



Life Cycle Investigation of Educational Systems in the Context of Civilizational Development of the Planetary World

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Abstract

The article analyzes the dependence of the phenomenon of education on the type of civilization in space of which the life of the world community takes place. It is based on the interaction of social institutions of the market, science and education. It "proceeds" on the surface by the division of social labor, which generates a specific form of social system of education in dependence on the social division of labor in specific socio-economic conditions. To reproduce effectively its structural and functional parameters, the author suggests resorting to the paradigm of the «life cycle of educational systems in the context of a civilizational approach» based on the use of cognitive analysis. Its advantage is only that the concept «grasps» the phenomenon of education as a whole. This means that the phenomenon of civilization education is studied as a social institution and social system of the industrial society. To analyze the dynamics of knowledge change, two methodological conditions must be used: to apply the civilizational approach and the paradigm of the life cycle of social systems, since this phenomenon has a long-lasting dimension in space and time; the meaning of educational content at each stage of industrial civilization life is distinguished: natural knowledge prevailed at the stage of its origin; at the stage of growth - technical knowledge that corresponded to the essence of civilization itself; at the stage of maturity - scientific knowledge turned into ideologues of social development, which led to the emergence of technocracy and "drove" the planetary community into a dead end; at the stage of decline - technological knowledge led to the loss of mainstream guide of social development and began the catastrophic destruction of the social organism of the planet, which entails a change in the type of civilizational development; the solution is seen in the rise of the planetary community into the space of informational civilization, the transition of education to mastering methodological knowledge corresponds to it.

Keywords: Education; Industrial Civilization; Social Institute; Social System; Social Division of Labor; Life Cycle; Origin; Formation; Maturity; Decline

Introduction

Problem Statement in General and its Connection with Important Scientific or Practical Tasks

The current stage development of the world community, being in a prolonged social crisis from the end of the twentieth century, is characterized by a persistent search for an effective variant of the educational system, since it

depends on the planetary formation of personal and collective knowledge, capable of capturing its mechanisms and climbing the level of informational civilization. The problem arose due to a number of objective and subjective causes. The problem of retarding the development of fundamental science about the informational day in the context of each individual element of planetary integrity is among them in the first place, on the one hand, it means a complete absence or lack of fundamental knowledge about the mechanisms of

its creation (self-organization) and reproduction, both in the horizon of knowledge on personality and society, and certain areas of their interaction-ideology, economics, civil society building, culture, politics, management, ethics and aesthetics, and, on the other hand, strengthening the opposition to traditionalism in the field of national politics, afraid to leave the acquired shell, sometimes by the age of struggle, national independence and statehood, as well as a surge of inertia in the life of scientific, humanitarian, technical and especially military elites, which leads to an increase in the time of cultural lag and a temporary increase in resistance to innovative proposals of the future days.

Analysis of Recent Researches and Publications, which Initiated the Solution of the Given Problem, on which the Author Relies

This problem is constantly in the field of view of foreign and domestic scientists, sociologists, managers, philosophers of education and teachers. Especially the rich material for understanding the life cycle of educational systems has been accumulated by modern economics and management. The problem of the life cycle of the enterprise is given considerable attention by domestic and foreign scientists and practitioners, namely: I Adizes [1], O Arefieva [2], I Blank [3], T Volkova [4], N Rodionova [5], A Klimchuk [6]. It is for this area that scientists have developed and presented a fairly large number of life cycle models of organizations. Each researcher used various organizational characteristics based on life cycle model and considered a various number of development stages.

Highlighting Previously Unsolved Parts of the General Problem to which this Article is Devoted

Our working hypothesis is that in order to clarify the direction, content and form of self-development of informational age education, it is necessary to study the life cycle regularity of the social system in industrial education and predict future events in education on their basis.

Aim

The aim of the article is to set the content and types of educational systems on the basis of a civilizational approach. We can determine the life cycle in order to predict the algorithm of formation the educational system of the informational age in their functioning.

