

A Humanitarian Approach to the Digitization of Education

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Abstract

Digitization is a global, all-encompassing process, affecting all spheres of human life and society. In this context education is not an exception, and the changes taking place in it are a natural result of the rapid development, wide dissemination and accessibility of information technology and networks. Understanding the methodological and philosophical foundations and principles of the process is a necessary phase of the transition to the digital education, the digital society and the digital economy. In the narrow sense digital education can be understood as a conversion of learning materials and the learning process itself from analog to digital format (i.e. electronic textbooks, electronic libraries, open online courses and webinars, video lectures, etc.), but this phenomenon can be considered in broader terms as the complex changes of infrastructural, managerial, behavioral, cultural nature. Recent events (quarantine almost all over the world because of the Covid-19 pandemic) have made it clear that the broad approach to digitization is necessary for the translation of all education systems across the world to an online format, since it refers not only to the form of presenting educational and control materials but first and foremost to the aspects of general behavior, psychological, cognitive and axiological issues. Studies have shown that in the process of transferring education from the classroom to a distance form, all participants of the educational process (students, teachers, education managers, parents) underwent a reassessment of views on education and its role in the life of a person and society. Furthermore, the contradictions, implicitly or weakly expressed prior to the forced and urgent transition to the distant form, were sharpened, and the problems related, for the most part, not to the technical aspects (although these problems also exist), but to the components of education such as communication, personal development, socialization and even physiology, became most urgent. All this requires more in-depth study, a comprehensive and systematic understanding of all the elements not only from the standpoint of functionality, but also axiological, epistemological, ontological and anthropological meanings.

It has become obvious that the focus should be placed not on the technical tools with which digital education is implemented, but on a humanitarian approach with its humanistic values, in the center of which is a person: teacher - pupil /student - director - parent. As participants of the educational process, they determine the goals, objectives and methods of activity, select the appropriate technical means and evaluate their training, educational and development potential; they are the *centrum omnium* that underlies education.

This article is devoted to the digital transformation of education in view of the humanitarian approach based on the study of culture, values and history of mankind as a whole and of the people in particular, supported by the pedagogical, psychological, sociological and communication theories that focus on the person, the individual.

Keywords: digital education, humanitarian technologies, digital risks.

Гуманитарный подход к цифровизации образования

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Аннотация

В настоящее время цифровизация носит глобальный характер, затрагивает все сферы жизни человека и общества. Трансформация образования в данном случае не исключение, а закономерное следствие развития, широкого распространения и общедоступности информационных технологий и сетей. Осмысление методологических и философских основ и принципов данного процесса – необходимый этап перехода к цифровому образованию, цифровому обществу и цифровой экономике.

Цифровое образование можно понимать в узком смысле как перевод учебных материалов и самого процесса обучения из аналогового формата в цифровой (это и электронные учебники, и электронные библиотеки, и массовые открытые онлайн-курсы, и вебинары, и видеолекции, и многое другое). Но это же явление можно рассматривать более широко – как комплексные изменения инфраструктурного, управленческого, поведенческого, культурного характера. И последние события (карантин практически по всему миру из-за пандемии в связи с Covid-19) наглядно доказали, что при переводе всех систем образования по всему миру в онлайн-формат требуется именно широкий подход к цифровизации, так как затрагиваются не столько формы представления учебного материала и контроля, сколько более общие поведенческие, психологические, когнитивные и аксиологические категории. Исследования показали, что в процессе перевода образования из аудиторного в дистанционный формат у всех участников образовательного процесса (учеников, учителей, управленцев системы образования, родителей) произошла переоценка взглядов на образование и его роль в жизни человека и общества, обострились противоречия, неявно или слабо выраженные до этого вынужденного и экстренного перехода в дистант, актуализировались проблемы, связанные по большей части не с техническими сторонами (хотя эти проблемы тоже есть), а с коммуникативными, развивающими, воспитывающими, социализирующими и даже физиологическими составляющими образования. Все это требует более глубокого исследования, комплексного и системного осмысления всех элементов с позиций не только функциональных, но и аксиологических, гносеологических, онтологических и антропологических смыслов.

