The pandemic period in Russia: overcoming the problems of the rapid transition to distance learning in the system of higher education

Natalia Karzaeva¹,* , Elena Karanina¹, and Asya Kotandzhyan¹

¹Vyatka State University, Moskovskaya street, 36, Kirov, 610000, Russia

Abstract. The article tests the hypothesis about the need to change the methodology concept for training economists in the higher education system when switching to distance learning. The authors use the empirical method of students and teachers’ survey in Russian universities, statistical methods for processing results, and an analysis of research results published by Russian scientists on the effectiveness of distance learning. The lack of proposals from specialists and scientists to overcome the problems of distance learning predetermine the need for this research. The authors divide problems into four groups: software-technical, socio-psychological, organizational and methodological. The analysis of systematized problems made it possible to propose a transition to an active interaction between a teacher and a student, which is of theoretical importance. Implementing this concept contribute to the restoration of social communication in the educational environment, creation of methodological support in the conditions of distance learning. It is of great practical importance for organizing the distance educational process. Keywords: higher education, distance learning, problems, socio-psychological, organizational, methodological.

1 Introduction

The main consequence of the coronavirus infection COVID-19 for the higher education system in Russia was a fast transition to distance learning. It cannot be argued that this form of knowledge and information transfer was new for higher education institutions. But the process was not long. We can even say that at the beginning of the 21st century, the flagships of higher education mastered this format. The conditions of quarantine as a result of the pandemic and the need to organize a continuous educational process have predetermined the need to switch to distance learning. According to scientists, “the pandemic has influenced greatly on the sphere of higher education globally” (Arzhanova, Baryshnikova & ets. 2020, p. 5).

New experience in teaching for the administration of higher educational institutions and for teachers and students, has led to the scientists’ increased activity. It should be noted that the research is carried out by Russian and foreign scientists who specialize in the field of pedagogy, in legal and economic sciences: I.V. Arzhanova, M.V. Baryshnikova, E.A.

* Corresponding author: k-nn@yandex.ru

Works deal with various issues of higher education in the era of organizing activities in the digital environment: the role of information technologies in the educational process, advantages and problems of their use, adaptation of participants to new forms of communication and their willingness to use Internet resources. Particular attention is paid to students’ psychological problems, in particular, their motivation to learning, involvement in the professional community, growth of self-organization and discipline in the educational process. Almost all researchers consider the role and prospects of online education in the post-pandemic period. However, it should be noted that the authors pay insufficient attention to the methods of education in remote access systems. The question is: what changes in teaching methods are necessary to achieve the requirements for students’ acquisition of competencies, regulated by professional and educational standards. If changes are necessary, is it necessary to determine what needs to be improved and brought in line with the new form of education.

The aim of the article is to confirm the hypothesis about the need to change the methodology concept for training economists in the higher education system when switching to distance learning. The main tasks for achieving the goal are the following: to identify the main problems while forming competencies in students of economic specialties; to determine directions for developing teaching methods.

2 Materials and methods

The methodological basis of the article is the general scientific methods of logical analysis and synthesis of theoretical provisions formulated by scientists on the problems of distance learning in higher education in Russia during a pandemic. During the study, the authors have carried out a secondary analysis and systematization of the results of sociological surveys.

To test the hypothesis, the authors used the empirical method of the questionnaire survey and statistical methods of processing its results. A questionnaire survey of students of economic specialties was in three cities: Moscow (Russian State Agrarian University - Moscow Agricultural Academy named after K.A. Timiryazev), St. Petersburg (St. Petersburg State University of Economics), Kirov (Vyatka State University). The respondents were full-time students of 2-3 courses, the direction "Economics" and "Economic security". Teachers of legal and economic disciplines of various higher educational institutions of Russia took part in the questionnaire survey. The authors used a non-statistical method to form the sample of respondents. The sample size was 159 students and 26 teachers.

The survey was conducted anonymously in October - November 2021. Questions were formulated according to the main goal of the need to change the concept of teaching methods in distance learning. A respondent could choose the answer from the options offered or formulated independently. In this case, several options could be chosen. To compare students and teachers’ vision on individual problems of transition to distance learning, the questionnaire questions were the same for both groups of respondents.

