Postmodern Openings
ISSN: 2068-0236 | e-ISSN: 2069-9387
Covered in: Web of Science (WOS); EBSCO; ERIH+; Google Scholar; Index Copernicus; Ideas RePeC; Econpapers; Socionet; CEEOL; Ulrich ProQuest; Cabell, Journalseek; Scipio; Philpapers; SHERPA/RoMEO repositories; KVK; WorldCat; CrossRef; CrossCheck

2021, Volume 12, Issue 2, pages: 494-509 | https://doi.org/10.18662/po/12.2/320

The Contemporary Distance Learning Industry in the Context of COVID-19

Karim EL GUESSAB[1],
Rita VYAZOVA[2],
Oksana UBEYVOLK[3],
Andrii KURGUZOV[4],
Liudmyla KOMPANIIETS[5]

[1] Zaporizhzhia National University, Ukraine, karimk11166@yahoo.com

[2] Zaporizhzhia National University, Ukraine, ritakorn28@yahoo.com

[3] Zaporizhzhia National University, Ukraine, ubvolk@i.ua

[4] Zaporizhzhia National University, Ukraine, kurguzeyrodelavega@i.ua

[5] Zaporizhzhia National University, Ukraine, milation@i.ua

Abstract: The article examines the state and trends in the development of distance learning in the world in conditions of covid-19, identifies the main specific difference between distance education and other forms of education, and analyzes the state of the world market of educational services via the Internet. Important features and characteristics of distance learning, examples of its organization in higher educational institutions were given. The main problematic points on the way of introducing the distance education system in the context of a pandemic and the factors hindering the development of this promising form of education are identified. In addition, the article examines the psychological and pedagogical features of distance learning with the current conditions of the development of education at the university. The psychological characteristics of students and their learning difficulties have been determined. It also clarified the problems faced by teachers in the organization and implementation of distance learning.

Keywords: *distance learning, COVID-19, postmodern society, the psychological and pedagogical features.*

How to cite: El Guessab, K., Vyazova, R., Ubeyvolk, O., Kurguzov, A., & Kompaniiets, L. (2021). The Contemporary Distance Learning Industry in the Context of COVID-19. *Postmodern Openings, 12*(2), 494-509. https://doi.org/10.18662/po/12.2/320

1. Introduction

Education today is an area around which heated discussions are unfolding, both at the state, public level, and in society. The processes of integration, globalization are underway, but they should not emasculate the content of national cultures and educational systems on the basis of which they occur. The openness of education should be combined with its general availability at all levels, in the interaction of interested parties and, above all, the state, in all components of this process in order to preserve society's intellectual potential. Indeed, a scientific analysis of any phenomenon involves considering it from several positions (Marek, Wen-chi & Chew, Chiou Sheng, 2021).

Nowadays postmodern society is going through complex processes of reassessment of basic values in all spheres of life - material, spiritual, socio-political, social (in the narrow sense) against the background of various activation of the human factor in the above areas.

The analysis of global problems should take into account the main objects of influence of these problems and the subjects whose activities cause aggravation or confrontation in certain systems. In other words, it is necessary to distinguish between the spheres of interaction between the individual, nature, society (in this case, the world community), which is made up of states with different forms of social structure, economy, national-state organization (federal or unitary), different mentality, legal systems, and the like (Arora, Srinivansen, 2020).

The variety of problems facing society today requires a revision of the existing approaches to assessing the phenomena of social life, one of which is spiritual. It has undergone serious deformation over the past almost fifteen years due to the prevailing social and, above all, political realities. The latter also applies to such a variety of the spiritual sphere of activity as education. The quality of education largely determines the level of training of specialists in various fields and fields (Taylor, 2020).

Another component of the global challenge of the future lies in the spiritual integration of the human community. This is a kind of convergence in order to develop ways to bring national mentality closer together and develop on this basis worldview compatibility, leveling the threat of global confrontation as a consequence of these processes. And the role of education in this sense can hardly be overestimated. After all, it, as a social institution, makes it possible to facilitate the organization of a multidimensional dialogue of mentalities and cultures (Wingo, Ivankova, Moss, 2017).

However, it is very important to remember that the processes of integration and globalization should not emasculate the content of national cultures and educational systems on the basis of which they occur. Otherwise, the individuality of the student and the teacher is leveled and ultimately suppressed. In this sense, a typical example is test assignments, especially in the humanities, which limit live communication between a teacher and a student. We believe that computer technologies, on the basis of which test tasks are introduced, should not impoverish the spiritual world of a person and be a factor in the deculture of a person.