Стало очевидным, что во главу угла должны быть поставлены не технические инструменты, с помощью которых реализуется цифровое образование, а гуманитарный подход с его гуманистическими ценностями, в центре которого находится человек: педагог – ученик (студент) – руководитель – родитель. Именно субъекты образовательного процесса определяют цели, задачи и способы деятельности, отбирают соответствующие этому технические средства и оценивают их обучающий, воспитательный и развивающий потенциал, именно они тот centrum omnium, который лежит в основе образования.

Настоящая статья посвящена проблеме цифровой трансформации образования с учетом гуманитарного подхода, основанного на изучении культуры, ценностей и истории человечества в целом и своего народа в частности, опирающегося на педагогические, психологические, социологические и коммуникативные теории, в центре которых находится человек.

Ключевые слова: цифровое образование, гуманитарные технологии, цифровые риски

Introduction

The relevance of the humanitarian approach to digitization of education

The starting point for the transition to the digital era has been the possibility to store, process and transmit data in a digital format. Since that time the amount of information began to grow dramatically, and now in a few years, mankind produces more information than for the entire period of its existence: this phenomenon is called *information blow-up*. As with other areas of human life, education cannot remain unchanged in this ever-faster information flow that changes not only our perception of the world, but also psycho-physiological, cognitive, communication and social behaviors of the younger generation. It (education) is no longer intended just to impart knowledge but should form the skills of processing the array of information as well as of orientation in the world information noise, fake, virtual personalities, etc.

The answer to all these and many other challenges of our time has been the global digitization, including the digitization of education. However, this process faces a number of objective contradictions: on the one hand, it is obvious that education must meet the challenges of our time, prepare the child for life in the new digital society, and on the other, the future in which today's students will live in 15, 20, 30 years' time is quite uncertain – what changes will occur in the scientific view of the world, in technological progress, and what knowledge and skills will be useful to them.

Another feature of the digital transformation of education at this stage is the absence of a uniform, even a rough model of the process and its final result, not to mention the fact that there is still no well-established and generally accepted definition of digital education and a clearly defined range of concepts associated with it or being integral part of it. One person talks about digital didactics, another explores digital pedagogy.

In addition, digital education is usually reduced to the learning process, and the issues of upbringing and socialization that affect the formation of a person's value system are out of sight, and the third component of pedagogy - personality development – appears to be deformed because some development processes become hyperactive (polysensor activity, multitasking, etc.) while others (memory, imagination, attention, speaking proficiencies, etc.) are inhibited.

In our opinion, it is the humanitarian approach that is needed to solve the above-mentioned problems, because it highlights the anthropocentric paradigm, where the central place is given to the upbringing of a person, the development of his/her basic mental functions, the formation of the worldview and values, as well as the cultural code of the nation and other spiritual bonds (Danilova, 2008).

Analysis of the literature on the humanitarian approach to the digitization of education

The process of digitization of education throughout the world has been uneven and phased. Initially, the prospects of converting the training process to electronic format and transferring many operations to technological training platforms were associated with the idea that teachers, having freed time from re-conducting the same lessons in the classroom and from the routine work of scoring each assignment, would cooperate more with each other using digital technologies, devote more time to “active learning” of schoolchildren and students; students would be able to obtain knowledge not only from their teachers working with them directly, but also from teachers of leading world universities; the training would be adapted to the individual needs of each student on the basis of a large array of data concerning personal interests, achievements and mistakes (Bowen, 2015; Uvarov et al., 2019). But gradually disillusionment has set in, a number of shortcomings were identified, and the ideas that some restrictions are needed to the digitization process such as introducing the so-called “digital Shabbat” (the period of total

refusal to use gadgets) and forming a digital minimalist philosophy (restrictions in using gadgets) (Newport, 2019) have arisen.

