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Research full article

UDC 378.1

DOI: <http://doi.org/10.15350/2409-7616.2023.2.43>

DISTANCE LEARNING: «LOST TIME OF LIFE» OR «WIND OF CHANGE»?

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Abstract. *The issue studies the students' qualitative subjective perception of distance and hybrid learning in higher education institutions during the COVID-19 pandemic. The abundance of negative reviews about distance learning prompted the authors to set a goal to reveal negative and positive factors of distance learning and to test a hypothesis that the quality of the educational*

process drops sharply with the introduction of distance learning. Research method: questioning of students of 1-4 courses of universities in Moscow. The results obtained are controversial and demonstrate a drop in students' self-organization skills, but an increase for some students; stress reduction and comfort level of the educational process adjustment at home; intensification of fatigue, a drop in motivation to study, general decrease in the effectiveness of the learning process, but according to subjective estimates, at least half of the respondents were able to maintain the level of academic performance or even increase it. Despite the shortcomings, the vast majority of students (95%) positively assessed learning in a hybrid format and would desire to continue this way. The findings allow us to conclude that the "digital revolution" in the field of education is in demand. It's possible to turn the use of hybrid learning into a competitive advantage of the university, to develop new educational products and evaluate the prospect of adapting personalized and individualized educational trajectories.

Keywords: *distance learning, hybrid learning, the COVID-19 pandemic, digitalization of education, DLT, individual educational trajectory, personalization of education.*

For citation: *Goryacheva V.R., Velchev D.F., Larkina A.O., Mahmudova K.A., Rabotyagova A.N. Distance learning: «lost time of life» or «wind of change»? CITISE, 2023, no. 2, pp. 488-505. DOI: <http://doi.org/10.15350/2409-7616.2023.2.43>*

Научная статья

УДК 378.1

**ДИСТАНЦИОННОЕ ОБУЧЕНИЕ: «ПОТЕРЯННОЕ ВРЕМЯ ЖИЗНИ»
ИЛИ «ВЕТЕР ПЕРЕМЕН»?**

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Аннотация. *Исследование посвящено качественному субъективному восприятию студентами высших учебных заведений образовательного процесса на дистанционной и гибридной формах обучения, к которой перешли вузы в период пандемии COVID-19. Обилие негативных отзывов об обучении «в дистанте» побудило авторов поставить цель - выявить факторы, положительно и отрицательно влияющие на восприятие дистанционного обучения и проверить гипотезу о том, что качество образовательного процесса резко падает при введении дистанционного обучения. Метод исследования: анкетирование учащихся 1-4 курсов вузов г. Москвы. Полученные результаты неожиданно противоречивы и демонстрируют: снижение навыков самоорганизации студентов, но их рост у части обучающихся (1/4 опрошенных); снижение стресса и повышение комфорта учебного процесса дома; усиление утомляемости, падение мотивации к учебе, общее снижение эффективности процесса обучения, но по субъективным оценкам, как минимум сохранить уровень успеваемости или даже повысить его смогли половина опрошенных. Несмотря на недостатки, подавляющее большинство учащихся (95%) положительно оценили обучение в гибридном формате и хотели бы так продолжать. Полученные результаты позволяют сделать вывод о востребованности «цифровой революции» в сфере образования и позволяют трансформировать применение гибридного обучения в конкурентное преимущество вуза, разработать новые образовательные продукты с его применением и оценить перспективу адаптации персонализированных и индивидуализированных образовательных траекторий.*

Ключевые слова: *дистанционное обучение, гибридное обучение, цифровизация образования, пандемия COVID-19, восприятие обучения, индивидуальная образовательная траектория, персонафикация образования.*

Библиографическая ссылка: Горячева В.Р., Вельчев Д.Ф., Ларкина А.О., Махмудова К.А., Работягова А.Н. Дистанционное обучение: «потерянное время жизни» или «ветер перемен»? // ЦИТИСЭ. 2023. № 2 (35). С. 488-505. DOI: <http://doi.org/10.15350/2409-7616.2023.2.43>

Introduction.

The COVID-19 pandemic has put universities in front of a serious challenge to effectively organize the educational process using distance learning technologies (DLT). The process of adaptation to the digital space was contradictory, both sides - students and teachers - faced a lot of difficulties in the field of education, communication and organization of the workspace. However, the technical side of the training raised fewer questions than the content. If we consider the situation as a whole, then the practice of an emergency transition of Russian universities to training using DLT has made it possible to identify the weaknesses of this process: insufficient technical equipment of a number of universities, shortcomings in the formation of an electronic information and educational environment, unpreparedness of some teachers and students for the digitalization of the educational process. Also, studying the opinions of students about this system of distance learning, one can notice a large number of negative reviews about it, which prompted the author of the study to set a goal: to identify factors affecting the quality of the educational process through studying the perception of students studying in a distance/hybrid format¹. Identification of the most significant problems and advantages of distance learning would be valuable information for improving the educational process. The hypothesis of the study is that students learn the material worse and overwork when studying remotely/hybrid. Factors that presumably negatively affect learning outcomes on the part of students are low self-organization skills, fictitious attendance at classes (sleeping during seminars and lectures, eating, being physically absent from the room, etc.), poor perception of the material prepared by teachers for demonstration in electronic format. The experience of organizing distance learning at a university is extremely useful. The study of the features, disadvantages and advantages of teaching with the use of DLT for regular students is necessary to maintain the educational level at the university and promising for the creation of new educational products based on them in the future.

