

The Ambivalent Nature of the Educational Process in Higher Educational Institutions in the COVID – 19 Pandemic

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Abstract: The ambivalent nature of the educational process in higher educational institutions was clearly manifested during the COVID-19 pandemic. Such an organization of the learning process leads to building a new cognitive model of the educational process. The purpose of the study is to reveal the attitude of students to the new mode of learning and teaching and to characterize the ambivalent nature of the modern educational process. The following methods were used: the method of questioning the reference group (204 respondents of Russian Transport University); a qualitative and quantitative approach to the differentiation and integration of the data obtained made it possible to designate a probabilistic assessment of the educational process organization from the students' point of view; the dualism of the modern digital university educational environment was considered from the point of view of an ambivalent approach proposed by foreign and Russian scientists. Our hypothesis basing on a dissatisfaction with forced on-line learning, in which the implementation of various educational models (face-to-face and on-line) as a result of the COVID-19 pandemic, was only partially confirmed. 7.5% of respondents expressed a dissatisfaction with online learning, 13% were satisfied with online learning, 79.5% of respondents showed ambivalent reactions (halfway reactions). Due to the empirical study we have determined 6 dualistic oppositions of the modern digital university environment: a) synchronous and asynchronous learning, b) simultaneous presence in two active areas (home - university), c) virtual presence with visual absence (when the camera is turned off), d) electronic communication in synchronous and asynchronous mode, e) interactive interaction a teacher – a student and a student – a teacher (the student teaches the teacher to communicate within the virtual environment, f) the opposition of generations “friend” – “alien”).


1 INTRODUCTION

The educational process in higher educational institutions in the period of COVID – 19 pandemic (March 2020 – the present time) is being discussed all over the world (Mahyoob, 2020; Yekefallah et al., 2021; Kirsch et al., 2021). The role and function of Internet communication in the implementation of training and upbringing has become dominant. The instructions are received on Internet. But at the same time negative and positive effects of Internet communication have become stable, salient and long-term oriented (Cherkasova and Taktarova, 2021; Sorokova, 2020).

Discussions about the position of a specific form of the educational trajectory in COVID-19 pandemic

and about the educational process content in an inseparable combination with technological features (Simonova et al., 2021) continue due to the constantly emerging “coronavirus zigzags” of the educational process (Solovov and Menshikova, 2021; Cherkasova and Taktarova, 2021). Ambiguity of the educational trajectory vector is leading at the present time to the actualization of the ambivalent educational landscape. There is a simultaneous realization of a dual attitude towards the educational process both from the side of the students and the teachers (Noskova et al., 2021). At the same time, opposite phenomena are also collided in educational process. It is completely new for all participants of the educational process: synchronous (interactive online classes on various Internet platforms, including

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universities' platforms or university online learning systems) and asynchronous training (explanation, tasks, exercises, lectures and control, monitoring, examination, tests in the asynchronous training system on the educational portal of the university). Students and University teachers are at home, but at the same time they are in the digital educational environment of the university: in online learning system or on various Internet platforms.

With regard to the University faculty (instructors, Professors, tutors), such a competence as a digital pedagogical competence or "electronic" pedagogical culture (Isaeva, 2021), in on-line educational mode has become dominant and advanced. It means that the higher school teacher's digital skills are advanced. It is the real and unusual situation when the teacher's professional competence is vs the teacher's digital competence. The faculty's ability to work in the digital educational university environment and with variety of various Internet platforms tools (virtual whiteboards, instant messengers, chats), understanding and adequate response to students' reactions, management of students' reactions and the very speed of reaction to students' reactions on Internet.

The formation of such a cognitive model of behavior is accompanied by various risks and pain points (Dunaeva and Egorova, 2021), with the simultaneous actualization of both positive and negative qualities of online learning (Baeva et al., 2020).

Research questions:

RQ 1: Is the attitude of the University students to the new format of learning unambiguous?

RQ 2: How is the ambivalent nature of the educational process in the COVID - 19 pandemic manifested?

2 LITERATURE REVIEW

The "ambivalence" category, which was extrapolated from the field of psychiatry, was used as a supporting theoretical basis for the study. Ambivalence was considered from the point of view of psychoanalysis by the Swiss clinician Eugen Bleuler as a duality of attitudes towards external factors. According to E. Bleuler ambivalence is a very contradictory state of the personality taking similar to the character of internal conflict (Bleuler, 1911). The scientist divided ambivalence into three types: emotional, intellectual and volitional (Bleuler, 1911).

