GENESIS OF THE EDUCATION SYSTEM IN THE CONTEXT OF THE WAVE THEORY OF E. TOFFLER

GÊNESE DO SISTEMA DE EDUCAÇÃO NO CONTEXTO DA TEORIA DA ONDA DE E. TOFFLER

GÉNESIS DEL SISTEMA EDUCATIVO EN EL CONTEXTO DE LA TEORÍA DE ONDAS DE E. TOFFLER

ABSTRACT: The purpose of the research is to determine the patterns of development of the system of Russian and foreign education in the context of scientific approaches to the typology of the state. Consider the features of the genesis of education in the wave theory of sociocultural development of E. Toffler. Methodology: in the process of research, methods of comparative analysis, cyclicity, intersectoral synthesis, theoretical and legal modeling, historical and legal reconstruction, as well as other methods of scientific knowledge were used. Education, as a product of the State and an instrument of State influence on the consciousness and behaviour of the population, is directly dependent on the peculiarities of the State structure and the objectives of which the State is guided in the process of organizational and managerial activity, the methods of interaction of the State with society, local social corporations and individual citizens/subjects.


RESUMO: O objetivo da pesquisa é determinar os padrões de desenvolvimento dos sistemas de educação russo e estrangeiro no contexto das abordagens científicas da tipologia do estado. Considere as características da gênese da educação na teoria de ondas do desenvolvimento sociocultural de E. Toffler. Metodologia: no processo de pesquisa foram utilizados métodos de análise comparativa, cíclicidade, síntese intersetorial, modelagem teórica e jurídica, reconstrução histórica e jurídica, além de outros métodos de conhecimento científico. A

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educação, como produto do Estado e instrumento de influência do Estado na consciência e no comportamento da população, depende diretamente das peculiaridades da estrutura do Estado e dos objetivos pelos quais o Estado se orienta no processo de atividade organizacional e gerencial, os métodos de interação do Estado com a sociedade, as corporações sociais locais e os cidadãos/sujeitos individuais.


RESUMEN: El propósito de la investigación es determinar los patrones de desarrollo de los sistemas educativos rusos y extranjeros en el contexto de los enfoques científicos de la tipología estatal. Considere las características de la génesis de la educación en la teoría ondulatoria del desarrollo sociocultural de E. Toffler. Metodología: en el proceso de investigación se utilizaron métodos de análisis comparativo, ciclicidad, síntesis intersectorial, modelación teórica y jurídica, reconstrucción histórica y jurídica, además de otros métodos del conocimiento científico. La educación, como producto del Estado e instrumento de la influencia del Estado sobre la conciencia y el comportamiento de la población, depende directamente de las peculiaridades de la estructura del Estado y de los objetivos por los que el Estado se guía en el proceso de la actividad organizativa y de gestión, los métodos de interacción del Estado con la sociedad, las corporaciones sociales locales y los ciudadanos/sujetos individuales.


Introduction

The State and society are interrelated phenomena that develop under the influence of both objective and subjective factors. The transition of humanity to the state form of social organization and the exercise of public power has necessitated the need for special training of people participating in public life as managers and executors of managerial decisions. And for both, activities in the state system were a type of the professional employment assuming existence of certain professional competences which could be received or in the course of accumulation of own life experience, or by means of the specialized preparation which is carried out by carriers of the required knowledge, abilities and skills. Such a system was later called education.

Having emerged as a consequence of a person's objective desire to streamline and improve social relations, the education system is one of the most important characteristics of a human being as a reasonable being (homo sapiens), which is capable not only of "scanning" information about the surrounding world, accumulating and transmitting it in the process of its own life, but also of purposefully obtaining, systematizing and practical introduction of new
knowledge from almost all fields of nature, culture and technology, regardless of whether they have an applied effect on its vital activity or not.

As an integral part of the educational machinery of the State, the system develops and transforms into an inextricable link with the development and transformation of the State.

Methods

Traditionally, researchers, analyzing state history, distinguish in it early (ancient), middle, new and recent stages, designated as "times". This approach in terms of legal science does not seem constructive. While the scale of the measurement of social activity intervals is subjective and exists as a "time meter," only for those who are and act as a contemporary within the corresponding time period. Social time has only one state - modern. In the past, there is no more time, in the future there is no time as well. Contemporaries can describe and evaluate the past, but they cannot change it, which, of course, does not exclude changes in descriptions of retrospective periods, depending on the target settings which guide the direct descriptors (chroniclers, historians), and those who form the corresponding "order for an objective true historical vision. "Accordingly, anticipation of the future is based on two main approaches: "growing and continuing the past in the future", "alternative to the past future."

