

## TEACHER AS A HUMANIZER OF DIGITAL TECHNOLOGIES IN MODERN EDUCATION

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**Abstract:** In the paper, a complex of problems associated with the impact of digital technologies, distance ones included, on the efficiency of education are discussed. The analysis of development stages and objectives of education in the history and culture of Homo Sapiens is presented. Particularities of the primitive, agrarian, industrial, and digital educational systems are singled out. Consequences of digital revolution, causes of decrease of the efficiency of traditional industrial class-and-lesson system in the modern conditions of the 21st century are analyzed, and the main trends of digitization and technification of the pedagogical process are identified. The analysis of opportunities and risks brought about by digitization of education is given. Recommendations for teachers on humanization of education and upbringing are suggested.

**Keywords:** digital technologies, education, humanism, paradigm of education, spiritual dimension, culture, Man.

### 1 Introduction

The information post-industrial era puts Man into a singular life situation. The digital way of life builds up on the previous industrial one. In conditions of the digital "wave" or new phase of historical development, earlier systems (including the traditional educational one) are less efficient. At the same time, the forming digital educational system has not elaborated its efficient approaches and solutions in learning and upbringing yet. This was demonstrated brightly by the situation with distance learning during the outbreak of Covid-19. Alongside this, people are making sure that one of the main problems brought about by technologies is dehumanization of the pedagogical process. Students and teachers have to spend more effort and time for performing educational tasks, while the efficiency remains at the previous level at the best. This speaks about technologies working not for Man but against him. In these conditions, all participants of the pedagogical process, and teachers first of all, have to act as humanizers of digital educational technologies.

The present days are witnessing the new information and technological revolution. The world of digital technologies assimilates the reality, with changes touching on the sphere of education, too. Among them there are: the lack of consistency and stability or continuity of change; the complexity of planning and vision of the future; the ruin of traditions, crisis of values and ideals; virtualization of life; mobility of life; the problem of information noise; gamification of the life of Man, and others.

Man faces the danger of losing himself. This problem affects the system of education, too. Technologies are used not so much for the sake of Man (with the result of improving overall efficiency, conditions of studies and work) rather than for the technologies themselves. As a result, the educational process gets dehumanized.

### 2 Literature Review

The theoretical and source studies basis of the research consists of scientific works in the following domains: works on anthropology, history, general philosophy dedicated to the problem of main stages in the development of mankind (Dyakonov, 2007; Toffler, 1970, 1980; Harari, 2014, 2016, 2018; et al.), works on humanist philosophy, psychology, and pedagogy (Fromm, 1955, 1965, 2005; Sommer, 2019; Frankl, 2000; Amonashvili, 2017; et al.), religious philosophy

(Berdyaev, 2001; Ilyin, 2015; Zenkovsky, 1923), works on the problem of the future development of Man, civilization, and the system of education in conditions of digital society of the 21st century (Robinson, 2011, 2013; Epstein, 2016; Peterson, 1999; Kurpatov, 2018; Soltovets et al., 2019; et al.), and works discussing teachers and researchers training problems (Zhukova et al., 2019; Parshina et al., 2019; Shukshina et al., 2018a; Shukshina et al., 2018b; Strielkowski & Chigisheva, 2018).

The analysis of scientific literature enables the authors to make the following conclusions.

In its history, mankind has passed several phases of historical development which have formed a certain way of life of Homo Sapiens. 4 phases can be distinguished: the way of life (civilization) of hunters-gatherers, the agrarian way of life, the industrial one, and the modern, information one.

The contemporary digital world has changed people's life and is technifying the system of education. This manifests itself in the following signs: 1. Education is becoming increasingly less of a free right and more of a duty. 2. Technologism raises the secondary questions of education ("how?") to the class of the most important ones while pushing the essential problems from the point of view of humanism ("what for?" and "what?") to the background. 3. Technologism introduces the notion of norm (standard) and, accordingly, of external objective assessment. 4. As one of the major criteria of successiveness, technologism introduces the students' individual adaptation to formal and normative requirements. 5. Technologism proceeds from the principle of maximality while humanism proceeds from the principle of optimality. 6. Technologism "subdivides" participants of the pedagogical process and educational institutions into better and worse ones according to an external norm. 7. For technologism, education is the sphere of services while it is the sphere of human relations etc. for humanism. 8. Technologism "prevents" man from fulfilling his mission – being the maker of his own life and the creator of culture for the entire society.

