Distance Education During the COVID-19 Pandemic: Development Features

Evgeniya Mikhailovna Nikolaeva
Doctor of Philosophical Sciences, Professor in KFU/ Institute of Social and Philosophical Sciences and Mass Communications / Department of Philosophy and Religious Studies / Department of General Philosophy, Kazan Federal University, Russia

Svetlana Nikolaevna Kotenkova
PhD in Economic Sciences, Associate Professor in KFU/ Institute of Management, Economics and Finance/ Department of State and Municipal Management, Kazan Federal University, Russia

Maria Yurievna Eflova
Doctor of Sociology, Professor in KFU/ Institute of Philosophy, Social Sciences and Mass Communications / Department of Socio-Political Sciences / Department of General and Ethnic Sociology, Kazan Federal University, Russia

Polina Sergeevna Kotliar
Candidate of Philosophical Sciences, Senior Lecturer in KFU / Institute of Social and Philosophical Sciences and Mass Communications / Department of Philosophy and Religious Studies / Department of General Philosophy, Kazan Federal University, Russia

***Abstract*---**An existential problem for modern society is the stability problem when the ambiguity of extended forecasts becomes characteristic even for the foreseeable future. Consideration of this problem from the perspective of the digital space is especially important for two reasons. First, the bulk of modern communication processes takes place in the network space. Second, the processes of searching, consuming, exchanging information and acquiring new knowledge are directly or indirectly connected today with digital resources. This article deals with the analysis of the specifity of the implementation of distance learning in the context of the Covid-19 pandemic. The empirical study base is a group interview with students of Kazan Federal University which has highlighted students' attitudes over online education in the face of a pandemic. The analysis of the respondents' viewpoints reveals several common stances towards understanding their individual educational strategy, and the

results of the study enable to determine the specific features of the implementation of training for students of Kazan Federal University, to show the features of the influence of distance learning on the choice of educational technologies. The differences between the students' attitudes over the development of remote education are revealed.

Keywords---active learning, COVID-19, distance learning, educational technologies, passive learning.

Introduction

The machines of the industrial age that shaped the modern world were equivalent to nature in the sense that a car, for example, was analogous to a horse, or a steam engine reproduced the power of an ox, or an airplane reflected a bird in nature, etc. S. Estevez points out that such machines that defined the era expressed the activity of man and machine that created a specific constellation of space and time. In it, procedurality and activity are of great importance, which allows us to understand the connection between movement and its effect, to fix the sequence (Estévez, 2009). It is obvious that the interaction of technology, man and environment forms a continual (analog) chronotope, in which people alone are analog creatures. It is in this chronotope that the basic ontological states of man have been formed (Pasquale, 2015).

Today we are participants and witnesses of the destruction of this chronotope under the onslaught of digital technologies that are taking over the social space. Digital processes are instant and invisible, they do not have natural commonplace patterns. It is fact of life that in the context of computers we are dealing (individually and collectively) with logic – increasingly algorithmic – that makes the world much less "apprehensible" and that has little equivalent or correspondence to the kinds of cultures and societies that humans have built over millennia (Pasquale, 2015). Neurophysiologist and behaviorist R. W. Gerard in one of his reports Some of the Problems Concerning Digital Notions in the Central Nervous System argued that both analog and digital processes function in the human brain, but each function expresses its own logic. In a similar system there is a continuity relationship; in digital, discontinuous relationship (Gerard, 1951).

The notion "analog" is rarely used by researchers to characterize the essence of a person, the ontological foundations of his/her life. Most often, analog technologies are the technologies that are inferior to digital ones in their quality level. Analog technology, which, for example, underlies the invention of vinyl records or an ordinary (fixed-line) telephone, is based on the sliding of a certain wave and the subsequent transmission of sound through a system of line-of-sight repeaters. This equates to a continuous wave pattern to be transmitted directly with allowance for accompanying noise and background interference. Digital technology is based on the breaking of a sound or picture into a set of quantitative atomic elements. By dividing a continuous process into a multitude of atomic discrete moments, it is possible to achieve high-quality and highly realistic signal reproduction. This is digital technology which is based on the fact

that any process (sound or video) is subject to atomization, and subsequently, when reproduced, is again transformed into "continuous" process for perception (Kim & Su, 2020; Tetro, 2020).

