

# *Negative consequences of digitalization and their reflection on the axiological position of teachers and students*

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**Abstract** - The article focuses on the negative aspects of reflecting the introduction of innovative technologies in the pedagogical context of interaction between students and teachers. It describes elements of a conflict of interest between university administration, bureaucratic structures and educators. It also presents the results of a content analysis conducted over a period of 6 months to compare assessments done by Russian and foreign scientists and practitioners of problems related to the values of subjects of the educational process. The authors of the article prove that imbalances in the internalization of absolute values negatively affect all aspects of socio-cultural practices, both at university level and in the production sphere. It is concluded that thanks to innovative technologies, scientists and practitioners will be able to not only specify and actualize the meaning of absolute values much faster than in the recent past, but also minimize the loss of all subjects of the education system in the process of harmonizing professional and national interests.

**Keywords** – cultural intelligence, information-psychological security of the person, critical thinking, university, student, teacher, absolute values, digital dementia.

## I. INTRODUCTION

The Fourth Industrial Revolution and the related transformations of the information environment have introduced profound imbalances in the ratio of the biological, physical and digital spheres of human life. This problem is emphasized by pioneerscientists studying the consequences of society informatization[1], among others the names of K. Schwab and N. Davis [2] should be especially emphasized. We agree with one more statement of these authors: today it is really “challenged” to understand what a person should be guided by in order to remain a person. This is the reason why K. Schwab and N. Davis in the indicated source refer to the arguments of StewartWallis that only values indicate where “the true north is in the compass of life” and determine the means of movement to it. Neither legislation nor economic

theory, without relying on values and the institutions that form them, will be able to achieve positive results in determining the format of the future.

Since the education system has always been the most important social institution of the value context of the development of individuals, it is important to point out that the axiological assessment of the negative phenomena and processes in education associated with the digitalization remains insufficiently studied.

This applies not only to the value of education for subjects of the educational process, but also to the conditions in which these values are formed.

## II. THE VALUE OF EDUCATION AND GENERAL CULTURAL VALUES IN THE METHODOLOGY OF SCIENCE

Scientific approaches of Z. Bauman [3], P. Bourdieu [4], E. Durkheim [5], M. Weber [6], K. Mannheim [7] provide a basisfor understanding current socio-cultural processes. The imbalances of world outlook, the erosion of norms and patterns of behavior, the dominance of negative socio-cultural attitudes are always associated with a period of social disasters. At the same time, the actual impact of digitalization process on the sphere of education and its subjects is most often described by scientists in terms of characteristic features of innovative technologies [8], necessary resources [9], competencies [10], and reengineering of the educational process [11]. However, descriptions of such kind do not provide an answer to the important question - what values are the core ones and how they influence the perspective and existing transformations.

A. Serdiukova defines values as “something balanced (compared with some standard samples) and evaluated by a person in accordance with the ranks of individual significance” [12]. Nowadays such assessment of conformity is difficult to

implement due to lack of articulate norms and standards of socio-cultural practices established by scientists. Values are, indeed, not material. However, it is they who cement society within the framework of permissible fluctuations in understanding the essence of Good and Evil, Duty and Responsibility, simulacrum of values and traditional algorithms of actions protecting the stability of society. In addition, they allow people of different nationalities to find rational trajectories of self-actualization in different cultural fields.

From this perspective, the value of education can be considered at the student level as a social elevator and a basis for self-actualization. For the teacher, the value of education is predetermined by the meaning of professional activity and self-assessment of its effectiveness. All this specified the direction of the study conducted over 6 months.

### III. METHODOLOGY, ANALYSIS AND RESULTS

Based on a comparative content analysis of publications in scientific and periodical press, observations and interviews conducted over a 6-month period, Russian and foreign scholars and practitioners evaluated the problems associated with value attitudes, their assessments and articulation of the causes of negative phenomena in the positioning of young people and teachers in the system of education.