Main Material Presentation

Civilizations, as a relatively independent social integrity (are dynamic phenomena that move through various cycles, phases of genesis, growth, maturation, decline and decay)

[7]. There is no doubt that the educational system lives the same life together with the megastructure in the structure of civilization. It “comes” with this structure and “leaves” with it. Therefore, the cyclical nature of the maternal system affects the rhythm of subsidiary life as its organ in the structure of the whole.

In support of this thesis, we cite the opinion of O. Shpenhler, who proposed, as is well known, the idea of a plurality of equivalent cultures. He determines, based on the factor of culture, the general phases of cyclical development of each of them. The first phase is the phase of the culture emergence, occurs suddenly, when the transcendental pre-phenomenon first reveals itself in external manifestations; the second is related to the process of its growth - self-disclosure, self-development of culture, its spiritual content in all spheres of human life activity; the third phase determines the flowering of culture, i.e the state of maximum realization of its internal potentials; the fourth is due to the decline of culture, when the deep possibilities of culture are exhausted and it passes from organic to mechanistic forms. The phase of civilization begins - a period of expansion and militarism, reflection the advantages of the quantitative principle over the qualitative one, which dominates in culture. A sign of the transition to the phase of civilization is “massification”, which penetrates into all spheres of human life. Symbols of this process are large cities instead of settlements and small towns. The principle of “massification” finds its addition in the globalization of forms and ways of human existence of the economy, politics, technology, science, and so on. This, in turn, indicates the “civilization” dominance of the principle of space over the principle of time in human life. The fifth phase means physical destruction (antiquity) or ossification (China), when the creative potential of culture has been exhausted [8].

The theory of civilization, which is gradually maturing in modern theory of knowledge, also does not provide answers to these questions, although modern textbooks present the existence of at least three types of theories in this area. HP Klimova, for example, in the study “Education as a phenomenon of civilization”, notes that civilization is a social organization that has developed historically, and acts as a means and method of society development in the direct production and reproduction of social life and human himself, which has the hereditary translation of mankind social experience and the generation of universal material and spiritual values, created during the work of individuals to ensure the self-development of internal human forces [9]. From what we have just considered, it follows that civilization is a product of human interaction with each other, which meaningfully manifests itself as a type of human connection in the course of both material and spiritual production, and culture is the end product of this productive interaction.

Everything seems quite logical: at first new connections are formed between individuals, producers and peoples, and only then the artifacts of the culture of the new era appear. And only then the culture begins to infuse the planetary community of people by means of feedback and stabilizes civilization with its conservative potential, that is, keeps it in a mode of homeostasis.

Confirmation of the above we find in the work of S. Martyniuk "Genesis of informational civilization" [10]. But we cannot afford a long quotation of other work, although the five approaches to assessing the problem of defining civilization as a specific type of interaction between human and society would be of interest to the average reader. Therefore, it is quite logical and "more appropriate to determine the amount of connections between people that they form as a society in the process of their life activity and the type of these connections, which is reflected in the way they are implemented - as a civilization" [10]. Modern creation and self-reproduction of planetary community is based on qualitatively new types of relations between participants of the world cultural and historical process, in this case there is hegemony of informational interaction in the new society too-World knowledge society, born with the advent of informational civilization. "Interaction between civilizations based on the principle of self-determination can accelerate or slow down, enrich or impoverish development. In the course of interaction, each civilization perceives only those elements that best suit it and do not violate its own individuality" [7].

Therefore, it is quite natural that culture, as a product of previous stages of the planetary community development, just "determines the humanistic and valuable orientation of civilization" [9]. We believe that this should be a planetary personality, that is, the world community becomes a

Collective personality. In this regard, there are already some theoretical justifications [11].

To calculate the stages of the life cycle of educational systems, it is necessary to establish quantitative parameters of existing civilizations, which should reasonably limit the number of objects within which we can reproduce the content and structure of the subject so that it can be used as a methodological tool for predicting self-deployment system of education in the informational age.

At the same time, we must turn to such a classification of civilizations, which is inherent in all planetary humanity, that is, to refuse their territorial and national classifications. Therefore, we dwell on the selection of such stages or types of civilizational system of the planetary social world as: pre-civilization, agrarian, industrial (technocratic), informational, intellectual, cosmic [12].

