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SOCIAL MEDIA AS A TOOL OF CREATING PERSONAL LEARNING ENVIRONMENT

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Abstract

One of the keys to educational success in the changing open world education is the creation of personal learning environment on the basis of social media. In the past several years social media have come to constitute an increasingly important context of life of every person. This article examines the trends of implementing a Personal Learning Environment scheme in institutions of Higher Education with the help of social media. The main concern of this descriptive research study is to analyze the concepts of personal learning environment and social media, overview the opportunities and advantages of social media in education, to present general guidelines for creating personal learning environment on the basis of social media. The authors' attention was also focused on the description of online instruments that can be used for developing language learners' competence, and overviewing the results of the experience in this field and to describe the impact that personal learning environment had on students' educational achievements. An attempt is made to describe the approaches to the definition of the concept of personal learning environment. Based on the results of the study, the authors propose general guidelines for the implementation and use of social media resources in a personal learning environment scheme.

Keywords: Online educational tools, PLE, social media.

1. Introduction

The ideas and opportunities of academic mobility and distance education has made a huge impact on all spheres of higher education all over the world. More and more students are jumping at the chance to spend a year or two studying abroad, exploring new culture and as a result obtaining diplomas of two different universities. The most progressive universities are ready to open new double diploma programs. In this regard, a great number of practicing teachers of higher educational institutions admit that they face serious difficulties in organizing the process of teaching distant students. There appears a great need in new methods and techniques of organizing the educational process - methods of introduction of new material, training skills, evaluation of academic results, methods of educational interaction. One of the keys to educational success in the changing open world education is the creating personal learning environment on the basis of social media. In the past several years social media, especially such applications as Facebook, Twitter, YouTube and Wikipedia, WhatsApp, Telegram, and Instagram, which are part of what is known as Social Web 2.0, have come to constitute an increasingly important context where individuals live their everyday lives. "Social connections affect so many aspects of our lives that our argument that they can also be applied to education and learning should be no surprise" (King & Sen, 2013, p. 622).

2. Problem Statement

Nowadays the educational interaction is undergoing significant changes and tends to focus on the learner rather than on the teacher, it is becoming learner-oriented. The preferences of the learners, their convenience, their educational aims are affecting the educational content, methods, tools and forms of teaching. In this regard, teaching process is turning to helping, assisting learners along their own learning path. These ideas are highly popular among researchers such as Barber (Barber, Donnelly, & Rizvi, 2014), Gershunsky (1998), Mikhailov and Mikhaylov (2014), Moscovskaya and Masyukova (2016), Pidkadasistyi, Mizherikov, and Yusefavichus (2014), Shestak, Vesna, and Platonov (2014). Analysing the methods, tools and forms of modern higher education, we managed to identify the following tendencies:

2.1. The increasing popularity of non-formal forms of education

In recent years, the idea of non-formal education (home schooling, learning from the workplace) has been actively developed. This is mostly due to the proliferation and widespread use of open educational resources (MOOCs). According to Cross (2016) (futurist, a scientist who popularized the idea of electronic and non-formal education), only 10-15% of acquired knowledge is obtained from formal sources, and the remaining 85% is non-formal.

2.2. A high degree of self-organization of subjects of the educational process

The ideas of the effective time-management and self-management, the shift from external to internal control in education have become relevant in recent years. Students learning at their own pace are usually forced to multitask, often combining training with the implementation of research projects, or studying in different programs at the same time. The role of the individual in organizing their own

learning is rather significant. Moreover, learning can take place in different contexts and situations and might not be provided by a single learning provider.

2.3. New ways of accessing to educational materials and resources

Doing self-studies, learning distantly, students can't have the direct access to studying materials, lectures and libraries, they can't practice their skills attending practical classes and seminars. In order to make their learning process effective, the students are to be provided with alternative sources of information, should be involved into online individual and group practices and activities, should have the opportunity to collaborate with other learners and teachers.

2.4. Lack of training time

The aspect is closely related to the previous one. It involves the reorganization of the system of monitoring and assessing acquired skills and competencies, focusing on the final result in the form of demonstrated practical skills to effectively solve specific professional tasks.

In response to this problem, our study proposes to investigate the concept of a network education as a system and process and to set and describe its principles. It is obvious that the organization of the learning process, which is characterized by such characteristic features, requires new approaches, methods and tools. One of such approaches to the organization of the educational process in the framework of the implementation of individual curricula is a personal educational environment.

3. Research Questions

This research attempts to answer the following research questions: What is the general understanding of the term "personal learning environment"? What are the general guidelines for the implementation and use of social media resources in personal learning environment scheme?