### 3 Research Methodological Framework

The objective of the paper is to analyze risks of dehumanization of the pedagogical process in conditions of digital education as well as to search for ways of overcoming these risks and to elaborate recommendations for teachers on humanization of education and upbringing. The following tasks have been set for achieving this objective: identifying the stages of the rise and development of the educational system depending on the way of life of Homo Sapiens; describing technological consequences of information revolution in the process and system of education; analyzing changes in and efficiency of functioning of the traditional industrial and humanist system of education in the new digital conditions; conducting the survey of students and teachers on this problem; creating recommendations on leveling out the risks and humanization of digital education.

For confirming or ruling out the expected risks, the survey of school teachers of Saransk city (156 people, September-October 2019) and students of various focus areas and profiles of training of M. E. Evseyev MSPI, N. P. Ogarev MPU, Moscow City University, and Voronezh Institute of High Technologies (509 people, March-April 2020) was conducted. The survey covered questions of digitization of education, distance learning, their effectiveness, and particularities of use. Based on theoretical studies and the survey, recommendations for participants of the pedagogical process on overcoming the identified risks of digitization have been elaborated.

For accomplishing research tasks, the authors used theoretical research methods: analysis, synthesis, comparison, systemizing the materials on the research problem, forecasting, as well as empirical research methods (survey).

## 4 Results and Discussion

Based on the theoretical analysis and experience of pedagogical activity, the authors have singled out 4 stages of historical development that have formed particular ways of life and systems of education: the way of life (civilization) of hunters-gatherers, the agrarian way of life, the industrial one, and the modern, information one. Each subsequent one was constructed on the basis of the previous one, "building up" on it.

### 4.1 Hunting and Gathering Way of Life

Around 70 000 years ago, in the period of cognitive revolution, Man began to not merely adapt to the world of nature in which he lived. He began changing the natural surroundings and creating new artificial world of material and spiritual objects – the world of culture, the values of which changed the very Homo Sapiens and literally "demanded" taking care after themselves, preserving, and passing on to further generations. So the "cultural tradition" was born which continues into nowadays. As for education, it became the process of passing the torch of culture from generation to generation.

Thus, as early as in the primitive society, Man faces two objectives of education. The first one is inherent in animals and "comes after" Homo Sapiens throughout his entire evolution – this is learning for survival in the severe world of nature and society. The second one emerges as the culture does – this is preserving and passing on the accumulated "cultural tradition" from generation to generation.

So, as the world of culture (both inner and outer) appears, Homo Sapiens begins creating new maps of reality (Kurpatov, 2018) using which he explains and transforms the nature. As subsequent kinds of activity emerge, artificial cultural maps of reality become even more intricate and complicated.

### 4.2 Agrarian Way of Life

Some 12 000 years ago Homo Sapiens begins settling down on land. Particularities of the agrarian way of life can be summed up by words "limitation", "cyclicity", "consistency", "accumulation" – of the space, time, labor, family, resources, etc. Here are but a few main aspects of this era. First, agriculture became the main activity leading to the sedentary way of life. Now people were busy working on a permanent place, they were bound to their land plots, they did not leave their settlements for too distant places and too long a time, and they preferred consistency and predictability over change. Second, they began harvesting and storing the grown food products, breeding animals, which led to appearance of excesses, accumulation of resources. In its turn, this was one of the factors for the emergence of private property and social stratification. Third, a large stable family consisting of several generations and a great number of relatives became the main unit of the society. Within the family, a clear hierarchy formed; this was essential for survival, increasing the number of the family members, as well as for material accumulation of resources in the challenging natural conditions. Fourth, social stratification and income inequality emerged. The greater mass of people did agricultural work, but there were also gatherers, hunters, and warriors, priests and the nobility. Gradually, there appeared merchants and craftsmen, and as the writing system was created, literate people who were used for the state and community purposes. The hierarchy in the society formed in a similar manner to the family one. Fifth, this determined the limited division of labor, but in general, the production and consumption processes were united. Although the vast majority of people (peasants) did hand over their products to other social groups (or exchanged them), at the same time, they used the products of their own making. Sixth, time was perceived in a cyclic manner, and the structure of life was timed to the natural phenomena within one year (seasons, floods and droughts, migration of animals and birds, etc.). Unlike hunters-gatherers, peasants had to think about the future and plan for several months or a year ahead. Seventh, a glance into the future, the view of his own boundaries (understanding of