These changes in comprehension of digital education are quite logical – from the ideal image of the integral ecosystem of digital learning to the realities of the world around, risks and their consequences. However, this problem associated with the bipolarity of this phenomenon, which is a combination of both enormous educational opportunities and equally serious threats, has not yet been resolved. On the one hand, digital technologies make it possible to receive immediate feedback due to automatic data processing and save time, to interact with students in a different way (interactive tasks, the possibility of remote collaboration, etc.), to visualize training material (multimodality), to receive information quickly, to plan training at an individual pace, etc., which entails the introduction of digital skills in the list of civic skills in some countries at the level of official documents (Digitaalinen Suomi, 2019). On the other hand, analysis of the scientific literature has shown that the use of digital technologies for searching and processing information leads to tremendous changes in the perception and understanding of the world by children and teenagers (Palfrey & Gasser, 2008; Helsper & Enyon, 2011), new psychological dependencies associated with the virtual world are identified (Sieberg, 2011), other psychological problems appear that cannot be ignored by the modern education system (Zelenin, 2019), the transformation of the traditional values is going on at a frightening speed (Tapscott, 2009), the network communication format itself undergoes metamorphoses (Lanclos, 2016; Sullivan, 2016), social skills are being deformed (social autism), and physiological problems (physical inactivity, health deterioration, etc.) become more common.

Developing into a large-scale sociocultural phenomenon that affects all spheres of life today digital technologies largely determine the "cultural core" of the era, society, and sociocultural time markers. The national traditional views of life that have evolved over the centuries are now undergoing changes under the influence of virtual reality, transforming the picture of the world, including the linguistic.

In order to neutralize the possible negative effects of the digitalized world there must be comprehensive understanding of all elements of the system from the standpoint of not only functionality, but also axiological, epistemological, ontological and anthropological meanings (Gordienko, Sokolova, & Simonova, 2019).

Today it is clear that a complete rejection of digitization is impossible, but at the same time the absolute digitization of education is also a utopia. Thus, a model that combines all the possibilities of digital technology and traditional teaching seems to be the most productive. In this model a blended learning technology can be used, based on a combination of direct forms of interaction between the participants of educational process (traditional classroom lessons) and virtual interaction through learning environments (Andreeva, Rozdestvenskaya, & Yarmakhov, 2016; Daniluk & Faktorovich, 2019). According to a study conducted by American scientists in 2017 on the basis of six universities, this technology is recognized as the most promising (Bailey, Vaduganathan, Henry, Laverdiere, & Puglese, 2018). The use of the humanitarian approach as the core in the construction of a blended learning model will allow us to reduce the risks and threats that have already been objectively revealed and give reason for concern (Lubkov & Morozova, 2019).

Methodological grounds

The purpose of this paper is to identify and describe the possible risks for digitization of education in the case of a humanitarian approach based on anthropocentrism in

relation to the value component and where the meaningful content and principles of the digital transformation implementation, are not taken into account.

The methods of conceptualization of a humanitarian approach, analysis of the scientific literature on the problem, the method of independent assessments, monitoring, and the method of critical interpretation were used in the study.

Results

Where digital technology, is perceived and used without adequate analysis of the positive and negative aspects of technologisation, regardless of humanitarian approach, it becomes a real threat not only to education but to mankind as a whole. A risk analysis of technocratic approach to digitization shows that axiological sphere will be affected first of all, and this would have a negative impact on the epistemological (loss of value of knowledge), the ontological (the person ceases to perceive himself in space, time, movement, etc.) and other aspects important to humanity. These are some of the possible risks that may arise if the humanitarian approach to digital transformation is ignored.

Let us consider the risks in terms of key values such as freedom, responsibility, communication, cognition, development, equality and security, the deformation of which is possible because of digitization, and also show some ways to solve these problems.

