

# **Prospective Pedagogues and Coaches Perspective on the Challenges and Solutions of Remote Studies**

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# Prospective Pedagogues and Coaches Perspective on the Challenges and Solutions of Remote Studies

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## Abstract

### Keywords:

benefits; challenges; problems;  
prospective teachers and coaches;  
remote studies; solutions.

The conditions created by Covid-19 in the world and in Latvia have promoted the transition from traditional teaching and learning practices (contact lectures study form) to remote study form into the study process. The preparation of prospective teachers (University of Latvia) and coaches (Latvian Academy of Sport Education) is related to the need to develop various competencies. The purpose of the article is to analyse the opinions of 1st-year students, prospective preschool teachers and coaches about the benefits and difficulties of students in remote studies in the Covid 19 pandemic situation. We used theoretical method - analysis of scientific literature, and empirical methods - observation, negotiation (the total number of 1st year students in the 2021/2022 academic year in UL preschool teacher programs and LASE coaches' programs was 590), content analysis, survey of selected 240 students (200 UL and 40 LASE) was conducted in the period from October 2021 to April 2022. The results of the empirical study show that the benefits and difficulties of distance learning have become more relevant, increasing the willingness to take responsibility for a self-directed learning process. Students are becoming more pragmatic, and goal oriented. They learn new skills and find operational solutions in various unusual situations. The research revealed that remote studies have promoted students' self-directed participation and initiative in improving the study process, self-management, and responsibility for the personal significance of their activities.

## Zusammenfassung

### Schlüsselworte:

vorteile; herausforderungen;  
probleme; zukünftige  
vorschullehrer und sport-trainer;  
online-studium; lösungen.

Die von der Covid 19 Pandemie veranlasste Situation weltweit darunter auch in Lettland hat den Übergang vom traditionellen Lehr-/Lernverfahren (mit Präsenzveranstaltungen im Studium) auf das Online-Studium gefördert. Während des Studiums soll ermöglicht werden, den Studierenden, den zukünftigen Vorschullehrern (Universität Lettlands) und den Sport-Trainern (Lettische Akademie für Sportpädagogik), verschiedene Kompetenzen zu erwerben. Als Ziel dieses Artikels wurde die Analyse der Meinungen Studenten des ersten Studienjahres der obengenannten Hochschulen über die Vorteile und Schwierigkeiten des Studiums im Online-Format während der Corona-Krise gesetzt. Dafür wurden die theoretische Methoden (wissenschaftliche Analyse der Fachliteratur, Inhaltsanalyse) und die empirischen Methoden (Beobachtung, Umfrage und Diskussion) eingesetzt. Im ersten Studienjahr 2021/2022 waren in beiden obengenannten Hochschulen insgesamt 520 StudentenInnen. An der empirischen Forschung haben 240 ausgesuchte Studierende (200 StudentenInnen der Universität Lettlands und 40 - der Lettischen Akademie für Sportpädagogik) vom Oktober 2021 bis zum April 2022 teilgenommen. Die Ergebnisse der empirischen Studie zeigen, dass die Vorteile und Schwierigkeiten beim digitalen Studium an Relevanz zugenommen hat, die Bereitschaft zum selbstgesteuerten Studium sowie die Übernahme der Verantwortung dafür steigen. Die Studierenden werden pragmatischer und zielorientierter. Sie erwerben neue Fertigkeiten und finden wirksame Lösungen in verschiedenen aussergewöhnlichen Situationen. Die Studie ergab, dass das Online-Studium die selbstgesteuerte Beteiligung und Initiative der Studierenden bei der Verbesserung des Studiums, das Selbstmanagement sowie die Verantwortung für die persönliche Bedeutung ihrer Handlungen gefördert hatte.

## 1. Introduction

The announcement of the World Health Organization on March 11, 2020 (WHO, 2020), that Covid 19 has reached the proportions of a pandemic, determined the need to declare a state of emergency not only in Latvia and Europe, but in the countries of the world, and set new requirements for the transformation of education and the preparation of future pedagogues in higher educational institutions.

The pandemic has deeply affected the education system of countries around the world, due to the imposed restrictions, educational institutions were closed, Covid 19 affected more than 1.5 billion learners of all ages worldwide (UNESCO, 2020; UNICEF, 2020). To limit the spread of the Covid-19 virus, the Latvian government also declared a state of emergency (CM order No. 653), determining in the



field of education to stop the learning process in person in all educational institutions and provide learning remotely (Cabinet of Ministers, 2020).