Materials and Methods.

Klaus Schwab wrote about the change in the paradigm of communication, interaction, life and work in his work “The Fourth Industrial Revolution” [19]. Highlighting the positive and negative aspects of digitalization of various spheres of life, the politician touched upon the development of the education sector. The work notes both the increasing accessibility and actualization of the content of education due to the introduction of digital technologies, and the danger of “erasing” the meaning of the teacher associated with this process. As part of the new industrial revolution, the teacher must find his new place, balancing between traditional and the latest approaches to learning. The introduction of digital platforms for organizing the educational process carries the danger of substituting true assessments of the quality of services provided with marketing tools for promoting the teacher's brand based on superficial feedback from students [12]. The study of the features of human interaction in a digital educational environment and the specifics of the provision of educational services in the context of digitalization were devoted to the works of scientists long before the events associated with the start of the COVID-19 pandemic and the widespread

¹ For the purposes of this study, we do not distinguish between a purely distance learning format and hybrid formats with elements of face-to-face education

distance education. The authors point out the complexity of the high-quality digitalization of higher educational institutions, which require a thorough study of the digital footprint of students, the demand for educational products in the "smart university" format [1].

A voluntary survey was conducted in March 2022 among 1 - 4 year regular students of Plekhanov Russian University of Economics and Russian Foreign Trade Academy. The questionnaire contained open and closed questions. It was important for the authors of the study to obtain personal opinions and a qualitative assessment of the educational process using DLT. The response was received from 62 students.

Results.

The quality of organization of the technical side of the educational process depended on the educational platform provided by the higher educational establishment. The most commonly used platforms were: Zoom, Webinar, MS Teams. The most convenient platform appeared to be Zoom, according to 81% of students, the Webinar platform almost failed (86.5% of answers). Technical failures, reduced functionality of applications, the complexity of solving technical issues, the unpreparedness of teachers to solve emerging problems negatively affected the effectiveness of training and the image of teachers.

2/3 of the respondents agreed that distance learning was well organized. The main complaints related to the difficulty of participating in the oral discussion of the materials. This was important, since group discussions and surveys were the most common among 54% and 31% of the students surveyed. Other types of work at seminars, such as case study analysis, problem solving (found in 41% and 67% of respondents) were popular, but could involve both oral and written responses. Many also failed to respond promptly in the chat and formulate a detailed answer to the question.

The discrepancy between the cost of education and a long stay "in distance" worries many students, as can be seen from the answers to open questions. Intramural study mode costs significantly more than distance learning. The introduction of distance learning raised a number of questions among students about the unchanged cost of education. There was an attempt to resolve the controversial issues by introducing internal study mode to vaccinated students, but this practice did not receive a positive response. On the part of the university, there are no legal prerequisites for lowering the price, since the situation with the COVID-19 pandemic can be regarded as force majeure, and its onset is not associated with violations of contractual obligations by the educational institution. The university, on the contrary, incurs additional costs associated with the establishment of distance learning - payment for digital learning platforms, hiring additional technical staff, organizing technical support, and so on.

The respondents were asked whether they would choose distance learning if they knew about the risks of intramural form of study during a pandemic. The majority answered that they did not even consider such a possibility upon admission (73.7%). For many, intramural study mode is an opportunity to get a quality education (65.8%), change the environment and expand the circle of acquaintances (57.9%), study in another city (21.1%). Potentially, this improves employment opportunities (21.1%). The prestige of intramural study mode also turned out to be a significant factor (36.8% of respondents agree with this), a number of students simply did not plan to work during their studies, trying to devote all their time to studying (36.8%). Budget education and deferment from the army are also factors in choosing face-to-face education, although less significant. Thus, the perception of intramural study mode as solid, high-quality, promising and prestigious played a major role in the choice of students.

Disadvantages of distance learning.

The negative aspects of distance learning, according to students' answers, are divided into several groups (Table 1). Two or more options were allowed.

Table

Negative aspects of the distance educational process, by groups of problems

Learning	Health	Social	Psychological	Technical
<ul style="list-style-type: none"> • complexity of perception of information through gadgets/PC; • low effectiveness of training; • poor assimilation and memorization of information; • low level of concentration; • protracted educational process; • disrupted communication process between teacher and student; • difficult to answer in seminars; • the teacher rarely reads letters; • low information content of lectures; • lack of systematic presentation of knowledge; • too easy to write off; • substitution of the learning process by scoring. 	<ul style="list-style-type: none"> • severe fatigue; • increased stress on the eyes and brain; • weight and health problems, sedentary lifestyle. 	<ul style="list-style-type: none"> • less opportunities for live communication; • low level of interaction with classmates during classes. 	<ul style="list-style-type: none"> • high psychological fatigue; • the need to “stay at home”, there is no switching of activities; • discomfort from a non-working environment while studying in a hostel; • hard switching back to intramural study mode; • problems with self-discipline. 	<ul style="list-style-type: none"> • technical failures and malfunctions; • reduced quality of submitted materials; • low level of teachers' knowledge of learning platforms; • less paperwork.