It is time to move on to reproducing the content of educational systems that emerged in the previous stages of civilizational development of the planetary community. We need to do this in order to make sure that: firstly, the educational system is a man-made product, so it has matured over time; secondly, we need to work out tactics to study the problem field - it will be a study of the life cycle of the most mature educational system, or we will look for relevant fragments in all kinds of civilizational progress of the world community.

To do this, we turn to the work of K. Korsak, who gave a detailed description of the educational phenomenon in the discourse of pre-agrarian, agrarian, industrial and information societies in the journal «Ridna Shkola» («Native School») in 2002 [13]. It has 12 factors that are evaluated by the researcher in each type of society (Table 1).

Characteristics	Variants of societies			
	Pre-agrarian	Agrarian	Industrial	Informational
1. "Average" product of the training system	member of the tribe	slave or serf	worker or clerk	freelance professional
2. Dominant form of education (and upbringing)	family and flock	family and state	state	civil, socialized
3. The nature of studying	Natural	direct, individual	mass, standard	individual, non-standard
4. The basis of studying culture	Example	word and example	printed text and word	Numerical form of information
5. General characteristics of education: a) compulsory, b) initial *	Education (as a system) did not exist	very short 4 years, 6 years	lasted 7-9 years, 7-13 years	continuous, 12-14 years, > 20 years
6. Educational standards	Absent	local	International	International
7. The value of higher education	did not exist	insignificant	significant	ultimative

8. The role of education and science in the productive forces of the country	virtually absent	barely noticeable	moderate	Decisive
9. Primary methods	Natural	empiricism	scientific (division and analysis)	scientific (division and analysis)
10. Leaders among sciences **	materials science	mechanics, mathematics	physics and chemistry	biology and ecology
11. The basis of the ideas	Fantasies and myths	faith and religion	exact sciences	human and world sciences
12. Object of trust	Myths	belief in God	exact sciences	complex sciences

Table 1: Defining features of societies and the corresponding characteristics of science and educational systems (according to K. Korsak).

Notes: *Initial Education - all types of training and professional competence from human birth to the moment of entry into the labor market or beginning the duties of a new family member.

** The word "science" is used here in the international sense "Sciences" (non-subject, trustworthy knowledge, obtained as a result of experiments and measurements).

The given comparative table of society and education properties comparison with science can also be found in V. Ohneviuk's monograph «Education in value system of sustainable human development». Commenting on its factors, he notes: "there are at least eleven important factors that determine the essence of the era in which there is a life activity of the current generation and the value base of which will be determined by Homo educates» [14]. If we analyze the presented table with the parameters of educational and science system in the relevant time periods of the cultural and historical process, it becomes obvious that the educational system has gradually matured in the space of the respective civilizations.

In the days of industrial society, formed in the space of technogenic civilization, the educational system had finally matured, as evidenced by its parametric characteristics, and therefore it had entered a phase of sustainable operation. This means that to reproduce its life cycle we have to consider in detail this period, i.e., from about 1430 to 1955 [15-20].

Thus, now we can determine the main boundaries in subject field of the life cycle phenomenon study of the social educational system in the industrial age, as a number of its principles are proved, namely through: determining the immanent connection of the educational system with civilization, as a form of planetary community life, which passed three stages:

- agrarian, industrial and entered the information one;
- finding a comparative analysis of the twelve parameters formation of the educational system in the space of civilizational self-development of the planetary community in the treasury of domestic scientific thought;
- establishing the fact that the educational system had reached the greatest degree of maturity during the technocratic era and now it is possible to model the full

life cycle of the educational system on its basis;

- identifying a "white spot" in our analysis, since we have not yet established a technological relationship in the ratio of social division of labor and education as a kind of rational human activity, which should be one of its products, because it (the educational system) directly depends on the development of social division principle of labor (production) in which a person participates;
- formulating the working hypotheses about the education that has two types of existence in the structure of civilization: as a social institution, since it obeys the pulsation of the energy and information field of the maternal structure and as a social system that depends on human consciousness and gradually matured on the side of transformational society.