In the scope of this paper more interesting and important is the definition according to which analog is equivalent to or corresponding to something (in particular, what we can detect and recognize in nature). In this regard, the research of anthropologist S. Estevez is of current concern. She remarks that the technologies with which we built our world, from the earliest times until very recently, were equivalent, analogous to organic, unfolding, lasting processes in which people and their environment participated, "whose operations simulated processes that people had seen in nature and functioning of their own bodies" (Estévez, 2009).

Method

The empirical basis of this research is presented by the method of focused group interview. Since the main purpose of the exploratory work was to carry out not quantitative (for example, what percentage of students of Kazan Federal University are dissatisfied with distance learning or how many students missed more than one class for no reason), but qualitative analysis. The format of the interview is productive in a situation where it is necessary to get an insight about beliefs, personal experience, experiences that cannot be formalized into a questionnaire list of questions, there and then, where there is a need for a detailed understanding of the respondents' thinking (Markova et al., 2017; Burgess & Russell, 2003).

The theoretical and methodological basis was the work by R. Merton, M. Fiske, P. Kendall Oberemko & Terentyeva (2018), T. Greenbaum Greenbaum (1999), R. Kreuger Krueger (2014), S.A. Belanovsky Belanovskiy (1996), E.V. Dmitriev Dmitriyeva (1998), O.T. Melnikov Melnikova (2003), and others. Of particular note is a considerable influence of the phenomenological paradigm presented in the works by E. Husserl, the essence of which can be briefly described as the search for a general idea of the world through the recognition of the subjective experience of each individual. Also, the concept of appreciational sociology by M. Weber, thanks to which it becomes possible to overcome psychologism in relation to the experiences of a particular individual and reach the level of social generalizations. General scientific methods were used within this study, such as analysis and synthesis, modeling and idealization, as well as concretization and abstraction (Dori et al., 2003; Niemi, 2002).

Results and Discussion

Focus group interviews were conducted on June 5 and June 11, 2020 (N = 2 focus groups containing 20 people) students of Kazan Federal University of various courses and fields of education, studying in the remote mode from March to June 2020 in the face of the pandemic of COVID-19. The problems solved in the study are as follows:

- To reveal the attitude of students to their experience of online learning; to delineate the students' problems arisen in connection with a vast amount of uses of digital techniques in learning process.
- To determine the stage of students' involvement into distant educational process.
- To reveal the students' expectations of elective education. To expose the students' attitude to such models as minor, non-major disciplines, concerted tracks of students from different institutes.

Analysis of the discussion on the task "to reveal the attitude of students to their experience of online learning" showed that all focus group participants state that they have encountered such difficulties as, "The moment of socialization is being lost. There is no opportunity to get to know the teachers better, meet them face to face. It is as if anonymous communication, it is difficult", "Distance learning does not replace full-time education when you communicate with teachers and classmates. There is not enough live communication", "Attention is deflected by household chores (cleaning, food, etc.)" (Kaur, 2013; Thompson, 2010).

For the next task – "to determine the stage of students' involvement into distant educational process", the following variants of viewpoints were identified, "I believe that lectures (especially streaming) are better to be organized online, because you can go back to recording and repeat the material. And the seminars are better to be given live", "I like this form, it is convenient in my demanding schedule. You can listen to a lecture and do something in parallel, or sleep longer without spending time on getting ready and going to the university. A very interesting experience – all my teachers are well versed in technology, teaching has not degraded in quality. But half of my friends do not like this form, it is difficult for them not to communicate with the rest of the students. The factor of laziness also disrupts: there is a temptation to be distracted, but then I really revise the records of lectures", "In distance learning, motivation suffers acutely. You stay indoors, you'd rather not study, you do everything under the wire, sitting at the computer is very depressing. I think that traditional education ought not be replaced by distance education. But all correspondence education would be replaced by such an online variant" (Oudeyer et al., 2016; Yilmaz & Bayraktar, 2014).