Source: compiled by the authors based on a survey

As can be seen from Table 1, there is more diversity among the negative aspects of distance learning. A decrease in concentration of attention during training is noted even by those students who, in general, have everything in order with self-organization. It is more difficult to force yourself to study, to "serve" uninteresting classes. Many students do other things, eat or just sleep during class. The absence of a change of scenery, communication with peers, a long stay at the computer impairs cognitive skills and is harmful to health. The actual ability to cheat on any form of control reduces the motivation to learn anything.

"I remember almost nothing from what I studied during the distance mode" - although such a remark of the student was met once in an open question, we considered it essential for analyzing the effectiveness of distance learning. There were other similar ones - "material is hard to perceive", "low involvement", "difficult to concentrate". Control of knowledge for many students turned into a profanation, which had a negative impact on the motivation to study.

Students noted the difficulty of communicating with the teacher, difficult or slow response to letters, irrelevance or inconsistency of some forms of knowledge assessment / conducting classes with the distance format. Many imperfections of the educational process turned out to be related to the requirements of the university to control attendance at distance lectures, which was perceived ambiguously by students.

Despite the abundance of shortcomings, for 23% of the respondents, distance learning turned out to be more effective than intramural mode, and for 32% of students, the effectiveness of training in both options seemed the same. But still, 42.6% of students considered traditional education to be more effective than distance learning (Fig. 1).

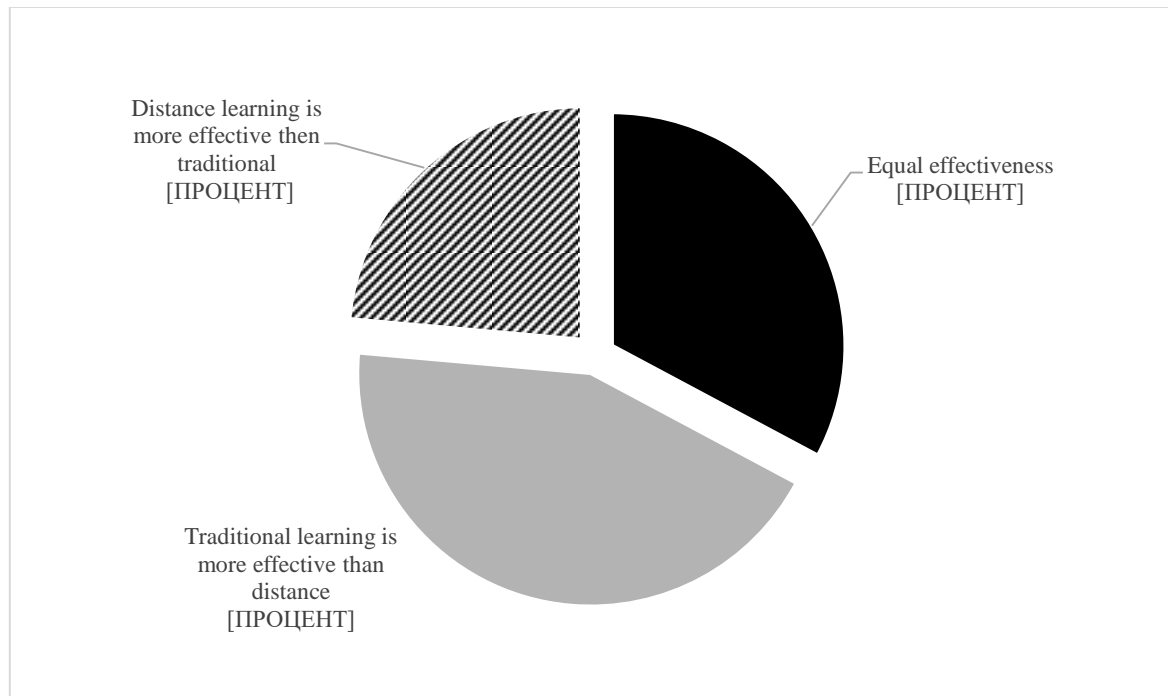


Figure 1 - Evaluation of the effectiveness of distance learning by students (Source: compiled by the authors based on a survey)

According to the authors of the study, this is due to greater psychological comfort and less fatigue during personal communication: less mental energy is spent on overcoming digital communication barriers.

Benefits of distance learning.

Among the advantages of distance learning, the respondents named the following (in descending order of importance):

1. the ability not to waste time on the road and fees, saving time - 42 answers;
2. less stress from learning, comfortable learning process, rest from society - 18 answers;
3. the opportunity to combine work and study - 14 answers;
4. lack of reference to the place of the lesson - 10 answers;
5. the ability to sleep longer - 10 answers;
6. more time is left for extracurricular activities that can be done without sacrificing education - 10 answers;
7. more free time for doing homework, studying additional materials, increasing the effectiveness of learning - 9 answers;
8. the opportunity to develop self-discipline and self-organization, rational use of time - 8 answers;
9. better assimilation of information - 5 answers;
10. better visibility and accessibility of the presented materials - 4 answers;
11. the possibility of selective attendance at classes - 4 answers;
12. the risk of falling ill is reduced - 3 answers;
13. less fatigue - 3 answers;
14. it is easier to be active in online classes - 3 answers;
15. more time for sports - 2 answers;
16. lack of "paper" work and the availability of all materials in electronic form - 2 answers;
17. the possibility of better nutrition - 2 answers;
18. development of new software products related to distance learning, in addition to learning platforms - 1 answer;
19. easier to pass the session - 1 answer.

