

## Independent Work of Students in a Virtual Educational Environment

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**Abstract:** Virtual learning has been introduced into educational institutions to meet the needs of a new generation in the formation of various competencies in today's globalized society. Nowadays, the virtual educational environment contributes to the development of independent and critical thinking among students who are ready to adapt in a constantly evolving world, to professional growth, continuous growth in the quality of knowledge, skills and professional and personal qualities.

**Keywords:** independent work, virtual environment, educational environment, interactive, students.

### Introduction

The virtual learning environment as a means of effective communication of participants in the educational process contributes to the transition from the "knowledge" paradigm to "personally-oriented" education, aimed at developing the creative potential of students, their cognitive activity, motivation and participation in language classes.

Independent work of students at a particular educational stage is multi-purpose and is aimed at achieving communicative and educational goals. The main requirement for the successful use of a virtual environment is the development of creative cognitive abilities, language skills of students through the use of a virtual environment [3, p. 8].

Scientific and technological progress has led to digitalization, informatization of many aspects of the activities of modern society. Informatization of society ensures and accelerates the continuous development and improvement of the intellectual potential of society, thanks to quick access to sources of reliable information, visibility of the information provided.

Informatization has probably made some changes in the education system. As you know, education is one of the main institutions for the formation of both the individual and society. Therefore, the study of the issue of the influence of informatization on various aspects of the educational process seems to be relevant.

The study of languages is important, since knowledge and command of languages is currently the key to international cooperation and communication. Therefore, the study of foreign languages requires careful selection of methodological tools.

The problem of developing the skills of independent work of students was raised in pedagogy by teachers and researchers of the twentieth century, such as Ushinsky K.D., Kapterev P.F., Vakhterov V.P. and others. Their works scientifically substantiated and defined a methodology for teaching schoolchildren to independently obtain information through experiment, observation.

In foreign literature, independent work is often interpreted as "independent and self-regulating learning" [10, p. 4]. The literature review revealed not only different definitions of the concept of independent work, but also the substantiation of the advantages of students' independent work in educational activities. Works by I. Cunningham, J. Hsu, K. Hamilton, J. Van, S. Virtanen emphasize

that the cognitive activity of students depends on a number of external and internal factors, among which the ability to work independently stands out [5, p. 46]. Research conducted by scientists from the UK and the Netherlands has shown that in the conditions of "self-regulated learning" students become more motivated and more actively involved in the learning process.

The study of sources of scientific and methodological literature shows the successful experience of organizing students' independent work using a number of methods and teaching aids. Thus, the problem of the formation of independent skills in the educational process of the university is analyzed in the scientific works of D. Pedros, J. Cravino, L. Morgado, C. Barreira. As a teaching aid, a set of tasks for independent work of students in computer programming was proposed [7, p. 17].

The situation of the coronavirus pandemic, when the greatest emphasis in learning was placed on independent work, showed the need to develop a system of working methods in a virtual educational environment. It is necessary to revise not only the tools of work, but also the monitoring and evaluation system.

### **Discussion**

In connection with the global informatization of education, the concept of "virtual learning environment" has appeared. In the methodological literature, a virtual educational environment is interpreted as the use of the communication capabilities of global computer networks for educational purposes [4, p. 29]. A virtual learning environment is a means of effective communication between participants in the educational process. The virtual learning environment was explored by such researchers as V.P. Tikhomirov, A.Yu. Uvarov, A.V. Khutorsky and others.

The scientist Alexander Yuryevich Uvarov considered the virtual environment as "an open object of educational architecture with the main goals, methods and organizational forms, which is a plexus of communicative, informational and physical space" [10, p. 99].

A.V. Khutorsky believed that the virtual educational environment is, first of all, "a system of influence and conditions for the formation of a personality according to the scheme of the basic setting" [13, p. 36]. M.P. Shishkina noted that "virtual learning environment" is a widespread concept, and different meanings can be attached to this concept or some of its synonyms, for example, as "software or platform that is used to provide educational services." [15, p. 99]. This environment can be considered as "a set of integrated learning tools that allows you to manage online learning by providing an appropriate management mechanism, monitor the progress of student learning, evaluate learning success and provide access to resources."

According to Professor of the University of Helsinki T. Seppo, "in a virtual environment, information and communication resources are consistent with the processes of communication and activity, forming a certain integrity, and are integrated into a single system through which meaningful learning is supported" [11, p. 537].

The American scientist H. Pimentel emphasized the importance of online learning back in 1999 and described the virtual space as "a learning environment that allows you to learn, evaluate situations, perform the actions necessary for learning, carry out the necessary research activities, and also helps you perform tasks much better than in ordinary, traditional situations" [9, p. 77].

Thus, the virtual learning environment involves, first of all, the interaction of the subjects of the educational process with information and communication technologies. The role of the virtual learning environment is inexhaustible for the development of students' independent work skills, if they comply with all the requirements when using them.

Methodically competent use of the virtual learning environment is carried out in compliance with traditional didactic requirements in accordance with didactic principles, such as ensuring visibility, scientific character, awareness of the learning process, the requirement for systematic and consistent learning, as well as the unity of educational and educational functions.

However, in addition to traditional didactic requirements, there are a number of specific conditions for successful functioning in a virtual learning environment. Based on the experience of implementing virtual educational environments, the need to ensure the adaptability of the university (virtual learning environment) is noted, which implies the possibility for students to choose the most appropriate individual pace of learning the material [2, p. 67].