The matter of such a conflict is manifested in the fact that the same object or objects, phenomenon,

image simultaneously causes opposite reactions: satisfaction – dissatisfaction, agreement – disagreement, solidarity – antagonism, sympathy – antipathy, egalitarianism – hierarchism. The main characteristics of the "ambivalence" phenomenon are duality, contradiction, bipolarity or positive-negative, pleasant - unpleasant, loved – unloved. Thus, it means a potential conflict, a conflict of interpretations, actions, reactions within the same phenomenon. We fully agree with the scientists (Jaspers, 2020) from Belgium. They emphasize the effectiveness of the educational activities interpretation, largely consisting of contradictions, through a bifocal lens (Jaspers, 2020), with 2 opposite foci. At the same time, the scientists underline the importance of empirical focus.

The category of ambivalence is an object of study for different sciences: not only psychology and psychiatry (Canas-Simião et al., 2021). It is studied by social science (Olsen, 2021), linguistics (Strokal, 2020), literary criticism (Chen, 2021), social philosophy (Amaya, 2021), pedagogy (Jaspers, 2020; Lièvre F., 2021; Novikova, 2001; Bim-Bad, 2008; Sheraizin, 2003).

Russian scientists L.I. Novikova and B.M. Bim-Bad consider ambivalence as an integral part of human essence and a mechanism for integrating and harmonizing mutually exclusive components. This point of view is presented in the paper, devoted to the problems of education in secondary school. The authors emphasize the importance of implementing such an approach in the educational school environment, starting from goal setting, content, management, regulation, control and organization. The indicated approach is also valid in relation to the educational process at the higher school where educational programs of higher education are implemented in various directions. The same point of view is presented in the study of the Russian scientist R. M. Sheraizin.

He highlights on the one hand, academic freedom, openness, duality, polyvalent training, partnership within the university complex, and on the other hand, the integrity and consistency of the educational process, integration into the territorial scientific and educational environment, self-organization (Sheraizin, 2003). We fully agree with R. M. Sheraizin that such an approach to the modernization of university education is aimed at the successful implementation and comprehension of the educational process through a dual position. This activity presupposes mutual change, complementarity and interpenetration (Sheraizin, 2003).

The zigzag trajectory of the “coronavirus educational process” in higher school is an actualization of the dualistic University faculty and student’s experience. It is reflected even in such a paradoxical nomination of activities within the educational process as flipped classes (Tsytovich et al., 2019). A number of contradictory terminological nominations of educational discourse are being broadcasted in all spheres of life. It only actualizes the polarity of concepts and divides the nominated phenomena according to the dualistic principle: traditional learning - non-traditional learning. Traditional education is characterized by the nominations traditional learning (face-to-face learning), traditional education, face-to-face education, classroom learning (CL), off line learning. An unconventional, new educational mode has given the birth to such terms as distant learning (DL), on line learning, e-learning, remote learning, full distant learning, full E-learning, full on-line learning. Ambiguity in choosing a new educational trajectory and half-and-half decisions on the modern classes mode are reflected in new educational activities nominations: blended learning, combined classroom learning, hybrid learning.

At the same time, we see the dynamics of the educational process development. Non-traditional educational technologies and methods are being integrated into the traditional system of higher education, and the educational university environment becomes digital educational university environment. But it was assumed that such a transition would be smooth (Magomedova, 2015; Khusyainov, 2014). But the COVID-19 pandemic forced to make an uncompromising extreme jump into the digital educational environment, actualizing the dualism of the educational process. At present time the oppositions and “pain points” were clearly visible. It makes up the ambivalent nature of modern university education (Isaeva et al., 2020).

The hypothesis of our study is based on the assumption that the ambivalent nature of the educational process in the COVID-19 pandemic is manifested in the simultaneous implementation of different educational models (traditional and distance). It leads to dissatisfaction with forced on-line learning from the side of all participants of the higher school educational process.