Representatives of the first approach consider the preservation of the socio-cultural tradition an objective good in the framework of which past, present and future generations live in accordance with the rules established within the framework of a single "historical track", which sets the direction of linear national history, which is common for all developing in the direction indicated by the vector "beginning - infinity."

Supporters of the "alternative future" proceed from the objective as independent of the subjective perception and assessment of the limb of any form of life, whether it is a separate person, state, human civilization as a whole. All of us once enter life through the transition portal "birth" and leave it through the portal called "death." Moreover, the portal is one space-time point, a kind of door opening in both directions, overcoming which at birth means a transition from the state of "nothing" to "something," and at the time of death - a return to the state of "nothing". Just as there are no people who can live forever, there are no eternal states and no alternative statesmen, an alternative future implies that, inevitably, someday, the socio-political life of any state ends, giving way to new life forms. Just as the death of a person involves the death (completion of the functioning) of its internal bodies, the death of the state entails the termination of the life of structures from which the state mechanism and state...
apparatus is formed. Accordingly, the applied significance of education aimed at preparing and adapting people to the rules and techniques of the state system, which has gone into socio-historical oblivion, is lost. At the same time, the problem of educational activities is also being updated for those who are called upon to lead and participate in the operation of the new system. The understanding of education in terms of its object, subject, goals, objectives, methods and technologies is changing and does not depend on calendar (ancient, middle, new, modern), but rather from socio-historical time, life activity within the framework of which is determined not so much by the date and place of birth of a single person acting as a consequence either as a subject of provision, or as an object of obtaining educational services, but by the educational legal personality formed within the framework of national culture and being broadcast on its representatives, both individual and corporate.

Education, as a cultural phenomenon, is inextricably linked to it and forms part of the national cultural context. The typologization of culture is simultaneously the typologization of all its structural and functional elements, including the educational system.

It seems appropriate to consider the genesis of the education system using integrated cyclical methods, comparative historical and comparative cultural analysis, taking as a basis the theoretical concept of wave development of the culture of E. Toffler, providing an opportunity to move away from stereotypes of linear-historical social development and to present an original and at the same time logical position in which scientific knowledge from various fields of research, are combined into a holistic semantic structure, the provisions and conclusions of which have both theoretical and practical significance.

Results and discussions

Consideration of the genesis of the education system should begin with the formation of an idea of the phenomenon of "genesis" itself. In its most general understanding, genesis is the origin, the emergence of the birth (from the Greek - Γένεσις, Γένεση). In modern legal science, the word genesis is used to characterize the initial dynamics of the state of the studied phenomenon from the moment the prerequisites for its occurrence appear up to the completed conceptual design (ROMASHOV; SALNIKOV, 2020).

The genesis of education is the process of formation of the educational system as a complex structure, which includes as structural and functional components the object... subject composition, normative, organizational, instrumental bases, substantive content.
The object of educational activity is public relations in the field of organization and implementation of educational activities. The object defines the most general goal-setting determining direction of the vector of educational activity. Understanding the subject of education includes two dynamic states: primary and continuous. Primary education is guided by an object in which social relations are aimed at the socialization of the "young generation" and its preparation for entry into "adult life". Continuing education proceeds from the infinity of both the process of learning itself and the application of competencies obtained during educational activities in the process of striving for the presented and desired, but not achievable ideal of personal and general perfection. Paraphrasing Socrates's phrase: "I know that I know nothing," Albert Einstein formulated a thesis defining the essence of continuing education: "The more I learn, the more I realize how much I don't know".

The object of continuous education is the phenomena of nature, culture and technology. At the same time, in modern conditions, the differentiation of the object component, which defines the vector of educational activity in specialized educational institutions, is replaced by a pluralistic model of the object of education in the framework of which different directions of educational activity in terms of content are combined and logically interconnected. In particular, modern European studies represent a complex interdisciplinary scientific and educational direction for the study of Europe simultaneously as a geopolitical space (region), cultural phenomenon, social, legal and economic communication etc. (DINAN, 1999; SUSHKOVA, 2014, p. 26; STEPHANOU, 1997, p. 171–185).