The situation caused by the pandemic was particularly difficult in the preparation of future preschool teachers in higher education institutions, as it is related to the need for diverse competence development in pedagogical practice, with particular importance being paid to the specifics of preschool teachers' work in developing children's skills at an early stage of life (OECD, 2019). In this regard, high-quality preparation of future preschool teachers and coaches in the Covid-19 pandemic situation is important, paying special attention to the development of students' competencies in remote studies.

The purpose of the article is to analyze the opinions of 1st-year students, future preschool teachers and future coaches about the benefits and difficulties of students in remote studies in the Covid 19 pandemic situation.

## 2. Theoretical foundation

Along with the Covid-19 pandemic, several studies identified unique features related to the implementation of teacher education, especially teacher programs, in the difficult situation of Covid-19. As you know, in the preparation of future pedagogues, the acquisition of practical experience is important, which develops the teachers' professional identity (Donitsa-Schmidt et al., 2020; Velle et al., 2020).

As noted by several researchers, there is still no unified definition of the concept of remote studies. The scientific literature on online teaching and learning in this regard includes different meanings, sometimes the terms are used interchangeably, such as distance learning, online training, emergency online education, distance education, online teaching, remote teaching (Carillo & Flores, 2020). Distance studies are also defined as a form of training in which the interaction between the teacher and the student takes place, preserving all the components of the learning process: goals, content, methods, organizational forms, using specific Internet technology tools or other interactive means (Granichina & Surikova, 2021, 146).

In Latvia, the definition of remote studies is included in the Education Law, Article 1, 11 - remote studies is a part of the face-to-face education process, in which students learn, including using information and communication technologies, without being

physically in the same room or place of study with the pedagogue (Likumi LV, 2020).

In recent years, the use of remote studies in teacher training is more and more often seen in scientific publications (Bozkurt & Sharma, 2020; Zhang, et al, 2020; Adedoyin & Soykan, 2020). The relevance of these studies appeared in a unique pedagogical experience when higher education institutions reoriented the learning process in the form of remote studies.

In the studies so far, several problems of the education policy were revealed, which should have been addressed immediately. They were the technology infrastructure available, online teaching resources and teachers use of those resources, distractions in the home environment for both teachers and students, learning styles and online teaching methods (Zhang et al., 2020).

Summarizing the challenges of the digital transformation of distance studies, the following were found in higher education institutions: 1) the lack of compatibility of distance training, because in some disciplines the technologies of distance studies cannot be used effectively and efficiently, e.g. laboratory work, sports lessons; 2) obsolescence and availability of technology; 3) students' academic performance; 4) readiness of students and lecturers to apply and use technologies; 5) challenges of the student evaluation system (Adedoyin & Soykan, 2020).

Several challenges were discovered in the research conducted by the authors - student inactivity, digital divide, i.e., inequality of access and lack of understanding of how to use digital devices (Leech et al., 2022). For example, Romanian researchers (Safta-Zecheria et al., 2020) found insufficient access to digital tools and technologies, drew attention to the need for improving students' digital skills. Research on the educational experience of students of higher education institutions in distance studies identified and characterized the educational process, the technologies used and the personal adaptation of students. The main directions in which students perceived challenges and problems in distance studies were distinguished: the educational process, which showed how the interaction between the student and the lecturer develops, the experience of using ICT, which mediates the teaching and learning process, personal adaptation, which focuses on changes in the students' feelings (Olivera et al., 2021).

The insights revealed by Gillis and Krull's (2020) research are important. Assessing students' perceived

barriers to success in distance learning, they find that they are:

1. Distraction, restlessness, unmotivating in mental health, disturbed sleep, anxiety, worries about personal finances and access to medical care.
2. Academic or course changes (less opportunity for discussion and questions, unmotivated engaged/unengaged option, and insufficient course flexibility).
3. New living conditions (distraction and privacy related to new workplace).

Students' readiness to learn online, which includes active participation, responsibility for planning their time in close connection with their own learning goals, self-competence, motivation, self-discipline, and learning style, turned out to be no less important an issue in distance studies (Dorsah, 2021; Ceballos et al., 2021).