The next task is "to reveal the students' expectations of elective education." The following expectations were identified: "Conducting demonstration lectures where students of different educational program track can meet. Also giving joint lectures on general subjects that all students have", "Mixing groups. But not one group, and it would have its own microclimate for 4 years, but different people. So there would be additional communication and responsibility", "Platforms for joint research of students of different institutions", "Introducing a plan for interdisciplinary research and creating conditions for its implementation, using information from each other", "At the beginning of training, conduct tests to determine soft and hard skills to identify areas of strengths of each student, areas where they can show the best results", "Engaging practicing teachers, interacting with companies (practice, employment, lectures)", "From the 3rd year, introducing an individual schedule of classes or having an opportunity to choose morning or evening shift", "Practical orientation of coursework and research papers, so that

students solve real problems of enterprises. Choosing one educational program in the 1st year, continuation of the topic throughout the entire period of study", "Combining offline and online learning. Transferring some of the subjects online", "Using new forms of education (brainstorming, business games, ...)", "Interaction of junior and senior students. The younger ones see what awaits them. Senior students practice in teaching, working with people", "It is better to know the whole general history than one single aspect of it" (Suryasa et al., 2019; Sergeieva et al., 2021).

The following can be identified as key positions in understanding students' choice of their educational scenario: "A junior bachelor cannot build their own educational scenario by themselves. When it is hard for a person what occupation to choose, too much variation will lead to the fact that we will not know anything. A little bit of everything, but nothing in general. That most of education ought to be programmatic, and a small part – elective. Non-major information can be obtained from other sources" and "Where is the good of burdening your head with side information. You can find a person who is versed in some area than to delve into some new area yourself. So, you need to meet and interact, but not burden yourself with too much" (Danchikov et al., 2021; Zulvany, 2020).

In accordance with the abovementioned, it should not be left unnoticed that the experience of joint attendance in the university is not only study, but also social formation, education, competition, the formation of social ties for the future, an integral lifestyle that forms an individual. The learning process is not limited to passing information or reading books. It suggests the translation of what M. Polanyi called implicit (peripheral) knowledge. This is a fundamentally non-formalized, non-articulated component underlying scholarly traditions. Explicit knowledge suggesting the possibility of fixation in various kinds of texts can be transmitted remotely via digital technologies, and implicit (tacit) knowledge cannot be acquired, it can only be mastered through belonging to scholarly traditions, to school of thought, through direct joint practices, in which not all can be expressed verbally. Taking courses of lectures even on the most modern online platforms for any program cannot compare in its effect with mastering this program in a traditional university environment. It is probably possible to teach those professions online in which the main work is also done online, you can provide additional professional training, you can solve local educational problems. But you cannot form self-confidence, friendly relations, create a competitive atmosphere and everything that predetermines life orientations. The university (physical) campus is primary, and digital education practices can act as a useful addition in relation to it, but not as an appropriate replacement (Citrawan et al., 2018; Billaiya et al.,2017).

Summary

Despite the fact that we know too little about the best ways to use computing and communication technologies for effective teaching and learning, the tertiary education space is being digitized today at an exponential rate. Many problematic questions arise in this connection. For example, how to effectively use digital technology to create diverse and rewarding educational experiences, which aspects of learning can be improved via technology, and which of them require

traditional (analog) classroom interaction with appropriate social and interactive contexts.

A person who is placed in the regime of total online education for several months (as in the situation with the pandemic of COVID-19) inevitably experiences a feeling of body-perceptual deprivation. And this is not surprising, because as a cognizing being, he/she was formed in close contact with the environment, with the physical objects that inhabit it. The formation of the human cognitive apparatus takes place in the dynamic connection of its physicality and the environment and formation (natural, cultural, social). Thanks to the structure of our body, which is a complex system with surprisingly clear coordination of various processes, we are able to receive impulses from the surrounding world, respond to them in a certain way, suitable for a specific situation and conditions, change under the influence of the environment and transform it (Thompson, 2004).