3 METODOLOGY

The paper analyzes the on-line learning organization experience in the Rostov State

Transport University during the COVID – 19 pandemic (March 2020 – the present time). Conventionally this period was divided into the following stages:

- an extreme jump into on-line learning, including a full lockdown (March 2020 - June 2020);
- short-term period of face-to-face learning (September 2020 - early October 2020);
- post-extreme period of on-line learning (early October 2020 - January 2021);
- return to face-to-face learning (February 2021 - July 2021);
- face-to-face learning (September 2021 - the end of October 2021);
- online learning due to the bad epidemiological situation (end of October - 6.12.2021).

To analyze the characteristics of the educational process during the COVID - 19 pandemic and the students` attitude to this educational mode, the questionnaire method was used (RQ 1, 2). A questionnaire was developed from several blocks, covering all 6 periods of the study. The reference group included 204 students of the Transport university (1st, 2nd, and 3rd grade students). The heterogeneous stuff of the respondents was chosen deliberately in order to analyze the dynamics of 1st, 2nd and 3rd grade students` reactions. The students have different levels of the experience in on-line mode. 2nd and 3rd grade students have already had electronic educational experience and sustainable digital long-term oriented competences. The freshmen did not have experience of working in digital educational university environment. The qualitative and quantitative approach to the differentiation and integration of the data obtained made it possible to designate a probabilistic assessment of the educational process organization from the students` point of view (RQ 1).

Ambivalent approach (founder E. Bleuler) was used to analyze the dualism of the modern digital educational university environment and the unique university faculty`s and students` experience of the educational process organization (according to Novikova) (RQ 2).

4 RESULTS AND DISCUSSION

RQ 1: Is the attitude of the University students to the new format of learning unambiguous?

The results were obtained during the questionnaire survey. The participants of the

reference group showed different behavioral reactions:

- the categorical NO was expressed by 7.5% of the respondents;
- categorical YES - 13% of the participants;
- HALFWAY reactions were expressed by 79.5% of the respondents.

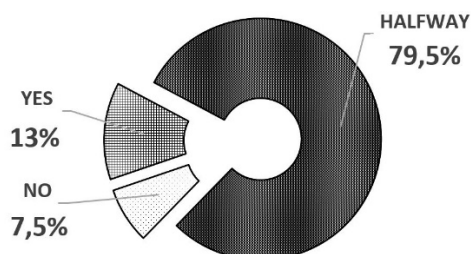


Figure 1: Respondents' reactions to the question on relevance of on-line learning.

The analysis showed that processes of diminution and exaggeration can be observed according to the respondents' answers when quantitative questions are posed. This fact can't be ignored when studying behavioral reactions and strategies. The students who could not confidently give unequivocal YES (13%) or NO (7.5%) answers were referred in our study to the group of respondents with the HALFWAY reactions (75.5%). In the process of forming the answers, this group (75.5%) overestimated or, on the contrary, embellished the events or the facts. It led to the situation when this part of the respondents could not decide what to answer. It should be noted that, nevertheless, all three behavioral responses are valid for projecting the strategy of the future educational process. Dissimulation and attributive processes in the answers of the respondents were identified when

posing qualitative questions. Denial of some facts of reality or the past associated with Covid-19 pandemic as undesirable events in life was observed: "I did not have enough communication practice with the group, so the educational process itself was not very interesting." The 3rd grade students said about the possibility to earn money and not to visit the University. And because of it they demonstrated answers NO.

Reverse students' reactions were fixed. It is attribution of some features to the educational process, which in fact are not inherent in it: "I was very pleased with Zoom, there is a good quality of sound and video". Both behavioral reactions with this type of questions show the opinion of the respondents, indicating their emotions and feelings in words in relation to a given object. The results and interpretation of such reactions can be used to judge the strategy of the studied educational phenomenon.

RQ 2: How is the ambivalent nature of the educational process in the COVID - 19 pandemic manifested?

The research of ambivalent nature of the educational process in higher school in the COVID - 19 pandemic demonstrated the simultaneous realizations of 6 dualistic oppositions: a) synchronous and asynchronous learning, b) simultaneous presence in two active areas (home-university), c) virtual presence with visual absence when the camera is turned off, d) electronic communication in synchronous and asynchronous format, e) interactive interaction a teacher – a student and a student – a teacher (the student teaches the teacher to communicate within the virtual environment, f) the opposition of generations "friend" – "alien". Negative and positive features of these dualistic oppositions were analyzed.

Table 1: Dualistic oppositions in terms of ambivalent characteristics of the educational process during the COVID-19 pandemic.

