CDSES 2020

IV International Scientific Conference "Competitiveness and the development of socio-economic systems" dedicated to the memory of Alexander Tatarkin

DISTANCE LEARNING: MANAGEMENT, INSTITUTIONS AND RESULTS

Elena Alpatskaya (a)*
*Corresponding author

(a) Chelyabinsk State University, 129, Bratiev Kashirinykh St., Chelyabinsk, Russia, selena90@yandex.ru

Abstract

The process of distance learning as a purposeful organization and stimulation of educational and cognitive activity of students to acquire knowledge, skills, and develop creative abilities from the position of management and institutionalism is a set of stages, norms, rules, forms, and methods which allows us to judge its results and effectiveness of the organization. Education is also a management process that includes goals-setting, planning, organizing, motivation, and controlling. These components are used in Russian high-education practice based on the results of a survey of university teachers and young people. Goals-setting means establishing the goals that encourage the teacher and student to interact. The distance form is available at a convenient time (place) for both the teacher and the student. Planning and organizing are related to learning opportunities and outcomes. This is a definite organization of various stages of learning in terms of time and access to resources. There are also direct (costs for high-quality Internet, purchase of equipment), and indirect costs of interaction (access, time delays, etc.). Motivation for distance learning should be strong, because the student independently plans his activity in the educational process. Controlling here is rather formal - this is the main weak point of this form. Students' self-control is more effective. Thus, the effectiveness of distance learning strongly depends on the period of learning, its level, and the content of the program. The goals pursued by the teacher and student, the organizing of the process, motivation and controlling of learning the course are important too.

Keywords: Distant, education, forms of learning, learning, learning stages, results of learning

1. Introduction

Distance learning is one of the forms of organization of education as a purposeful pedagogical process of organizing and stimulating educational and cognitive activity of students to acquire knowledge, skills, develop creative abilities and moral and ethical views. Learning is an integral socially significant component of education, carried out in the interests of a person, family, society and the state, as well as a process aimed at obtaining a set of acquired knowledge, skills, values, experience and competencies of a certain volume and complexity for the purpose of intellectual, spiritual, moral, creative, physical and (or) professional development of a person, satisfying his educational needs and interests[1] – which can then be applied in practice, in professional work.

As such, the forms of education as a pedagogical process (full-time, part-time, combined part and full time) are defined by the law on education. For the realization of specific educational programs, the form of education is determined by the appropriate educational standard. Distance, i.e. remote form, involving participation and interaction in the learning process of a teacher and a student, is acceptable in many educational organizations at different levels and has existed for a long time. Although distance form in the Educational Law today is not defined, it has a network form involving participation in the educational process resources of several educational organizations, if this is agreed directly between them, which identifies the main characteristics of the implemented educational programs and characteristics of individual subjects, courses, disciplines (modules), practices, issued documents on education and (or) qualification, a document or documents of the education and also resources and the distribution of responsibilities between them, the period of this agreement[2]. In general, this involves the use of educational resources, manuals, videos, guidelines, etc. of other educational organizations, which is often implemented in distance (remote) form (here the question of copyright compliance arises, but this is a juristic field and we do not consider it in this article).

One of the forms of distance education – correspondence – appeared in the USSR in 1961. It assumed the presence of the student at the installation lectures and subsequent consultations with the teacher by phone or in correspondence, leading towards the Final exams. There were other examples of distance learning already in Russian practice, for example, learning foreign languages using the. (Beketova & Demina, 2018). Today, the distance form is present at all levels of education (high, medium-special, secondary, preschool, professional development, training of employees of various companies, etc.).

