Students' attitude to e-learning

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Abstract. In the context of the Covid-19 pandemic, the relevance of the transition to remote forms of training has increased not only for part-time students, but also for full-time ones. Online learning, based on the use of various electronic educational platforms, differs significantly from the traditional system and completely changes the entire educational process, including the forms of knowledge acquisition, control and assessment. E-Learning has many advantages, but it can only be considered as an addition to traditional forms of training. However, under the conditions of the pandemic, remote learning for a certain period of time became the only form of communication between students and teachers and showed alongside with its advantages its shortcomings as well. It turned out that higher education is not only technically, but also organizationally unprepared for the transition to online education. This work examines the main aspects of the remote learning system as a necessary and effective technology in the current conditions. At the same time, our task is to analyze the negative assessments that students give to the current state of remote education.

1 Introduction

The latest pedagogical and information technologies are aimed at ensuring that learning promotes the desire to learn, motivates to cognitive actions, and contributes to the growth of the attractiveness of the learning process itself. New approaches to organizing the learning process, including remote learning, create preconditions under which the students are interested in the educational process itself, and they are supposed to be happy to fulfil the tasks assigned to them.

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This becomes possible on modern educational platforms thanks to a well-structured learning process, as well as to assessing the knowledge and skills of students. The pedagogical literature shows an enormous importance of feedback between the student and the teacher in the process of their interaction, when the teacher receives information about the effectiveness of the material on the subject studied by the student [1].

Distant learning is a form of education, which is a learning activity performed remotely, when students do not interact or contact directly with their teachers. Teacher and student are connected only by the educational platform and marks, which in numerical form express the quality of knowledge. Remote learning integrates a number of innovations in the field of application of modern information and communication technologies (ICT) in education, such as computer-based learning technologies, interactive multimedia, web-based learning, on-line training, etc.

At the same time, another factor influencing the success of an educational process based on learning platforms in remote learning is the internal stimulus of a student from whom special efforts are required.

The advantages of such training are in the fact that students themselves control the study time. They have a definite educational goal in front of them, but they know in advance what time resource they have, how many days, hours a particular section on the educational platform will be open for his review. Using this information, student independently allocate their time to study this or that item.

Remote learning system based on an educational platform includes a set of rules, guidelines and necessary curriculum material. It is also obligatory to have the schedule of classes, the definition within the program of the types of work that ensure the processing of the information received not only in terms of quantitative but also qualitative criteria of the individual activities of students and their educational achievements. Such a system allows us to determine the personal rating of each student in any academic subject at each lesson [2]. The rating is understood as a cumulative mark in different disciplines or in a whole cycle of disciplines studied during the learning period [3]. In such a situation, students are clearly aware of their success or lag, they see well the trajectories of their movements [4].

Strict regulation of the activities of students in the classroom, compulsion of training procedures often leads to misunderstanding of the students' goals and their actions, to the lack of awareness of the need for the material to be studied and of its practical importance [5], [6].

Modern pedagogical technologies, and to a greater extent e-learning technology are personality-oriented, and are aimed at developing individual resources of students [7], [8].

E-learning technologies provide an opportunity to reduce the role of stress factors in the process of passing tests and exams by students, and thus to increase the level of psychological comfort in class [9], [10].

However, the key advantage of distance education is that here a student is less dependent on the teacher's attitude to his or her success and is more independent. This is perhaps the main goal of remote learning - to motivate students to independently achieve high educational results [11].

At the same time, the practice of introducing remote education on various electronic platforms has shown not only its advantages, but also significant disadvantages that make it much less effective than traditional education.

2 Materials and methods

Our research at Naberezhnye Chelny State Pedagogical University (Russian Federation) was aimed to find out from students

- What was the degree of their involvement in the online learning process ?

• Did the remote learning help improve the quality of their education ?
• Was it difficult for them to study remotely ?
• What problems did they meet with in the course of online learning ?

To answer these questions there was worked out a questionnaire on students' perceptions of online learning with 15 questions, each of which having 3 answers.

A total of 325 students were surveyed who expressed their opinion by filling out Google Forms.

The 1st year students in the sample amounted to 82 people, the 2-d year ones – to 77 people, the 3-d year ones – to 88 people, and the 4-th year students – to 78 people.

3 Results and discussion

The students were asked a question to what extend online learning model increased students' involvement in learning activities. It turned out that with the answer "Online learning encourages students to more actively participate in lectures" there strongly agreed or rather agreed 36%, rather disagreed or did not agree at all 64% of respondents.

42% of students strongly agreed or rather agreed with the statement that online learning models increased involvement in learning activities, while 58% rather disagreed or did not agree at all with this statement.

As for the statement that online learning is able to motivate to be more active in learning the number of students who strongly agreed or rather agreed with it amounted 45%, and the number of those who rather disagreed or did not agree at all reached 55%.

The given data showed that that most students disagreed that online learning could increase their involvement in the learning process. It means that most of them are not satisfied with online learning and remote education.

The next question was related to the extent to which e-learning was effective in improving the quality of learning.

With the statement that online learning models make easier understanding the learning material there strongly agreed or rather agreed 27% of respondents, rather disagreed or did not agree at all 73%.

With the statement that e-learning helps to solve problems during online classes there strongly agreed or rather agreed 17%, rather disagreed or did not agree at all 83% of students.

The statement «The application of online learning can improve performance and learning outcomes» was strongly shared or rather shared by 33% of students, rather not shared or rejected by 66%.

