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INFORMATION AGE SYSTEM FOR EDUCATION IN PARADIGMAL FORECAST DISCOURSE

***Abstract.** The state of origin of the system of education and upbringing of the information age realized in the algorithm of self-organization is predicted on the basis of the regularities of the first stage of the life cycle of the social system of industrial education; the state of the "spirit of the era", which carries the information society, is estimated as an example of a new type of life of the planetary community; worldview, ideological and conceptual prerequisites for forming a new type of education are analyzed; the state of fundamental science is highlighted as a basis for generating a modernization of the content of education in the 21st century; the problems of the theory of education and pedagogy, which are not solved in the perspective of the state educational policy (especially the means of pedagogical influence on the individual, including in the sphere of strategy, tactics and operational management of education) are revealed.*

***Keywords:** planetary personality, industrial education, information education, spirit of the era, science, evaluation, free education, theory of education, cognitive pedagogy, personalization, individualization, control parameter*

The modern planetary community that is the transition from an anthropogenic to an information civilization is experiencing an inter-civilizational shift. After the 2019 elections, Ukraine was at the stage of political and organizational rebooting of the government system. Now it is essential to apply knowledge of the life cycle patterns of the industrial education system to assess the current state of the education sector and try to address the horizons of future education in the overly excited social chaos. Thus, the problems of the future in the thinking of modern politicians, educators, and, most importantly of state managers are very relevant.

The relevance of this study is influenced by the fact that while the transition of the planetary community changed from agrarian to industrial civilization and society has already undergone a similar transformation. As it is known from the history of pedagogy, industrial civilization has eliminated outdated types of family, governess, and church-parish education, which correspond to the specifics of agrarian society, and introduced forms of conveyor type. A qualitatively new mass standardized training of specialists was formed in which students, as details on the conveyor belt, passed from class to class, from one subject teacher to another.

Therefore, aiming to predict the nature and modus (from Latin modus – measure; method; image, type) of information age education, we have carefully examined the life cycle of the social system of the industrial age. In our opinion, it consists of four stages, namely: birth – XVI (1543) – the end of the XVII century; growth – the end of the XVII century – the end of the nineteenth century; maturity – end of XIX (1895) – 70 years of XX century; decline – the 70s of the twentieth century – the middle of the 21st century.

At the same time, it became apparent that the education system as a social phenomenon is subject of various mechanisms that ensure its existence in time and space: at the stage of birth, the laws of self-organization and self-regulation of social structures operate; growth is a period of homeostasis; maturity is a period of homeorhesis; decline is a period of homeoclase.

It is essential to pay attention to the methodological caveat: if we are to compare the elements of the evolution of the social world, we must always remember that "evolution is also in the process of radical reconceptualization" [6, p.262]. It means that there is no direct analogy of organizational forms of transitional stages between different civilizations, but there must be a general algorithm for organizing the self since social systems live by universal laws.

The current state of the industrial education system is overripe and retained by the excessive organizational activity of interstate, supranational, national, and corporate management of education. All the directives of education management in recent years have been directed to this state. In our opinion, the main disadvantages of the industrial education system are the following:

- closed or semi-closed character, which can only be overcome by conducting demanding exams, interviews, testing;
- unacceptable narrowing of the level of freedom of a person who studies;
- outdated semantics of the content of learning, the violent nature of the relationship between teacher and student, based on "subject-object" relations;

- the primary tool of industrial education – the so-called modular system – is nothing more than a means of enhanced control over the student's knowledge at the level of individual educational topics;
- a significant reduction in the role of educational interaction between the teacher and the student and the reduction of the influence of the teacher's personality on the younger generation;
- introduction of electronic journals for students, formalized testing, etc.

Here is not a complete list of "weaknesses" of the Bolonska system, which does not meet the conditions of the information age. This system requires a higher level of freedom and creativity from the individual.