Within this framework, digital interactions are accompanied by inevitable losses, distortions, "gaps", when the problem of faithful translation or appropriate vocabulary arises, as described by P. Watzlawick, J. Beavin Bavelas, D. Jackson. What digital communication lacks is "adequate vocabulary" for the endless unforeseen contingencies of human relationship (Watzlawick et al., 2011). These scholars come to the conclusion, "Not only can there be no translation from the digital into the analogic mode without great loss of in formation but the opposite is extraordinarily difficult" (Watzlawick et al., 2011). In other words, our exploration confirms that in order to launch and implement a full-fledged interaction, an individual needs to use the entire set of cognitive abilities, skills, tools that are mediated by his/her bodily activity and having an analog nature.

Conclusion

Higher education is traditionally associated with a way of acquiring social status. However, in modern society, the idea of stability of higher education as a phenomenon goes through considerable transformations. The dynamics of its content and forms are becoming digital in nature. The onset of the pandemic has clearly demonstrated how the very ontology of education is changing under the influence of the requirement for compliance with self-isolation regimen. These changes are ambiguous; often, with the acquisition of a high-tech nature, education loses its most important functions associated not only with the systemic development of cognitive abilities and professional skills, but also with upbringing, social formation of an individual. Concluding, one can stress the following:

- All focus group participants received education remotely, but none of the respondents was an apologist for it.
- All participants noted the problem of lack of motivation in home learning environment. The problem of giving the course up, traditional for individual mastering MOOC, turned out to be also relevant in a pandemic, despite the control of the teachers. Thus, we can conclude that the problem of "passive students" has become actualized, that is, those students have stood out whose goals do not coincide with the expectations of teachers.

- Proceeding from the experiences of distance education, students tried to understand their further educational strategy, they were sensitive to the fact that they would be information-laden, and also would not be able to make the right decision in choosing courses.

Acknowledgments

References

Belanovskiy, S. A. (1996). Metod fokus-grupp [Focus Group Method]. *M.: Magistr*, 7-12.

Billaiya, R., Malaiya, S., & Parihar, K. S. (2017). Impact of socio economic trends on students in quality education system. *International Journal of Social Sciences and Humanities*, *1*(1), 16-20. https://doi.org/10.29332/ijssh.v1n1.10

Burgess, J. R., & Russell, J. E. (2003). The effectiveness of distance learning initiatives in organizations. *Journal of Vocational Behavior*, *63*(2), 289-303. https://doi.org/10.1016/S0001-8791(03)00045-9

Citrawan, I. W., Widana, I. W., & Suarta, I. M. (2018). Education sector optimization for improving human development index. *International Journal of Social Sciences and Humanities*, *2*(1), 117-133. https://doi.org/10.29332/ijssh.v2n1.102

Danchikov, E. A., Prodanova, N. A., Kovalenko, Y. N., & Bondarenko, T. G. (2021). The potential of online learning in modern conditions and its use at different levels of education. *Linguistics and Culture Review*, *5*(S1), 578-586. https://doi.org/10.21744/lingcure.v5nS1.1442

Dmitriyeva, Ye. V. (1998). Fokus-gruppy v marketinge i sotsiologii (Focus groups in marketing and sociology). M.: Tsentr.

Dori, Y. J., Belcher, J., Bessette, M., Danziger, M., McKinney, A., & Hult, E. (2003). Technology for active learning. *Materials Today*, *6*(12), 44-49. https://doi.org/10.1016/S1369-7021(03)01225-2

Estévez, S. M. (2009). Is nostalgia becoming digital? Ecuadorian diaspora in the age of global capitalism. *Social Identities*, *15*(3), 393-410.

Gerard, R. W. (1951, March). Some of the problems concerning digital notions in the central nervous system. In *Cybernetics: Circular causal and feedback mechanisms in biological and social systems. Transactions of the Seventh Conference* (pp. 11-57). New York, Macy Foundation..

