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ORGANIZATION OF SELF-STUDY AT HEIS THROUGH
DISTANCE LEARNING TECHNOLOGIES

Bulueva Shumisat Ismailovna (a)*, Gadzhieva Naida Yusupovna (b),
Dadaeva Aza Rumanovna (c)
*Corresponding author

(a) Chechen State University, 32, Sheripova str., Grozny, Russia, sovdat@list.ru,

(b) Dagestan State Agrarian University named after M.M. Dzhambulatov, 180, M. Gadzhieva str., Makhachkala,
Russia, naka82@bk.ru

(c) Chechen State Pedagogical University, 33, Kievskaya str., Grozny, Russia, atb-1952@mail.ru

Abstract

The paper discusses the features of self-study at HEIs in the context of distance learning. Self-study at HEIs embraces a variety of types of work like doing homework, studying learning material, doing individual assignments, preparing term papers, projects, reports, abstracts, essays, project work, participating in subject olympiads, competitions, research papers and many others. Student self-study activities are quite diverse and can be focused not only on the reproduction of knowledge acquired, but also on the creativity of students. Moreover, they are mainly geared towards strengthening independent and individualized learning, currently dominated by the development of distance learning. Distance education today is the most progressive and rapidly evolving in the learning process, including higher education. Rather than promoting the acquisition of content-rich knowledge, higher education is tasked to shape productive thinking of students, develop the intellectual potential of a person capable of self-education and self-organization in the context of future complex professional activities. Distance learning to enable student self-study is viewed as a pattern of student self-study based on information and communication technologies enabling to communicate, receive and transfer knowledge, tasks remotely via the Internet. Distance learning can be effectively implemented in the process of student self-study activities under certain pedagogical conditions. It demonstrates certain unique features, and calls for flexible and updated pedagogical methods. The paper provides an empirical study that made it possible to identify the main problems and difficulties among university students being involved in extracurricular self-study activities.

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Keywords: Distance learning, higher education, self-study



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1. Introduction

Today, the main and primary task of Russian education is its modernization, within the framework of which higher education as vocational training involves new quality and implies the formation of an individual that is highly adaptable to the needs of society, the labor market and the economy. In this paradigm, new education is aimed at the development and implementation of academic programs to ensure the training of professional personnel, with a focus on the integration of Russian education into the European, and, therefore, into the world learning environment. A special niche in higher education is occupied by the formation of continuous key and professional competencies. The formation of individuals in terms of self-learning should be considered as a separate stage in the development of education. The authors herewith are concerned with the features of student self-study at higher education institutions, since today it has become an indispensable and necessary condition for obtaining deep and lasting knowledge, skills and abilities, and most importantly, for enhancing certain abilities towards the formation of key competencies of a future expert to succeed in any professional field.

With a two-tier system of higher education and the Federal State Educational Standards of Higher Education of the third generation, the importance of student self-study increases significantly and implies redistributing the amount of classroom time towards an increased time allotted for self-study. A number of bachelor's curricula surveyed at some universities showed that those who design academic programs allocate up to 90 % of the total number of hours within a discipline for student self-study in some disciplines. Bublik (2014) notes in;

Planning and Organization of Student Self-Study” that “an increasing role and importance of student self-study within academic programs is also conditioned by many other factors of our time, with the most important to be the rapid development of science and technology, the improvement of production and information technology and the resulting renewal and increase of information. (p. 62)

Nowadays, dramatic changes occurring in the world and, in particular, in the Russian education system entail the transition of education mainly to an online format. These changes were caused at the end of December 2019 by a global problem – the outbreak of the COVID-19 pandemic. In Russia and other countries across the world, a regime of high readiness and self-isolation forced higher education to switch to a contactless format based on the use of distance learning technologies. There is a need for new methods of automated independent work in a remote format.

2. Problem Statement

The paper deals with the issue of self-study activities organized for university students through distance learning technologies. A self-isolation regime made people switch to a remote form of communication via online technologies. Education in Russia was forced to adapt to these conditions suddenly, rapidly, with an aim of maintaining the quality of education.

In this regard, the education sector is challenged towards the idea of making the educational process more effective, given that the number of classroom hours is constantly decreasing. People are switching to a remote form of communication using information online technologies. Education in Russia was forced to adapt to these conditions suddenly, rapidly, while maintaining the quality.

A new online information sphere opens up large-scale access to information and an interactive teacher-student dialogue. In these conditions, the role of self-study has increased, and teachers have had to adapt rapidly and look for new forms and methods to work and control the level of mastery of learning material by students.

3. Research Questions

The subject of research is student self-study in the context of distance learning technologies.

4. Purpose of the Study

The paper aims to identify the features of student self-study at HEIs in the context of distance learning technologies.