In order to predict the prospects for the birth of a new type of education, it is important to assume that the education system is born and declines under the influence of external logic, mainly due to changes in the division of social work or metabolism of the planetary social organism. The formation and functioning of education are carried out by internal logic, that is, based on the social division of labor, in which the educational activity is a relatively independent segment.

According to the results of the accumulated scientific knowledge about social systems, we can see several vital regularities, which directly indicate that the contours of the value-semantic matrix of education of the information age are being drawn slowly and based on self-organization. In this case, it states that the emergence of the information age education system occurs in the space of social chaos, in which the educational space was found due to the homeoclass of the industrial age education system.

In our opinion, the prerequisites for the creation of the information age education system are the following three factors:

- 1) a new division of social work, which matures in the depths of the planetary social organism and alters the industrial labor that gave birth to the conveyor technology of production, including in the space of education;
- 2) the emergence, under the influence of the new social division of labor, and a specific type of educational activity. The executors become a layer of educators who have mastered the elements of the new information culture;
- 3) changes in the social institute of education caused by the metabolism of the planetary social organism.

It should be noted that the social institution of education and the social system of education are two fundamentally different phenomena. In the first case, nothing depends on

the person, and in the second case, the structure is a work of man. Unfortunately, moderators of modern education mostly do not understand this fact, and therefore sometimes put forward proposals that are not practically possible to implement.

A necessary prerequisite is the approach of the so-called fourth wave of scientific and technological progress, which bears the sixth technological stage in the form of new algorithms for human action, products, and services. At the same time, the life structure of the planetary community is radically changing, since on the surface there is an "individualized society" (the term of Bauman), in which:

- 1) the person comes to the fore as the primary goal of the cultural and historical process;
- 2) private interest begins to prevail over the collective;
- 3) spiritual production puts aside highly automated industrial production;
- 4) the global economy is turning green, digital and changing the principle of dynamic equilibrium to the principle of constant disequilibrium, which puts it in a state of constant risk;
- 5) globalization "takes away" the space of the planetary world as a parameter for organizing the life of the average person and the national community;
- 6) the market for goods and services becomes a Global Market, some areas of religious teachings tend to create a World Religion, education becomes a Global Education; the generic life of ordinary people and peoples from national entities of the regional base becomes a Global Civil Society;
- 7) the structure of the modern world order becomes instead of a cellular network, which leads to partial annihilation of the social institutions of the state and public administration;
- 8) the quality of life of the world community is now defined by informatization as a factor of its fundamentalization. There is already a significant increase in methodological knowledge;
- 9) nation-states are gradually, but steadily, transformed into a World Power through the creation of continental and intercontinental structures (such as the Trans-Atlantic Community, the EU, the BRIC, the African Union, the North American Union), and inferior to the World Knowledge Society and others.

Such a trend was commented by W. Beck: "The modernization absorbed the structure of feudal society in the nineteenth century and gave birth to an industrial society. So today,

modernization engulfs an industrial society, and it is being replaced by another modernity" [2].

In order to understand the future, Zygmunt Bauman's substantiation of the fundamental fact that "an individualized society is the reality of the present-day" is productive. He points to three of its main features: "1) the loss of control over most critical social processes; 2) the growing uncertainty and progressive insecurity of the person in the face of uncontrolled change; 3) the desire of a person to refuse to achieve a promising goal in order to obtain immediate results, which ultimately leads to the disintegration of both social and individual life" [1]. Our generation is already living one day. So we have nothing to add to this.

It should be recalled that the education system, like any functional system, is a product of the self-unfolding of the base, and in the form of being – the external conditions of its generation and functioning. We will explain in detail what is the matter here.

The basis for the birth of a qualitatively new system of education is fundamental science, which captures a new segment of meaning and leads us to use a new kind of motion source for us – the energy of information in the fifth technological way, and the energy of networks, particles and ensembles of particles – in the sixth. Therefore, science adds new knowledge about the scientific picture of the world, artificial intelligence, genetics, nanotechnology, robotics, space to the field of education. This new knowledge should, logically, quickly emerge in information banks, and textbooks as a result of understanding the pedagogy of modern scientific achievements. Their intensive used by experts in practice is a significant factor in the quality of information system development. If, as a result of the professional knowledge does not change the behavior of the specialist, then such an education system obviously stalls.