With a significant margin, the group of answers concerning saving time on the road to the university is in the lead; the opportunity to engage more in personal affairs and combine work with study; study from anywhere; be in comfortable conditions for yourself and sleep longer. This means that for a large number of students there was an optimization of the educational process, an increase in its efficiency. About 18% of students consider the absence of stress and greater comfort for themselves as important positive aspects of distance learning, which was an unexpected discovery for the author of the study. Many manage to devote more time to doing homework and reading additional materials. A number of students in distance learning see an opportunity to improve self-organization skills and additional opportunities for self-development and mastering new skills in working in programs.

From the responses received, it became clear that the benefits of distance learning were extremely attractive and left a deep imprint on student perception. The enormous prevalence of education using DLT and the experience of organizing such education for students preferring intramural study mode throughout the industry should push universities to partially adapt the digital format of education. The identified advantages constitute valuable material for further research, development and practical application.

To summarize the attractiveness factors of distance learning:

- Organization of current control: the main type of activity at the seminars is the demonstration of presentations (this type of current control was met by 95% of students). It is followed by problem solving (67.2%), group discussion (54%), case studies (41%), survey (31%). With

the exception of problem solving, all of the listed types of activities can be carried out in distance learning with the same convenience and efficiency as in-person, although there were complaints about the technical side of the issue described earlier.

- Greater comfort of a home environment, no stress of getting up early and getting ready to go to university, unnecessary communication, saving time on the road;
- Flexibility of the learning process: an attractive opportunity to study from anywhere and combine classes with work;
- Opportunity to selectively attend only those classes that you like;
- Transfer of paper routine to electronic form, a more “modern” approach to learning.

It should be noted that 15.7% of respondents consider distance learning to be devoid of any shortcomings and feel great in remote learning. This gives grounds to consider the distance learning form very promising for a certain niche of consumers of education services focused on an individual approach to learning.

The quality of materials shown during webinars.

The materials shown at the webinars are of good quality. The thesis about the low quality of materials was not confirmed. The opinions about the low quality of the materials obtained during oral conversations before the survey are probably related to the variation in the quality of the materials presented by different teachers, including at the stage of adaptation to the distance format. The visibility of the materials provided in the process of conducting classes is assessed by 55.9% of the students as good, another 40.7% associate the quality with a particular discipline, only 3.4% consider the quality of the materials received to be insufficiently visual (Fig. 2).

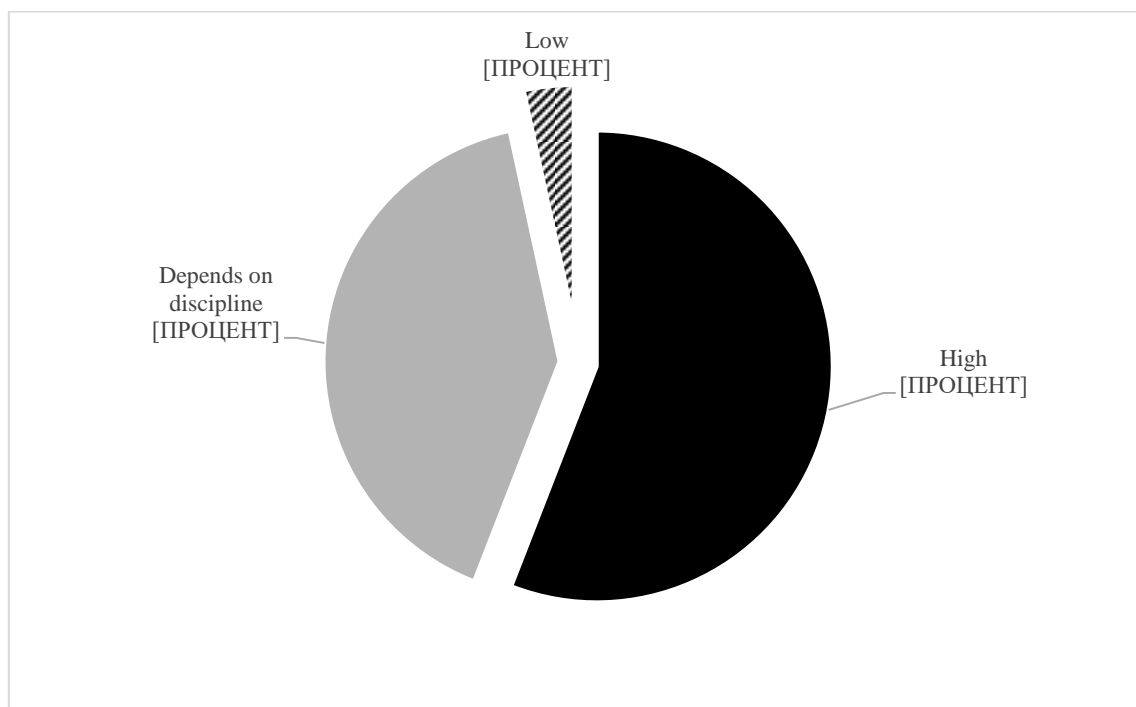


Figure 2 - Visualization of the materials provided for demonstration and study, from the point of view of students (Source: compiled by the authors based on a survey)

If we consider the prepared materials in terms of quality, then for the majority of their quality, according to the students, has not undergone any changes (73.9%), 13% note their improvement, the same number - their deterioration. Thus, the presented materials are generally well prepared and hardly cause any complaints.