The authors summarized and analyzed the results of a questionnaire survey of students and teachers in order to test the hypothesis for the need to change the concept of teaching
methods. The results of statistical processing of answers in the article are presented as a percentage.

3 Results

The results of teachers’ survey confirmed the opinion of scientists about a fundamental change in the conditions of interaction with students. 25% of teachers do not note restrictions while conducting lectures, but during practical classes this indicator dropped to 12% (Fig. 1). Lack of visual contact for 69% of the respondents is a negative factor in both forms of training. They also note the difficulty of building a dialogue with the audience when conducting classes online (lectures - 44%, practical classes - 56%). Students feel less discomfort with distance learning. More than half of the respondents do not notice its shortcomings (52% - lectures and 58% - practice). According to students, the main disadvantage of conducting lectures online is inability to concentrate at home (16%), and practical lessons: the difficulty of communication with the teacher (28%), lack of contact with other students (16%) and limited educational opportunities of platforms (16%).

![Fig. 1. Number of recipients who point out the limitations and disadvantages of conducting practical exercises in a distance mode (%).](image)

Communication in the educational process plays a huge role for all participants. In usual communication with the student, the teacher can get feedback, and through visual observation, audio-analysis of intonations, assess the level of competencies acquired. The capabilities of the software products and the technical limitations for individual students (or their unwillingness to take advantage of all the capabilities of the platforms) most often do not allow the teacher to fully observe the student with whom he is communicating. According to the survey results, 78% of students use audio communication. For teachers, this indicator is ten points higher and reaches 88%. The frequency of using chats by students is the same for two groups of subjects (teachers - 63%, students - 64%).

It is very difficult in the educational process to achieve student involvement, as evidenced by the frequency of questions asked by students. 48% of students indicate that they rarely ask questions, 57% - when they do not understand the material, and only 16% do it often. Teachers’ answers almost coincided with students only in the assessment rarely - 44%. As for the rest, they were different: when clarifying the material - 31%, often - 44. At the same time, more than half (56%) of the teachers noted that the same students asked the questions.

These circumstances also affect the formats for discussing the results of solving problems, conducting business games, and discussing cases. There is also a certain unanimity in the assessment of students and teachers of the order of their interaction in this process (fig.2):

- answers of the student asked by the teacher (teachers - 25%, students - 19%);
- answers of interested students in the chat (teachers - 44%, students - 49%);
- audio answers of interested students (teachers - 75%, students - 64%);
- written comments of teachers in students’ files (teachers - 38%, students - 22%).

![Fig. 2. Percentage of recipients who named the form of discussion of the results of completed tasks.](image)

The questionnaires had a question about the reasons for the inactive participation of students in the discussion of the results of their work. Problems of software and hardware were indicated by 69% of teachers and almost two times less students (36%). Also, 36% of students noted unwillingness to be in the spotlight. It should be noted that there is such a reason also in traditional classes. Students’ passivity is noted by 81% of teachers and only a third of students (Fig. 3).

![Fig. 3. Percentage of recipients who indicated problems when discussing the results of completed assignments (%).](image)

The unpreparedness of students for classes is recognized equally by the recipients of both groups. The level of this indicator does not exceed 13%. Self-assessment of the decline in student performance (15%) is not much higher than the level of unpreparedness. But the teachers absolutely disagree with this and believe in 75% of cases that when switching to distance learning, academic performance has decreased.

The groups of recipients see the reasons for the decrease in the assimilation of the material differently. If students recognize the discrepancy between content and presentation form (34%) as the main reason, which is less than 20% among teachers, then representatives of the second group point out a low level of current control (56%), noted by 29% of students (Fig. 4).
Fig. 4. Percentage of recipients who indicated the reasons for the decrease in the assimilation of material (%).

Teachers also note as important reasons the lack of knowledge necessary to study the discipline that the student should have received earlier (31%). In the group of students, this indicator is about 16%. The indicator of insufficient time for communication with a teacher is slightly higher than this level (19%), while for a group of teachers it is the fourth (12%).

One third of students who consider the content of the online presentation of the material unsatisfactory, suggest to change it. Only 12% of teachers agree with them (Fig. 5). 39% of students are satisfied with everything. In their opinion, nothing needs to be changed. Only 6% of teachers agree with them.