Based on the dimensions developed in the scientific literature (Hung et al., 2010) (computer/internet self-efficacy, learner control, motivation to learn, online communication self-efficacy and self-learning) for determining readiness for online learning, Chorrojprasert's research (2020) identified 4 characteristics that learners should have, so that they can learn online effectively: learning orientation, adequate cognitive functioning, adequate knowledge base for the content to be presented, and appropriate study skills and strategies.

Looking at the research of scientists from several countries in the practice of online teaching and learning in teacher education, Carrillo and Flores (2020) found three essential elements in the implementation of distance studies:

1. Social presence, which is related to the ability of participants to effectively engage in society, communicate purposefully in a collaborative environment and develop interpersonal skills relationships by projecting themselves as the people they are.
2. Cognitive presence, or the extent to which participants can construct meaning through sustained reflection and communication within the research community.
3. The presence of teaching, that is planning, promoting, and directing social and cognitive processes with the aim of achieving meaningful learning results.

Our interest was also attracted by a study (Granichina & Surikova, 2021) on student satisfaction with remote studies, which found the most significant positive benefits for students: convenience of being located at home, easier allocation of time (including time otherwise spent on the way to studies), financial (tickets), multiple possibility to use lecture materials in e-studies. The mentioned study also identifies difficulties subjectively assessed by students - lack of personal contact with the lecturer and other students and prompt lecturer's answers, lack of motivation to learn, difficulties with learning information in the electronic environment, health problems.

The need to switch to distance learning also highlighted the need to focus on students' feelings, as students' anxiety and stress increased (Sangster et al., 2020). Consequently, there was a need in research to focus on students' understanding of the advantages and difficulties resulting from the implementation of technology in distance studies (Vergine et al., 2020).

Importantly, the extraordinary circumstances of Covid-19 raised the attractiveness of the teaching profession in the labor market (Donitsa-Schmidt & Ramot, 2020).

In connection with our research, we must admit that so far, the opinion of future educators who work in educational institutions and study at the same time about the benefits and difficulties of remote studies in the emergency of Covid 19 has not been sufficiently studied, therefore we will focus on the study of this issue. Finding out the perceptions of students working in educational institutions is important to understand the development of future preschool teachers' and coaches' competencies in the study process.

### 3. Research methodology

The study was conducted in the period from September 2021 to April 2022 in the conditions of the Covid-19 pandemic when students were taught remotely. A total of 590 students took part in the study – 500 from the University of Latvia (UL), and 90 from the Latvian Academy of Sports Education (LASE). The study had 2 stages.

The 1st stage was organized in September and October 2021 in contact lectures for obtaining opinions on the current situation in obtaining education. Several empirical research methods were used in the study. Since the authors of this article worked with students of the groups involved in the study, one of the empirical research methods was observation. It was a method of direct observation,

where the researcher was the leader of the study process. The second method was discussions with students during lectures about the study work process. Data was obtained that enabled the creation of a survey on more important factors. Factors were grouped by importance and a questionnaire was created.

The second stage of the study was organized during distance studies from November 2021 to April 2022. The participants of the study were a sample of 240 students: 200 of the UL – pre-school teachers, 1st year students, all the respondents were women. 40 respondents were LASE students: 20 women, 20 men. Students answered 13 questions about the benefits of remote studies on the factors identified in the 1st stage of the study. The following factors (F) were considered: 1) material benefits; 2) time planning; 3) psychological comfort: independence, self-directed studies; 4) advantages of receiving a lecturer's presentation; 5) high-quality work of the lecturer: materials, answers to questions, explanations, operational instructions, provision of current supplementary literature; 6) lecture recordings 7) environment, family, friends; 8) technologies; 9) safety; 10) communication - work in chat, in groups; 11) combining work with studies; 12) opportunity to participate from anywhere in the world; 13) parallel other work (see Figure 1).

The opinions expressed by students about difficulties in distance studies were divided into 11 groups in the factor questionnaire: 1) communication; 2) technology uncertainty; 3) time planning; 4) difficult study process; 5) home environment; 6) amount of information and work; 7) acquisition of literature; 8) staying focused on the computer; 9) study time; 10) parallel other duties; 11) motivation (see Figure 2).

Let's estimate the appropriate sample size  $n_0$  in our survey research. According to the methodology we have categorical data. Then according to Cochran (1977) we use Cochran's sample size formula (1) for categorical data, we will get  $n = 384$ .

$$n_0 = \frac{t^2 * p * q}{d^2} \quad (1)$$

Where

Alpha level 0.05 we consider using t-value,  $t=1.96$ ,

$p * q = 0.5 * 0.5 = 0.25$  estimate of variance,

$d = 0.05$  acceptable margin of error for proportion: MoE.