4. Purpose of the Study

The main aim of the research presented in this paper is to describe the concepts of personal learning environment and social media, overview the opportunities and advantages of social media in education, to present general guidelines for creating personal learning environment on the basis of social media at higher education level, to overview the results of the experience in this field and to describe the impact that personal learning environment had in development on students' professional skills.

5. Research Methods

As the purposes of our research was to analyze and describe the concepts of personal learning environment and social media, overview the opportunities and advantages of social media in education, the main scientific method on which we based this research was the literature reviews. It helped us to observe the current approaches to the problem of investigation, to reveal the gaps in the research literature on the studied issue, to contextualize the current research, in line with best national and international practices. Our theoretical investigations were supported with the practical results, presentation of

experience and statistics, thus the methods of observation, survey and statistic evaluation of frequency and character of usage of personal learning environments, social media, learning management systems and Internet resources in the process of higher education in Russia, were used.

6. Findings

6.1. What is the general understanding of the term "personal learning environment"?

Based on Google's query analytics (Google Trends), the individualization and personalization of education is becoming the main direction of the modernization of education all over the world.

Personal Learning Environment (PLE) is considered as a set of objects of the educational process (content, forms, methods, means of training and educational communications), serving as a means of personalizing the student's personality (Slepukhin, 2014, 2016; Slepukhin & Lezhnina, 2015).

Although Kompen, Edirisingha, Canaleta, Alsina, and Monguet (2019) claim that there is no widely accepted definition of a Personal Learning environment, it usually refers to a group of Web technologies, and comprised of different tools based on social software which help users and learners manage the flow of information.

The main idea of a Personal Learning Environment recognizes that learning is a continuing process and seeks to provide tools to support it. It also recognizes the role of the individual in organizing their own learning.

Creating a personal learning environment and organizing an educational process based on it, contributes to its informal character, provides the opportunity to plan ahead, and ensures that students have access to a variety of contexts and sources. Thus, it responds to the challenges of the modern world and allows each student to move along the individual educational path, learning according to their personal interests and learning contexts.

The promoters of educational reforms on the basis of creating PLEs, state that due to it students are capable of choosing from several alternatives for capturing, storing, classifying, analyzing, creating, sharing and processing information, thus creating knowledge (Attwell, 2006).

A personal learning environment is a combination of both online resources and tools, as well as tools used offline. One of the most important features of a personal learning environment is the fact that the students are given the way of structuring their course content and tools, come to organize and manage data and content, as well as the access to new sources of information.

6.2. What are the general guidelines for the implementation and use of social media resources in personal learning environment scheme?

In 2013, Pearson Learning Solutions released the results of the survey "Social media for teaching and learning". Their results state that from 2012 to 2013 "social media in teaching has grown 21.3% and an inflection point has come, blogs and wikis still are more used than Facebook, because they provide a space to create larger contents (Pearson, 2013).

According to McLoughlin and Lee (2010), a self-regulated learner is responsible for managing and evaluating their learning styles, is capable of providing self-feedback and judgment. Personal educational

environment as a phenomenon is inseparable from such realia of modern education as network forms of the organization of the educational process.

Many institutions are experimenting with the use of social software tools in a more restricted environment as part of the curriculum. In this regard, the creation and effective functioning of a personal learning environment is impossible without the implementation of information educational environments that is provided by an on-line learning system - LMS - Learning Management System.

Thus, Learning Management Systems become the basis for building personal learning environment and provide all participants of the educational process with:

• access to curricula, access to professional databases, information and reference and search engines and electronic educational resources;

• assessment schemes, all types of classes, procedures for assessing learning outcomes;

• interaction between participants of the educational process, including synchronous and (or) asynchronous interaction via Internet.

Components of the personal learning environment on the basis of Learning Management Systems:

• a personal account of the student;

• personal accounts of the teachers;

• electronic educational resources (a database of electronic teaching materials; video lectures; educational courses and webinars; a range of educational courses in LMS; free access to resources; resources of professional, information, reference databases, social media tools).

In the current research we focus our attention on the effectiveness of the social media tools. Here is a description of the most popular and highly used ones.

In order to introduce and integrate the theoretical material into personal learning environment there are found to be effective such social media tools as vodcasts and podcasts, presentations Slideshare, Prezi and Scribd web service (Figure 01).

A podcast (podcast) is an audio file (audio collection) that its creator sends by subscription via the Internet. Recipients can download podcasts to their devices, both stationary and mobile, or listen to lectures online. Vodcast (Vodcast from video-on-demand, i.e. video on demand) is about the same as a podcast with video files only.

In order to integrate the vodcasts and podcasts to the educational process we recommend using the special software, such as Adobe Acrobat Connect Pro, Distance Learning System and others, which provides access to educational materials, organizing backward and horizontal links, etc. Adobe Acrobat Connect Pro service gives students and teachers the opportunities of meeting in virtual classrooms, organizing discussions and round tables with native speakers on the latest news and media events.