№	Dualistic oppositions	Positive features	Negative features
1	Synchronous - asynchronous learning	Preserving the educational process integrity anywhere and at any time	Technical troubles (poor Internet / no Internet / system is overloaded); correct organization of the on-line classes is hampered due to insufficient "electronic" pedagogical culture
2	Simultaneous presence in two active areas (home -university)	Saving time and money for way to the University; comfortable home conditions; ability to implement diverse educational content (online courses, podcasts, educational sites, animation, graphical presentation)	Household difficulties; problems with new technologies due to the lack of stable electronic competencies; insufficient technological equipment of the teacher's and student's workplace
3	Virtual presence with visual absence when the camera is turned off	There is no information noise for the teacher and for the students due to the students' visual absence	The reverse visual communication and visual monitoring are impossible due to the lack of visual information channel.
4	Electronic communication in synchronous and asynchronous mode	New language of digital communication permits to be an active participant of any learning mode.	The language of digital communication as a new teaching paradigm demands stable electronic teacher culture

5	Interactive interaction a teacher -a student and a student -a teacher (the student teaches the teacher to serf in the virtual environment	The young generation teaches IT technologies the University teachers. The teaching strategy works not only the direction a teacher – a student, but also vs: the student shares his life experience, knowledge and skills.	The older generation experience is in low demand. The younger generation IT experience is ignored by the older generation.
6	“friend” – “alien” as a behavioral interaction of the University faculty and Homelander (The term «Homelande» is from RuGenerations, 2021) Generation	Internet area is a home environment for Homelander Generation (Z)	Internet area is not a home environment for the University faculty. It is an alien forced area.

The ambivalent nature of the educational process of the COVID-19 pandemic is characterized by the presence of systemic oppositions. This dual educational process forms a certain kind of conflict-generating process or conflict potential. This conflict-generating process is the base for analyze of identified oppositions and the “pain points” of the modern educational process. The potential of such a conflict-generating activity in modern digital university environment is the spring for the formation of educational university trajectory on the basis of the given oppositions.

The list of such oppositions will be expanded. The very trajectory and the model of university education are being taken shape in the context of technological advances and the epidemiological situation.

5 CONCLUSIONS

Our hypothesis basing on a dissatisfaction with forced on-line learning, in which the implementation of various educational models (face-to-face and on-line) as a result of the COVID-19 pandemic, was only partially confirmed. 7.5% of the respondents expressed negative reactions. 13% were satisfied with online learning, they emphasized the relevance of on-line mode. 79.5 % of the respondents showed ambivalent reactions (halfway reactions).

Due to the empirical study 6 dualistic oppositions of the modern digital university environment were determined: a) synchronous and asynchronous learning, b) simultaneous presence in two active areas (home-university), c) virtual presence with visual absence when the camera is turned off), d) electronic communication in synchronous and asynchronous format, e) interactive interaction a teacher – a student and a student – a teacher (the student teaches the teacher to communicate within the virtual environment, f) the opposition of generations “friend” – “alien”. All these opposition were characterized from positive and negative points of views.

The study of the modern educational process, the students’ attitude to the new learning mode and identification of the dualism of this mode set the vector of a hybrid educational model orientation. This new model can be integrated into the ambivalent and polyvalent mode of the modern digital university environment: synchronous and asynchronous learning format, the possibility of conducting the educational process in a convenient (for teachers owing electronic pedagogical culture and students) digital mode (on-line learning system, choice of an Internet platform) at any place and at any time.