27% of students suggest to change the presentation form. 81% of teachers recognize the need to improve teaching methods for distance learning. 94% of teachers would like to process all methodological material (cases, business games, individual assignments). This is less important for students (24%). The need to change presentations is noted by a small number of respondents in both groups (teachers - 12%, students - 10%).

Fig. 5. Percentage of recipients who recognized the need to change the elements of the educational system (%).
The basis and prerequisite for the transition to distance learning is electronic telecommunications, including Internet resources, software and innovative technologies (Karanina & Antuganova, 2019). However, some authors consider the technologies and digital content used in this form of education as its advantages (Oborin, 2020; Orusova, 2020), but we fully disagree here. The advantages of distance learning can be recognized as positive results of its application.

The advantages are: firstly, the expansion of opportunities for people to undergo training in the presence of various kinds of restrictions (physiological, financial, movement, time, etc.), which is noted by many researchers (Orusova, 2020; Bushev, Nectarevskaya & Tolstokora, 2020; Cherkasova, 2021; Lenkovets, 2020; Kilmametova, 2020). Secondly, the increase in the number of people wishing to study leads to an increase in the interest of the leadership of higher educational institutions and the state in general (Herodotou, Rienties & et al., 2020; Xiaoke Zhu, Xiao-Yuan Jing & et al., 2019), which has an impact on economics of educational institutions. O.V. Orusova and O. M. Linkovets also point out the possibility of reducing the cost of educational activities in its distance form both by an educational institution and a student. The third advantage of distance learning is the possibility of planning the curriculum by the student, its adaptability to individual needs due to different time zones, employment, etc. (Oborin, 2020; Orusova, 2020; Bushev, Nectarevskaya & Tolstokora, 2020; Cherkasova, 2021; Lenkovets, 2020; Kilmametova, 2020). Fourth, the use of innovative technologies in distance learning requires new competencies by teachers and students (Cherkasova, 2021; Sobyanin, Irkhina & et al., 2020).

The following positive points cannot be attributed only to distance learning, since they exist in its traditional form as well:
- quality management of the educational process (Oborin, 2020);
- brightness, dynamism of visual information, which is better perceived and remembered (Orusova, 2020);
- modular training system (Oborin, 2020);
- possibility to have master classes (Oborin, 2020);
- availability of training materials (Orusova, 2020);
- systematization and structuring of teaching material (Orusova, 2020);
- close communication between students and teachers, taking into account an individual approach (Oborin, 2020);
- increasing visibility, possibility of presenting materials in different forms (Oborin, 2020; Sobyanin, Irkhina & et al., 2020).

Regarding the last point, we would like to note that an indisputable advantage of distance learning is possibility to watch a video of a lecture or practical lesson.

In addition, among the advantages of distance learning, there are controversial ones, which are treated differently by researchers, for example:
- psychological comfort of students when distancing them from the teacher at the time of control events (Orusova, 2020), learning at home (Oborin, 2020);
- close communication between students and teachers, taking into account an individual approach (Oborin, 2020);
- quick collection of information and its processing (Sobyanin, Irkhina & et al., 2020);
- saving time and effort in preparing for classes (Sobyanin, Irkhina & et al., 2020);
- improving the quality of education (Sobyanin, Irkhina & et al., 2020).

According to researchers, distance learning has much more disadvantages. We suggest to systematize them into four main groups: software and hardware, organizational, socio-psychological and methodological. The disadvantages that belong to the first two groups can
be eliminated. Methodological tasks can also be solved if they are not determined by socio-psychological problems.

The group of software and technical shortcomings of distance learning is the smallest:
- unsatisfactory quality of the Internet connection (Arzhanova, Baryshnikova & ets. 2020; Oborin, 2020; Orusova, 2020; Bushuev, Nectarevskaya & Tolstokora, 2020; Cherkasova, 2021; Lenkovets, 2020; Lazareva & Moroz, 2021; Ostapchenko, 2021);
- lack of necessary equipment for distance learning (Arzhanova, Baryshnikova & ets. 2020; Oborin, 2020; Bushuev, Nectarevskaya & Tolstokora, 2020; Cherkasova, 2021; Lenkovets, 2020; Lazareva & Moroz, 2021; Ostapchenko, 2021);