The effectiveness of distance learning compared to intramural study mode.

An analysis of the responses provides conflicting information. More than half of the students (56%) consider distance learning to be effective. At the same time, the number of listed negative learning factors is also large. In our opinion, this is not due to the content that determines the effectiveness of training, but to the subjective perception of distance learning and the significant influence of social and psychological factors. 44.1% of students learn the same amount of material at a distance as in intramural study mode, 18.6% learn, but consider the process more difficult, 13.6% cannot learn the material. 23.7% of the respondents easily cope with the task and master the material better than during the internal study (Fig. 3). Thus, the existing shortcomings are still overcome by the majority of students, and some even succeed in distance learning.

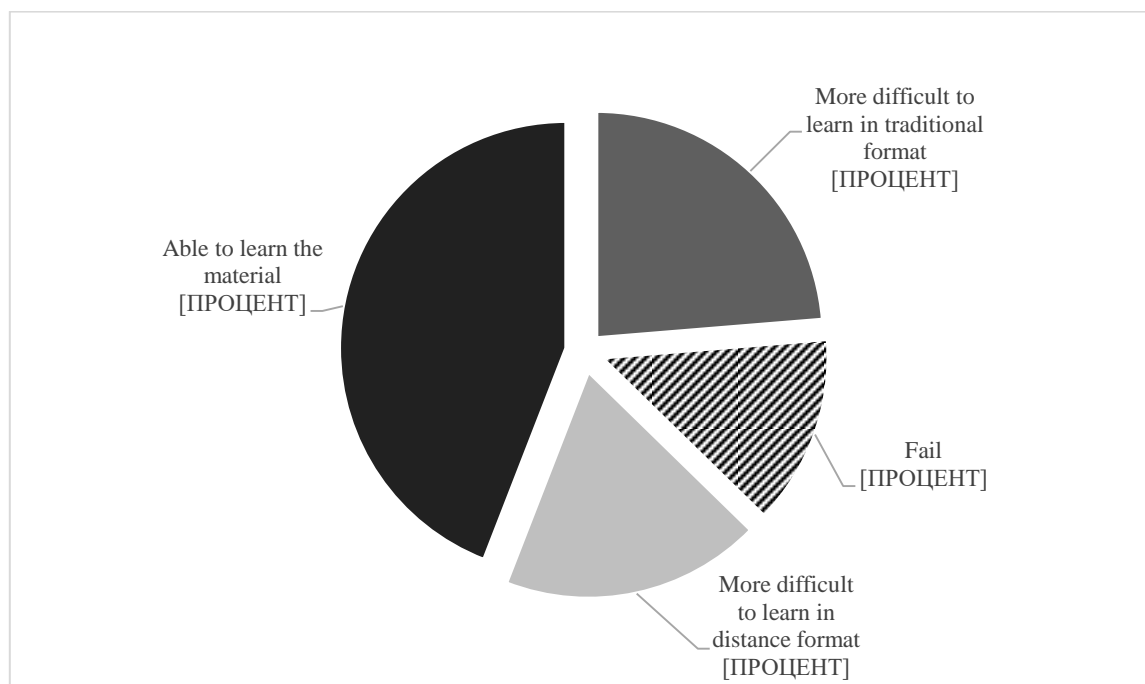


Figure 3 - Evaluation of the quality of the material learned during the distance learning (Source: compiled by the authors based on a survey)

Organization of educational activities.

64.9% of students successfully organize their learning activities online, about 30% more cope with this task depending on the discipline, and only 5.3% of the respondents do not succeed at all. The reasons are given as follows:

- it is difficult to combine work with study;
- the volume of tasks is too large;
- laziness;
- low concentration of attention and home environment;
- problems with self-discipline;
- I want to sleep all the time;
- eye fatigue;
- procrastination;
- distractions;
- falling into depression, despondency;
- the impossibility of perception of some teachers in a remote format;
- the presentation of the material suffers and others.

17 out of 34 students who answered this question believe that everything is fine with them and there are no problems.

Thus, the majority of students still manage to overcome the negative aspects of distance learning, although for some it is given with great difficulty. Based on the answers, the main reasons are non-working environment, self-discipline and fatigue.

Mode of attending an educational institution.

The study was conducted during a period of restrictions during the pandemic. The answers to the question about the convenient mode of attending an educational institution were received as follows:

- 38% want to study only “at a distance”;
- 34% offer hybrid options for part-time visits;
- 12% welcome the option of intramural study mode for vaccinated people only;
- 20.7% agree to periodically leave the whole group for quarantine;
- 20.7% want to study in-person.