There are different forms of the pedagogical process in distance learning, such as a hybrid learning (a combination of the traditional form and the Internet), electronic learning (completely online), mobile learning (using wireless devices, tablet PC, smartphone) and gamification of traditional education. Also, distance learning processes are divided according to the degree of interactivity into the following categories: completely independent learning (the student's work with available text and other educational material), work with an electronic mentor (directing the student's activities by periods and stages of education, and the teacher plays an advisory and auxiliary role) and work in online classes (the teacher

---

[1] Federal law «On education in the Russian Federation» from 29.12.2012 N 273 (01.08.2020) // Consultant Plus. http://www.consultant.ru/document/cons_doc_LAW_140174.
[2] Federal law. Art.15

plays an active role not only in consulting, but also in organizing the learning process by terms and structure) (Beketova et al., 2020; Leontyeva, 2018; Peteraitis et al., 2019; Tatarinov, 2019; Tseryulnik, 2020).

Nowadays, there are new concepts to be considered, such as digitalization of education (digital means of communication, recording, data transmission using digital devices) and the digital educational environment, which includes (Moskalyuk, 2019, 1) information resources, including information arrays of data, educational portals, collections of video, audio, photo, and library materials; 2) telecommunications (network and mobile environments, television, mass media; 3) management system (user authorization, testing, content, personal and collective space). These processes are considered as a modern stage of technological, informational and intellectual development of society (Chow & Croxton, 2017; Gryaznova et al., 2018; Hatlevik et al., 2018).

In some other countries, the distance form of learning appeared even earlier and exists today in many well-known educational institutions (Berg & Simonson, 2016; Veselitsky & Khabarov, 2019). This includes online lectures, games, animated videos, and interactive discussions. For the year of 2016 the global distance learning market was estimated at $ 50 billion (in Russia in 2018 – 6-8 billion rubles).) (Veselitsky & Khabarov, 2019, pic. 1). Some foreign authors divide distance learning (student activity) and distance teaching (teacher activity), which together form up the process of distance education (Berg & Simonson, 2016).

Today, and especially in the current situation of the pandemic, quite a lot of research is devoted to the effectiveness and technologies of distance learning, analysis of its advantages and disadvantages (see for example, (Fojtik, 2018; Krasnova, 2002; Labuznov & Shendyapina, 2019; Yashina, 2019; Yashina & Goreva, 2019;) and many of them point out various advantages of it, such as the convenience and flexibility of the learning process for students (time, place, intensity of learning), cost savings for universities (there is no cost to hold classrooms), opportunities for the application of information technology, activization of independent work of students. Although, there are some disadvantages, such as (Krasnova, 2002):

a) high start-up costs for organizing high-quality distance interaction (purchasing equipment, providing stable Internet access for teachers),

b) higher requirements for the qualifications and personal characteristics of teachers (knowledge of not only the main subject, but also the skills of organizing distance work, software tools for its organization, some psychological traits associated with distance work and responses to numerous messages online),

c) high intensity of work of teachers (creation of special courses and tasks, high intensity of work in social networks and e-mail), which is often not paid,

d) the problem of checking the independence of students' performance of control tasks and tests online.

From a managerial point of view, it is interesting to consider distance learning from the perspective of step-by-step development of mental actions, when the goal-skill and methods of evaluating its achievement are put at the center of distance learning (Zelitchenko, 2018). Therefore, the process of

distance learning is divided into separate small tasks that follow each other and are consistently controlled.

Thus, the subject of this study is in demand and relevant, especially in modern conditions of pandemics and quarantine. At the same time, the study of the distance learning process from the managerial and institutional points of view is a rather poorly studied issue.

2.   Problem Statement

The supporters of universal implementation of distance technologies advocate for their greater progressiveness, accessibility and efficiency. For example, in the analysis of the results of a survey of university teachers of Russian universities conducted at the RANEPA in April 2020[3] it is noted that the skeptical attitude of the majority of teachers in the abrupt transition to distance learning is associated with an internal rejection of distance education, conservative views on the nature of learning, stress associated with the destruction of the established daily routine, i.e. it turns out that the disadvantages of this form are rather the problem of the teachers themselves. Let us examine, whether it is true or not, by displaying the learning process from the point of management and institutionalism, i.e., phases, norms, rules and institutions that regulate this form of education both from the teacher and the student.