his own limitation), as well as of the borders of the world and the society formed in Man a transcendent idea about the world of the "due" which did not coincide with the "existing" world. So, the world in the ideas of Homo Sapiens was subdivided into the real and the ideal one. Which is the most important, the agrarian way of life led to Man working even harder building the artificial world of culture, accumulating, preserving, and passing on as heritage his material and spiritual values, having paid for this with the free time of his own life.

It is back then, and later as cities (polises) and states emerged, that transmission of the cultural tradition became the most significant objective of education. This is associated with the objective situation of accumulation of cultural values. Family became the home "garden", "school", and "university," and it had to organize the process of the young generation's moving into adulthood and professional training for life within their social or income-based status. Not only had adults to pass on the experience of activity (the educational aspect), but they also had to introduce the young into the space of life, make them a part of the integral society with its history, myths, legends, customs, ceremonies, etc. (the upbringing aspect).

As the writing system was created (70 000 – 5 000 years ago), the process of learning became more systemized, artificial, and authoritarian. Education was given not for the sake of individual, his or her rise in the society, not for the sake of fulfillment of the built-in potential, but for transmitting the culture from generation to generation, maintaining the unity of the society in the past, present, and future history.

Regardless of the content of inscriptions (household and mathematic calculations, riddles and legends, laws and codes, etc.), of the type of writing (Chinese inscriptions on turtle plastra, stone tablets from Mesopotamia, clay tablets from Shumer, Egyptian hieroglyphs, the Crete writing, and so on), learning this art required immense efforts of both teachers and students. As children were perceived by adults as nothing more than a means for solving the set problems, they were completely subjected to the systemic organized process of training and they had no rights. The teachers were distinguished as demanding, strict, and punishment (including the corporal one) was a norm for that time.

Schools for learning the writing system (edubbas in Mesopotamia, chanceries or scribal schools in Egypt, etc.) were available for a narrow circle of people only. Just like other schools (the military ones, the schools of merchants), they were designed to mould a person as a social unit, to adapt the person for living for the benefit of the society and the state.

It is hard to call such education humane. Certainly, teachers, mentors, and parents, all the more so, could treat children leniently, with a protective wish to help them perform the set task. However, the adults of that time did not have the slightest idea about having to help children find their place in life, express and fulfill their own potential, and the like. Man was only perceived as a tool for accomplishing group, social, and state tasks.

The period from 800 to 200 BC sees the next "cultural takeoff" in the process of development of Homo Sapiens. This time span was termed the "Axial period" by Karl Jaspers (1991): "The most extraordinary events are concentrated in this period. Confucius and Lao Tse were living in China, all the schools of Chinese philosophy came into being, including Mo-ti, Chuang-tse, Lieh-tsu, and a host of others; India produced Upanishads and Buddha and, like China, ran the whole gamut of philosophical possibilities down to skepticism, to materialism, sophism and nihilism; in Iran Zarathustra taught a challenging view of the world as a struggle between good and evil; in Palestine prophets made their appearance, from Elijah, by way of Isaiah and Jeremiah to Deutero Isaiah; Greece witnessed the appearance of Homer, of the philosophers – Parmenides, Heraclitus and Plato – of the tragedians, Thucydides and Archimedes. Everything implied by these names developed during these few centuries almost simultaneously in China,

India, and the West, without any one of these regions knowing the others".

For the first time ever, this powerful spiritual movement independently poses the question about the essence of Man, his place in the universe, his inner world, alongside the questions about the structure of the very world. So, in the middle of the objective reality, there emerged a "humanist little island" of the inner Man striving to learn himself in the world and the world in himself and to bring these two to the harmonious unity. Just like the artificial world of material culture (of the existing) built up on the natural world, so in the culture itself, there emerged the inner ideal of the imaginary (the due). It was represented by myths and stories, theories and calculations, diagrams and wordings. In his aspiration to explain the world around him and to know the truth, Man created, to put it in the modern words, the "augmented reality" of culture; quite frequently, this led him away from the objectivity of nature and led to the transcendent world.