Organizational disadvantages can include:
- changing the learning process (Arzhanova, Baryshnikova & ets. 2020), including its formalization (Oborin, 2020), reduction of contact hours per discipline (Orusova, 2020), changing the role of the teacher (Grunt, Belyaeva & Lissitsa, 2020);
- significantly increasing the time for preparing a teacher for classes in the Internet environment, checking completed assignments, developing electronic courses (Oborin, 2020; Orusova, 2020; Cherkasova, 2021; Sobyannin, Irkhina & ets, 2020; Lazareva & Moroz, 2021; Ostapchenko, 2021; Grunt, Belyaeva & Lissitsa, 2020; Shtykhno, Konstantinova & Gagiev, 2020);
- increasing the time spent on consulting in the absence of methodological materials on finding sources of information, completing assignments, etc. (Ostapchenko, 2021);
- significantly increasing the volume of tasks, means and methods of remote support and, consequently, the load on students when studying in distance mode (Oborin, 2020; Cherkasova, 2021; Sobyannin, Irkhina & ets, 2020; Lazareva & Moroz, 2021; Ostapchenko, 2021; Shtykhno, Konstantinova & Gagiev, 2020);
- increasing the time for students’ independent study of the material (Cherkasova, 2021; Ostapchenko, 2021; Shtykhno, Konstantinova & Gagiev, 2020);
- decreasing the quality of the learning process (Arzhanova, Baryshnikova & ets. 2020) or its "simplification" (Shtykhno, Konstantinova & Gagiev, 2020);
- unpreparedness of students for self-organization and lack of skills (Arzhanova, Baryshnikova & ets. 2020; Oborin, 2020; Orusova, 2020; Bushuev, Nectarevskaya & Tolstokora, 2020; Cherkasova, 2021; Lazareva & Moroz, 2021; Ostapchenko, 2021; Shtykhno, Konstantinova & Gagiev, 2020; Prys, 2020; Lopteva, 2020);
- low adaptation to work in remote mode (Oborin, 2020; Grunt, Belyaeva & Lissitsa, 2020);
- non-compliance of distance learning with educational standards (Grunt, Belyaeva & Lissitsa, 2020);
- student dissatisfaction with the cost of training (Grunt, Belyaeva & Lissitsa, 2020).

According to scientists, the main socio-psychological problem of distance learning is the violation of social ties, which are the basis for a specialist in any professional field. The destruction or minimization of vertical social ties between students and teachers is noted by almost all authors (Arzhanova, Baryshnikova & ets. 2020; Oborin, 2020; Orusova, 2020; Bushuev, Nectarevskaya & Tolstokora, 2020; Cherkasova, 2021; Sobyannin, Irkhina & ets, 2020; Ostapchenko, 2021; Shtykhno, Konstantinova & Gagiev, 2020; Prys, 2020; Lopteva, 2020). But horizontal communication between students is also of great importance in the development of future specialists, which is also not facilitated by distance learning (Аржанова, Барышникова & ets. 2020; Orusova, 2020; Bushuev, Nectarevskaya & Tolstokora, 2020; Cherkasova, 2021; Кильмаметова, 2020; Ostapchenko, 2021; Shtykhno, Konstantinova & Gagiev, 2020; Lopteva, 2020; Platonova, 2021);
In addition, the group of socio-psychological shortcomings of distance learning includes:
- a negative impact of long-term work with electronic resources on the psycho-physical state of teachers and students (Oborin, 2020; Ostapchenko, 2021);
- lack of feedback between participants of the educational process (Oborin, 2020; Cherkasova, 2021; Shtykhno, Konstantinova & Gagiev, 2020; Prys, 2020);
- lack of video contact between the teacher and students (Cherkasova, 2021);
- impossibility of forming competencies in certain disciplines in distance learning (Arzhanova, Baryshnikova & ets. 2020; Oborin, 2020; Prys, 2020);
- demotivating students for learning (Oborin, 2020; Lazareva & Moroz, 2021; Ostapchenko, 2021; Grunt, Belyaeva & Lissitsa, 2020; Prys, 2020; Prys, 2020; Lopteva, 2020);
- psychological discomfort of students (Grunt, Belyaeva & Lissitsa, 2020).