Hence, it is possible to conclude that most students disagree that online learning was effective for them. They are uncertain whether e-learning makes it easier for them to understand the material or is able to improve their performance and learning outcomes.

The important question for us was whether it was easier for students to study online.

It turned out that only 27 % of students strongly believed or rather believed that the online learning process had been easier for them while 73% rather disbelieved or didn't believe at all in it.

36% of respondents strongly agreed or rather agreed with the statement that online learning model increased flexibility in learning while 64% rather disagreed or did not agree at all with this statement.

With the answer «Online learning makes it easier to communicate and interact with the lecturer» there strongly agreed or rather agreed 32%, rather disagreed or did not agree at all 68%.

The descriptive analysis of the results of students' perceptions of online learning from the aspect of convenience showed that most of the students rather disagreed that the online learning method implementation was convenient.

The next important question was asked regarding obstacles and difficulties in the implementation of online learning model.

The students' answers proved that the majority of students strongly agreed that they had obstacles in the course of online learning.

68% of students strongly agreed or rather agreed with the statement that "Internet access becomes obstacle to attend online learning" while only 32% rather disagreed or did not agree at all with this statement.

With the statement «I find it difficult to do online learning» there strongly agreed or rather agreed 62%, rather disagreed or did not agree at all 38% of respondents.

82% of students strongly agreed or rather agreed with the answer «I feel the conventional method (face-to-face) is better than online learning» while only 18% rather disagreed or did not agree at all with this answer.

In addition to the questionnaire mentioned above, three supplementary items were also given:

1. Explain the obstacles and difficulties you have found during online learning.
2. What is your positive impression or experience during online learning?
3. What is your suggestion to lecturers or campus management to improve online learning in the future?

The above findings showed that the online learning which became the solution in the middle of the Covid-19 pandemic had negative response from students. Most students argued that online learning did not facilitate them in learning activities. Their involvement in the learning process during online classes did not increase. Most of them also felt the ineffectiveness of online learning in improving the quality of learning. It means that most students were unsure that online learning would be effective to improve their performance and learning outcomes, and they state that conventional method (face-to-face) was better compared to online learning.

Supplementary item number one (№1) was used to identify various kinds of obstacles experienced by students in the course of online learning. As a result, several major problems could be identified. They are: 1) understanding the topic of the course was more difficult because the communication process with online method was less effective, especially in practical courses; 2) the process of communication and discussion, both with lecturers and fellow students, was less than optimal when using online media; 3) there were many technical problems such as signal interference or unstable internet connections during online learning; and 4) the economic aspect as online learning method increased the use of internet data package which was commonly used by students, so the cost of purchasing internet packages would also increase.

Supplementary item number two (№2) identified positive impressions and experiences of the students when studying online. Based on the answers given, some of the positive impressions could be described as follows: 1) the implementation of on-line learning was more flexible than with conventional methods because it could be done from home (not necessarily a direct meeting in class); 2) online learning became the right solution when conventional method (face-to-face) was not possible to apply due to Covid-19 pandemic; and 3) online learning method provided a new and exciting learning experience for students such as a virtual learning atmosphere which could be created through the electronic devices.

Supplementary item number three (№3) was related to students' suggestions or expectations for improvement of the online learning process in the future. Some of their suggestions were as follows: 1) the need for special training or assistance before online

learning implementation, especially when dealing with unfamiliar e-learning media; 2) the implementation of online learning should be made attractive, it should be not limited to the distribution of modules or assignments, but it should also contain explanations from the lecturer by using audio features, video tutorials or video conferences; 3) the need for media or platform which was easy to access, and equipped with a digital library so that students could find references within the same online learning platform.

The process of communication and interaction in online learning environment is an important factor to help students achieve better learning outcomes [12], [13], [14]. When the process of communication and interaction between lecturers and students does not run smoothly, students will feel that the conventional method (face-to-face) is better than online learning. Course content, teaching methods, e-learning media, and technology support need to be considered for the implementation of online learning [15], [16], [17]. Technical support problems became obstacles and constraints for most students when all courses were carried out online.

Nevertheless, online learning is still considered as a breakthrough and new paradigm in the education system [18], [19].

With the development of internet technology, online learning has become an interesting solution for most universities in an increasingly modern learning environment. Online learning is characterized by flexibility [20] where lecturers and students do not need to be physically present in the classroom, which is not obtained by conventional methods [21]. Simulation and visual techniques which can be accessed from students' gadget make online learning interesting and provide a new learning experience for students.

4 Conclusion

Online learning is the solution found by higher education in many countries including Russia amid the current Covid-19 outbreak.

Based on the survey results about students' perceptions of online learning, we see that most students had negative impressions and assessments of online learning. It could be seen from the aspects of convenience, involvement and effectiveness of online learning which obtained low scores (rather disagreed or did not agree at all) from the students. It was caused by several factors. First, assignment was more dominant than explanation of the material; secondly, unstable internet connection was an obstacle for most students.

Our data are confirmed by the results of a study conducted by the Ural Federal University (UrFU) led by G.E. Zborovsky which was held in the Sverdlovsk region in the summer of 2020. Of the 1,042 respondents, 62% answered that the transition from traditional forms of education to online and remote learning reduced the quality of education, for 56% it weakened the motivation to learn, 36.5% are certain that online education has led to a deterioration in academic performance and the ability to study independently [22].

E-learning will remain an important factor in the educational process in the future, especially in higher education. The findings of this study suggest that university management, designers, and lecturers or instructors should make careful planning and preparation so that this learning system can be accepted and beneficial for students. For this reason, technical support and the role of lecturers become major concern in better online learning planning.

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