Freedom as a fundamental value becomes ambivalent in the digital format: on the one hand, it is good, because there is an expansion of opportunities for communication, cognition and creativity, but on the other, permissiveness (quasi-freedom) carries with it a lot of internal and external risks. The notion of unlimited freedom in virtual reality (a possibility to invent a name, biography, appearance, destiny or complete anonymity) leads in real life to the fact that the scope and boundaries of freedom may be violated by an individual, and the responsibility for the actions becomes unclear. As a way out, the individual increases their virtual communications and eventually goes into escapism (withdrawal from reality to illusion world). In this connection there comes the problem of finding ways to neutralize these risks, instilling the sense of responsibility for the actions in young people and transforming destructive understanding of freedom – "freedom from ..." for a positive understanding – "freedom for ...".

Freedom in the network means the equality of all users: you are free within the boundaries that do not violate the boundaries of the freedom of another person. The hypertext basis of digital information allows every person to work and construct information in his/her own logic, however, one should be responsible for an information product. The problem of responsibility in digital society and digital education is also associated with destructive tendencies (cyber vandalism, trolling, cyber bullying, etc.) which are the result of the lack of restraining barriers in the network that impede the commission of immoral acts or actions, that are much easier to do in the virtual world than in the real life. The lack of a connection between freedom and responsibility can lead to anarchy, so digital communication must be built on the basis of moral and ethical values.

Digital technologies today are not only a tool for searching information, but also a condition for the very possibility of cognition, which is being transformed by existing super-saturated information field, where today's man has not only to learn and work, but also to live. On the one hand, digital civilization makes it possible to search for the necessary information in a flexible way, to expand it to the necessary level of information satisfaction, and on the other hand, there arises a hybridization and interference of information flows, mixing and shifting the necessary emphasis to an uncontrolled area. A quick look at different Internet pages does not create a holistic knowledge, it most often remains eclectic, mosaic. As a result, a distorted, illusive idea of owning it is born

(downloading, reproducing instead of creative reading and comprehension). A good image of this was suggested by Shlykova (2015, p. 87) who compared the Internet network to the library after the earthquake, which houses a lot of valuable and useful information, yet only a person who has a basic knowledge and values is able to avoid getting lost in this information chaos.

The Internet is recognized by the younger generation as the absolute source of information: “For generations, nurtured in the digital virtual space, the Internet with all of Wikipedia, blogs, social networks, news channels, etc. speaks the ultimate truth – they appeal to it, they cover their cultural nakedness by it, it is a shell of spiritual emptiness and worthlessness of communication” (Prokudin & Sokolov, 2013, p. 89). Cognition, earlier recognized as a cultural value, is losing its status, knowledge and scholars as the bearers of cultural meanings are no longer valued, since an opportunity to find information on any matter very quickly creates the illusion of a broad outlook, although connections between different information vectors in this case, as a rule, do not arise. Humanistic meanings of knowledge are lost, the idea of cognitive catharsis, when understanding happens and the discovery of a new that uplifts a person, vanishes. Due to discrepancies between the seeking and obtaining existing knowledge there may be a gap between the meanings, values of real and virtual knowledge. Science as a basic value institute, based on a search for answers to the universal questions, loses its value meanings for the younger generation too, because of the phantom idea of the only right and ready answer to any question. In this context leading researchers and acknowledged scientific authorities are perceived as remnants of the past.

Among digital risks are inaccurate information as a result of poor-quality scanning of sources, information hoaxes and misinformation (fake news), and information noise due to the abundance of advertising, and manipulation of the conscience, intimidation and coercion, and the lack of real socialization, as well as damage to health and the human psyche.

Thus, it must be taken into account that digital technology causes substantial socio-cultural transformations in the cognitive sphere. Introducing digital forms to education requires a number of measures to neutralize these risks - purposeful training to work with the information flow, strengthening value component knowledge and knowledge in general.