The possibility of overcoming these problems is a debatable issue. However, the need to use distance learning makes the teachers create such a methodological base that would make it possible to level its socio-psychological shortcomings. In addition, researchers also highlight the disadvantages of distance learning, which can be included in the methodological group. The group of methodological problems can be divided into three subgroups: control, teaching materials, teaching techniques.

Control deficiencies may include the following:
- reducing the level of all types of control (Sobyanin, Irkhina & ets, 2020);
- decreasing the level of control over the presence of a student in the classroom and his attention (Lopteva, 2020);
- difficulty of assessing the independence of students' tasks (Oborin, 2020; Orusova, 2020; Cherkasova, 2021; Shtykhno, Konstantinova & Gagiev, 2020);
- non-transparency of the assessment system (Oborin, 2020);
- low quality control of the level of knowledge (Bushuev, Nectarevskaya & Tolstokora, 2020);
- impossibility to understand mistakes (Oborin, 2020).

Disadvantages of educational and methodological materials are:
- inconsistency (insufficiency or redundancy) of the quality and quantity of educational resources required (necessary) for studying the discipline (Arzhanova, Baryshnikova & ets. 2020);
- many technical errors in electronic editions contain (Oborin, 2020);
- poor student's memory for video materials (Prys, 2020);
- lack of guidelines for studying the discipline, completing assignments (Ostapchenko, 2021);
- low quality of the material, its rigidity (Bushuev, Nectarevskaya & Tolstokora, 2020).

A third group of deficiencies in teaching techniques includes:
- difficulty of retaining the attention of students throughout the lesson as a result of the lack of the ability to observe the reaction of the audience (Prys, 2020; Attia, 2017);
- decreased perception of the material and, consequently, its assimilation (Lopteva, 2020);
- “impossibility of using a number of teaching methods available in the classroom” while “restricting communication with students” (Shtykhno, Konstantinova & Gagiev, 2020, p. 76);
- limitations in the development of competencies (to own and be able to) (Bushuev, Nectarevskaya & Tolstokora, 2020);
- lack of the ability to take into account students’ individual characteristics (Bushuev, Nectarevskaya & Tolstokora, 2020);
- use of traditional teaching methods that are ineffective in a distance learning format (Cherkasova, 2021).
E.R. Kilmametova is pessimistic regarding the possibilities of distance learning and believes (not without reason) that “online conferences, digital content and discussion forums may not provide a holistic result of learning and teaching” (E.R. Kilmametova, 2020, p. 146). We agree with the opinion of G.S. Ostapchenko to change teaching methods. Private proposals of specialists to change the teaching methodology should correspond to a new approach to the organization of the educational process. The essence and content of the new concept of the educational process is to determine the roles of its participants. The student must acquire professional competence using a variety of teaching methods and modes. The teacher should help the student acquire these competencies. Therefore, the role of the student becomes active. Due to the fact that the main feature of distance learning is a change in both the volume and quality of interactions between a teacher and a student, an increase in the student's independence, it is necessary to build all methodical work on the foundation of a student's understanding of his tasks when acquiring the competencies required in professional activity. This will both motivate him and contribute to understanding the logical structure of the curriculum in general and each discipline in particular. When developing content, the teacher must follow this logical - target setting. Control procedures and their content should allow assessing the level of competencies acquired by students.

5 Conclusion

A rapid transition of Russian higher educational institutions to distance learning was the main reason for all the shortcomings and problems associated with it. The risk of a decline in the quality of education, highlighted by all scientists, can be mitigated by appropriate measures. According to students and teachers, the main disadvantages of the distance learning format are: firstly, the violation of traditional social communications, secondly, the inconsistency of the content with the conditions for the transfer of information and experience, and thirdly, the inconsistency of the forms of control with its tasks.

The solution of these problems is changing the role of the student, increasing his motivation, which requires clarifying the concept of organizing the educational process. At the beginning of the educational process, a student must have a clear idea of the final result: what competencies he must have in order to gain professional recognition in the labor market. The teacher must help the student acquire these competencies. It is this interaction of the participants in the educational process that will allow to restore social communications in the educational environment, develop its methodological support, including modified content of the discipline for the formation of competencies and forms of control.

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