For a population if sample size exceeds 5% Cochran's (1977) correction formula should be used to calculate the final sample size  $n$

$$n = \frac{n_0}{1 + \frac{n_0}{Population}} = 234 \quad (2)$$

240 respondents were surveyed in the study, and this gives the opportunity to obtain relevant statistically significant research results.

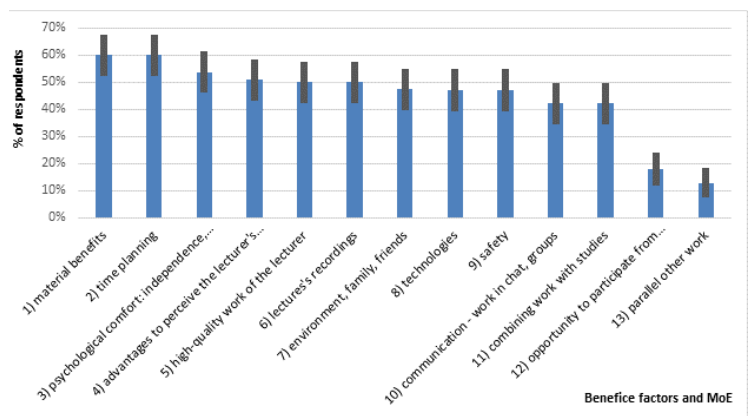
#### 4. Results

Stage 1 of the study. Students' observations and discussions with students in contact lectures in September and October gave the opportunity to evaluate the most important factors that were used to compile the questionnaire. Observations of students in remote studies showed that students understood the pandemic situation, and that remote studies were the only available communication with the lecturer and fellow students in learning the content of study subjects in pandemic conditions. It was observed that the students were often under stress in the online conditions caused by the situation due to unforeseen difficulties with using MS TEAMS, but gradually learn the use of Information Technology.

Cases were observed when students joined a lecture or seminar but did not always participate in the work of the study subject from the beginning of the lecture to the end of the lecture. This led to the additional work of the lecturer to perceive and understand the subjects to be learned in the description of the study subject and the mid-term tasks, which the students did not perceive as important for them.

The 2nd stage of the study was from November 2021 to April 2022.

Figure 1. The positive benefits of distance learning



When evaluating the obtained results on the positive benefits of remote studies, the results were grouped and can be seen in Figure 1. The data in the

figure are arranged by proportion of respondents in descending order. The relevant margin of error values is displayed using the error bars. After recalculation according to the obtained data, they range from 6.2 % to 4.2 %.

By evaluating the answers obtained by the respondents in the form of free notes about the positive benefits, the most typical answers were collected.

Material benefits (F. 1, 2): There is no need to spend money to get to and from lectures. Time planning: Saves the time that would be spent on the way to school and back. You can plan your own time when to do homework or independent work, connection time for lectures, time for handing in work. In remote studies, you can have a meal during lectures and gain knowledge without interruptions.

Psychological comfort (F. 3): Independence, self-directed studies (Learning theory is much more interesting; I especially liked the explanations of concepts, information found by fellow students and supplemented by the lecturer). More time was devoted to the analysis of literature sources (thus the received information was strengthened), additional literature, resources, materials, platforms were promptly found. If at the beginning the study subject was like a blank sheet, then in independent work the answers to all questions were found. One example answer said, „Knowledge of German and Swedish is complemented by knowledge of English with the support of my daughter”. Distance learning puts more responsibility on students to develop themselves: read more, research, search, satisfy cognitive needs. The opportunity to present in seminars remotely reduced the stress that would have existed in person. Such learning has strengthened self-directed learning abilities.

It is better to observe the lecturer's speech and presentation from a close distance (F. 4).

High-quality work of the lecturer (F. 5) was mentioned with elements such as materials, answers to questions; explanations; operational instructions; recommendations; supplementary literature; prompt answers to unclear questions.

The availability of lectures' recordings (F. 6) for re-watching at your own leisure was praised.

Environment, family, friends (F. 7): An opportunity to study from an environment that is more comfortable for you. You can spend more time with your family. There is no need to find a babysitter to be able to pick up children from school. While moving in

transport, you can listen to lectures on the phone with headphones.