The hypothesis was based on the fact that it is absolute values that can become the basis allowing all subjects of the learning process to succeed in the conditions of digitalization of education and the scaling of the educational environment beyond the borders of states and continents. Success here is considered within the framework of the effectiveness of the results and conditions for the implementation of subjective functionality. This is closely related to the essence of the value context of the life of each member of society in the educational, professional, and leisure fields. Today's everyday life practices are characterized by a lack of scientific substantiation of the negative consequences of the digitalization of the educational field.

One of the most significant consequences is digital dementia, fragmentary presented today in the Russian scientific field [13].

Psycho-emotional and social tension, poorly controlled influence of the context of external information on the psyche and mental processes of a person pose a threat not only to individuals, but to the society of any country as a whole. This is what A. Primakin and A. Kostyuk draw attention to [14]. The authors substantiate the danger of dominance of information propagating violence, cruelty, permissiveness, including elements of misinformation and distorted information, its duality, and pornography. The information flow turned out to be outside the scope of the possible impact and control of non-engaged scientists, civil society. This expands the trends in the manifestation of fragmented thinking, minimizes the ability of an individual to analyze the ongoing processes, of which he is a witness or participant.

The study showed that the students' positions today are quite contradictory and are based predominantly on the values introduced from family practices, leisure preferences and the

experience of self-actualization in educational institutions [15]. Fragmented thinking as a counterbalance to critical thinking demanded by society is already manifested everywhere. So, out of 100 students, only 8-10 people demonstrate the ability to identify the sources of events, phenomena and processes, to analyze life and professional subjects through causal relationships and value contexts.

This is reflected in the process of adaptation of university graduates in the workplace.

As evidence of this, in an interview with the head of a family business (more than 500 employees, the location is Western Siberia), it was noted that only employees born in 1975-1985 consistently demonstrate the internalization of positive values on organizational behavior: organization, responsibility, respect for the hierarchical structure, the ability to obey and creatively perform their functions, the desire to improve their professional level with reasonable ambitiousness. It was emphasized that these workers demonstrated a commitment to family values that characterize their parents, who are also employees of the enterprise. Of the 50 newly recruited young people born in 1990-2000, only 4-5 people show similar characteristics of emotional and cultural intelligence. The rest, having an insufficient level of qualification, place excessive demands on the payment of their unproductive work.

The presented episodes of the study actualize the question of the role of university professors who are forced to work with any students. At the same time, a problem is revealed - not only how to develop the creative potential of some and increase it among other students, but also how to preserve oneself in the context of digitalization and the associated rating race. It is no coincidence that for more than 8 years already in foreign analytical materials one can read formulations such as "World University rankings are worthless when families choose a University; university rankings are needed by universities and founders, but not by the public; students are not interested in the University's place in the rankings; applicants do not look at the ratings data when choosing universities" [16]. The task of increasing the citation of the works of teachers is not strictly correlated with the task of student development. Coercion to seek grants and realize their goals systematically comes at the expense of pedagogical work.

At this point it should be reminded that the subjects of the educational process internalize values and their simulacra.

In Russian practice, a paradoxical situation arises with the implementation of the tasks planned by the Ministry for research and development for each researcher. Depending on the region, the "threshold" amount is different. For instance, for the Sverdlovsk region it is 70.1 thousand rubles a year. As a result, in universities where the position of a scientific employee is absent or is represented in a minimum number, this responsibility is assigned to the teacher. At the same time, the main function of the teacher remains unchanged - 900 hours of class time in the academic year. In the process of our research, university employees asked for an anonymous interview content with them and admitted forcing many teachers to contribute 20 to 70 thousand rubles to the

pseudoscientific research fund from personal incomes. Falsification of actual research work is becoming widely spread.

It should be noted that among universities in Russia there are those in which the parameters of different loads on the teacher and researcher are taken into account in the regulations and procedures as in the National Research University Higher School of Economics (short version: HSE University). For the rest, the metric replaces pedagogical and socially significant goal. It is no coincidence that the website of the Society of Scientific Workers (<http://onr-russia.ru/>) discusses the reduction of the teaching load of up to 450 academic hours per year for teachers conducting active scientific work. At the same time, this workload is also more than 100 hours more compared to the load of a university teacher in European countries. Russian scientists so far only point to the need to add at least 40% of positions of scientific employees and research professors with a teaching load of no more than 20% of the staffing time of universities.