Mastering the updated thesaurus of science is a means of self-expansion of modern spiritual production in general and education as a means of self-reproduction of the social whole in particular. In this era of industrialization, industrial production was the basis of this principle. Unfortunately, fundamental science is in search of a new paradigm. It means that for almost 60 years, or the life of two generations, it has not nourished the prospect of education. Approximately in the period of 2025-2030, we are bound to be covered by another wave of the scientific and technological revolution.

Furthermore, here, we see the first serious obstacle to the birth of the education system of the 21st century. In universities, there is no fundamental science, and as a consequence, the theory of education and pedagogy has not yet been developed. Educational programs, even at

universities, do not always reflect the semantics of the fifth age-old technological institution. Physics taught in modern school is far from what scientists are doing now. It means that to master the present requires fundamentally different mental structures, those inherent in the sixth technological unit. National academies of pedagogical sciences, designed to be tools of the theory of education. They used to theoretically and methodologically process and transform the acquired scientific knowledge into educational topics which did not work, but with the help of the theory of pedagogy to provide participants of the educational process with effective technological and educational methods this goal can be reached.

At the same time, educators are vainly relying only on the philosophy of education, which they mistakenly consider to be a combination of theory, worldview, and ideology. It is not true at all. Philosophy only presents ideas and decodes the meanings of the future, and the theory substantiates fundamentally other components of the development of qualitatively new technologies of mastering knowledge. It is not a fact that at a new stage in the evolutionary development of the planetary community, education will be based on classical forms of education and upbringing. Probably, classical pedagogy should give way to cognitive pedagogy, which, even today, has penetrated the economy. This process is evidenced by the awarding of the 2019 Nobel Prize to American scientists William Nordhaus and Paul Romero [4].

Another factor is that in education, every stage of the life cycle of the industrial education system has a new kind of knowledge that has determined the mainstream of the industrial education system. This kind of knowledge is methodological knowledge. It will distinguish the information education system from the education of the industrial period. That is why the factual paradigm must be urgently changed to the methodological paradigm of education.

A breakthrough in education should be ensured at the next stage of its life cycle by the discoveries in the natural sciences on the horizon of studying the microcosm as a whole. Priority is given to microbiology and cognitive science. In the coming years of the XXI century, up to thirty percent of all services in the fields of science, medicine, education, culture, and production will be directly targeted at humans.

The theory of education must understand the need for a new transition in the system of Global Education from the conveyor principle of organization and function to the principle of personalization by the organizers or managers of education. Also, the principle of individualization by the participants of educational-educational interaction should be initiated

with the prognosis of the rapid transition to "deserted" technologies of knowledge transfer from one generation to the next.

External conditions are crucial for shaping the social body of the information age education system. The bodies of public and private management of modern education should deliberately influence the creation of favorable external conditions, which is brought about by the "spirit of cognitive" in the economy and education.

It should be recalled that "Cognitio (Latin cognitio – cognition) is an interdisciplinary scientific area that integrates cognition theory, cognitive psychology, neurophysiology, cognitive linguistics, and artificial intelligence theory" [3]. It is time to form cognitive capital.

Today, there are a number of problems in promoting the ideal of education of the 21st century, since the synergistic trend in philosophy and science, having received in the previous years a significant impetus for development, during the first quarter of the 21st century did not lead to the development of a qualitatively new scientific picture of the world. Public opinion has been plagued by social chaos and ideals of the absurd. The Enlightenment has planetary development guidelines in general.

In practice, this means that post-postmodernism is entangled in itself. Therefore, it is not able to bring the consciousness of the planetary community to a new level of understanding of science, culture, and education. There are no other ideas and proposals for a new outlook, outlook, and scientific outlook for the 21st century.