In the digitization of education, interpersonal and group communications carried out through electronic networks are recognized as equally important. Digital technologies generate new cultural codes and ways of interaction and therefore, values and communicative meanings are changing. On the one hand, new technologies allow us to create a multifunctional dialogue between network users, expand and complement it, to cooperate interactively through mobility, convergence (combining different services on the same base), interactivity, multimedia, multisensory and other technologies. But on the other hand, for the younger generation communication often turns into pseudo-communication. This leads to the loss of communication as a value associated with the expansion of the conceptual and semantic field, the displacement of meanings from enrichment and the transfer of knowledge and emotions to generating simulacra (signs beyond which there is no meaning), but which are nevertheless perceived and acted upon, creating an imaginary and false picture of reality among the recipients of communication. Such communication leads to a loss of responsibility for the words said, disorientation in the social system of values. “Free” communicative actions, the anonymity of the communicants, distant communication makes it possible not to take into account the moral and ethical features, and the virtual classroom becomes an object of mass information and communication influence and manipulation, with the active imposition

of new values. This often fails to satisfy the spiritual, moral and universal human needs for communication, and a person usually begins to experience frustration, to overcome which, he/she increases the number of recipients of virtual communication and the duration of communication sessions, but in the end often does not find meaningful life landmarks or comes to their moral distortion. Freedom and responsibility in the communicative sphere are associated with mastering the basic principles of communication, observance of ethical and communicative norms. All these phenomena ultimately influence the formation of the worldview.

Thus, the communication sphere's value also undergoes change, due to which the education system puts to the forefront training on culture of interaction in the networks, ethic norms compliance while placing reliable qualitative information, personal security verification.

Conclusions and recommendations

Having recently lost some of its relevance, the humanitarian approach is still one of the options for resolving the current prevailing contradictions between the declared objectives of the preparation of a harmoniously developed personality and a digital transformation, based on the cult of technology.

No doubt, today's children perceive the world and their place in this world differently, but the adjustment of the educational system to the short-term needs and requirements may lead to the situation when the development and education of the younger generation become the quasi-characteristics. After all, in the absence of formed values a child is not able to distinguish the good from the bad and the useful and harmful, good and harmonious from a hostile and destructive. Today his/her upbringing and development, socialization and the formation of a human personality occurs mainly in a virtual reality (social networks, computer games, popular messengers), where information and activities are not regulated by ethical, aesthetic and axiological norms. The child does not even understand the difference between the real live communication and activity on the virtual simulacra. He/she takes the Internet for the ultimate truth, searches there for answers to the most important and innermost questions for him/her, exposing himself/herself, without even knowing about it, to the risks and dangers of both spiritual and physical character, and spiritual risks are no less dangerous than physical. Only the implementation of a unified concept of education based on humanitarian approach with its main values of the human person, lively communication, freedom and responsibility, knowledge and security can protect the child from the negative impact of digital technologies. The same approaches should underlie the digital transformation of education.

The pedagogical community must come to the understanding that digital technology is not a panacea for all the problems of modern education, but only one of the instruments that helps to achieve higher educational goals. Universal human qualities and values (kindness, compassion, empathy, love, friendship, selflessness, etc.) remain unchanged as long as man exists, and education and development of these qualities is the main purpose of education. The displacement of the targets have already led to a deformation of the characteristics: the man as the center of the universe and at the same time as the preserver and the creator of a microcosm inside gives way to a "posthuman" essential qualities which are the denial of traditional values, the pursuit of unlimited consumption and personal success without any effort on his/her part.

Further ignoring the above trends, risks and threats in the construction of digital educational will lead to irreversible changes in the inner world of the man. Recently, philosophers, such as Keligov, Kutyrev, and Tchaikovsky, talk more and more often about

the transition of Homo sapiens to a different species, and let us hope it will not be e-homo, and the man created in the image and likeness of God, will not turn into a kind of robot.

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