In foreign practice, a conflict of interest arises under the dictate of the administration of higher education institutions on the amount of financing the activities of scientists. The tragic death of professor-researcher Stefan Grimm (Stefan Grimm, Chair in Toxicology at Imperial College, London) caused a wide resonance. It is believed that it was he who stressed the destructive impact of commercialization of universities on the science in the era of Fourth Industrial Revolution, when fundamental research is of less priority than short-term and unimportant research work, and academic science turns into “business for speculators”.

In general, the workload of teachers for whom pedagogical activity is the main one is calculated today without taking into account the increase in time spent on class preparation with the use of digital technologies. In addition, administrative arbitrariness exacerbates the position of the teacher in the process of superimposing on him the functions of administrators, laboratory assistants, and engineers. In foreign practice, there are discussions about one of the aspects of such a load. As an example of this illustrative is the discussion held on October 17, 2019 on a website <https://www.timeshighereducation.com> by Kate Cantrell, Lee Cronin, Paul Greatrix, David Palumbo-Liu, Emily Michelson, Dennis Tourish and Michael Filimowicz with the subtitle “How to avoid being sucked into the black hole of administration”. Here are examples of the arguments presented:

1. But today's US academy places a greater burden on faculty than ever before, and the responsibilities of administration have exploded beyond belief. Possessing wisdom, patience, fortitude and humility has little or nothing to do with it. What one most benefits from is a keen legal mind.

2. Teaching, researching and pulling your collegiate weight all provide plenty of tasks that deserve our mockery, given how much time we devote to them. Essay moderation pairings, tracking student absences, submitting or double-checking expense reports, planning a conference via a thousand emails, external examining, requesting image permissions in an article – no aspect of our profession is free from administrivia. And as

I (ideally) rise in the profession, I will (less ideally) have to face all sorts of new tasks that so far remain obscure to me. So much of it seems entirely useless, a product of our increasing culture of distrust, supervision and quantification.

Minimization of academic freedoms, the substitution of pedagogical activity proper with its simulacrum in the form of reports, grant applications, the struggle for quoting and maintaining the workload with the so-called effective one-year contract, rampant bureaucratic work deprives the teacher of psychological, physical, temporary resources in the professional format of their work. This is evidenced not only by Russian analysts [17], but also by foreign researchers [18].

#### IV. FINDINGS

Despite the fact that digitalization of education has positive characteristics (the possibility of intercontinental and inter-country, in-country communication between teachers and students, the introduction of distance learning, electronic textbooks, the availability of information databases, etc.), it also has negative aspects. These include phenomena occurring in parallel with the task of developing creative thinking of students: expansion of manifestations of fragmented thinking, digital dementia, the prosperity of plagiarism, narrowing the format of assessments of socio-cultural processes. For teachers, the rating race, authoritarily woven into the fabric of the digitalization of education, has become an overwhelming burden. Bureaucratic structures are interested in developing this burden, as a rule, which are relevant only to university funding procedures, and not to pedagogical activity proper.

This problem is explained by a serious dysfunction - loss, leveling, transfer to a latent mode of absolute values - such as Good, Evil, Good, Honor, Conscience, Duty, Responsibility. The task of innovative understanding of the essence of these categories is becoming more and more evident, but at the same time it is gaining prospects for resolution. Thanks to innovative technologies, scientists and practitioners will be able to more quickly than in the recent past not only specify the general initial basis, but also minimize the losses of all subjects of the education system in the context of the coordination of interests.