Figure 01.　Using podcasts as social media in a PLE

Presentations Slideshare, Prezi, Scribd web service used as data stores, especially presentations that allow the users of the personal learning environment to place PowerPoint presentations in Flash format. These services provide the user with the opportunity to show their presentations online.

The second set of social media tools used effectively as the components of the personal learning environment includes the tools which provide the users with the opportunity of practicing skills in the format of team work and joint group projects. Among such social media tools the most effective are Google services (Googledocs, Google Groups, GoogleForms and others), Mindmapping, virtual board technologies. These tools of personal learning environment are based on the cloud technologies, they help to organize open discussions, forums, and other types of online collaboration.

According to students' choice, one of the most popular online tools for collaboration is called Linoit, an online canvas, used for creating an interactive virtual board, where students and teachers can post ideas, memos, videos and photos. It appeared to be a highly effective for presenting the project work results, sharing ideas and reviews (Figure 02).
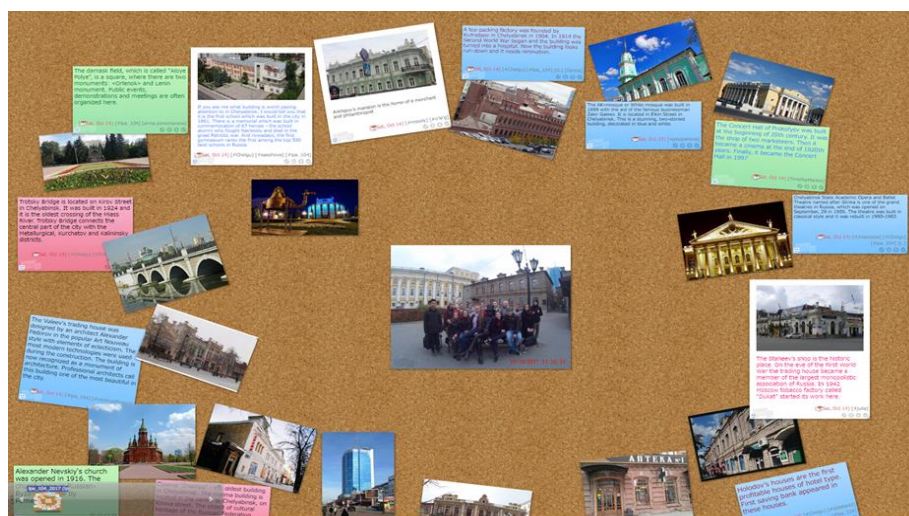

Figure 02.　Linoit involves the use of collaborative teamwork

6.3. What is the impact of personal learning environment on students' learning process?

In order to find out the trend in using social media tools among students the researchers conducted a research study in 2018 at Chelyabinsk State University. Data was collected through an online survey with the help of GoogleForms service. Four groups participated in the study with a number of 61 students.

The collected data was analyzed to find out knowledge of social media, participants' perceptions and attitudes towards social networking and the impact of personal learning environment on students' learning process.

The results of the survey state that 90% of students were familiar with social media varying at different levels; only 10% of students were not familiar with social media described.

There were thirteen social media tools presented to students in the survey. They were Facebook, Wiki, YouTube, Googledocs, Mindmapping, Linoit, Slideshare, Prezi, Scribd, LinkedIn, Twitter, Podcasting, and Instagram. The top five tools that students were informed about are:

- − Instagram (71% of votes)
- − YouTube (67%)
- − Podcasting (59%)
- − Mindmapping (48%)
- − Prezi (44%)

The respondents were mainly positive about their learning experience using PLEs during their study. In students' answers we read: "...the ability to use PLE promoted my self-management and strengthened my social interactions". Another participant says: "it (using social media in PLE) helped me to get acquainted with Web 2,0 tools." Almost 71 % of students reported that they were happy with using the Personal Learning Environment in their language learning course (Figure 03).

What is your general Impression of the Personalized Learning Environment in ESL course? (12345)

61 ответ
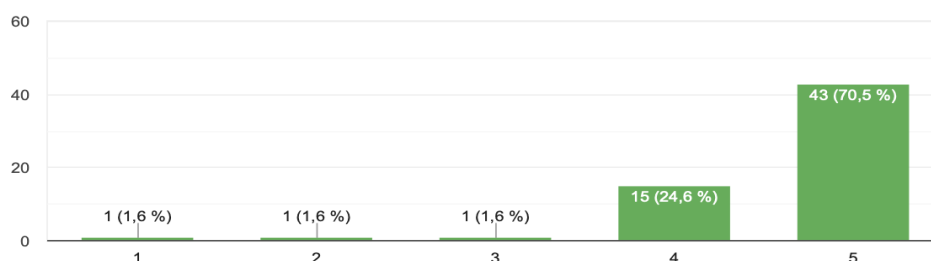
Figure 03. Students' general impression of the Personal Learning Environment

7. Conclusion

Here are some general guidelines for the implementation and use of social media resources in a personal learning environment scheme:

1.Encourage learners to meet their needs and interests.