We hope that modern philosophical thought will be boosted by practical successes in the development of artificial intelligence, genetics, nanotechnology, robotics, and outer space exploration. The existing industrial culture only plays an influential conservative role, stabilizing the acquired traditions of achieving the system of industrial development, including in the space of education.

The lack of adequate philosophical thought and a scientific worldview automatically block the emergence of promising ideology to direct practical efforts aimed at generating an information age education system. It is evidenced by the activities of new government bodies, guided by the ideologists of bureaucratized technocratism, and is in practice a layer of world corporatocracy.

Efforts of sectoral authorities to implement recently adopted laws of Ukraine "On Higher Education" (2014), "On Education" (2017), "On Professional Higher Education" (2019), National Concept of the New Ukrainian School (2017) aimed at prolonging the system action algorithm industrial education in a new civilization do not correspond to the spirit and content of a new era.

In practice, they lead to the "tightening of the nuts" through the continuous improvement of the administrative aspect of education. This process has become a kind of "organizational terrorism" since the forms and content of the curricula are endlessly improved. In the field of education, new and new requirements for licensing of educational programs are introduced, the conditions of licensing and accreditation of educational institutions are continually changing. They include certification of higher education, certification of teachers, endless primitive technological testing, retraining and professional development of qualifications for teachers, B2 level language, Scopus and Web of Science publications, internships at the teacher's own expense at a meager salary, directive regulation prices for educational services for educational institutions, etc. The primary campaign at domestic universities is a real test of endurance and lost leave for half of the teaching staff, especially the heads of faculties and departments, leading teachers, as well as technical staff.

At the same time, it is worth paying attention to the increasing "administrative pressure" of modern officials, ideologues, and managers of education and graduates of secondary education, whose admission to higher education has turned into "execution" in the full sense of the word. External Independent Assessment (EIA), and in other countries, the Uniform State Examination (USE), especially in the field of humanitarian knowledge, is an advanced instrument of individualized ideological control over young people's loyalty to the current political regime. In the higher education system, it is the EEI when entering some specialties of the magistracy. It can still be seen as a public-funded training selection tool, but not for contractors who choose management or arts.

In practice, this is a total war, declared by officials in different countries around the world to children, parents, teachers, and the existing education system. The reason for this behavior of domestic public administration is that the complexity and functionality of their structure do not correspond to the mass of the contingent constituting the national education system. Compensation is due to the natural manifestation of bursts of aggressive energy.

At the same time, based on the laws of the stage of birth of the system of technical education, we can already trace the birth of the first elements of the education system of the XXI century. Any social system changes and acquires integrity only in the process of interaction between subject and object. It is a starting position that is beyond doubt.

So let us begin with the main issue: is there any request for the new personality? It is about an ideal of the educated person in the measurement of the XX century. There is no such ideal. Moreover, the total obsession of modern education management with the aspiration at any cost "to save", modernize the system of industrial education with the absence of the ideal

model of information time education system of the graduate leads to misbalance of all integrity elements.

It turns out that at entry into an era of anthropocentrism, there are, as we know, very many suggestions about whom the identity of the XX century should be. Among them there are: "The new person", "The person of culture", "Superman", Intermen, "Cyborg", "The symphonic personality", "Godman", Postman, "The planetary person", "The planetary personality", "The noosphere personality", "The electronic personality", "The only subject", "Spiritually conceiving person" (*homo sapiens spiritualitus*), etc. However, the pedagogical community has not made a choice yet.

Is there a solution? There is one, but it is quite tricky. If information education does not follow from industrial time, then its purpose has to be designed on the basis of innovative complete-design consciousness of its organizers, because as the quicker we move a waterway of social evolution, the better we have to consider what stands behind separate pedagogical measures, to what consequences lead our professional educational activity.