Scientists believe that the possibility of optimizing the current situation on the planet largely depends on the level of culture of each person. The way out of it is seen in the cooperation of states of the world community with different levels of socio-economic and spiritual development (Perry, Steck, 2019).

The goal of education is a person, not a service with all that it implies. Although it should be noted that reform processes are taking place in society, which, as a rule, boil down to a reduction in funds for education, strengthening the tendency to turn education into a service. This trend is also facilitated by the Bologna process, which provides for the financing of the educational system according to the internationally accepted scheme: state - corporation - private person, where the state is not assigned a primary role.

The openness of education should be combined with its general accessibility at all levels, giving rise, according to the Bologna Convention, to a natural differentiation of students according to the bachelor-master system, in the interaction of stakeholders and, above all, the state, in all components of this process in order to preserve society's intellectual potential (Mahalakshmi, Radha, 2020).

Scientific analysis of any phenomenon, including distance education, provides for its consideration, at least from the following main positions (Tomasik, Helbling, Laura & Moser, 2020):

- genesis of the phenomenon
- its evolution
- transformation of the phenomenon
- the presence or absence of conditions for its existence in the future.

Considering the above and the difficult epidemic situation in the world, today distance education is becoming almost the only way to extend the educational process at all levels of education. That is why a thorough study of this type of pedagogical process and the formation of optimization

and adaptation mechanisms in accordance with the current realities of the world is becoming an important task both for teachers and for the main managers of the educational process.

2. Theoretical Framework

2.1. Philosophy and genesis of the postmodern educational process

Before proceeding to consider the issue of researching the problems and prospects of introducing distance education in the context of pandemic consequences, it will be important to consider the essence of the education paradigm in today's postmodern society. This is relevant for the reason that only with perfect knowledge of all the features of today's educational process, it is possible to successfully adapt the principles of distance education in the contemporary realities of the world.

At the turn of the XX-XXI centuries, a significant role in understanding the essence and goals of postmodern education, according to most researchers, belongs to the philosophy of education. This discipline arose in the second half of the last century on the territory of the educational space of the USA, Great Britain, Germany, it was directly related to the crisis phenomena of the system, the lack of practical effectiveness of approaches in solving the problems of socialization, education and training of children and youth (Gillett-Swan, 2017).

The influence of the educational system and philosophy at all stages of history was mutual. In the philosophical concepts of thinkers of the ancient era and the Middle Ages, and then representatives of the New Age, the French Enlightenment, German classics, Marxism, the issues of education, upbringing, moral and personal improvement of a person were raised as a reflection of cultural processes.

In the last century, the Western European philosophy of education took shape and developed within the framework of a large number of directions and concepts - empirical-analytical, hermeneutic psychoanalytic, postmodern, religious-theological. The result was the formation of a well-known contradiction between universalism and the need to take into account individuality, prepared the basis for a paradigm change and the transition to a non-classical, and later - in a post-classical model, oriented in the field of education to uniqueness, originality, and the creative principle of personality (Bailey, Card, 2009).

Philosophy, being a form of knowledge, a theoretical worldview and an art of thinking, is directly related to culture. This means, firstly, that philosophy has potential, is of particular value for education as a cultural

phenomenon with the help of a broad ideological and methodological base, a reflective attitude to the tools of consciousness and cognition, the requirement of consistency and consistency.

Secondly, the postmodern world is experiencing a deep crisis of value ideals, therefore, the philosophical worldview, which is based on the value type of thinking and orientation towards moral, humanistic values, makes it possible to determine the correct vector of civilizational development.

Thirdly, by examining the ways of mental and moral development of a person in a cultural environment, philosophy determines the degree of assistance to this process of the educational system.

The universality of the categorical apparatus of philosophy makes it possible to overcome the fragmentation of knowledge, to make it coherent and meaningful, which makes it possible to determine one's life guidelines. In addition, many pedagogical categories and concepts have their own philosophical origin.

Today, it is becoming more and more obvious that it is necessary to look for a new set of pedagogical and philosophical ideas that create an intellectual basis for the education system. Therefore, right now there are different approaches to the issue of reforming the education system (Levesque, Zuehlke, Stanek, Ryan, 2004).