Technology (F. 8): The main benefits of this learning stage are learning to work remotely, learning new digital skills, and strengthening existing ones. The skills to make presentations and format documents are improving, as are people's digital skills such as ability to work in the MS Teams environment in the remote learning process.

Safety (F. 9): It is epidemiologically safer to be at home at the computer than to be in contact with people from different regions of Latvia. Even if you're sick, you don't have to miss your studies.

Communication (F. 10): Good collaboration both among students and between students and the lecturer. It is convenient to communicate remotely in small groups.

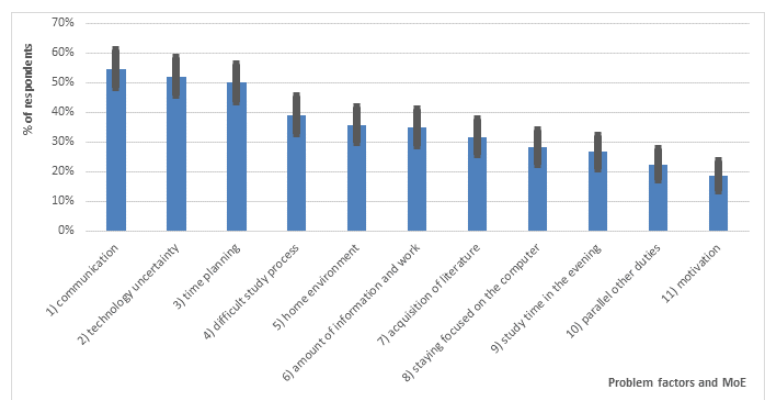
Combining work with studies (F. 11): It is easier to combine studies with your basic job.

You can join the studies from any place (F. 12) (home, work, abroad, walking, in the car, etc.).

Parallel other work (F. 13): Some practical occupation can be combined with the perception of the study subject. You can do simple mundane routine work while listening, for example.

When evaluating the obtained results on problem factors in remote studies, the results were grouped and can be seen in Figure 2. The data in the figure are arranged in descending order of proportion of respondents. The relevant margin of error values is displayed using the error bars. After recalculation according to the obtained data, they range from 6.3% to 4.9%.

Figure 2. Difficulties in remote studies



The summary of the most typical answers of the students is as follows.

Communication (F. 1): There was a lack of discussions about the study content that would help in the future to analyze multifaceted information and critically evaluate information sources. „I don't like to present my work without seeing the other fellow students and the teacher. You cannot meet the lecturer and classmates in person.”

Technology insecurity (F. 2): Technical problems – connection difficulties and failures. Solution: try to connect in advance.

Time planning (F. 3): Unforeseen circumstances or work schedules make it difficult to plan time.

Difficult study process (F. 4): The tasks are not always fully understood. The study process is less interactive.

Home environment (F. 5): In remote learning, there are more distractions that would not be present in person. It is not always possible to seclude yourself in a quiet room so that nearby noises do not interfere with learning. The everyday home environment distracts thoughts and complicates the perception of content.

Amount of information and work (F. 6): A large amount of homework (mid-term tests), as work, school and childcare are difficult tasks to combine.

Acquisition of literature (F. 7): It is difficult to find information, because it is impossible to go to the library due to the distance and work schedule, so you must make do with what is available on the Internet and in the National Digital Library of Latvia. If it is not possible to print it, it is not possible to write your comments and notes, underline the most important content.

Staying focused on the computer (F. 8): It is often difficult to stay focused on the learning process if there is no direct contact between the teacher and the student. Difficulty concentrating after work in the second half of the day. When studying remotely, it is not possible to devote 100% attention to studies throughout the day, because children require attention and care from time to time.

Study time in the evenings (F. 9): In the busy everyday life, the brain is tired in the evening, and it is not possible to perceive important information as well as in the morning lectures. A teacher working for the first year needs the evenings to prepare for the next day's lessons with children.

Parallel other duties (F. 10): In parallel with studies, other duties must be performed. Sometimes

the work had to be combined with lectures, which complicates the learning process.

Motivation (F. 11). It is difficult to organize yourself for work, to start doing some homework on time.