Conclusion

Thus, the subject of further research is the life cycle of educational systems and presented to us as a dual dynamic process that unfolds in time and space in accordance to the attributive properties of a certain stage evolution of the planetary world: in the structure of the social body of civilization the phenomenon manifests itself as a social institution, which determines the social division of labor and determines its content, and on the side of the social division of labor it manifests itself as a social system that is consciously designed by human for the needs of the day and based on the exchange of educational work with its other varieties. It (the educational system) moves through four stages of life, namely: birth, growth, maturity and decline.

References

1. Adizes IK (2018) Managing Corporate Lifecycles. Book Club, Family Leisure Club, pp: 496.

2. Arefieva OV (2015) Information Base of Economic Security Management of the Enterprise. Scientific Bulletin of the National Forestry University of Ukraine: A Collection of Scientific and Technical Works. RVV-NLTU, Lviv, Ukraine, 25(4).
3. Blank IO, Sytnyk HW, Andriiets VS (2017) Enterprise Financial Management. 2nd (Edn.), Kyiv National University of Trade and Economics, Ukraine, pp: 792.
4. Volkova N (2007) Pedagogy. Akademvydav, Ukraine, pp: 605.
5. Rodionova N (2020) Virtualization Problems of Human Existence in the Informational Public Space. M. E. Zhukovskiy National Aerospace University, Ukraine, 4: 23.
6. Klimchuk AA, Lagoda IA (2014) Project Management of Organizational Changes at the Transition Stage. Proceedings of the 5th International Scientific and Practical Conference of Students, Post-graduate Students and Young Scientists Current Issues in Management Theory and Practice, Ukraine, pp: 199-201.
7. Erasov BS (1990) Culture, Religion and Civilization in the East (Essays on General Theory). Moscow: Nauka, pp: 87-88.
8. Shpenhler O (1993) Zakat Yevropy/Author Introduction Article. In: Dubnov AP, (Ed.), Novosibirsk: VO, Science, Siberian Publishing Company pp: 592.
9. Klimova GP (1997) Education as a Phenomenon of Civilization. Extended Abstract of Doctor's Thesis, Ukraine, pp: 60.
10. Martyniuk SY (2002) Genesis of Informational Civilization: Monograph. Prosvita, Ukraine, pp: 192.
11. Bekh VP, Hrytsiak IA, Riabeka OH, Drahomanov MP (2015) Phantom of the Planetary Organism: A Look Into the Future: Monograph. National Pedagogical University, Ukraine, pp: 552.
12. Bekh VP, Bekh YV, Drahomanov MP (2014) On the Threshold of Singularity: A Planetary Community in the Vortex of the Universe: Monograph. National Pedagogical University, Ukraine, pp: 220.
13. Korsak K (2002) Education and Society are Guidelines for Development. Ridna Shkola, Ukraine, pp: 7.
14. Ohneviuk V (2003) Education in the System of Values of Sustainable Human Development. Znannia Ukraine, 448: 380-382.
15. Hrinin LE, Hrinin AL (2015) The Cyber Revolution and the Sixth Technological Way. Historical Psychology and Sociology of History, Ukraine, pp: 172-197.
16. Horbunova LS (2015) Philosophy of Transformative Education for Adults: University Strategies and Practices: A Monograph. Sumy State University, Ukraine, pp: 270.
17. Martynov R, Tkachenko L (2015) Technocratic Consciousness: Theoretical Research Strategies. Bulletin of Donbas State Pedagogical University. Series: Socio-Philosophical Problems of Human Development and Society. 3: 103-111.
18. Matseliukh NP, et al. (2016) Economic Theories in the System of Scientific Economic Knowledge 2nd (Edn.), Kyiv University, Ukraine, pp: 179.
19. Romankova LM (2016) Educational Imperative of the World Knowledge Society: Monograph. Vasyl Stefanyk Precarpathian National University, Ukraine, pp: 598.
20. Kharichkov SK (2015) Management of organizations and administration. Osvita, Ukraine, pp: 444.