3.   Research Questions

Considering the learning process as a management process allows you to detail it and highlight its stages (components), which is important for distance learning, which largely depends on the conditions and specific forms of organization.

Any management process, as you know, includes the following functions (stages): 1) goals-setting, defining the goals of the upcoming activity; 2) planning, distribution of activities by stages and time; 3) organization, initiation of the process itself, including its conditions, methods, forms and possible results; 4) motivation of participants to its qualitative implementation; and 5) controlling of results, correlation of real results with planned ones.

At the goals-setting stage, distance learning is initiated from the perspective of goals that encourage participants in the process (teacher and student) to interact. The distance form is most affordable and convenient when you can participate in the learning process at a convenient time and in a convenient place for both the teacher and the student. The rules here are the rules and conditions for using the Internet, the conditions for participation in education, and competition among educational organizations offering various training programs at various levels. Distance learning provides the greatest range of opportunities, since you can study remotely all over the world. On one hand, this form is convenient and progressive for both the teacher and the student. Most of the advantages of distance learning are related to the learning goals, the range of which is expanded due to greater flexibility and separation of courses and training programs into stages (modules). The goals of modern youth, according

---

[3] University teachers expressed their opinion about the forced transition of the educational process to online (issue). (2020) Laboratory of social research methodology INSAP RANEPA. 30.06.2020. https://socialresearch.ru/posts/68-prepodavateli-vyskazali-svoe-mnenie-o-vynuzhdennom-perekhode-obrazovatel-nogo-protsessa-v-onlajn.

to a large-scale study of Sberbank in 2017 «30 facts about modern youth»[4], in the field of development and learning are rather short-term, they do not have stable preferences in their aspirations, there is no confidence that gradual efforts will lead to the goal. Young people avoid difficulties, but at the same time everyone has a sense of their uniqueness, difference from others, their interests in self-development are «multifocal» and not global, which creates a platform for individualization of learning (which is just possible at a distance). However, there are also difficulties for teachers, that may be associated with more thorough development of the course stages, preparation of visual, interactive, control materials for each, even small, section or topic. Accordingly, the goals of studying the whole course are divided into smaller goals, tasks, stages, and steps, that require the teacher to perfect the logic of building the course and the possibility of reconstructing its structure depending on the level of training, goals, and time available to the student. Also, the workload on the teacher increases with the increasing need for «practical interaction» in the course of training (games, interactive interaction, and constant communication with the teacher using various communication channels).

The planning and organizing stages are important in terms of learning opportunities and outcomes. This is a definite organization of the various stages of training (introduction to new material, practical tasks, reporting and certification) in terms of time (setting deadlines) and access to resources. Let us note, that direct, face-to-face communication between the teacher and the student, even via online interaction (Skype, Zoom, and others), is difficult to replace – because in direct communication, especially in practical classes, the student gains experience, has a lot of opportunities to ask questions, and the teacher receives full feedback. Online communication in this regard is limited, because there is a time lag «question-answer», not always the teacher has the opportunity to answer immediately (for example, by e-mail with a large number of students and groups). Communication with the use of video links also is limited in time, places, high demands on the quality, and organization of a teacher's work space (private room, no noise, etc.). Therefore, the distant interaction may have certain costs – direct (cost of quality the Internet, for the acquisition of high quality equipment, expansion of housing) and indirect (the difficulty with passwords and access time delays, misunderstanding assignments, etc.). These costs can be both significant and insignificant. Students can use artificial reasons about the allegedly broken Internet to cancel the results of an unreleased exam or test. And for teachers, a high-quality Internet is the main condition that a student will receive the necessary information in the right volume and quality, as well as the key to a more successful and operational control of students' knowledge (for example, when using a web camera online for an exam or test). The issue of quality planning and organizing distance education is important at every stage and in the study of each topic, because young people are often not able to plan for a long period, expecting quick and easy results and need help in planning their actions, even for any insignificant result, and, thus, perceive their choices as a matter of life and death, afraid of mistakes, irreversibility of the choice[5].