Philosophy as a worldview and methodology is the basis for comprehending culture through the definition of the life-meaning goals of postmodern civilization, making it possible to identify value guidelines in global and regional education. The importance of the philosophy of education lies in the fact that it allows for philosophical reflection on those special points of culture that can be interpreted in the categories of human education, which is especially important in the context of the modernization of national education.

2.2. The essence of distance education in a postmodern society

Distance education is distance learning, a purposeful process of interaction between students and a teacher through the use of information and communication technologies. The most promising and widely used complete educational technology is the Internet.

The Internet is the only electronic address environment, a global computer network, and each of its users is an element of the network. By its purpose

Internet stands for:

- the largest and fastest source of information and entertainment;

- a means of progressive communication and communication;
- the most favorable environment for doing business;
- an ideal advertising medium;
- a large-scale space for art.

In recent years, many scientists, developers and users have been trying to introduce the Internet to distance learning, in the process of which almost any knowledge can be obtained, including higher education, although such a position is not inherent in the functional list. The basis for the formation of distance learning via the Internet should be some elements of other distance learning forms.

As with any other form of distance learning, the main figure in Internet learning is the teacher. He issues an assignment to students, checks its execution, answers questions and provides consultations. The difference is manifested only in the form and method of information transfer and control. If distance learning based on paper and audio media is reduced to the student's completion of the task received by mail from the teacher, by processing educational and methodological developments, manuals, textbooks, cassettes, etc., and the teacher is ready to answer questions by phone or hold a consultation in a special training center, then Internet learning is based on the interaction of a student with a teacher using modern information technologies.

The Internet in distance education acts as a set of computer networks with a wide range of information, educational and communication services. The progress of using the Internet ensures the publication of educational and methodological information, pedagogical communication in real and deferred time between participants in the educational process, remote access to information resources independent of time and space.

The introduction of distance education requires (Tomasik, Berger, Moser, 2018):

1. organization of logistics (software environments, computers, channels);
2. development of educational and methodological support;
3. the existing organizational structure responsible for the implementation of Internet technologies;
4. training of personnel and students;
5. planning and organizing the online learning process;
6. adaptation of the document management system;
7. motivation of the team, support from the leadership.

The characteristic features of contemporary Internet learning are: virtual reality, Internet services Web2.0, open educational resources, video

services. The use of virtual reality determines the level of the educational organization. Services Web 2.0 (Web 2.0.) - network services that are used to organize a joint simple and comfortable network activities. Video services are a telecommunication system that enables the interactive exchange of text and audio / video information between two or more users connected to the Internet. The practice of introducing video services shows that distance learning can be even more effective than eye lessons.

It is worth noting that the Internet is a little over 40 years old and it was not created for the purpose of education. Now, for teachers and students, the Internet is presented as a set of computer networks with a wide range of information, educational and communication services (Putnick, Bornstein, 2016).

So, distance learning is now the most appropriate process for implementing the principle of lifelong education. The priority is now being given to Internet technologies. It is important that interactive types of classes, distance laboratory workshops and the like are used. The characteristic features of real Internet learning are the use of Internet services Web 2.0, OEOR, video services. Scientists are of the opinion that the Internet is not just a technology, but a new way of cooperation, participation and concern for the modern world.

2.3. Distance education as a reality of a contemporary educational system in the context of the COVID-19 pandemic

Distance education has long been a reality of world education and requires not only empirical and theoretical understanding. Now there is already a lot of material requiring grouping. The first should be noted that distance learning will be actively growing and in the future, while competition in the education sector in this area will cover state higher education institutions. This is interconnected with the system of non-state higher educational institutions (Ryan, Deci, 2000).

Postmodern education is a definite ideology. And with distance learning, the pressure of ai is less than with traditional learning methods. If we talk about the ideology of progress associated with technical innovations, various innovations, many scientists note that the level of morality is significantly reduced, but a high price and a tough management system remain. The issue of moral education is not raised in our time, distance education in this aspect is significantly inferior to traditional education (Masonbrink, Hurley, 2020).

In the postmodern world, technocratic ideology is becoming an obstacle to the humanistic understanding of science and technology, more

and more penetrating into the education system. In higher educational institutions, the time for general humanitarian training has been greatly reduced, which proves the departure from the principles of humanization and humanization of education. Such trends have not bypassed distance learning either.