The subject composition of education is formed from subjects engaged in teaching activities and trained subjects.

In primary education, the training subject acts as a "medium of true knowledge" that the trainee does not have. Education is the process of the teacher's transfer of knowledge to the student, the latter's assimilation of the information received and its reciprocal reproduction to the teacher as part of the exercise of the control function. The axiom with this approach is the installation in accordance with which, teachers teach students and the reverse process is basically impossible.

In the process of continuing education, the differentiation of teachers and students loses clear boundaries separating one group of educational actors from another. The educational process is bilateral in nature and implies that in the framework of educational relations, education takes on a reciprocal (corresponding) character and has a transformative effect equally on teachers and students.
The normative element of the education system is formed by normative and law enforcement acts regulating the process of educational activity and, together, forming an intersectoral array of "educational law."

The organizational foundations of the educational system are educational organizations and institutions with competence in the field of educational and scientific activities.

The instrumental foundations of education form subjective competencies through which educational services are provided and the final (primary) or intermediate (continuing) educational product is obtained - educational competencies.

The substantive content of the educational system in the complex forms regulatory and protective relations within the framework of which the corresponding rights and obligations of subjects of educational activity are realized, as well as subjective responsibility for abuses and harmful acts committed in this area is determined and carried out.

In the process of genesis, not so much the listed and briefly characterized elements of the education system change as their essential content.

In Soviet humanitarian science, of course, he supplemented the formational approach to the typology of the state and related state culture. The idea of a socio-economic formation was based on the relationship between productive forces and production relations. According to the authors of the information concept, the emergence of state culture is due to the emergence of a social institution of private property and the class structuring of society determined by it. The process of social development is a consistent change of socio-economic formations (slave-owning, feudal, bourgeois, socialist). The replacement of the "old" formation with the "new" formation is due to antagonistic class contradictions between exploiters and exploiters, who receive their permission in the framework of an inter-class conflict that acts as a "driver of social progress. In the conditions of the allocated formations, education is considered as one of the means of class domination. The right to education is the privilege of the dominant class as the bearer of a "class culture". Oppressed classes are either not considered as people in principle (slaves are "living property, talking tools"), or act as a "common people", whose social purpose is to ensure the safe and comfortable life of representatives of the elitist sectors of the state and society. In this sense, the education of "ordinary" people is either a manifestation of a kind of altruism on the part of the "gentlemen", influenced by the ideas of "public education", or is purely utilitarian in nature and is mainly associated with vocational training, which is a necessary condition for performing functions to serve the interests of the dominant group.

The transition to universal equal education is the result of a socialist revolution that destroys exploitative classes, abolishing private property and class inequality. In the Socialist
State, the right to education takes on a popular character and is exercised at the expense of the State.

The planned nature of the socialist economy involves forecasting in almost all areas of the "national economy", including the organization and implementation of educational activities. At the same time, the creation and functioning of educational institutions, as well as the employment of graduates of secondary special and higher educational institutions, are resolved at a centralized state level. The socialist educational system was characterized by a system of distribution of trained specialists who were obliged to "work out" the budget funds spent on their training to the state.

The consequence of the destruction at the end of the 20th century of the system of the socialist state and law was a change in conceptual approaches to understanding the axiological, epistemological and methodological foundations of the organization of the educational system, as well as the need to make large-scale changes in the formal and technical parameters of educational activity. A logical question arose - in accordance with what theoretical concept education should be considered, based on what conceptual provisions to build promising models for the training of persons who acquire certain professional competencies, as well as personnel for teaching and research activities.

According to the authors, the method of cyclicity of socio-cultural development presented in E. Toffler's "wave theory" should be chosen as the methodological basis for understanding education (TOFFLER, 1981).

The human world, in the view of E. Toffler, is a phenomenon that exists in the dynamics of continuous changes, which are wave-like in nature and have an impact on public relations, similar to the one that ocean waves have on the coastline. According to the researcher, human history is an evolutionary process in which three cultural waves coexist and compete: land culture (agriculture), industry culture (industrial economy), information culture (digital economy). Each wave carries its own way of public organization and management, which is reflected in the peculiarities of the formation and functioning of the corresponding educational systems.