Only 1/5 of students desire to study in traditional way, and the vast majority find more advantages for themselves in distance learning or in a hybrid format. The desirability of studying only “at a distance” is associated with the difficulties of switching to intramural study mode and vice versa, as well as with the high self-organization skills of individual students. In a hybrid format, it is proposed to attend lectures remotely, attend seminars in person, and also give students a choice according to the option of attending, especially in senior years, when many are forced to work. It seems that the hybrid format is the most convenient and up-to-date for most students.

Violations during distance learning

Among the unpleasant aspects of distance learning, students noted the following:

- participation in seminars from the bed;
- total cheating at the control and at the session;
- late participants;
- teaching or studying from a noisy place (from a car, with a child);
- fictitious participation of students (connected and went to bed);
- systematically low level of training of teachers and students;
- hacker attacks during classes;
- eating during classes;
- Discrimination of students "at a distance" during partial face-to-face attendance;
- difficulties with attestation of students on distance and traditional forms during seminars with combined visits;
- carrying out written work at lectures;
- lack of motivation for high involvement in the educational process, both on the part of teachers and students.

Part of the problems are related to the lack of smoothness of the distance learning process, the need to develop learning and teaching skills in this form. There is reason to believe that the listed problems, especially on the part of students, are even deeper, however, we have not conducted similar studies among teachers. The data correspond to the information about the low degree of self-organization of students obtained earlier.

Hybrid form of education

If it were possible to choose the form of education, 95.5% of students would combine traditional and distance forms at their own discretion (some students chose two answers each), only 4.5% would remain in in-person study, while 9.1% know for sure that would have problems with self-organization (Fig. 4). At the same time, a small number of students (13.6%) would remain in distance learning mode.

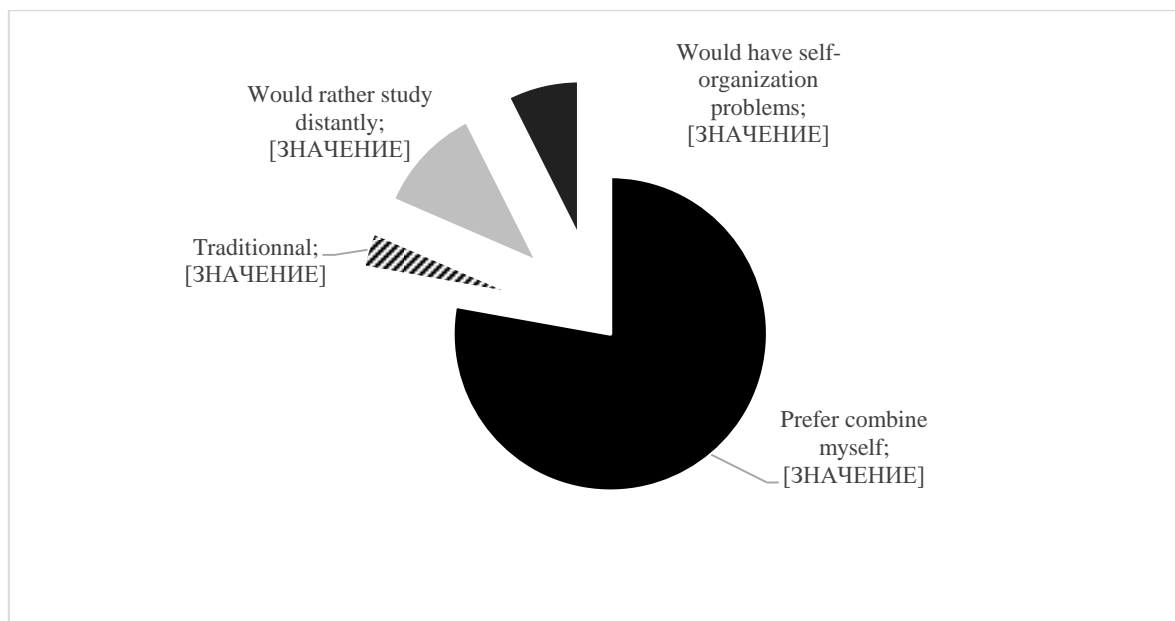


Figure 4 - Student preferences in learning (Source: compiled by the authors based on a survey)

When entering a university, if they had previously had distance learning experience, 20.6% of students would consider studying “at a distance”, 26.5% of students would leave everything as it was and would study in a hybrid mode, 29% are not so sure about completely distance mode.

Lack of communication and social activity in the context of distance learning.

Despite the fact that the lack of social activity in distance learning is named as one of the disadvantages of this form of education (16 out of 57 answers indicate the lack of social activity and communication as one of the negative aspects of distance learning), the affirmative answer to the question about the lack of communication and social activity was obtained from only 36.2% of students. 25.9% of the respondents do not experience any lack of communication, and for 37.9% of the respondents, the main social circle is outside the university (Fig. 5).