It is in this time that Man faces a conscious needs and task of learning himself. It is all about what his inner "I" is, what his Personality is alongside the external biological and social status. The value of Man and Personality becomes recognized, but humanism is not autonomous yet, it is in the depths of religious and philosophical doctrines.

Regardless of the principles underlying the public worldview (animist, cosmo-centric, or theocentric ones), the ideas of humanist upbringing and education of Man as an independent active individual were present in the cultures of Buddhism, Daoism, Confucianism, the philosophy of the Ancient Greece, Judaism, Christianity, and Islam. Up to the Renaissance epoch, humanism was not the leading philosophical principle (the Nature, Space, God, Society are always the reason, the top value, while Man is secondary and inferior towards them). However, it was expressed in the light of theological and philosophical doctrines.

The Renaissance epoch in the Western Europe marked the beginning of transition from the theocentric worldview to the anthropocentric one. In this time, the ideas of humanism begin to go into the foreground, becoming independent in the 20th and 21st centuries. The humanist worldview presents Man as an objective and not as a means, it gives him the leading role both in his own life and in life of the entire mankind and the planet Earth. This shapes a new ideal of personality featuring such qualities as independence, freedom, businesslike manner, and activity, places him above the entire animal and plant world while also gradually distancing away from the "divine" world in the daily earthly life. Secularization (separation) of the scientific knowledge from religion led to the development of sciences and methods of rational learning of the world: in astronomy, physics, and chemistry, in algebra and geometry, in philosophy, biology, and medicine, and, certainly, in pedagogy. Rendering Man, his "I", his inner world of culture autonomous has become the reason and the main driving force behind the humanist values and learner-centered education.

Moreover, independence and freedom bring Man to subjectivism of culture (the philosophy of relativism), which is expressed in the formula "the objective truth = the total of subjective opinions". The truth (this concerns first of all the sphere of social relations) is now a composite of subjective opinions, appraisals, wishes, and actions of autonomous individuals. This particularity of humanism is described by Yuval Noah Harari (2016). As seen by humanism, in esthetics, the notion of the "beautiful – ugly" is determined by the taste of Man, in economy (a good product – a bad product) – by the customer's wish, in politics – by views of the voters, and in ethics (the good vs the evil) – by subjective opinion of Personality.

In spite of the development of natural and exact sciences, the philosophy of rationalism, art aimed at understanding the essence of Man, the new stage in the sphere of education only begins with the development of factories and plants and, accordingly, the urban growth.

#### 4.3 Industrial Way of Life

It emerges and spreads gradually, beginning approximately from the 18th century and having becoming mass by the late 20th century. The development of industry and science (first of all in the countries of Europe and the USA) leads to reduction of the percentage of the population leading the agrarian way of life. First men, and later women go to work at the urban factories and plants, offices and companies. It is then that the class-and-lesson system becomes widespread.

Industrial revolution (and the so-called office revolution in the 20th century) came to destroy the settled agrarian family which had remained the most wide-scale form of human communal life until the era of large plants and factories in metropolitan cities. The problem was not in the family becoming nuclear ("bi-generational") in the era of industrialization and urbanization. The urban family, unlike the agrarian one, ceased to have the shared center of "labor" attraction which was the land for the agrarian family. Certainly, living on the land is extremely difficult (permanent struggle with the natural environment), but efforts of all the members of the agricultural family are focused on the shared objectives and results, accordingly. As a rule, with all its difficulty, joint activity united the people and rendered them mutually dependent. The family relied not merely on love but on the shared activity without which no collective was possible. In such families, children were brought up within working together, albeit not easy.

As a result of industrialization, the first to exit the common joint family activity were men who went to factories and plants. The next were women to leave for plants first, and later for offices. Children got mass schools and kindergartens. So the single center of family union was ruined.