5. Research Methods

The authors apply the following research methods including the analysis of information and educational resources, analysis of the Federal State Educational Standard of Higher Education, analysis of recommendations, best practices and experience in the use of distance learning technologies at modern universities.

6. Findings

Today, self-education, to one degree or another, is necessary to ensure the high-quality implementation of information activities for human development. This development is also associated with mastering and upgrading new technologies, including remote formats. However, student self-study activities should not be spontaneous and uncontrolled. They should rely on some scientific and methodological support that is grounded and practically proven. In this respect, the leading function of scientific and methodological support for self-study is the transfer of spontaneous extracurricular work of students into the channel of systematic, controlled and self-directed study.

The volume of self-study hours for mastering an academic discipline is determined by a specific academic curriculum and almost always significantly exceeds the amount of classroom time with a teacher. It is this circumstance that has provoked a research interest in the role of self-study in educational activities involving a university student. The paper deals with extracurricular self-study that is performed by students with no direct involvement of the teacher (Berdennikova, 2013).

Due to a variety of self-study activities and a large number of hours allocated, a question arises as to whether it is correct to plan and organize the time spent by university students on doing self-study in the distance learning mode.

The following authors addressed the issue of planning and organizing self-study in higher education, including Bublik (2014) and others.

The issues of organizing self-study in the context of distance learning technologies were addressed based on the scientific and methodological publications of such researchers as Gadzhieva and Musakaeva (2013), Rudenko (2003) and others.

Marchuk (2013) in the paper “Psychological and Pedagogical Features of Distance Learning” devoted to the essence of distance education notes: “A widespread use of modern information technologies can lead to a fundamentally new approach to education technology at large, which will rely, among other things, on the didactic capabilities of a person’s superconscious function” (p. 79). As we can see now, this time has come – the time for new approaches to education technology, coupled and directed at the forms of distance education.

Distance learning to enable self-study activities is viewed as a pattern of student self-study based on information and communication technologies enabling to communicate, receive and transfer knowledge, tasks remotely via the Internet (Gadzhieva & Musakaeva, 2013, p. 77).

Some authors, in particular, Rudenko (2003) with “Scientific and Methodological Support and Methods of Teaching Natural Sciences with the Use of Distance Learning Technologies” (p. 16), and Zaitseva with “Distance Learning for Organizing Self-Study of Medical University Students” helped to determine that self-study of university students organized through distance learning is a didactic system aimed at the formation of students’ competencies that are a set of functionally interrelated parts of the learning process, namely goals, the content of a discipline and the productive and assessment material (Rudenko, 2003).

In modern conditions, we are trying to keep at arm’s length from each other, which is much more evident in the education system. Since crowdedness becomes undesirable, it is advisable to implement self-study activities based on information and technology support of the learning process. In organizing self-study activities, it is also obligatory to use an automated learning kit comprising distance technologies or, in other words, distance education system (Polskaya & Polskoy, 2021).

It is advisable to consider distance learning in student self-study as a set and sequence of didactic procedures that provide an individual learning path in accordance with the competencies being formed within a specific discipline (Guzeev, 2021).

During the adaptation period, when universities are sharply forced to switch to distance education, teaching staff began to use various communication channels to interact with students. Being free to choose those channels convenient for them, teachers often make their students use many synonymous communication channels (4–5 instant messengers, social networks, 3–4 videoconferencing services, mail, SMS, calls, etc.). This is extremely inconvenient, leading to the loss of information by students, to demotivation. It also affects the reputation of a particular educational institution (Astafieva et al., 2021).

In this regard, it becomes necessary to standardize the tools used to interact with students (video, messengers, and mail), making the distance education a core of communication with students and limiting, as mentioned above, additional duplicate tools and communication channels. Once formed in the distance education system, courses, content, tests can be reused in the next semesters. The use of the distance education system in modern times is becoming not only necessary, it is correct and convenient.

The authors examined the LMS Moodle resources for providing distance learning at various educational institutions, which allowed them to identify the functionality of the distance education system:

- Development of online courses (curricular disciplines – structure, content, test scenarios, etc.);
- Automatic connection of students and teachers to courses (using packets transmitted from MAC);
- Providing students with access to learning content (text, audio, video, etc.), including timetabled studies;
- Control of students' knowledge:
 - automatic tests (verification and assessment is set by the system automatically);
 - involving teachers (written work, essays, etc.);
- Communication tools (notifications, chats, forums, webinars, private messages);
- Keeping a course grade book (points received by students both at webinars and for tasks completed in the distance education system);
- Accumulation of the final grade for disciplines, based on the weighting coefficients (in fact, the point-rating system);
- Conducting surveys, questionnaires;
- Providing reports and statistics (student progress within a course, on the quality of test materials, etc.).