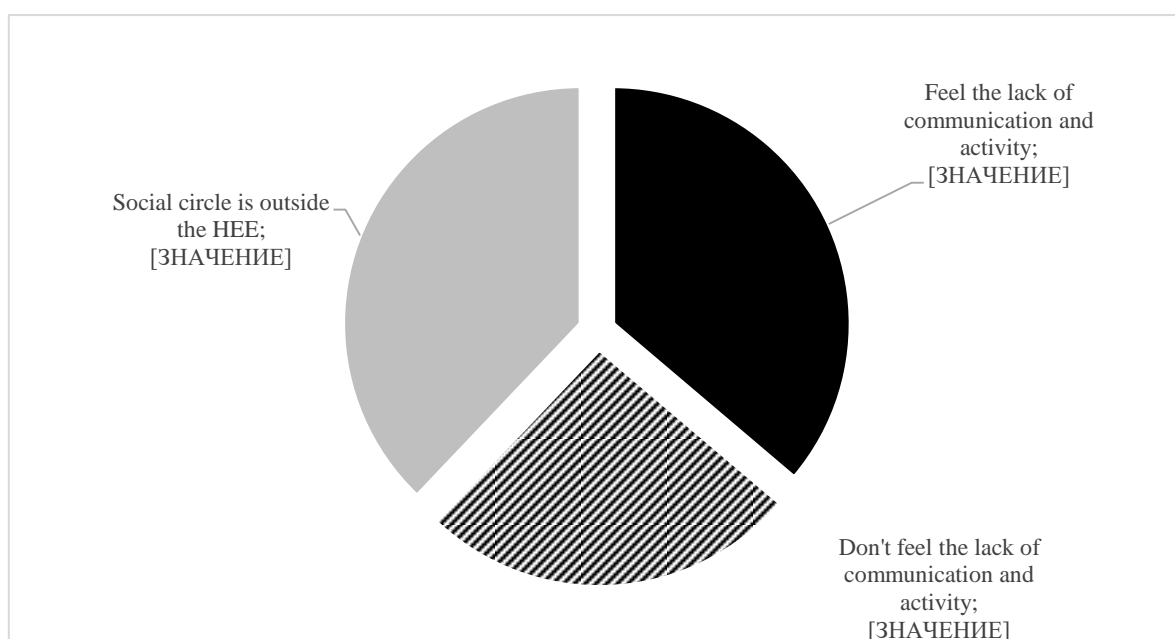


Figure 5 - Lack of communication and social activity of students during distance learning (Source: compiled by the authors based on a survey)

In addition, speaking about the lack of communication, one cannot fail to mention first-year students who, having entered a higher educational institution, almost immediately got into distance learning. In such cases, students do not have enough time to form a sufficient connection to maintain communication outside of lectures and seminars.

Conclusions on the results obtained

1) the main problems of distance learning are: low self-organization skills of students, low assimilation of knowledge, fatigue and health problems, lack of communication with peers, impaired communication with teachers, "profanity" of learning by students and teachers. Technical and organizational problems arise regularly;

2) Of the positive aspects, there are savings in travel time to the university, studying in a relaxed atmosphere, lack of stress, more time for extracurricular activities and homework, convenience of distance learning;

3) The vast majority of students are considering a hybrid learning option for the future.

Discussion.

In the context of the pandemic, there was a demand for research on the rapid transformation of educational products and their technological implementation [11]. The works of Udzhukh I. A., Meshvez R. K. design of the educational process based on e-learning courses [21]. It describes the introduction of media materials into the educational process and the formation of an educational media product on its basis. The transformation of the educational process with the use of distance learning technologies has also taken its place in the field of scientific discussion [9, 20]. The challenges of a dynamically changing educational environment, the rapid restructuring of the "soft skills" of teachers, the need to develop digital competencies are highlighted in the monograph by O. Griban [10].

If compared with results of the study of associative relations of modern students, conducted among students of RTU MIREA. The students were required to give an association to the word "online". One of the most frequent associations was "convenience", "computer", "remote", comfort, education, accessibility (frequency 40, 43, 34, 18, 17, 11, respectively). But often there were also such: "boring" (frequency 10), "laziness" (5). There were fewer negative associations, and according to the results of the entire study, associations with a pronounced positive character amounted to 17%, and a pronounced negative character, only 4%. The results obtained generally indicate a positive perception of ongoing processes and digitalization, although they do not exclude sharply negative assessments [5].

A number of studies devoted to the study of communication skills of students in the distance, made it possible to draw conclusions about the decrease in communication skills, group work, and confidence. The prevalence of distance learning does not allow such skills to develop. Therefore, in the process of establishing a distance learning system, it is necessary to pay increased attention to the psychological nuances in learning [16].

The introduction of information technologies in education requires the actualization of pedagogical science and teaching methods. It is possible to find the optimal parameters of informatization and the traditional content of education, using the achievements of domestic pedagogical science. The works deal with the nuances of memorizing information, cognitive activity, didactics of the educational process, aspects related to the personification of education - that is, the foundation is laid for the introduction of information technologies in education without

losing the quality of the educational process². Modern research, within the framework of which the determination of the optimal amount of information for study is carried out, is also carried out and is interdisciplinary in nature [17].

The problems of student education were studied in various aspects by representatives of Russian universities. So, Bulan I. G. notes the decrease in interest and motivation for learning, the interruption of communication with the teacher by the electronic environment, the virtualization of communication, as a result of which the teacher “leaves” as the main motivator of students as the most important negative consequences of distance learning [6].