We are supporters of the idea of the Planetary personality as it answers the leading trends of the planetary world evolution, which is based on mastering of senseogenesis by the human community because the change of civilizations is based on mastering of the Semantic Universe substrate. The perspective, in our opinion, ideas concerning this subject are stated in two works: "On a singularity threshold: planetary community in the Universe whirlpool" (2014) and "The personality in a whirlpool of the planetary world" (2019). Secondly, this idea is in line with a trend of modern planetary world globalization. The work of the Chinese researcher Zhen Jia on a subject: "Phenomenon of the planetary personality" (2019) is devoted to the specified problem. Thirdly, and the main, the Planetary personality is capable of generating and providing eternal life of qualitatively new organizational integrity – a planetary social organism. We wrote about it in works "The phantom of a planetary organism: prospection" (2015) and "Drift of the planetary world: a look in the third millennium" (2015).

On the other hand, as we know, in practice appears and exists a deficiency of teachers who have a modern scientific picture of the world and computer-aided teaching technologies in the particular field of knowledge, even in the system of higher education, not to mention a general education link. There is an urgent need for information culture formation of teachers while there is no scientific picture of the world, which stands in line with the realities of the XX century.

Society established intensive studying of the new phenomenon in education: scientists carry out dissertation researches, methodological principles and study guides are developed,

conferences and round tables are held. It is a reliable sign that teachers are delighted with the requirements of new education system creation, because mentors of pupils in far XVI-XVIII were also forced to study processes and mechanisms of industrial time, to formulate rules of industrial behavior for rural youth.

Solving in practice a burning issue of perspective teaching personnel deficiency in line with an industrial paradigm ideology, organizers of modern education try to reanimate at the new level institutes of tutors, facilitators, business coaches, training organizers, mentors, etc. Such a simple analogy will not work here.

It is possible that the psychologist-communicator, the trainer, the mentor-organizer, or the education Center operator, whose duties are to develop the individual development plan for the specific personality and ways of its mobile attraction to mobile society, will become the most demanded specialty in the nearest future.

As information civilization has to be based on essentially other substrates and have a specific structure, therefore education also has to be based on other principles, to become Global education, which is serving person activity in any corner of the planetary world in a variety of production processes. Fundamentalization will be a consequence of the developed spiritual production. It will follow the same pattern as it happened to industrialization.

The essence of education fundamentalization consists of the mastering of knowledge generalization process content, which is implemented by integration of universal and professional, theoretical and practical, rational and irrational knowledge components of the planetary social world and the Universe that was acquired based on the system approach. At the same time, education fundamentalization is implemented as "a trend of distribution and deepening of fundamental preparation with simultaneous volume reduction of the general and obligatory disciplines due to more severe material selection, the system contents analysis and allocation of main invariants".

The fast approach of the individualized society and private interest aggression involuntarily bear inside the qualitatively new principle of the training organization and education: from the state and private education management – the principle of education personalization and from the student or the pupil – the principle of individualization. Therefore this moment has to be a midstream, the leading ideologem of information time educational system development. It needs severe theoretical justification, as thanks to this principle, it is possible to disclose person natural inclinations to create a creative personality with a high level of individual freedom. A market, which comes to deep automation and robotization of industrial processes, is demanded in the near future. The ordinary person can

"survive" in such conditions only by the means of his/her own business organization. The talented one – by moving forward social development, by its participation in methodological and axiological processing of the accumulated knowledge, and by creating a new ontology of the planetary social world.

Advanced development of information society morphology in all spheres from the government to remote education centers creation and creation of entrants' personal offices, is proving in favor of a new education system formation. As for today –it is a fact.

Here the planetary tendency in the formation of ontologic integrity and distribution of the social world is fully revealed, which is the transition from cellular to network structure. In the global education space, this trend is not only spread but also materialized in the form of virtual mega universities and other remote forms of education.