An equally important stage is motivation, which should be very strong in distance learning, since the student is mainly planning their own level (activity) of participation in the educational process – watch a video lecture or read a text, answer the test immediately, without preparation, or later, etc. All

---

[4] Sberbank has studied modern youth (issue). (2017). https://www.banki.ru/news/lenta/?id=9603392.
[5] Sberbank issue, 2017.

this affects learning outcomes, not only formally (grades), but also qualitatively (real knowledge). Practice shows that high-quality mastering of the material using only distance technologies is difficult for long-time education. In our opinion, self-motivation, or rather, its absence for many students is one of the significant disadvantages of distance learning. There are situations, where a student is simply interested in the formal result of education – obtaining a certificate or diploma, and the content side of it is not very important. The established authorities and their experience do not cause young people special worship, they do what they think right themselves, do not like to sit in one place, they are important for social interaction, communication and social success (at a distance, this is achievable through the promotion of educational projects in social networks and messengers)[6]. The motivation side of teachers also deserves attention, since teacher developed interesting course and competently «sell» it including the thoroughness of development of sections, clarity, the choice of examples, and personal characteristics of the teachers, although a greater amount of effort here does not necessarily mean good results. Low motivation or lack of motivation of at least one of the participants makes the learning process meaningless.

Controlling appears to be a more formal stage in distant learning, and that is its weakest side. Also, its weakness is related to the student's motivation, i.e. their self-control is most effective. This requires additional efforts from the teacher in terms of developing control tasks and activities that should not be quite complex, but cover all sections and topics of the course, and, at the same time, be diverse in both form and content. Assignments should change periodically, since simpler assignments and answers tend to spread quickly among students. Alternatively, you can control (attach tasks) online, when the next task can't be completed in the absence of the previous one, and the final score is affected by the timing of the task. Effective control is both a detailed tracking by the teacher of the level and number of stages (themes) of the course passed by the student, and stimulation of the student at each stage, which creates motivation for successful completion of training.

4. Purpose of the Study

The purpose of this study is to find out if the statements about the significant advantages of distance learning are relevant, and to determine the shortcomings of this form and what they bring (based on comparison of the results of a survey of teachers and students, as well as research of Sberbank on the characteristics, goals and aspirations of today's youth)[7].

5. Research Methods

Let us analyze the stages (functions) of the process of distance learning by the example of Russian universities and, in particular, Chelyabinsk state University, given the experience of distance-learning gained to date and the results of a survey of teachers and students conducted in the Institute of social Sciences of RANEPA[8], and CSU. We will correlate these stages with the modern features of young students identified in Sberbank's large-scale 2017 study «30 facts about modern youth».

---

[6] Sberbank issue, 2017.
[7] Sberbank issue, 2017.
[8] RANEPA issue, 2020.

According to the results of the RANEPA survey, the main requirements for teachers when implementing distance learning is reduced to three points:

1-the material component (providing computer equipment and software), which, in fact, reduces the cost of teachers both to create high-quality content (learning materials) and to use communication channels (Internet, mobile and video) - i.e., the cost of organizing of distance learning;

2-the communicative component (an environment for communication that is necessary and sufficient to maintain remote learning, inclusion in the team and maintain a high level of learning) – depends on both the level of training of teachers in the field of information and communication technologies, and their psychological readiness for this form of interaction (and they, as representatives of the older generation, are not always ready to communicate everywhere and always, as young people do);

3-organizational component (reducing bureaucratic pressure and providing greater freedom in the choice of means and methods of training). As for CSU (probably, and many other universities) we can say that there is no specific format of distance learning, but only educational platforms which are installed and paid for by the University, and the filling of them is basically the same (learning materials in various formats, forms and procedure of communication between teachers and students, monitoring of attendance and knowledge).