The first wave within which the "culture of the earth" develops is the oldest and longest in the history of human civilization. The big traditional patriarchal family uniting 4-5 generations living together and representing a uniform family and cultural context in which education is a part of the family relations and represents transfer of the vital knowledge, abilities, skills from the senior generation to younger is characteristic of this wave. At the same time, only those competencies that are owned by representatives of the older generation and
which are of purely utilitarian applied importance are transferred. Given the long-standing persistence of the traditional way of social organization and social activity, such a model of education appears to be sufficiently effective to allow it to persist for centuries.

The wave of industrial culture is due to the industrial revolution, as a result of which the traditional way of life is changing technologically. New technologies arise not because of old ones, but rather instead of them. Educational activity in an industrial wave is a technology for transferring and obtaining professional competencies in a certain area of "social production". At the same time, training starts to be divided into theoretical and practical. In addition to the training of specialists with purely applied professional competencies, the educational system begins to train personnel for teaching activities, which makes it possible to involve people who do not have practical skills and skills in the field where the teaching process is carried out. In addition, in the education system, the research component is distinguished, related to the acquisition, systematization and subsequent practical introduction of innovative and innovative knowledge. There are scientific and educational centers - universities, academies, which are a kind of industrial facilities that produce and distribute an educational product and are guided in their activities by special regulatory requirements - educational standards. Increasing social mobility leads to the emergence of such a phenomenon as educational migration, and this, in turn, entails an expansion of university (academic) freedom, which goes beyond purely educational activities and becomes one of the most important social rights (BAKSHTANOVSKY; SOGOMONOV, 2008, p. 41-154).

The wave of the culture of industrial industry is replaced by a wave that carries an information (digital) culture. National society, organized in accordance with state-legal institutions based on a differentiated perception of the world, represented by the scheme of the monistic dichotomy "alien", is gradually giving way to a pluralistic international order of social organization, within the framework of which the state ceases to be the sacred Homeland (Fatherland), becoming a completely rational phenomenon - a place of residence and life, the change of which is equally ordinary and normal; as ordinary and normal as such formative changes are for modern man, as a move from one settlement to another, a change of place of work, professions, family status etc. National language, law, currency, sovereignty certainly do not dissolve in the globalization flow, but largely lose their priority role in relation to private legal actors (citizens and corporations). In the prevailing conditions, education ceases to be a repeater, the main function of which is to transfer "true" knowledge from teacher to student. In a pluralistic multicultural world, the very concept of a single "true" knowledge is eroded,
excluding the possibility of combining semantic constructions that do not coincide in semantic content and are collisional in relation to each other.

The emergence of computers and computer technologies leads to the formation of a supranational Internet space that provides educational opportunities that are qualitatively different from previous wave cycles and, together, the emergence of equally new problems and related challenges and threats.

The wide dissemination in modern conditions of innovative educational methods, primarily associated with the introduction of various remote forms of educational activity, entails an unprecedented expansion in the provision and receipt of educational services, it brings education to a real international level, and it contributes to the intensification of educational and scientific mobility. Modern distance education involves the unification within the framework of a special educational structure of three constituent elements of educational communication: teachers - students - educational content. At the same time, according to T. Anderson, modern educational relations should be evaluated using the equivalent interaction theorem, "according to which" deep and meaningful formal learning is supported as long as at least one of the three forms of interaction (student - teacher; student - student; student - content) is at a high level. The other two forms may be minimal or even absent without diminishing the quality of education (ANDERSON, 2003, p. 1-14). Based on the proposed theorem, the following models of effective distance education can be formed and introduced into educational practice:

- courses with detailed, expensive digital educational content (hereinafter referred to as DEC) without interpersonal online interaction. The conditions for using this model are both the availability of significant material and financial resources related to the creation and initial promotion of the DEC, and the large group of trainees who are consumers of the offered educational product and determine its final profitability;

- courses with basic, inexpensive DEC, but intensive online interaction of students and teachers. The conditions for using this model are small groups of students trained, which provides the possibility of direct contact of each of them with a teacher capable of consulting and correcting the educational process, as well as the availability of resources for educating teachers and creating an infrastructure for inter-object online interaction;

- courses with basic, inexpensive DEC, but intensive inter-subject online interaction of students among themselves. The conditions of use are: a small group of trainees with approximately equal educational potentials and motivations, which allows you to use the
principle of "educational complementarity", the availability of resources to create a system of inter-object online interaction, as well as motivation of students;

- courses with detailed DEC and intensive online interaction of students with teachers and (or) among themselves. Conditions of use - a small number of students; availability of resources for content creation, formation of online interaction infrastructure and its maintenance (KOCHERGIN; ZHERNOV, 2019 p. 17; RADFORD, 2011; ROSAMOND, 2000; HILTZ, 1995).