Open education system is a solution for the future. "Open education – is education without the academic requirements to the admission, usually supposed online education. Access to the education offered at schools and universities expands "Open" education. The term "open" concerns the elimination of barriers, which can interfere with both opportunities and recognition of participation in the educational process, based on education. One of the aspects of education openness is the open educational resources development and deployment. For example, the institutional practice aimed at removing barriers to entry will not have the academic requirements of admission. Open University in Great Britain, Atabaski University, Thompson Rivers University, Open Learning in Canada are already referred to as such universities. Programs of distance and electronic learning, such as MOOC and Open Course Ware, fundamentally affected openness and access to education. Open educational institutions offer many free schemes of certification accredited by such organizations as UKAS in Great Britain and ANAB in the United States ..." [5].

Education managers need to pay attention to the experience of the Netherlands and Finland, concerning the organization of free education for pupils. For example, an experimental educational institution Agora College is situated in Roermond (Netherlands) and has been working since 2007. Here education organization is directed to increase the creative potential of pupils according to their offers, but it is not to be a controlled education through classical verbalization from teachers. Children create themselves under the supervision of trainers. There are no vacancies at this school.

Thus in practice, it leads to the fact that the educational process "oversteps" the bounds of classical state and private educational institutions, as the youth in large quantities tries to

receive certificates of informal virtual institutions, and employers, in turn, demand confirmation of such additional education when hiring.

The main direction of future education development has to become the formation of analytical competence in the plane of personal adoption and collective decisions as the problem of axiomatic mastering of factual material, is mostly going to be removed in the near future. The person must navigate independently in unusual life situations. For this purpose, it is essential to provide methodological knowledge and to create practical skills to approve creative decisions. Therefore, the qualitative property in the content of a new education system consists of its "transition" to the level of a methodological paradigm, which has to provide social production and cognitive capital accumulation.

Perspective forms and methods of education have already become obvious today because distance education, virtual universities, figurative material supply on IT-technology basis – is the reality of education at the beginning of an XXI century. The integration of a human brain in information networks stands in line and even direct recording of all-humanitarian and professional information to human brain structures. The last will occur due to breakthroughs in natural sciences and 5G technology, of which we, educators, know little.

Let us repeat a thought that the generation of an information time education system happens in the conditions of industrial time system self-disintegration. This circumstance obscures the emergence of a new education system's primary elements. We feel them more intuitively than allocate due to theoretical considerations. Therefore the problem of effective teaching and educational process management consists of perception and support based on "iconic turn" of education informatization and enrichment by new scientific knowledge, time implementation in practice of qualitatively new thesaurus, or radical updating of its semantic field. Rigid administration from the state management at this stage of information time education system life cycle is inadmissible because private interest in it did not ripen, trends of its self-expansion are just formed, and the social infrastructure already began to be restructured under the sixth technological way. Professional education here obviously lags, because the semantics of this new way are not adapted to its apparatus.

Excessive, scientifically unreasonable usage of IT-Technology in educational and extracurricular activities fascinates youth, and there is a need for psychological recovery. The reason is that the brain of the young human is not commensurable with volumes of information, which modern social networks contain. Besides, socially dangerous games appeared, for example, "A blue whale", "Run or die", "Disappear in 24 hours", and others,

which push youth to suicide and violation of the elementary safety rules. In modern society, such games became a social problem.

In the discourse above, the question is how the practice of domestic public education administration corresponds trends of modern times. Our answer is negative because the state management insists on the strengthening of the violent organization and the comprehensive control of education today. All directives of the last years are aimed at it. Even the Bologna system has elements of a violent character. The introduction of so-called dual education needs to be considered as the forced compromise today, rather than regularity of rational "improvement" of industrial education system and the principle of future education. Therefore, such practice of public administration is the main obstacle for the transition to the system of the information education constructed on subject-to-subject relations, towards which more private, than the state educational institutions are drawn.

The state of Ukraine has to be more flexible on the way to assist in the formation of information education. Once again, we will emphasize: education has to be more open because the conformist professor will not be able to develop and become the creative expert according to the requirements of not the fifth, but the sixth technological way. Therefore, for the education management system, remaining in the so-called fourth administrative way, which is organized on the management of deviations, is the day before yesterday's day.