#### References

- [1] Fourth Industrial Revolution: Beacons of Technology and Innovation in Manufacturing/ - URL: <https://www.weforum.org/whitepapers/fourth-industrial-revolution-beacons-of-technology-and-innovation-in-manufacturing> (accessed: 03.02.2019)
- [2] K. Schwab, N. Davis, Technologies of the Fourth Industrial Revolution, Moscow: Eksmo, 2018, 320 p.
- [3] Z. Bauman, LiquidModernity, St. Petersburg: Piter, 2008, 240 p.
- [4] P. Bourdieu, Social Space and Symbolic Power, Sociological Theory, Vol. 7, No. 1. (Spring, 1989), pp. 14-25.
- [5] E. Durkheim, Moral Education: A Study in the Theory and Application of the Sociology of Education, Trans. by E.K. Wilson and H. Schurer, Edited, with an introduction by E.K. Wilson, New York: Free Press, 1961. p. 274.
- [6] M. Weber, The meaning of “freedom from evaluation” in sociological and economic science. “Objectivity” of socio-scientific and socio-political knowledge? // Weber M. Selected works, Moscow : Progress, 1990, 808 p.
- [7] K. Mannheim, Man and Society in an Age of Reconstruction., London: K. Paul, Trench, Trubner & Company, Limited, 1960, 467 p.

- [8] A.Babkin, D. Burkaltseva, D.Vorobey, Yu. Kosten, Formation of digital economy in Russia: essence, features, technical normalization, development problems, St. Petersburg State Polytechnical University Journal. Economics, 10 (3) (2017), pp. 9-25. DOI: 10.18721/JE.10301
- [9] S. NunesEskivel, V. Dubolazov, Opportunities and risks of collaborative consumption economy. Economics, 2019, Vol. 12, N° 2, pp. 30-39. DOI: 10.18721/JE. 12203
- [10] S. Avilkina, M. Bakuleva, N. Kleynosova, Development of methodology for assessing digital competence levels in personnel training, St. Petersburg State Polytechnical University Journal. Economics, 2019, N°12 (2), pp.40–51. DOI: 10.18721/JE.12204
- [11] N. Vasetskaya, V. Glukhov, Principles of organization of the education system in the training of personnel in the digital economy, Scientific and technical VedomostiSPbSPU. Economics, 2018, Vol. 11, N°. 2, pp. 7-16. DOI: 10.18721/JE. 12204
- [12] A. Serdiukova, The formation of values and the pedagogical practice of their introduction into the educational process: archaic and modern, Public education, 2019, N° 1, p.168-172.
- [13] L. Strelnikova, Digital Dementia, Chemistry and Life, N° 12, 2014 .— URL: <https://hij.ru/read/articles/man/5210/> (accessed: 10.17.2019)
- [14] A. Primakin, A. Kostyuk, Approaches to information-psychological security of the person, Bulletin of the St. Petersburg University of the Ministry of Internal Affairs of Russia, 2018, N°. 3 (79), pp.227-230.
- [15] T. Filippovskaya, Barriers to the spiritual self-realization of a person in modern Russia, Self-realization of a person and health in modern society: proceedings of the V International Forum, Yekaterinburg, February 25-27, 2016, Ural. State Pedagogical. University, Yekaterinburg : 2016 , 214 p., p. 188-195.
- [16] Ch. Havergal, Few applicants to UK universities know what TEF is, survey finds, – URL: <https://www.timeshighereducation.com/news/few-applicants-uk-universities-know-what-tef-survey-finds...> (accessed: 10.17.2019)
- [17] A.Chernykh, E. Mikhailchenko, K. Mironova, Judge of the Constitutional Court ruled on Russian education, Newspaper “Kommersant”, N°187 of 10.14. 2019, p. 3.
- [18] K. Cantrell, L. Cronin, P. Greatrix, D.Palumbo-Liu , E. Michelson, D. Tourish, and M.Filimowicz, How to avoid being sucked into the black hole of administration. –URL: [https://www.timeshighereducation.com/features/how-avoid-being-sucked-black-hole-administration?utm\\_source=THE+Website...](https://www.timeshighereducation.com/features/how-avoid-being-sucked-black-hole-administration?utm_source=THE+Website...) (accessed: 10.17.2019)
- [19] Matveeva A.I., Sarapultseva A.V., Nazarov A.D. (2019). Analysis of spiritual socialization and personal adaptation in the period of digitalization of the economy. Proceedings of the 1st international scientific conference modern management trends and the digital economy: from regional development to global economic growth (MTDE 2019). Inst Int Relat, Yekaterinburg, Russia, vol. 87, pp. 463-467