Greenbaum, T. L. (1999). *Moderating focus groups: A practical guide for group facilitation*. Sage Publications.

Kaur, M. (2013). Blended learning-its challenges and future. *Procedia-social and behavioral sciences*, *93*, 612-617. https://doi.org/10.1016/j.sbspro.2013.09.248

Kim, S. W., & Su, K. P. (2020). Using psychoneuroimmunity against COVID-19. *Brain, behavior, and immunity, 87,* 4-5. https://doi.org/10.1016/j.bbi.2020.03.025

Krueger, R. A. (2014). *Focus groups: A practical guide for applied research*. Sage publications.

Markova, T., Glazkova, I., & Zaborova, E. (2017). Quality issues of online distance learning. *Procedia-Social and Behavioral Sciences*, *237*, 685-691. https://doi.org/10.1016/j.sbspro.2017.02.043

Melnikova, O. T. (2003). Fokus-gruppy v marketingovom issledovanii: Metodologiya i tekhni-ki kachestvennykh issledovaniy v sotsial'noy psikhologii [Focus groups in marketing research: Methodology and techniques of qualitative research in social psychology]. *Moscow: Akademiya*.

Niemi, H. (2002). Active learning—a cultural change needed in teacher education and schools. *Teaching and teacher education*, *18*(7), 763-780. https://doi.org/10.1016/S0742-051X(02)00042-2

Nilogov, A. S. (2017). To the pedigree of Konstantin Fyodorovich Roerich. *Genesis: Historical Studies* , (5).

Oberemko, O. A., & Terentyeva, N. N. (2018). Focused interview according to Robert Merton: features and criteria of quality. Monitoring of Public Opinion: Economic and Social Changes. No. 6.

Oudeyer, P. Y., Gottlieb, J., & Lopes, M. (2016). Intrinsic motivation, curiosity, and learning: Theory and applications in educational technologies. *Progress in brain research*, *229*, 257-284. https://doi.org/10.1016/bs.pbr.2016.05.005

Pasquale, F. (2015). *The black box society* . Harvard University Press.

Sergeieva, L. M., Stoichyk T. I., Tarasova, O. V., Sulyma, T. S., & Tarasiuk, I. V. (2021). Development of the modern educational environment of the institution of professional (vocational-technical) education in the digital space. *Linguistics and Culture Review*, *5*(S3), 459-475. https://doi.org/10.21744/lingcure.v5nS3.1554

Suryasa, W., Sudipa, I. N., Puspani, I. A. M., & Netra, I. (2019). Towards a Change of Emotion in Translation of Kṛṣṇa Text. Journal of Advanced Research in Dynamical and Control Systems, 11(2), 1221-1231.

Tetro, J. A. (2020). Is COVID-19 receiving ADE from other coronaviruses?. *Microbes and infection*, *22*(2), 72-73. https://doi.org/10.1016/j.micinf.2020.02.006

Thompson, E. (2004). Life and mind: From autopoiesis to neurophenomenology. A tribute to Francisco Varela. *Phenomenology and the cognitive Sciences*, *3*(4), 381-398.

Thompson, P. (2010). Learning by doing. *Handbook of the Economics of Innovation*, *1*, 429-476. https://doi.org/10.1016/S0169-7218(10)01010-5

Watzlawick, P., Bavelas, J. B., & Jackson, D. D. (2011). *Pragmatics of human communication: A study of interactional patterns, pathologies and paradoxes*. WW Norton & Company.

Yilmaz, O., & Bayraktar, D. M. (2014). Teachers' attitudes towards the use of educational technologies and their individual innovativeness categories. *Procedia-social and behavioral sciences*, *116*, 3458-3461. https://doi.org/10.1016/j.sbspro.2014.01.783

Zulvany, V. (2020). Macrolinguistics: texts and discourses, conversation interactions and conversation components. *Macrolinguistics and Microlinguistics*, *1*(2), 104–116. Retrieved from https://mami.nyc/index.php/journal/article/view/10