REFERENCES

- Mahyoob, M., 2020. Challenges of e-Learning during the COVID-19 Pandemic Experienced by EFL Learners, *Arab World English Journal*, 11 (4), pages 351-362.
- Yekefallah, L., Namdar P., Panahi R., Dehghankar L., 2021. Factors related to students' satisfaction with holding e-learning during the Covid-19 pandemic based on the dimensions of e-learning, *Heliyon* 7, volume 7, issue 7.
- Kirsch C., Pascale M.J. Engel de Abreu, Neumann S., Wealer C., 2021. Practices and experiences of distant education during the COVID-19 pandemic: The perspectives of six- to sixteen-year-olds from three high-income countries, *International Journal of Educational Research Open*, Volumes 2–2.
- Cherkasova, M., Taktarova, A., 2021. Negative impact of digital freedoms on Russian youth, *E3S Web of Conferences*, 273, 10015.
- Sorokova, M., 2020. Skepticism and learning difficulties in a digital environment at the Bachelor's and Master's levels: are preconceptions valid?. *Heliyon*, 6, e05335.
- Simonova, O., Barashyan, V., Gampartsumov, A., Khlebnikova, M., 2021. The application of reality simulators for improving the education quality at universities, *E3S Web of Conferences*, 273, 12081.
- Solovov, A.V., Menshikova, A.A., 2021. Coronavirus Zigzags of Electronic Distance Learning, *Higher Education in Russia*, Vol. 30, no. 6, pages 60-69.
- Noskova, A.V., Goloukhova, D.V., Proskurina, A.S., Nguyen, T.H., 2021. Digitalization of the Educational

- Environment: Risk Assessment of Distance Education by Russian and Vietnamese Students, *Higher Education in Russia*, Vol. 30, no. 1, pages 156-167.
- Isaeva, T.E., 2021. Higher School Teacher's Competences and "Electronic" Pedagogical Culture in the Post-Pandemic World. *Higher Education in Russia*, Vol. 30, no. 6, pages 80-96.
- Dunaeva N.I., Egorova P.A., 2021. Individual resistance to difficulties during distance learning, *Vestnik of Minin University*, Vol. 9, no. 2, pages 8.
- Baeva L.V., Khrapov S.A., Azhmukhamedov I.M., Grigorev A.V., Kuznetsova V.Yu., 2020. Digital Turn in Russian Education: from Problems to Possibilities, *Values and Meanings*, no. 5, pages 28-44.
- Blueler E., 1911. Dementia praecox oder Gruppe der Schizophrenien, In: *Handbuch der Psychiatrie (Herausgeb. von G. Aschaffenburg)*, Spezieller Teil. 4. Abteilung, 1. Haelfte. Leipzig und Wien. Franz Deuticke, 420.
- Jaspers, 2020. Linguistic dilemmas and chronic ambivalence in the classroom: introduction, *Journal of Multilingual and Multicultural Development*, pages 1-14.
- Canas-Simião, H., Nascimento, S., Reis, J., Freitas, C., 2021. Complex auditory musical hallucinations with ambivalent feelings, *BMJ Case Reports*, 14, e245397.
- Olsen, G., 2021. Ambivalence in activation encounters, *European Journal of Social Work*, pages 1-13.
- Stokol, O., 2020. Between good and evil: linguistic explication of the ambivalence of the universe in O. Dovhiy's poetry, *Actual issues of Ukrainian linguistics: theory and practice*, pages 40-57.
- Chen, P., 2021. Theorizing untranslatability: Temporalities and ambivalence in colonial literature of Taiwan and Korea, *Thesis Eleven*, 162, 072551362199077.
- Amaya, A., 2021. Epistemic ambivalence in law. *Philosophical Issues*.
- Lièvre, F., 2021. An ambivalent picture.
- Novikova, L.I., 2001. Ambivalent approach in education, *Modern humanitarian approaches in the theory and practice of education*, Perm, pages 24-25.
- Bim-Bad, B.M., 2008. Ambivalence category in the theory of human education, *Pedagogy*, 7, pages 8-17.
- Sheraizin, R. M., 2003. Ambivalent approach to the modernization of pedagogical education in the modern university complex, *Integration of education*, 3, pages 16-20.
- Tsytovich, M.V., Boronenko, G.F., Yakusheva, O.V. Flipped Classroom Technology and Its Implementation at Various Levels of Higher Education. *Bulletin of the South Ural State University. Ser. Education. Educational Sciences*. 2019, vol. 11, no. 3, pages 21-32.
- Magomedova, K.T., 2015. Stages of E-learning Development and Their Impact on the Emergence of New Technological Standards of E-learning Quality, *Bulletin of the South Ural State University. Ser. Education. Educational Sciences.*, vol. 7, no. 2, pages 22-29.
- Khusyainov, T. M., 2014. History of development and distance education, *Pedagogy and education*, No. 4. pages 30-41.
- Isaeva, T., Malishevskaya, N., Cherkasova, L., Kolesnichenko, A., 2020. University faculty motivation to students' distant evaluation, *E3S Web of Conferences*, 210, 18071.