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A shift from in-class to distance learning: opportunities and challenges

The current article considers the origin of distance learning and its primary features which distinguish in-class learning from distant format of education. The study discusses the advantages and disadvantages of distance learning as well. It is presented the opinion poll results on the overall efficiency of the distance learning and the extent of students' involvement and productivity in a distant setting.

Keywords: in-class learning; distance learning; advantages; disadvantages; opinion poll results; suggestions.

We live in an era of scientific and technological progress and it has a considerable impact on every field of life. Education is undergoing significant changes as well. One of the trends that has emerged and grown in popularity for the past few decades is distance learning which is defined as «a form of education when the participants in educational process are physically separated and communicate by different means and at different times» [1, p. 29]. It is worth mentioning that this meaning of the term doesn't fully contain information about the means of communication which are implemented. It drives us to the idea that it needs to be specified. Means of communication involve various kinds of Web-based electronic devices which are used to distribute the learning material via the use of contemporary technology even if a student and a teacher are located in different parts of the world; they stay connected with help of laptops, cell phones, tablets and etc.

As a matter of fact, distance learning provides an opportunity to learn throughout entire life. Learners may not always be physically present in the classroom, so one might study and qualify in the chosen subject area online without having to attend an exam center, a college building or university campus. It goes without saying that distance learning is a current trend and reality which create both chances and challenges for educational institutions, at the same time, making education accessible to even larger numbers of people. However, adjustment of university standards and requirements to the new trends are needed. In this regard, the topic is considered to be relevant and up-to-date.

Undoubtedly, close attention has been paid to study the distance learning concept since the beginning of 20th century [1, p. 33], [2, p 455], [4, p. 87]. Historically, distance learning can be traced back to over 100 years ago [4, p. 81]. To meet the needs of faculty and students, institutions started to apply

available technologies, such as audio connections (i.e. telephones), videotapes, and television. Early learners of this type of education were mainly students located in rural or remote areas who did not have geographical access to educational institutions [3, p. 27]. As new media emerged such as radio and television, these new technologies were integrated into distance education delivery methods: audiocassettes, television, videocassettes, fax, and print. The establishment of the British Open University in 1969 marked a significant development in the delivery of distance education by offering a mixed-media approach to distance learning technologies. Learning materials were sent to students by mail and supplemented by broadcast radio and television.

In fact, the benefits of distant learning can hardly be overestimated. On the one hand, with help of distance learning the students have plenty of time left for their self-education, hobbies as there is no need to go to classrooms (which might be especially time-consuming in large cities and the way to campus could take up to 2 hours one way). In addition, students can choose their own pace of study, revise for exams and create an individual schedule of classes without being stuck to a specific date and time of study. Also, increased chances for disabled people to receive their education, Thus, the wide range of students may be involved in the educational process, as the number of students enrolled in educational programs is not limited by the auditoriums and the staff. On the other hand, there are the pitfalls which should be taken into account: the background knowledge of students might not be equal but the overall process needs to be as inclusive for all students as possible; some students might find it difficult to organize themselves; sometimes it takes too much time to get the feedback from the instructors. Furthermore, the equipment for conducting remote lessons might be unavailable and it influences the process of study in a negative way as well.

According to the opinion poll conducted by the researchers from the National Research University, Higher School of Economics it was found out that distance learning is not worse in terms of quality than full-time education and attracts a greater audience (15%–18% more). The focus of this study was also to collect information from the students of National Research Tomsk Polytechnic University (TPU) to investigate the extent of satisfaction of students with the process of distance learning in comparison with in-class training. The influence of distance learning on the emotional state of engineering students from TPU has not been rigorously examined. Two questionnaires were developed for these purposes to conduct a survey. The number of participants made 80 students. The questionnaire one comprised the following questions (Table 1):

Table 1

Distance learning vs. In-class learning questionnaire 1

Questions	Answers / %
Which format of education do you consider to be more convenient?	31,7 – in-class learning 31,7 – distance learning 36,6 – both
Which classes are more comfortable for you to attend (psychologically)?	43,9 – in-class learning 36,6 – distance learning 19,5 – both
Is it important for you to have live communication with your classmates/teachers?	34,1 – not very essential 58,5 – very essential 7,3 – no matter
Do you feel emotionally-tired while studying remotely?	34,1 – no 24,4 – yes 41,5 – fifty /fifty
Is it difficult to organize yourself while studying distantly?	51,2 – very difficult 31,7 – a little 17,1 – not difficult at all
Do you feel overwhelmed in terms of homework while distance learning?	56,1 – yes 23, 9 – no matter 14,6 – it makes no difference
Do you need extra-curricular activities to reduce stress of students who learn distantly?	48,8 – I do not need it 16,6 – it is a waste of time 36,6 – I will be happy
Does distance learning have a negative influence on students' knowledge?	70,7 – yes 24,4 – to a certain extent 4,9 – no
What education format do you prefer?	24,4 – distance learning 39,0 – hybrid learning 36,6 – in-class learning

The list of questions of the second survey that was aimed at gaining the information on students' emotional state, their motivation and engagement in distance learning (based on self-assessment) is presented below. The respondents were asked to prioritize their feelings from 1–5 (more typical features of in-class learning to the left and more typical features of distance learning to the right):

– I can manage my time effectively
– I can take good class notes
– I can perform well in exams
– I can participate effectively in class discussions and answering questions
– I can keep up to date with my course work / homework
– I can overcome most of the challenges in homework
– I am afraid of failing

– I participate actively in most class learning experiences (i.e. presentations, discussions)

– I often work with other students on class projects and assignments

– I often discuss ideas from class with the instructor

– I often ask for feedback on my work from the instructor

– I often discuss ideas from class with other students

– Most of the time, I come to class without completing homework

The results of the second survey indicate that it is more difficult for the students of TPU (who participated in opinion poll) to study in a distant format as it is not always possible to cope with troubles without the instructor's feedback. Traditional education is less stressful and the learners actively interact with their classmates, so they prefer this way of study more.

In conclusion, it might be inferred that the respondents have certain emotional difficulties when learning distantly because they should acquire a huge amount of course material by themselves, in other words, some of the tasks do not have in instructor-led training. Additionally, some students have difficulties with self-organization, time-management and autonomous mode of learning. Therefore, it is recommended to incorporate customized courses with simplify students' immersion in distance learning, for example time-management, stress resistance, self-control techniques, self-discipline extra-curriculum courses or workshops. A preliminary needs analysis is certainly needed. Also, it should be taken into account that lack of live contacts and the increased number of homework can lead to the emotional burnout and may students might feel overwhelmed. Particularly, these are the burning issues for freshmen who are not very well aware and informed about the requirements and exam period details. In this regard, in order to avoid unpleasant incidents during the educational process, it is necessary to control the emotional state of students and provide psychological to reduce the risk of nervous breakdown.

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