The modern world is intensively coming into the sixth administrative way, that is, uses regulation of social processes by creating a number of external conditions, which cause foreseen reactions of the corresponding social system. In the sphere of modern education, the technology of an evaluation fits this purpose, to which internal management of education did not reach yet. Reflexive management remains terra incognita for our educators.

The main conclusions listed above are as follows : fight between new and old brings to the surface qualitatively new planetary community lifestyle – industrial society concedes to the individualized society, private interest gets considerable advantage over collective, the principle of dynamic balance concedes in economy to the principle of a constant disbalance, the principles of nature consumption and nature preservation concede to environmental management, in education, the conveyor principle concedes to the principle of personalization/individualization.

The change of principle of the education organization system from conveyor to personalization/individualization is the parameter of management in the conditions of planetary world interciviliation shift. The state has to understand this potential reserve of transition acceleration to a new algorithm of life and give more freedom for self-expansion

of separate elements of the national education system. Besides, if private institutions would be granted the right to define organizational rules of education more independently, then it could be possible to understand new algorithms of education management of the XXI century quicker. It can be provided by the implementation of specific diplomas for graduates of private education institutions.

At the same time, the idea of the Planetary personality has to be put on the basis of pedagogical activity and public education, as it is capable of creating and supporting the activity of a planetary social organism. Education of the XXI century, as known, has to advance the formation of spiritual production. It is a crucial moment. According to this, we have to form the personnel potential of a new education system, rather than endlessly recertifying or improving skills, organize retraining on the outdated principles of pedagogical activity.

The perspective is related here to "evaluation" technology that "does not contact with the process of receiving estimates but is considered much more widely – as the integrative category of evaluated-analytical activity in education quality management. As the evaluation in education covers a range of theoretical-methodological and practical works about systematic research of the values and merits of pupils, analyzed on the basis of uniform methodology, the association of quantitative and qualitative methods for tracking of character and dynamics of changes" [7].

A signal or a sign, that the self-organization stage of the open system of information time is coming to an end will become sharpening of need in a new scientific picture of the world. The appeal of philosophers to the idea of anthropocentrism, support of an ideologem of anthropocentrism and the requirements of formation of public morals will testify about the need and the opportunity to begin conscious regulation of the education system. Its duration defines the process of gene modification of a social education institute that is like an organ of metabolism of a planetary social organism, and then, the new type of social education system will only appear. So, the new type of civilization has to create a new type of education.

At the same time, the institutionalization of information civilization has only begun and is not exclusive that it will not follow the designed track. It is quite possible, as we could not provide an even larger quantity of directions of breaks in the future informatization horizon. For example, only the enforcement of 5G technology is capable of crossing out all our forecasts as these practical arming of the planetary community by artificial intelligence. Therefore, it is not accidental that it is implemented into life in strict confidence and under the leadership of the top officials of Great Seven (G7).

At the same time, in our humble opinion, the phenomenon of cardinally updated education will get the value of an ideologem of social development in a planetary social organism, just like it was once carried out by a religious ideologem. That is, the education system in the XXI century will receive the status of the parameter of social development management. It will mean that in practice, eventually, the sidereal time of fundamental science and education domination will come to an end. This is hugely encouraging for all educators.

References

1. Bauman, Zygmunt. The individualized society. – M.: Logos, 2005. – 390 pages.
2. Beck U. Society of risk. On the way to the second modern/U. Beck. – M.: Progress-Tradition, 2000. – 319 pages.
3. Cognitive science / https://uk.wikipedia.org/wiki/Когнитивная_наука
4. Nobel from economy was awarded for researches in influence of innovations on climate and economy // https://24tv.ua/ru/mezhdunarodnye_novosti_tag1121/
5. Open education // Mode of access: <https://ru.wikipedia.org/wiki/>
6. Toffler E. The third wave. – / From English A. Yvsa. – To.: Pub.house "Universe", 2000. – 480 pages.
7. Evaluation in education / Mode of access: <https://konspekta.net/lek-9071.html>