One of the problems of our time is the elitism of education. Different approaches are indicated here, but the main trend remains the orientation of the state towards the selectivity of higher education. This applies to both students and applicants and teachers. A pervasive opinion is a statement about the possibility of working in a higher education institution, only on the condition of achieving abundance and success. Due to the reorganization and consolidation of state institutions in Ukraine, there was a sharp decline in the load on the teacher, and was the main task of the reform. There is a possibility that the increase in wages will be in the event of a decrease in scientific and teaching staff.

Distance learning, following the path of democratization of the world, gives each participant in such a process the right to success. In the future, it is possible to simplify correspondence and evening forms of education, which partially, and possibly completely replace distance learning. Distance learning will make life much easier for students, because there will be a decrease in the study load and tuition fees. Speaking about the life of educational institutions in general, it can be argued that commercial institutions will not be able to keep a staff of teachers only thanks to distance learning, but for large national institutions it will become a real opportunity to economically pay salaries, from this it can be noted that distance learning is not economically profitable for most educational institutions (Levesque, Zuehlke, Stanek, Ryan, 2004).

The democratization of the educational space can also lead to negative manifestations: the stratification of educational institutions into mass and elite, which require significant economic costs. Elite educational institutions in all developed countries and distance learning there have a long tradition, in our country there is a permanent process of reforming and forming such institutions, but without a clear plan and perspective for those who are interested in this process.

The general informatization of the educational space awakens a number of problems that exist in distance learning. As psychologists and teachers note, the virtual world and gadgets that arose for communication, at the same time, caused a shortage of live communication. This is what leads to isolation, loneliness, fear of live communication. So, the available seminars in distance learning, which cannot be a priority form of training, do

not contribute to the socialization of the individual, because in such conditions it is difficult for a student to gain experience of speaking in front of an audience. Conducting webinars partially solves this problem, but their number during the training period is insignificant, because this form requires significant effort, therefore, increases the financial component of distance learning.

It can be noted that the active use of elements of traditional education in the theory and practice of distance learning will contribute to the positive dynamics of learning. An interesting moment is the combination of problem teaching methods with computer technologies. Distance learning is mainly formed on tests, formalized tasks, the solution of which is subject to a certain algorithm. Correctly applied problematic method allows you to activate the educational process. Taking the testing method as an example, it shows that it is not effective enough to test student knowledge. More and more complex tasks that require systemic understanding are used more and more often. The active use of problematic tasks not only in schools but in higher educational institutions provides distance learning. The main problem in this circle of problems remains the problem of educating teachers. The experience of teachers in universities refutes the opinion that with age, new ideas are learned worse, because they are a teacher constantly in the status of a student, learning new tasks and new skills. Thus problem learning is a two-way and complementary process (Burgess, Sievertsen, 2020).

Television plays an important role in distance learning. The problem here is just how the TV channels are organized. If a very shy scientist reads a lecture simply from paper, and is also afraid of the camera, then there will be no result. A very large role in teaching through television broadcasting is given to the operator and the programmer, thanks to which the entertainment of the lecture is realized. At present, the topic of discussion is perceived much better by the viewer than just mono lectures. It is the discussion, and not the political dialogue, that is most interesting to the viewer, despite the fact that it is the political dialogue that attracts more of the audience. Teaching through television broadcasting a acquires new meaning in the context of the global Covid-19 pandemic, because, firstly, it meets certain standards guaranteed by the state, and secondly, it has a wide coverage, a large audience, since it is also possible for residents of remote villages and regions.

In a post-industrial society, education and science are important components of sustainable development. Most of all, this applies to distance learning, which is cost effective. At the present stage, such an industry as the information economy has received a significant impetus. It is information in

the postmodern world of constancy and society (Amir, Tanti, Maharani, Wimardhani, Sulijaya, 2020).

At the present stage of development of pedagogical science, scientists are encouraged to separate training and education. If training gives qualification, then education is metaqualification. It allows you to find the information you need in different parts of knowledge and practice. Thus, distance learning can provide precisely metaqualification for students. It is it that offers continuous education and self-education, even applying distance technologies in such a way that a person retains the skills of competition and does not feel surprised by technical and intellectual innovations.

So, there is an unambiguous opinion that distance learning has prospects for development. This is due to an increase in demand in the market for distance education services. Well, the current stage is the need for universal training, where it is possible to find versatile information from various areas of theoretical and practical branches.