In the learning process, there is a need for feedback, which means the need for control, the correctness of the student's actions, and the development of recommendations for his future work.

The virtual learning environment (hereinafter referred to as the VLE) should provide the student with the possibility of a controlled variety of learning activities in order to gradually increase the intra-subject level of knowledge at a level of assimilation sufficient for the implementation of algorithmic and heuristic activities. Also, the requirements for VOS include the condition of efficient and reasonable use of resources, their verifiability, simplicity, reliability and completeness, in addition, the possibility of combining electronic and paper media is important [14, p. 52]. However, the main requirement for methodically correct work in a virtual learning environment is the focus on the state educational program.

P.I. Under independent work, Pidkasty understood the performance of work by a university student, which is a specific pedagogical means of organizing, managing and controlling cognitive activity in the educational process [8, p. 118]. In addition, independent work is a means of involving students in independent cognitive activity.

A.G. Molibog highlights the principles of organizing students' independent work at a university [6, p. 159]:

- limitation of any independent tasks in terms of volume and time;
- creation of favorable conditions for students to perform independent work;
- Independent work management.

Particular attention is paid to independent work in the case of using a modular education system at the university. It is there that the organization of independent work and the means of its implementation play a paramount role, since the number of hours according to the curriculum allotted for this type of activity often exceeds the amount of classroom work with a teacher by several times. However, the concept of "module" is quite new for pedagogical science, in this regard, it can be noted that its textbook definition has not even fully developed (S.Ya. Batyshev, O.G. Kukosyan, P.A. Yuttyavichene, etc. ), while the obvious advantages of modular learning include [1, p. 31]:

- logically structured content of educational material;
- A well-formed algorithm for assessing and monitoring the assimilation of knowledge, which allow, if necessary, to flexibly adjust the educational process.

### Discussion results

Thus, the specific content of the virtual learning environment may vary depending on the level of training of students, their individual interests. The main requirement for the successful use of a virtual environment is the availability of the entire set of resources for students through a single entry point, and, of course, the data must be synchronized with the teacher's computer to monitor the process. The

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virtual learning environment also has a content management function: its development, storage and use; planning and scheduling classes, evaluating results, as well as personalizing learning; administration and student involvement. This means controlled access to information about students and monitoring of their progress and achievements; communication and cooperation.

## Conclusions

Summarizing all of the above, it follows that the very presence of information technology in the learning process changes the internal specifics of the educational and cognitive activity of students, their style of thinking, and the psychological mechanisms of mental development. At the same time, the computer acts only as a “smart” tool, and the interaction of the participants in the educational process with modern technologies comes to the fore.

The virtual learning environment is an effective means of forming and developing students' independent work. In this context, priority is given to the professionalism and competence of the teacher. His ability to methodically competently organize the work of students with a virtual environment creates optimal conditions for a productive educational process.

The development of students' independent work skills and the improvement of their cognitive abilities open up great opportunities in the formation of competitive specialists.

## References

1. Batyshev S.Ya. Block-modular training. - M.: Trans-service, 1997. - 225 p.
2. Kalmykov D.A., Khachaturov L.A. Experience in the implementation of virtual educational environments // School technologies - School technology, - M.: 2002. - 667 p.
3. Cunningham I. Teaching leadership - self-managed learning and how scientists resist understanding the process // Development and learning in organizations. - M.: 2010. - S. 4-6.
4. Mamedova K.A. Virtual educational environment as a necessary component of the modern education system // Internet magazine "Jeydos" - Internet magazine "Eidos". 1999. - S. 9-11.
5. Mezhere V. What is independent learning and what are the benefits for students? // London: Department for Children, Schools and Families Report, 2008. URL: <http://docplayer.net/12844512-What-is-independent-learning-and-what-are-the-benefits-for-student.html>.
6. Molibog A.G. Questions of the scientific organization of pedagogical work in higher education. - Minsk: Higher School, 1975. - 197 p.
7. Pedrosa D., Cravino J., Morgado L., Barreira C. // Self-regulated learning in computer programming: strategies, admission of students during the assignment // 2016. - P. 87-101.
8. Pidkasy P.I. Organization of educational and cognitive activity of students. - M.: Pedagogical Society of Russia, 2005. - 245 p.
9. Pimentel J. R. Designing network learning systems based on experimental learning // Journal of the asynchronous learning network, - M.: 1999. - P. 64-90.
10. Sarekenova K.K. Organization of independent work of students on credit // Procedures - social and behavioral sciences - Procedures - Social and behavioral sciences. - M.: 2015. - S. 274-278.
11. Seppo T. Pedagogical thinking of students and the use of ICT in teaching // Scandinavian Journal of Educational Research - Scandinavian Journal of Educational Research, 2011. - P. 537-550.

12. Uvarov A.Yu. Open educational architecture // Internet magazine "Jeydos" - Internet magazine "Eidos". - M.: 1999. - S. 7-9.
13. Khutorskoy, A.V. Pedagogical innovation. Moscow: Academy; University book. - M.: 2008. - S. 33-38.
14. Chervyakova Ya.I., Chibisova O.V. Electronic textbook as a means of new information technologies // International Journal of Experimental Education - International Journal of Experimental Education. - M.: 2010. - S. 52-53.
15. Shishkina M.P. Innovative technologies in the development of the educational and research environment of an educational institution // Educational technologies and society. Educational technologies and society. - M.: 2013. - S. 98-100.