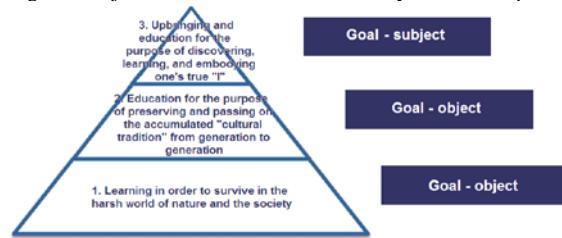
The authors have already mentioned that industrialization was a consequence of secularization and development of various (first of all natural and exact) sciences. Among them, the sciences about Man (philosophy, psychology, and pedagogy) had their own place to occupy. Homo Sapiens came to be perceived as a reasonable being (at least, as a result of correct upbringing and socially organized life). So, the eternal advance of the world around him in the civilized competition with others, self-improvement, and self-celebration became his vocation. This had an effect entirely on the way mass school system was organized as well as on the theoretical science about upbringing and education which V. V. Zenkovsky (1923) termed as "the pedagogy of intellectualism".

The class-and-lesson system was the child of industrial production organization: "Raw materials are turned into products through sequential stages, each with some form of testing as a gateway to the next. Mass education was designed as a series of stages, from elementary school to high school to higher education. Students are typically organized into separate year groups and progress through the system in batches that are defined by date of birth" (Robinson & Aronica, 2016). The linear production technology was transferred into the system of education. All students are subdivided into grades according to their age and sometimes abilities. The lessons are held within strictly allotted time (30-45 minutes) with short and longer breaks. Each class is dedicated to a certain subject and topic, all of them are distributed according to a schedule and united into larger cycles with the final check of knowledge. So, just like the future product passes through the assembly line, so the children go from the first grade until their graduation from school. The class-and-lesson system promotes competition, and according to the external objective assessment, it encourages successful students more and those lagging behind less, while students have to learn adapting to the uniform requirements and conforming to them for achieving higher results.

This was the end of the "agrarian" education era and the beginning of the new one. The authors call it the "industrial and humanist" one because this name reflects two main objectives set for the mass class-and-lesson system. The first one (already mentioned) is transmission of the cultural tradition, and the

second one (emerging back in the axial period but only nowadays going mass) is to unlock the potential of Personality, its creative self-fulfillment. While the first objective is the external one aimed at the development of the society (object), the second one is targeted at Man, at learning and fulfilling oneself (subject) (Figure No. 1).

Figure 1 Objectives of education in the history of Homo Sapiens



Source: the authors

In the industrialization era, the system of education got into a complicated controversy. In the economic and social viewpoint, the task of education is to "supply" trained people, ready "units" for industry and agriculture, for the economy and politics, the society and the state. These people have to be trained by the mass system of education with the maximum result and the smallest loss of effort and time. The class-and-lesson system used to be and still is now ideal to perform these requirements. Meanwhile, in terms of humanism, a more important objective has emerged for education – creating favorable conditions for an Individual to gain himself or herself, to unlock the individual's potential, to go up the social ladder, and to accomplish creative fulfillment for the benefit of people. Thus, both then and now, school has been in the gap between the traditional and humanist objectives of education. The former was dictated by objective tasks of development of the agrarian and industrial society, and the latter – by the scientific knowledge about the nature of Man, children in particular, emerging in the period of the New and Newest time. Thus, the educational process can be considered and built proceeding from these two paradigmal standpoints – the traditional one (social and technological) and the humanist one.

On balance, the industrial system of mass education permeated with humanist ideals has performed the set tasks successfully up to the 21st century. Humanist ideals, faith in man, his rationality, and the eternal advance of the world pervaded the spirit of industrial education. However, at present, the system has faced a most powerful challenge – the new digital technologies "attacking" simultaneously both the educational traditions of the industrialism era and the humanist values.

#### 4.4 Digital Way of Life and Technological Consequences of Digital Revolution

At present, the industrial and humanist paradigm of education gives way to the information and digital paradigm of education. Why and how does it happen?