There is currently no single local document regulating the self-study at the federal level. Universities independently define and establish the forms and requirements for the organization and control of student self-study at a particular education institution. These requirements are developed and approved in the form of regulations or guidelines for the organization of self-study at a HEI.

As part of this paper, the authors carried out an empirical study, which made it possible to identify the main problems and difficulties that university students encounter once being involved in extracurricular self-study activities. The study was carried out at Chechen State University in a distance format.

A questionnaire study was chosen to survey the issue of planning and managing time by students in offline learning, since this is one of the most proven methods of collecting primary information for analyzing the problem under study.

The survey shows the attitude of students to the use of distance learning technologies, and highlights possible challenges that students face when they use distance learning technologies during the COVID-19 pandemic.

- The following tasks were set, which are aimed at identifying:
 - The attitude of students to the use of distance learning technologies;
 - Problems arising and directly related to the use of distance learning technologies;

Difficulties arising in the organization and planning of self-study activities in the context of online distance learning.

A questionnaire study was chosen to survey the above issues within the disciplines of the humanities and social sciences in the context of distance learning technologies.

The survey involved 156 full-time students and was carried out anonymously using an online platform provided by Google.

The main questions that interested the authors were about the difficulties under the transition to forced online learning, as well as the problems of mastering the disciplines of the humanities and social sciences in a distance learning format.

Thus, for example, the key questions were:

1. Did your academic load increase when you studied the disciplines of the humanities and social sciences during the COVID-19 pandemic?
2. What technical problems did you face in the conditions of remote technologies?
3. Did you have difficulties in interacting with teachers?
4. Did you find it difficult to plan and organize your self-study activities?
5. Describe the problems and difficulties you encountered in online training.
6. Would you like to continue your distance learning on an ongoing basis?

Based on the study, the authors identified a number of problems and difficulties that the students faced using distance learning technologies. An overwhelming number of respondents noted that the academic load to study the disciplines of the humanities and social sciences gave a significant jump upward (82 %). In their opinion, this was primarily due to the lack of knowledge and skills in organizing and planning their self-study activities. Besides, 63 % of respondents noted that an increased number of hours was due to the fact that the teachers, perhaps unwittingly, gave more homework than it was during offline learning.

In addition, based on the respondents the study detected some technical problems of distance learning:

1. Not all students had a stable Internet connection (43 %).

It is worth clarifying here that the students who have younger brothers and/or sisters often had classes “overlapping” in time. This hindered some respondents because it was hard to find a secluded place in their apartment or they had to share a gadget. In addition, the load on the network increased resulting in an unstable Internet connection.

2. There were some difficulties in grasping hardware and software (15 %).
3. Lack of preparation of the teaching staff in the online training tools (Zoom, Teams) due to which there was a delay in the learning process (42 %).

Among other things, the study found a series of constraints:

1. No “lively” reaction from the teacher and/or the group to the statements, discussions and reports of the students (73 %). Failure to feel the engagement of the audience – this problem created difficulties in checking up the assignments the students had to complete on their own.
2. An admissible opportunity to complete homework at any time brings about a decreased priority of study sessions (65 %). There is a so-called “postpone” effect, which makes the skill to organize and plan self-study less efficient.

Based on the study, student’s motivation is crucial in the distance environment, and thus, provided that educational technologies do not respond to this challenge, there will be a serious problem to “overlook” the student.

Hence, to ensure an easier and higher quality education, there should be a creative and innovative approach, an aligned system of organizing educational activities to study the disciplines of the humanities and social sciences, clearer and more fixed assignment procedures, strict deadlines, but a preliminary clear explanation of tasks and algorithms for their implementation.

In view of this, today it has become relevant and necessary to search for new ways towards self-study at HEIs, provided that a remote format is used. Learning with the use of distance technologies has a certain specificity. It needs flexible and revised pedagogical methods. Notably, there is no big difference in self-study between full-time and distance learning patterns. In both cases, students get ready for seminars in a similar way: make presentations, write essays, study textbooks, etc.

7. Conclusion

The effectiveness of distance learning geared to organize self-study at HEIs can be ensured by a combination of the following pedagogical conditions, namely: creating incentives for students; ensuring the readiness of teaching staff to use distance learning technology; timely educational content; establishing interdisciplinary links in the content of an academic discipline; elaborating teaching materials (recommendations for studying sections of the curriculum, terms for mastering the material, criteria for assessing the quality of self-study); developing the skills for working with educational and methodological literature, materials on the Internet for self-study in the context of distance learning; giving group and individual tutorials on the methods of self-study; evaluating the results of self-study activities; detecting problems and searching for solutions to eliminate them.

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