According to the results of another study conducted in 2020, almost one in five learners experienced negative feelings from distance learning. 40.3% of respondents felt a decrease in the efficiency of remote work, 23.1% noted its improvement, 30.3% - unchanged. A decrease in motivation was noted by 57% of respondents, and efficiency - by 51% [3].

Kononykhina O. V. considers in the article the methods of increasing the motivation of students in distance learning, reveals the importance of internal and external motivation for learning and honest completion of tasks at a distance. The author proposes to change the usual methods of certification, based on the psychological characteristics of students' perception. For example, split up the final testing for more honest writing of its parts. This technique reduces the pressure of responsibility for writing a great final test and allows you to work out mistakes on smaller tests during training [14].

According to another study devoted to the study of the psychological safety of students in the process of long-term online learning, it was found that 54.6% of students experienced difficulties in engaging in work with a teacher in online classes, 62.2% of students experienced a lack of communication with classmates 34.8% of respondents had difficulty answering questions from teachers during distance learning, 43.9% of respondents were afraid to ask clarifying questions and write messages. Other answers that received more than 50% affirmative answers were “I am embarrassed when the teacher asks to turn on the webcam” (51.5%) and “I think that distance learning has become less effective” (52%) [13].

Apanasyuk L. A., Krivova A. L., Rzayeva S. M. in the study note a large number of advantages of distance learning for linguistic students, including the absence of the need to leave home, psychological comfort, and the development of skills to work remotely. Students are wary of distance learning on an ongoing basis, but they welcome its periodic introduction [4].

Rikker A.S., Tkacheva E.G. investigated the impact of online learning on the health of students. The authors revealed increased stress from distance learning, a significant increase in the study load, an increase in the negative impact on health in the form of deterioration in vision, posture, sleep, as well as a significant increase in fatigue and apathy [18].

Research on emerging health issues associated with increased screen time reveals a clear link between cognitive decline in children and depression in adults [7]. Given the psychologically vulnerable age of students, this factor cannot be overlooked. According to a study of “pain points” during distance learning during the pandemic, it was noted that 24.2% of students who studied online during the COVID-19 pandemic answered that this learning format depresses them and experienced a lack of communication. At the same time, 35% of those who answered felt great [8].

In a similar study by E. A. Maksimyuk, it is proposed to pay attention to the psychological preparation of students for the upcoming classes: this turned out to be in demand for more than 20% of the respondents [15]. It is recommended to present to students in advance a plan of several upcoming classes with a list of topics. This will allow them to calculate their strength and time for preparation. Understanding by students what is expected of them gives them the opportunity to

² Bespal'ko, V.P. Education and learning with the participation of computers (pedagogy of the third millennium). Moscow, Publishing House of the Moscow Psychological and Social Institute, Voronezh, MODEK, 2002. 352 p. (In Russ.);

distribute labor costs and develop self-organization. In general, this will encourage them to be motivated and eager to show their preparation. Otherwise, if you do not warn them about the curriculum for several subsequent classes, students risk "earning" burnout. Considering that education is already a complex process, the admission of such a state can lead to a total reluctance to learn. To do this, it is necessary to maintain contact with students (to communicate individually during classes, in chats, to correspond by e-mail). Analysis of their mistakes, discussion of the material not only at the lecture level, provision of additional materials - these methods will allow students to remain interested in learning. At a distance, it is extremely important that contact with the teacher prevail over independent learning, since it is tiring for students to sort out the material on their own. This will reduce their desire to learn, and on top of that, it will make it harder for them to return to intramural study mode.

Thus, difficulties and deficiencies have been identified in all of the studies reviewed, including the one conducted by our group.

However, the development of distance education is a strategic goal for the higher education system. Back in 2012, in the USA, 70% of representatives of educational institutions stated this as an obvious and important fact. More than 10 years have passed since then. Thus, this development trend is stable, due to the existing advantages of distance education (flexibility, mobility, the possibility of forming an individual learning path, and others), which means that further research should be carried out to strengthen the positive qualities of this form of education and leveling the negative ones [2].

Conclusion.

The hypothesis of the study was generally confirmed, but the results obtained opened up new prospects for research. From the point of view of the negative aspects of distance learning forced in the context of the COVID - 19 pandemic, the discrepancy with the hypothesis was the alleged assessment of the quality of materials prepared by teachers: although there are indications of a reduced quality of the materials provided, a direct question on this topic did not reveal a strong deterioration in them (according to 87 % of respondents, everything is in order). But there are also unexpected results. Distance learning turned out to be more attractive to students than originally thought. The reasons are the flexibility of attending classes from anywhere and the possibility of combining with other activities, in the absence of stress from attending an educational institution, the selectivity of attending classes. The results obtained can be a valuable indirect evidence of the demand for the transition to individual educational trajectories of students and methods of adaptive learning. As the survey showed, almost all students (95%) would choose a hybrid form of education. According to subjective assessments, at least half of the students successfully cope with their studies in distance learning, about a quarter have high self-organization skills and are able to choose the most interesting disciplines for themselves. With a professional approach to the individualization and personification of education, this type of educational services could well be in high demand and has great potential for development.

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Submitted: 13 May 2023

Accepted: 14 June 2023

Published: 15 June 2023