The innovative development of the economy and the world in general requires the modernization of the educational system, which is the engine of economic and social progress. Quality education has always been and will be an integral factor in the formation and development of a strong and successful society. The contemporary goal of the educational process is the availability and quality of the theoretical and practical base in the modernized world (Schneider, Council, 2020).

Distance education is a qualitatively new, progressive type of education that emerged in the last third of the 20th century. Online education has emerged from new technological opportunities created by the information revolution and based on the ideas of open education. Distance education appeared due to the need for education for a geographically remote population, the first distance learning was in the form of distance learning. By the 1970s, the world began to focus on the power of the computer and distance learning was virtualized.

The distance learning system gives equal opportunities to schoolchildren, students, people with impaired health, the disabled, the unemployed in any regions of the country and abroad to exercise their rights to education and information. This is especially important for people with disabilities, mostly deprived of the opportunity to receive a special education. Study materials, lectures and tasks are sent electronically. In addition, it is possible to directly, individually communicate with your lecturer via email or Skype or Zoom.

Unlike distance learning, when all students study according to the same program, distance education is individual, since the curriculum is

drawn up for each student individually and is a sequential set of module courses that meet the individual needs of the student. (Kaczmarek, Chen, Ohyama, 2020).

The distance education system is convenient for well-equipped computer classrooms to carry out knowledge control in it. It is also convenient in the presence of the Internet and a stationary computer for individual students who want to gain knowledge and test themselves, without being present in the classroom. The obvious disadvantages are the mandatory presence of the Internet and the potential distance of education, which makes it difficult to control how well the student tested his knowledge.

The distance learning platform is the centerpiece around which distance education participants gather. In this system, the teacher creates a general course of study using multimedia pedagogical resources, individualizes it to the needs and abilities of each student, and supports the activities of the students. The student studies on the net or uploads the pedagogical meaning, it is recommended to him, organizes his work, performs exercises, he can see the evolution of his activities on the computer interface, perform tasks for self-assessment and transfer the completed tasks to the teacher for verification. Teachers and students communicate individually or in groups, suggest topics for discussion, and collaborate on exploring or creating shared documents. The administrator provides and maintains system maintenance, manages access and rights of teachers and students, creates links with external information systems (administrative documents, catalogs, pedagogical resources, etc.). That is, the platform administrator has a specific role that is different from the institution administrator role.

Nowadays, there are many platforms for distance learning and their number does not stop growing every year. Platforms can be free, paid or rented, and tailored or not to the specific needs of an organization or institution.

Platforms can combine different tools. There are 3 types of platforms: simple platforms, synchronous virtual classrooms, complex platforms.

Simple platforms aim to provide an on-line course, they include minimal asynchronous communication, students can enroll in one or more modules / courses.

Synchronous virtual classrooms are a combination of synchronous facilities that mimic a classroom but remote. The instructor teaches classes at a distance and more or less audience intervention is allowed.

Complex platforms, in addition to simple activities, can include pedagogical design and distribution capabilities. Some of them include only web-based tools, others are used to manage stationary and distance learning.

Most often, distance learning at French universities uses the LearningSpace, TopClass, WebCT, Pleiad, Campus Virtuel, Virtual, Claroline, Ganesha, Moodle, Prométhée platforms. LearningSpace, TopClass and WebCT are platforms that offer a variety of activities. These platforms have numerous options and allow different use cases.

Pleiad, Virtual, Campus Virtuel are platforms that present convenience and functionality, although they are less modernized than the previous ones. Moodle, Claroline - beautiful and functional platforms, rich resources and opportunities for distance learning.

Ganesha is a platform that promotes personalized learning. Contrary to content-oriented platforms (content management systems), Ganesha organizes activities and teaching resources around the student rather than around the course.

2.4. Advantages of distance learning in the realities of today's post-pandemic world

Among the significant advantages of distance learning are the following:

The ability to study at any time. A student studying remotely can independently decide when and how much time during the semester to devote to studying the material. He builds an individual training schedule for himself.

The ability to study anywhere. Students can study from the comfort of their home or office, from anywhere in the world. To start learning, you only need a computer with Internet access. The absence of the need to visit an educational institution every day is an undoubted plus for people with disabilities, for those living in hard-to-reach areas, for parents with small children.

In-service training. For training, it is not at all necessary to take a vacation at the main place of work, go on business trips. You can also remotely study in several courses or in several educational institutions at the same time.