The suggestions written by the students in free form were analyzed using the content analysis method. Students made 259 suggestions for energizing and improving the process of remote studies caused by the pandemic. The most typical are the following: 10 respondents wanted the previous study work to be restored indoors in contact lectures; 10 students expressed their desire to work only in contact lectures; 10 respondents suggested that when all these restrictions end, they should only attend the studies in person. There was an opinion that both distance learning and face-to-face learning can be equally productive. There was recommendation to create pedagogical books also in audio version, because it would be ideal to listen to them hands-free. One respondent proposed to organize work within the Study subject combined remote and in-person approaches: 3x remotely, 1x in contact lectures after the lifting of restrictions.

It was recognized that timely psychological support from the lecturer helps to overcome anxiety, fear, ignorance, and find solutions to problems.

In the beginning, an introductory video or lecture specifically on how the MS TEAMS platform works would have been very helpful from the UL side. LASE students suggested creating combined lectures where they continue to learn theory; all students and teachers to turn on the cameras; Universities to provide lecturers with good equipment; for IT specialists to answer the questions of solving current problems of students. Due to the specifics of sports, create cooperation between parents and teachers in contact training. LASE students suggested opening a branch for students living far away.

200 UL students involved in the study worked in preschool educational institutions and studied at the same time. It should be noted that preschool educational institutions in Latvia were not closed during the pandemic. The 40 students involved in the LASE study simultaneously performed the duties of coaches in various sports. The opinion of future coaches is that remote work in sports is difficult and not productive. The specificity of different sports requires the organization of contact lessons, as it is necessary to provide an opportunity to demonstrate movements and/or to correct inaccuracies.

The study found that distance studies did not cause problems for 25 respondents: initially some things seemed difficult, but by studying and working, everything could be learned. „If you want to achieve something, you can. In the future, we could continue studying like this and meet face-to-face, let's say, once a month. I think all parties would be satisfied.”

It should be noted that 160 students indicated that such a study format should be supportable because it is completely satisfying at the given moment, and it is also appearing compatible with expected further studies. Students can solve several problems in remote studies because their personal experience is also related to solving stressful emotional situations.

## 5. Discussions

2 specific groups of students participated in this study. Preschool teacher programs enroll highly motivated individuals who are purposefully preparing for the teaching profession. The future coaches take a responsible approach to their work duties and emphasize the need for demonstration in various sports. This has raised the question of the importance and identity of the teaching profession. In accordance with Špona (2019):

The professional identity of a teacher is a something freely chosen by the person, a strong sense of belonging to a social group of professionals, purposefully and responsibly acquired attitudes, knowledge and skills for pedagogical work and acquired independent views on the importance of the profession for society, especially for children and young people. (p. 22)

As is known, self-efficacy is formed by reflection on one's own experience. At a time when you must adapt to the conditions of the changing labor market, you must be flexible, the importance of self-management of your career is highlighted (Alhaddad, 2014). Therefore, what was found in this study about students' ability to create self-directed learning shows the responsible attitude of future preschool teachers and future coaches towards the chosen profession. In the conditions of the Covid pandemic, future preschool teachers performed their duties as teachers in their workplaces, as work in preschool educational institutions was not interrupted. The obtained results show that the Covid-19 pandemic has had a certain impact on students' understanding and attitude towards distance learning, however, the relatively short period of the study does not allow judging the long-term impact and requires further research.

## 6. Conclusions

The results of the study show that, in general, the Covid emergency has increased the willingness of future teachers to take responsibility for a self-directed learning process. There is a trend that students have become more pragmatic and purposeful, their understanding of the importance of remote studies is mostly positive.

Relevant factors for the benefits of distance learning in this study were: material benefits; environment; family; friends; technologies; safety; psychological comfort: independence, self-directed studies; time planning; communication - work in chat, in groups; combining work with studies; advantages of receiving a lecturer's presentation; the ability to participate from anywhere in the world; parallel other work; high-quality work of the lecturer; lecture recordings.

At the same time, students' problems in remote studies were also observed: communication between students and with the lecturer, insecurity of technology, time planning, difficult study process; home environment distractions, information, and scope of work; literature acquisition opportunities; attention span at the computer, lecture time; side duties; motivation.

However, a very positive discovery is the fact that students have become mobile and promptly solve information technology problems, cognitive problems, and communication problems that arise in the process of remote studies. Self-directed study skills and the ability to plan time are learned. The recommendation to make audio recordings of the lectures is valuable, which enables doing certain jobs simultaneously with studying, as is the recommendation to organize the work in a combined manner after the Covid pandemic, to learn the theory in lectures remotely, and to organize practical lessons and seminars in contact lectures.

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