As for the main threats, associated with the inability to liberalize education and transition to a distance format, teachers specify[9]:

1) decrease in students' motivation to study (motivation stage);

2) lack of students' skills and abilities to maintain discipline and diligence in distance learning (motivation);

3) emotional breakdowns of both students and teachers (organization);

4) increasing load on teachers (organization);

5) the lack of an individual approach in the education system, impersonality (the problem of goal setting);

6) inability to control the level of knowledge (control);

7) restrictions in a number of areas (primarily technical and mathematical) on remote knowledge transfer (organization, control)

8) formalization of educational processes, tendency to template, unified solutions (organization).

Thus, the majority of the risks are associated by teachers with the stages of organization, motivation of students to learn and control.

6. Findings

The survey conducted at Chelyabinsk state University (faculty of management) is not as detailed, but it gives some results. For example, the majority of teachers surveyed used e-learning and distance learning technologies earlier (77.8% of respondents) and the main difficulties associated with it are the need to conduct classes online (27%) and the need to upload materials to an educational platform (27%). Then there is the choice of educational technology and the lack of feedback from students (18% each).

---

[9] RANEPA issue, 2020.

The majority (88.9%) of respondents conduct remote classes using personal equipment, platforms – Moodle (34.6%), Vkontakte (28.8%) and Viber/WhatsApp messengers (21.2%). Note that the Moodle platform has been utilized in our University for a long time and is used in the process of education by the faculty of part-time and distance learning, the Institute of advanced learning and retraining, as well as by some faculties when placing educational materials and monitoring knowledge earlier. The intensity and quality of use of this platform can be controlled by the University administration, while the use of the social network «Vkontakte» and messengers, as well as e-mail linked to personal contacts of the teacher, is more difficult to control.

Let us note, that the communication channels used by students (mostly full-time students were interviewed) to get information about the organization of distance learning are different – the Vkontakte platform is in the lead (71.8%), the CSU website is in second place (18.3%), and Moodle is in third place (only 5.2%). This clearly indicates a lack of communication between teachers and students. Although, in general, students receive answers to questions that arise and believe that they have adapted to distance learning (73.1%). Distant learning is a form of learning that will accompany our lives and be introduced into the educational process more and more. The characteristics and goals of modern youth contribute to this in many ways. The inevitability of the process is hindered by the psychological mood of the teaching staff (perhaps in 10-15 years the situation will change, because the current youth will grow up and will already represent the interests of teachers) and insufficient funding for the material base of distance learning in Russian practice (and the connection of teachers and students to a high-quality Internet). The forms of building distance courses, their division into smaller and more visual sections, i.e. issues of planning and organization of training, also deserve attention. The channels of interaction between teachers and students must coincide. The issue of organizing effective control of students' knowledge, as well as their independence in completing tasks, will not disappear. The issues, mentioned above, are again related to the quality of the material base of distance learning. More extensive programs and learning periods increase these risks. The motivation of teachers also suffers, because many of their efforts are not actually paid for (the marketing principle works – the main thing is not to create a creative product (training course), but to sell it skilfully).

7. Conclusion

Therefore, the performance of distant learning and education strongly depends on the period of training (long period reduces the effectiveness), level (pre-school and school less effective because of immaturity of students in matters of self-motivation and self-organization), and content (creative and practically oriented areas remotely mastered worse, because splitting them apart and control is difficult). Most of the problems and obsticles in the implementation of distant learning are also associated with the psychological rejection by teachers of new forms of communication and implementation of their activities. Short programs with a large amount of visual material presented in a compressed form, divided into small sections and controlled at the output of each of them are the most acceptable for remote viewing. Universities should also pay attention to the training of teachers in the field of organizing distant learning, psychological skills of working with a distance, as well as the motivation of teachers who present interesting and popular courses.

References

Beketova, O. N., & Demina, S. A. (2018). Distantsionnoye obrazovaniye v Rossii: problemy i perspektivy razvitiya [Distance education in Russia: problems and prospects]. *Social and humanitarian knowledge, 1,* 69-78.