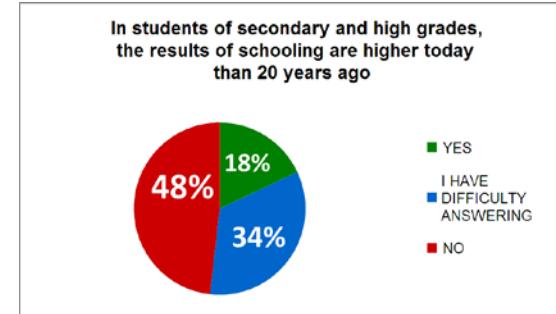
Owing to the development of information technologies and the virtual space, it has become possible to store, process, and send to large distances to an unlimited quantity of users immense volumes of information, as well as to use artificial intelligence (AI) for accomplishing a large number of educational tasks. AI has already learned to learn independently and to form based on the information data (big data) analysis solutions for the emerging problems. So, it does not only help in studies, but it performs the tasks for students while students with pleasure use its capacities instead their own. For example, this is the case with automatic translation into foreign languages, figuring out mathematical problems, compiling portfolios, even drawing, and so on. Moreover, software solutions offered by corporations (Google, Yandex and others) are built upon the profound cognitive analysis of human thinking. This is why these solutions are relatively efficient. They help save time and effort in performing the tasks of learning. As for the productive capacity viewpoint, a serious controversy arises. On the one

hand, using AI, one gets an opportunity of quickly creating a product of activity (translation, drawing, solving a problem, etc.). On the other hand, is this product a result of human creative activity? What exactly is created by a human and what is created by AI? When does artificial intelligence start to prevent Man from acting productively? At what stage will it completely take all possibilities for creative activity away from Homo Sapiens?

#### 4.5 Analysis of Changes in and Efficiency of Functioning of the Traditional Industrial and Humanist System of Education in the New Digital Conditions

Nowadays, the traditional class-and-lesson system has gotten under pressure of digital technologies which reduce the effectiveness of education and dehumanize it. To confirm the idea, the authors conducted a survey of teachers of Saransk city having the work experience ranging from several months up to 42 years (Figure No. 2). The teachers were asked to answer 15 questions on the problem of the influence of technologies on humanization and effectiveness of the process of learning. Among the questions, there was the following statement: "In students of secondary and high grades, the results of schooling are higher today than 20 years ago". 48% of the teachers disagreed with this statement, 34% had difficulty answering, and it was only 18% who agreed.

Figure 2 The survey of teachers of comprehensive educational institutions of Saransk



Source: the authors

Among the young teachers (having the work experience of 0-2 years), the percentage of those answering in the negative is lower (36%) while that of positive answers is only slightly higher (21%). As for the teachers having 10-19 years work experience, 11% answered this question in the positive, 50% – in the negative, and 39% had difficulty answering.

So, the class-and-lesson system turns into the digital one, which is expressed in technification thereof. The changes touch on all aspects: the administrative one, the educational one, and the upbringing one.

As for the side of organizing the pedagogical process (the administrative one), the process of information technification has led to the opportunities of automating management of the processes and, accordingly, controlling. This involves systems of online learning having step-by-step tasks and tests, monitoring (e.g., the USE), marking notes online (digital diary), checking the attendance (checking the magnetic cards at the entry), and so on. There are no reasons to believe that the technologies emerging tomorrow will not be applied in the system of education, as they downright "tempt" with a wish to automate the pedagogical process, to render it technically perfect, like an ideal mechanism which never fails and so guarantees the top result.

The result of enhancing the technological constituent was the focus on controlling the processes and results first of all. Certainly, this dehumanizes the process of education and makes its participants (pedagogical workers, students, and parents) adapt to the new emerging conditions and requirements. The logic suggests that technical capacities have to not merely help in organizing the pedagogical process, they have to become a

means to assist Man in solving creative educational tasks. Meanwhile, the actual practice is that it is students, teachers, and parents who become a means for the emerging technical innovations and new solutions. This is how the idea of humanism is substituted for the technocratic digital ideology.

Technologies also produce a most powerful impact on the process of education itself (introducing Man to the world of culture of Mankind, rendering Man more cultural). First of all, this is manifested in destruction of traditions of the industrial and humanist system. In it, the Teacher was the authority beyond exception, nearly the only bearer of the knowledge the student needs for the future life. The knowledge obtained guaranteed the "successfulness" of Man in the society: employment, a decent level of life. Learning was built according to the scheme of the traditional combined lesson at which the Teacher passed on the material, the student perceived and reinforced it and then demonstrated the teacher the level of absorbed knowledge and developed abilities and skills. The class-and-lesson system relied more on the verbal methods of learning, it implied the competition between students and the presence of objective assessment. However, many teachers, first of all didactics specialists, included into it the problem and search, developing methods of learning (including those based on reference signals) and joint creative activity successfully.

