “paperless” technology also leads to students' independence in self-study environment which is very important taking into account the transition to the autonomous character of the learning.

Information education technologies used by “paperless” classroom paradigm intensifies the teaching individualization, changes the character of interaction between the students and teachers, turning them into partners of information search and transformation of up-to-date information. Using this teaching paradigm “...the traditional paradigm as the paradigm of knowledge transfer should be turned to the paradigm of knowledge processing and construction” (Sidorenko, 2010, p. 117).

## 3. Research

There are several ways to create digital foreign language lessons. In order to succeed in the ‘paperless’ classroom, some terms should be kept. First of all, all the participants of educational process have to be equipped with a digital device with the Internet access. Secondly, it is necessary to create the platform for publication, storage and exchange of teaching information and material. As the example of such platforms can be used blogs and Moodle (Modular Object Oriented Developmental Learning Environment). Let's consider both platforms. Blog is the platform which is easy to create, it is free of charge and at the same time it allows students and teachers to carry out educational activities. Moodle and Blogger contain various teaching, applied sources, and instrumental media,

including communication ones which allow to initiate teaching interaction of students being constantly in touch as well as educatees separated by space and time. The performance capabilities of Moodle resulted in the quality change of the content of electronic text books. The variety of Moodle and Blogger resources open up new possibilities to present the teaching material in comprehensible, interesting manner and the use of computer environment to realize communicative approach in the foreign language learning. We think that modern technologies such as virtual discussion, role-plays and business games, case-study, project method, individual education training), advance self-study are able to realize their educational potential in specialized educational information communication environments and platforms. Moodle and Blogger can be used for creation, development and arrangement of teaching and methodical materials in the Internet and also the organization of teaching process.

We suggest using electronic text books and complexes as the main teaching materials of “paperless” education developed on the basis of hypertext. The creation and development of e-learning resources is concerned with the necessity to improve considerably the quality of the foreign language teaching in an engineering institute of higher education. To achieve this goal, the software product must possess academic completeness, didactic value and effectiveness (Sokolova, 2012).

Electronic text books and teaching aids developed on the hypertext technology offer a number of advantages: first of all, possibility to structure and arrange the learning information in hierarchical manner by the outer “unload” of the text. Non-linear learning information presentation contributes to the implementation of the visualization principle: the transition by links allows to study different concepts, notions and subjects by means of video-materials and graphic images. It is obviously, that information visualization leads to the increase of students’ interest and stimulates them to study new material. Moreover, the students have a good opportunity to build up their own individual track of material acquisition. Considering the advantages of a hypertext many pedagogues emphasize the information modularity and the possibility of its sharing by all participants of the educational process.

#### 4. Results and discussion

On the basis of the analysis of the results of “paperless” education technology approval in EFL teaching, we have come to the conclusion that the main advantages of this technology are: students’ active stand during the educational process, interactive communication with the e-learning environment, the variety of forms and modes of behavior, flexibility of training technique with a computer, the possibility to adjust and control learning rate and intensity, to achieve load and optimization and information intenseness, and to update information. It is to be noted, that the use of “paperless” education technology enhances the teacher’s potential by offering more freedom for his/her creative search of new training techniques and technologies involving students in the creative process. Moreover, the use of “paperless” education technology increases students’ motivation in foreign language learning, enables the combination of classroom and extracurricular work on the interactive basis, which in turns results in the improving of language preparation quality of the graduates in the framework of the General English and English for Specific Purposes course.

#### 5. Conclusion

In conclusion, it is to be emphasized that “paperless” education technology based mostly on electronic text books is not the educational panacea but only a tool contributing to the modernization and enhancement of the efficiency of the educational process. As once Heick (2012, p. 1) said, “There is more information available to any student with a smartphone than an entire empire would have had access to three thousand years ago.” Therefore, the main objective of a teacher is to teach modern students to use as much as possible information technologies for efficient solution of the learning problems.

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