The ability to learn at your own pace. It is not necessary to study at the same pace as other students. The student can always return to the study of more complex issues, watch video lectures several times, re-read the correspondence with the teacher, and can skip the topics already known to

him. The main thing is to successfully pass the intermediate and final certification.

Availability of training materials. Access to all necessary literature is opened to the student after registering in the distance learning system, or he / she receives educational materials by e-mail. The problem of shortage or absence of textbooks, teaching aids or teaching aids disappears.

Mobility. Communication with teachers, tutors is carried out in various ways: both on-line and off-line. It is sometimes more efficient and quicker to consult with a teacher by email than to make an in-person meeting in a full-time or part-time study.

Learning in a relaxed environment. Intermediate certification of students of distance courses takes place in the form of on-line tests. Therefore, students have less reason to worry. The possibility of subjective assessment is excluded: the system that checks the correctness of the answers to the test questions will not be affected by the student's success in other subjects, his social status and other factors.

Individual approach. With traditional teaching, it is quite difficult for the teacher to pay the necessary amount of attention to all students of the group, to adjust to the pace of each student's work. The use of remote technologies is suitable for organizing an individual approach. In addition to the fact that the student chooses the pace of learning for himself, he can quickly get in touch with the questions that arise.

Distance education is cheaper. If we compare the cost of training in correspondence and distance learning, the full one is likely to be cheaper. The student does not have to pay for travel, accommodation, and in the case of foreign universities, there is no need to spend money on a visa and international passport.

Convenience for the teacher. Teachers, tutors, teachers engaged in teaching activities remotely, can pay attention to more students and work, even while on a business trip or at a conference abroad.

2.5. Disadvantages of distance learning in the realities of today's post-pandemic world

Among the important problems and shortcomings of distance education, it is also worth highlighting the insufficient direct contact between a personal teacher and a distance student due to the extreme professional workload of domestic teachers.

Students of distance learning courses in advanced countries can receive answers to their letters within a few hours, since there are much more teachers in countries with significant experience in the implementation

of distance education than students. Unfortunately, in countries that are just beginning to master the techniques of distance education, the opposite situation has developed - we have a lot of people who want to receive distance education, and there are few experienced teachers who are familiar with the latest technologies of distance communication.

There are also problems such as:

- lack of personal communication between teacher and student (less effective transfer of knowledge occurs, without personal contact). Also, there is not enough communication with fellow students to exchange experiences;
- the student has strong personal motivation, the ability to study independently, without constant support and nudge from the teacher;
- the lack of the possibility of immediate practical application of the acquired knowledge, followed by discussion of the questions that have arisen with the teacher and clarification of the situation with specific examples
- students cannot always provide themselves with sufficient technical equipment - to have a computer and a constant Internet connection;
- there are no or very expensive applied computer programs necessary for maintaining WEB-sites and information resources, administration of distance learning processes;
- the need for large investments at the initial stage of organizing the work of the distance learning system.

3. Conclusions

Thus, distance learning is a special pedagogical technology for organizing the educational space, which is characterized by the peculiarities of the strategy of interaction of the future specialist with the carriers and sources of new knowledge for him. A feature of distance learning is the independence and personal responsibility of a person for the choice of a distance education program, the timing and quality of its completion. This system should be intelligent, that is, to determine and take into account the individual cognitive characteristics of the future specialist and adapt the process of professional training in accordance with their characteristics. To increase the efficiency of the organization of the distance learning process, it is necessary to analyze the existing methods and technologies for adapting training systems and substantiate the expediency of their use in the professional training of future specialists in accordance with various forms of organization of distance learning in the conditions of today's post-pandemic world.

Acknowledgement

The contribution of the authors to this paper is as follows: documentation: Karim El Guessab; Rita Vyazova; Oksana Ubeyvolk; Andrii Kurguzov; Liudmyla Kompaniiets; data gathering: Karim El Guessab; Rita Vyazova; data processing: Oksana Ubeyvolk; Andrii Kurguzov, writing: Karim El Guessab; Rita Vyazova; Oksana Ubeyvolk; Andrii Kurguzov; Liudmyla Kompaniiets. The English translation was made by Liudmyla Kompaniiets and proofreading company "Everest".