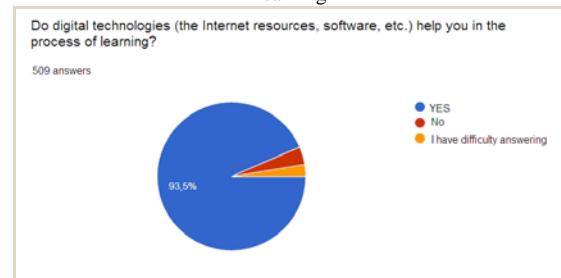
Nevertheless, at present, technologies undermine this educational tradition. Information resources (not just Wikipedia) replace teachers in the multitude of questions, students are "googling", and the educational communication consists in sending and receiving materials and links to resources. The need of not only teachers but also students' communicating with each other is being lost, social and educational links of the real world are getting broken, with virtual communication coming in their place. As a result, the motives of learning are changing (What for does one have to listen to a new lecture if the teacher can share it in the Internet? What for are the teacher's explanations at the lesson if you can watch them at a video hosting? What for does one need to call a deskmate if one can ask Alice?). As a consequence, the traditional industrial scheme of the combined lesson stops working. Dehumanization of the process of education manifests itself in the fact that Man having received the access to an immense inexhaustible volume of information ceases to be the creator of one's own inner world of knowledge, ideas, concepts, and systems. Meanwhile, creativity in the broad sense of this word is the vocation of man, and the humanist objective of education consists in bringing Personality to this objective. Do the modern educational technologies do it? Do they help in establishment of the creative Man?

As for the upbringing side, information technologies destroy traditional approaches and humanist values, too. Teachers (class masters) have gotten a serious competitor – the Internet with its entertaining content and communication resources. This is manifested first of all in the fact that it is difficult for one to motivate children (whipping them into shape is always there), to interest, involve them, to lead them "offline", to creatively spark and lead them after oneself, to be an authority for them. Who helps students answer the fundamental questions of their own being: "with who should I be?", "who should I be?", "what for should I exist?", "what should I be like?", "how to exist"? Is it the class master? A teacher of authority? Parents? Peers? Mass media? The Internet? The question remains open. Today, the traditional upbringing forms cease working efficiently, they need "modernizing", combining the virtual and the real worlds skillfully. It is important for teachers not only to be "online" with students by means of social networks, messengers, not only to use the Internet as an assistant in communication, but also to apply these means for solving humanist pedagogical problems and questions.

New information and digital paradigm of education is being formed rapidly and without people's participation, or, more exactly, without the participation of teachers. It is being formed by the new digital technologies while people are adapting, which has not been very successful so far. Let some results of the

survey of students concerning the topic of efficiency of distance digital education be given. Most students think digital technologies, including software, are helpful in the process of learning (Figure No. 3).

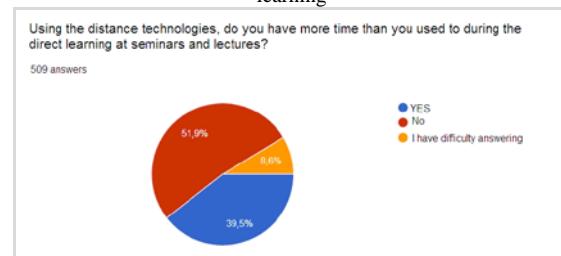
Figure 3 The results of survey of higher educational institution students on the problem of education digitization and distance learning



Source: the authors

However, this is where positive opinions on digital learning, the distance one included, run out. The vast majority of the students note they have had less time as they started working with distance technologies than they used to (Figure No. 4).

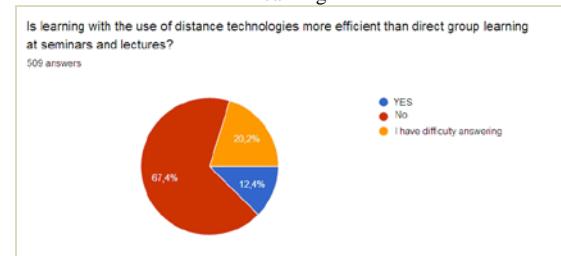
Figure 4 The results of survey of higher educational institution students on the problem of education digitization and distance learning



Source: the authors

The questioned ones also note lower effectiveness of learning with the use of distance technologies (Figure No. 5).