Within the framework of the "third wave", the educational process is intensifying, complicating and specifying. The crowding out of commodity production by the production of services actualizes the communicative component of educational activity, in which training in the rules and techniques of inter-subject communication acquires, if not priority over narrow professional competencies, then at least equal in comparison with them. It should be agreed with the position in the framework of which it is stated that only with a sufficiently high level of information culture and communicative abilities, modern graduates of universities will be able to adapt to constantly changing conditions and will be able to effectively design and implement their career strategy (GROMOVA; BERKUTOVA; GORSHKOVA, 2019, p. 7).

While offering new opportunities, the educational system emerging from the "third wave" also presents several challenges that pose significant challenges to national education in the "industrial era". These problems are primarily related to the outflow from countries with lower levels of economic development and social security of the most talented teachers and students, which contributes to the deepening of contradictions between the "developed" and "developing" political, legal and economic systems and, as a result, not to reduce, but to increase the degree of international tension. In particular, according to opinion polls, more than 50% of young Russians aged 18 to 24 express a desire to leave the country to the more socially and economically developed countries of Western Europe and the USA (LEVADA CENTER, 2019). In conditions where the state loses the properties of the "sacred homeland" and is perceived as an ordinary place of stay, the attitude towards it becomes purely pragmatic and rational.

A modern person who perceives article 2 of the Constitution of Russia determining that the main value in the modern Russian state is "a man, his rights and freedoms", reconfigures the system of his own worldview, gradually becoming accustomed to his own self-worth and considering the state as not only an equal, but also an equivalent subject. In the current situation, the state educational system prepares not just a professional specialist, but a free citizen with a sense of self-esteem, respecting a person in himself and demanding respect for himself. In this
sense, an educated person is primarily a free person who is aware of his own demand and significance, regardless of citizenship and social status. It is certainly more difficult for a state official to communicate with such a citizen than with a disenfranchised and therefore obedient subject. However, the "third wave", which carries an international digital culture, dictates its conditions, the rejection of which at the local state level does not mean stopping cultural development as such, but leaves the "retro state" on the margins of the inexorable social progress in its objectivity.

Conclusions

The genesis of the education system is the process of emergence and completed institutional formation of the educational system as an integrated structure, which includes, as structural and functional components, the subject structure, normative, organizational, instrumental bases and substantive content.

Modern education includes two dynamic states: primary and continuous. Primary education is guided by an object in which social relations are aimed at the socialization of the "young generation" and its preparation for entry into "adult life". Continuing education proceeds from the infinity of both the process of learning itself and the application of competencies obtained during educational activities in the process of striving for the presented and desired, but not achievable ideal of personal and general perfection.

In the process of continuing education, the differentiation of teachers and students loses clear boundaries separating one group of educational actors from another. The educational process is bilateral in nature and implies that in the framework of educational relations, education takes on a reciprocal (corresponding) character and has a transformative effect equally on teachers and students.

As a methodological basis for understanding and structuring education, it is advisable to consider the method of cyclicity of socio-cultural development presented in the "wave theory" of E. Toffler. According to the researcher, human history is an evolutionary process in which three cultural waves coexist and compete: land culture (agriculture), industry culture (industrial economy) and information culture (digital economy). Each wave carries its own way of public organization and management, which is reflected in the peculiarities of the formation and functioning of the corresponding educational systems.

In modern conditions, the educational system is undergoing a transformation, primarily associated with the introduction of various remote forms of educational activity, which entails
an unprecedented expansion in the provision and receipt of educational services, brings education to a real international level and contributes to the activation of educational and scientific mobility.

While offering new opportunities, the educational system emerging from the "third wave" also presents a number of challenges that pose significant challenges to national education in the "industrial era." These problems are primarily related to the outflow from countries with lower levels of economic development and social security of the most talented teachers and students, which contributes to the deepening of contradictions between the "developed" and "developing" political, legal and economic systems and, as a result, not to reduce, but to increase the degree of international tension.

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