References

Amir, Lisa & Tanti, Ira & Maharani, Diah & Wimardhani, Yuniardini & Julia, Vera & Sulijaya, Benso. (2020). Student Perspective of Classroom and Distance Learning During COVID-19 Pandemic in the Undergraduate Dental Study Program Universitas Indonesia. DOI: https://doi.org/10.21203/rs.3.rs-42334/v2

Arora, A. K., & Srinivansen, R. (2020). Impact of pandemic COVID-19 on the teaching-learning process: A study of higher education teachers. *Parabandhan: Indian Journal of Management*, 13(4), 43–56. DOI: https://doi.org/10.17010/pijom/2020/v13i4/151825

Bailey, C. J., & Card, K. A. (2009). Effective pedagogical practices for online teaching: Perception of experienced instructors. *Internet and Higher Education*, 12(3-4), 152–155. DOI: https://doi.org/10.1016/j.iheduc.2009.08.002

Burgess, S., & Sievertsen, H. H. (2020, April 1). Schools, skills, and learning: The impact of COVID-19 on education. *VoxEU*. https://voxeu.org/article/impactcovid-19-education

Gillett-Swan, J. (2017). The Challenges of Online Learning: Supporting and Engaging the Isolated Learner. *Journal of Learning Design*, 10(1), 20–30. DOI: https://doi.org/10.5204/jld.v9i3.293

Kaczmarek, K., Chen, E., & Ohyama, H. (2020). Distance learning in the COVID-19 era: Comparison of student and faculty perceptions. *Journal of dental education*, 10.1002/jdd.12469. Advance online publication. DOI: https://doi.org/10.1002/jdd.12469

Levesque, C., Zuehlke, A. N., Stanek, L. R., & Ryan, R. M. (2004). Autonomy and competence in German and American university students: A comparative study based on self-determination theory. *Journal of Educational Psychology*, 96, 68- 84.

Mahalakshmi, K., & Radha, R. (2020). COVID 19: A massive exposure towards web based learning. *Journal of Xidian University*, 14(4), 2405–2411. DOI: https://doi.org/10.37896/jxu14.4/266

Marek, M. & Wu, Wen-chi & Chew, Chiou Sheng. (2021). Teacher Experiences in Converting Classes to Distance Learning in the COVID-19 Pandemic. International *Journal of Distance Education Technologies*. 19. 40-60. DOI: https://doi.org/10.4018/IJDET.20210101.oa3

Masonbrink, A. R., & Hurley, E. (2020). Advocating for children during the COVID-19 school closures. *Pediatrics*, 146, e20201440.

Perry, D., & Steck, A. (2019). Changes in faculty perceptions about online instruction: Comparison of faculty groups from 2002 and 2016. *Journal of Educators Online*, 16(2). Advance online publication. DOI: https://doi.org/10.9743/JEO.2019.16.2.8

Putnick, D. L., & Bornstein, M. H. (2016). Measurement invariance conventions and reporting: The state of the art and future directions for psychological research. *Developmental Review*, 41, 71-90.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78

Schneider, Samantha & Council, Martha. (2020). Distance learning in the era of COVID-19. *Archives of Dermatological Research*. 1-2. DOI: https://doi.org/10.1007/s00403-020-02088-9

Taylor, D. B. (2020). How the coronavirus pandemic unfolded: A Timeline. New York Times. https://www.nytimes.com/article/coronavirus-timeline.html

Tomasik, M. J., Berger, S., & Moser, U. (2018). On the development of a computerbased tool for formative student assessment: Epistemological, methodological, and practical issues. *Frontiers in Psychology: Educational Psychology*, 9, 2245.

Tomasik, Martin & Helbling, Laura & Moser, Urs. (2020). Educational Gains of In-Person vs. Distance Learning in Primary and Secondary Schools: A Natural Experiment During the COVID-19 Pandemic School Closures in Switzerland. *International Journal of Psychology*. DOI: https://doi.org/10.1002/ijop.12728

Wingo, N. P., Ivankova, N. V., & Moss, J. A. (2017) Faculty perceptions about teaching online: exploring the literature using the technology acceptance model as an organizing framework. *Online Learning*, 21(1), 15-35. DOI: https://doi.org/10.10.24059/olj.v21i1.761

Zar, H. J., Dawa, J., Fischer, G. B., & Castro-Rodriguez, J. A. (2020). Challenges of COVID-19 in children in low- and middle-income countries. *Paediatric Respiratory Reviews*, 35, 70-74.