2.Students should be encouraged to share information and interesting resources and links within a PLE.

3.Let the students build their own PLEs at their own pace.

4.Draw students' attention to new tools, guide and assist learners as they experiment with them.

5.Focus attention on the importance of supporting networks, as access to the Internet increases, it is easier to connect with other users and become part of a network.

References

Attwell, G. (2006). Personal Learning Environments – a position paper. Retrieved from http://www.knownet.com/writing/weblogs/Graham_Attwell/entries/6521819364.

Barber, M., Donnelly, C., & Rizvi, S. (2014). On the eve of the avalanche - Higher education and the coming revolution. *Education, 3*. Retrieved from http://vo.hse.ru/arhiv.aspx?catid=252&z=1890&t_no=1891&ob_no=1910.

Cross, J. (2016). Informal Learning 2.0. Retrieved from https://web.archive.org/web/20160218150233/http:/www.clomedia.com/articles/informal_learning_2_0.

Gershunsky, B. S. (1998). *Filosofiya obrazovaniya XXI veka: v poiskakh praktiko-oriyentirovannykh obrazovatel'nykh kontseptsiy* [Philosophy of Education for the 21st Century: in Search of Practical-Oriented Educational Concepts]. Moscow: Publishing "Perfection".

King, G., & Sen, M. (2013). The Teacher: How social science research can improve teaching American Political Science Association. *PS: Political Science and Politics, 3*, 621-629.

Kompen, R.T., Edirisingha, P., Canaleta, X., Alsina, M., & Monguet, J. M. (2019), Personal learning Environments based on Web 2.0 services in higher education. *Telematics and Informatics, 38,* 194-206.

McLoughlin, C. & Lee, M. J. W. (2010). Personalised and self-regulated learning in the Web 2.0 era: International exemplars of innovative pedagogy using social software. *Australasian Journal of Educational Technology, 26*(1), 28-43. Retrieved from http://www.ascilite.org.au/ajet/ajet26/mcloughlin.html.

Mikhailov, B. A., & Mikhaylov, S. V. (2014). Osobennosti razvitiya informatsionno-komunikatcionnoi sredy v sovremennom obschestve [Peculiarities of the development of the information and communication environment of modern society]. In *Aktual'nyye problemy teorii obshcheniya* (pp. 127-134). Sankt Peterburg: SPbSPU.

Moscovskaya, N. L., & Masyukova, O. V. (2016). Virtual'naya shkola: mif ili real'nost'? [Virtual school: myth or reality?]. *Vestnik Severo-Kavkazskogo federal'nogo universiteta, 3*(54), 170-173.

Pearson (2014). Social media for teaching and learning. Retrieved from http://www.edudemic.com/wp-content/uploads/2013/10/social-media-for-teaching.jpg.

Pidkadasistyi, P. I., Mizherikov, V. A., & Yusefavichus, T. A. (2014). Pedagogika: uchebnik dlya studentov. Vysshiye uchebnyye zavedeniya [Pedagogy: a textbook for students. Institutions of higher education]. Moscow, Publishing Center "Academy".

Shestak, V. P, Vesna, E. B., & Platonov, V.N. (2014). Network education: the best domestic and foreign practices. *Modern problems of science and education, 6*. Retrieved from http://www.science-education.ru/en/article/view?id=10981.

Slepukhin A. V., & Lezhnina, L. (2015). Metodika formirovaniya u studentov kompetentsii proyektirovaniya personal'noy obrazovatel'noy sredy kak komponenty obshcheprofessional'noy

kompetentnosti [Methods of formation of students' competence designing personal learning environment as a component of general professional competence]. *Pedagogicheskoe obrazovanie v Rossii, 7*, 126-135. Retrieved from http://elar.uspu.ru/handle/uspu/2031.

Slepukhin, A. V. (2014). Ispol'zovaniye lichnoy obrazovatel'noy sredy v protsesse individualizatsii smeshannogo obucheniya studentov [Usage of personal educational environment in the process of individualization of mixed learning of students]. *Pedagogicheskoe obrazovanie v Rossii, 14*, 195-205.

Slepukhin, A. V. (2016). K voprosu o postroyenii ponyatiynogo apparata informatsionnykh obrazovatel'nykh sred [The conceptual apparatus of information educational environments]. *Vestnik CGPU, 1*(89), 153-161.