Beketova, E., Leontyeva, I., Zubanova, S., Gryaznukhin, A., & Movchun, V. (2020). Creating an optimal environment for distance learning in higher education: discovering leadership issues. *Palgrave Communications, 6,* 66. https://doi.org/10.1057/s41599-020-0456-x

Berg, G. A., & Simonson, M. (2016). Distance learning. Encyclopædia Britannica. https://www.britannica.com/topic/distance-learning

Chow, A. S., & Croxton, R. A. (2017). Designing a Responsive e-Learning Infrastructure: Systemic Change in Higher Education. *American Journal of Distance Education, 31*(1), 20-42. https://doi.org/10.1080/08923647.2017.1262733

Fojtik, R. (2018). Problems of Distance Education. *International Journal of Information and Communication Technologies in Education, 7*(1), 14-23. https://doi.org/10.2478/ijicte-2018-0002

Gryaznova, E. V., Bryzgalova, Yu. V., Izmestyeva, N. V., & Nikolaeva, L. Yu. (2018). K voprosu o prirode distantsionnogo obrazovaniya. [To the question about the nature of distance education]. *Azimuth of Scientific Research: Pedagogy and Psychology, 7*(4 (25)), 169-172.

Hatlevik, O. E., Throndsen, I., Loi, M., & Gudmundsdottir, G. B. (2018). Students' ICT self-efficacy and computer and information literacy: Determinants and relationships. *Computers & Education, 118,* 107-119. https://doi.org/10.1016/j.compedu.2017.11.011

Krasnova, G. (2002). Institut distantsionnogo obrazovaniya [The institute of distance learning]. High Education in Russia. №5, 123-126.

Labuznov, A. V., & Shendyapina, S. V. (2019). O povyshenii effektivnosti kontenta kursov distantsionnogo obrazovaniya. [On improving the effectiveness of content distance education courses]. *Modern pedagogical education, 2,* 21-24.

Leontyeva, I. A. (2018). Modern Distance Learning Technologies in Higher Education: Introduction Problems. *Eurasia Journal of Mathematics, Science and Technology Education, 14*(10), em1578. https://doi.org/10.29333/ejmste/92284

Moskalyuk, V. S. (2019). Ponyatiye i sushchnost' tsifrovizatsii sistemy obrazovaniya [The concept and essence of digitalization of the education system]. *Science and Education Today, 10*(45), 15-18.

Peteraitis, S. Kh., Shepelyuk, O. L., & Fardeeva, I. N. (2019). Learning Strategies in Distance Education. *International Journal of Recent Technology and Engineering, 8*(2), 1379-1382. https://doi.org/10.35940/ijrte.B2029.078219

Tatarinov, K. A. (2019). Didactic principles of distance education. *Baltic Humanitarian Journal, 8*(1(26)), 293-296.

Tseryulnik, A. Yu. (2020). Use of distance education model of teaching in the educational process. *International Research Journal, 6*(96), 92-95. https://doi.org/https://doi.org/10.23670/IRJ.2020.96.6.094

Veselitsky, O., & Khabarov, D. (2019). Tendentsii razvitiya distantsionnogo obrazovaniya v Rossii i za rubezhom [Trends of development of distance education in Russia and abroad]. *Colloquium-journal, 3-3*(27), 18-20. http://www.colloquium-journal.org/wp-content/uploads/2019/03/Colloquium-journal-327-chast-3.pdf

Yashina, L. I. (2019). Distantsionnoye obucheniye v vuze: soderzhaniye i tekhnologii [Distance learning in university: contents and technologies]. *Bulletin of the Surgut state pedagogical University, 1*(58), 142-147.

Yashina, L. I., & Goreva, O. M. (2019). Problemy vnedreniya distantsionnogo obucheniya v vuze [Problems of implementation of remote university education]. *Bulletin of the Surgut state pedagogical University, 4*(61), 84-90.

Zelitchenko, A. (2018). How to make distance learning more effective than traditional one. https://www.academia.edu/43803771