Figure 5 The results of survey of higher educational institution students on the problem of education digitization and distance learning



Source: the authors

What do the survey results show?

1. Almost all the participants of the pedagogical process (over 90%) are for the use of digital technologies and they see an excellent means for successful learning in them. The like question was posed to the teachers of Saransk, and their answers were similar, too.
2. The problem consists in the fact that the use of digital technologies in education does not solve the problems of saving time, effort, and obtaining a higher creative result.
3. This allows concluding that educational technologies are used as a goal in itself and "fail" the very process of learning.

In this situation, close attention has to be paid to the options of influence of teachers, psychologists, students, and parents on the

work of software designers. The software and architectural solutions have to be variable, "soft", i.e. humane, and, therefore, allowing one to tune up solutions for various people, their abilities, levels of technological and information competency, and so on. Even though the technologies can yield a maximum (of programs, assignments, templates, assessment and check methods, etc.), it is not maximum but "optimum" that has to be required in relation to people, and a calm rhythm of work and studies has to be maintained.

This means that distance learning (which is in fact purely digital learning) has to be a supplement for the real learning at a class or group of students. The survey participants' are quite right in saying that real learning with the use of technologies is more efficient as it renders the process of education human, while mere technification can dehumanize this process curtailing the results.

## 5 Conclusion

The community of teachers, programmers, psychologists, and scientists faces a serious task of leveling out the risks and humanizing digital education. It can be accomplished relying on the following provisions.

First, the system of education has to be built and managed at all levels as a Human and not technical system, and the relations of participants of the pedagogical process have to be cultivated in line with this approach. This means that the quality of education is first of all determined not by facilities, computers, interactive whiteboards, and even not by the Internet, but by students and teachers who can learn and teach well both having computers and not (the latter is certainly more difficult for a history teacher, but it is not quite challenging for a PT teacher).

Second, the technology, software solutions, and AI have to be adapted to Man, and not vice versa, which is frequently the case. For example, when deciding on the use of particular technologies, it is good enough to take into account the opinion of children and their parents. The opposite case results in the following situation: there is an official system for solving some problems and an unofficial chat in a messenger where they tackle many others, if not most of them.

Third, teachers must organize the pedagogical process relying on people's eternal, unchanging needs. Let the following needs be emphasized, alongside the needs of life preservation and procreation.

*The need of creativity.* If studies or work have no creative result in the broad sense of the word, they become pointless. This means, that students will be very hard to motivate even having high-tech "filling". As for the principal motive, this is interest flowing into the products of one's own activity.

*The need of belonging to a group (social position and protection).* Admittedly, everyone want to find their place in the society. Man is a super-social being. People desire to be accepted by the group, approved and protected by it, they await conditions and opportunities for fulfillment of their own potential from it. This is why children choose exactly such groups where they feel (mistakingly at times) their own importance. This means, that children will study better in a peer community in which learning and knowledge are a value rather than merely at the computer screen. The truth is also that it will be very hard for teachers to organize learning at a class where knowledge is no value.

*The need of interaction and mutual learning.* People want to not merely be a part of a group; they need interacting with each other, sharing the information, and teaching what they know to others. Digitization and distance learning must not reject this need. So, for example, in a traditional class, they use extensively the well-known technique of some students explaining ways of solving a problem to other students. Even if this process can be set up remotely (children teaching each other in the virtual

space), one has to agree it will be outplayed by real interaction anyway.

The need of soul searching. If the above needs of Man are met, he achieves the major objective of upbringing and education – finds himself. In this way to himself, his main guides are teachers and mentors not by occupation but in essence. They are parents, teachers, adults, and children. From the point of view of humanist pedagogy, it is "finding oneself", "fulfilling one's potential to the benefit of people" that is the most important objective and result of education.

Fourth, teachers must always bear in mind that digital technologies are not a goal in itself; they are only efficient if students want to learn and teachers want to teach.

Fifth, educational institutions have to introduce the "digital educational hygiene" rules: refusal from the use of gadgets during studies and work not requiring their use, reduction of the time of using them, etc.

It is only relying on Man's eternal needs and values that digital technologies can be framed to serve education. In the opposite case, we are in for the society of digital consumers and not for the society of creators of the human culture.

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