

World and Domestic Trends in The Development of The Education System: Systemic Challenges

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Summary

The article identifies the challenges of the socio-economic development of the region, manifested in the implementation of large investment projects of the country, the needs of the industrial complex in highly qualified personnel; the formation of the innovative potential of both the subjects of the education system and the system itself and, as a result, - innovative abilities of the inhabitants of the region; launching mechanisms for the formation of human and social capital, which is the basis of the economic leadership of the territory; implementation of scientific and educational and innovative potential of educational organizations.

Key words:

communication technologies, professional competence, higher education, teaching technology

1. Introduction

In the context of the modernization of the education system, not only high requirements are imposed on professional knowledge, skills and abilities, but also on the personal qualities of a specialist. A modern school needs a teacher who has such qualities as creativity, mobility, responsibility, creativity, as well as the ability to plan their own activities, analyze, identify problems, independently make decisions in various situations, having a high level of general communication skills. In order to form these qualities of future and working teachers, it is necessary to create conditions and develop mechanisms to acquire and demonstrate these qualities and skills. One of these mechanisms, in our opinion, is the regional space of lifelong education. In order to determine the essence of the concept of "regional the space of continuous education", it is necessary at least to reveal the content of the concept's "space" and "continuous education". Analysis of philosophical and psychological-pedagogical literature allows us to assert

that there is no single interpretation of the concepts of "space", "educational space" [1].

In philosophy, the category "space" is considered in unity with the category "time". So in a brief philosophical dictionary, these categories are associated with the manifestation of such qualities of matter as length and duration. The category "space" in philosophy was formed on the basis of observation and practical use of the position of objects and their relationship to each other, as well as their volume and extent. Initially, we can conditionally distinguish two main concepts of space. The first of them is based on the ideas of Democritus and in the most expanded form presented by I. Newton, within which they identified space with emptiness and considered it as a receptacle of actually existing material objects.

The second concept goes back to the ideas of Aristotle, who believed that space is simply a property of the bodies that are in it. These representations have something in common with the ideas of Plato, who understood by space the totality of all locations of real objects. Further development of ideas about space is associated with the development of his subjective interpretation. Subjective interpretation allows you to reveal the essence space through the value of absolute and objective coordinates, where various processes take place. Moreover, the coordinates are always set by the subject based on his theoretical, conceptual, programmatic ideas. Therefore, space can be seen as a result activity of the subject, its product.

2. Theoretical Consideration

In the article, the following research methods were used to solve the set tasks: theoretical (study and analysis of scientific and pedagogical, psychological and pedagogical, reference,

specialized literature, regulatory documentation on the topic of research, additional professional advanced training programs; analysis, comparison, classification of the information received and generalization); empirical (pedagogical experiment, observation, questionnaire survey, survey, conversation, testing); mathematical (statistical data processing).

System analysis of the development of the education system in Ukraine for the last 10 years confirms that an innovative breakthrough has been made in a number of system-forming areas, including optimization of the network of educational institutions, the creation of a state-public system education management and an independent system for assessing the quality of education, modernization of the educational and material base, etc. The innovative activity of educational institutions is reflected in promising development programs, which are based on a competence-based approach, innovative technologies and teaching aids. Over the past 10 years, innovative educational institutions have appeared and are actively developing, such as socio-cultural educational centers, "cluster" basic schools, schools of age, schools - resource centers [2].

The network interaction of basic schools with institutions of primary and secondary vocational education in the organization of specialized training aimed at the implementation of individual educational requests, interests and needs has been widely developed. A distance learning center and a network of methodological centers have been created. These structures are used to organize remote forms of continuous methodological and organizational support for the activities of teachers and managers.

Educators are developing digital educational resources. The social and professional communities of teachers and managers of the heads of vocational education institutions, etc. are actively developing [3].

Additional professional education includes professional retraining, advanced training, organization of methodological activities in educational institutions and self-education.

Today, the system of additional vocational education has begun to respond more quickly to changes in the labor market. Education content is mainly determined by customers, which can be both employers and individual citizens. Modular training programs with the use of Internet resources, which make it possible to form the readiness of teachers of the republic for innovative activities. Along with a positive assessment of the overall activity the educational system to solve the problems of the country's socio-economic development and the development of pedagogical potential, we have identified the following problems:

The structure of higher professional education does not correspond to European standards. In general, the transition to a two-level form of training has not been completed.

The necessary infrastructure has not been created in the system of additional vocational education, there is no uniform system of qualifications for all levels and forms of

vocational education and training that provides both horizontal and vertical mobility.

Based on the analysis of the situation, the main strategic goal of the development of education in Ukraine is highlighted: the creation and development of a competitive and socially oriented system of lifelong education, providing innovative development of the economy [4].

The education development strategy in Ukraine is based on recognition of education as a strategic resource for sustainable development - a country that provides a combination national-regional, interregional and international interests in solving complex problems of education. It is obvious that regionalization is becoming the initial factor in updating the content and organization of all levels of education. The functioning and development of the education system in the long term, in our opinion, will be determined by both external and internal conditions. Among the external conditions, the greatest value for education will have a transition to a knowledge-based economy, which will lead to increased demand for knowledge and competencies in the labor market and will require improving the quality of human capital through the formation of systems of continuing professional education [5].

A key internal condition affecting the development of education is the implementation of large investment projects in the field of education. In accordance with the tasks of school education, the main trend is determined development in the field of professional, including pedagogical, education: ensuring the availability of high-quality higher professional education to the population [3]. For the implementation of this task, it is planned to carry out the following main areas of activity:

institutionalization of new specialties "teacher-manager", "network professor", "assistant professor-tutor", "education manager" in order to form a navigation system for scientific and educational services;

transition to a two-level higher education (bachelor's and master's degree).

The next vector is to ensure universal access to educational resources of the global Internet, widespread introduction of distance learning programs, digital and electronic teaching aids of a new generation. To solve this problem, it is planned to implement the following areas of activity:

creation of a modern educational environment based on the use of integrated telecommunication systems for the effective organization of management of the vocational education system and quality improvement educational services; providing students, postgraduates, doctoral students and scientific and pedagogical personnel with access to the global Internet directly from work (educational) places; development and implementation of innovative educational and methodological complexes and digital educational resources;

development and implementation of modern methods of distance learning for students, graduate students, doctoral students and teachers using the Internet [6].

The third vector is formalized as the development of organizational, economic and regulatory mechanisms that contribute to the formation of scientific and pedagogical personnel with world-class qualifications, global worldview, bearing high social responsibility for the quality of educational results, flexibly managing the educational trajectories of citizens, their personal and career growth. Under this task, it is planned to implement the following areas of activity:

- creation of a system of high-quality network continuous education of scientific and pedagogical personnel in order to ensure its adequacy to new technologies and the requirements of the educational process;

- introduction of a system of measures to stimulate the retention of young teaching personnel in postgraduate and doctoral studies, create conditions for the growth of the professional level of scientific and pedagogical personnel through the system professional retraining, advanced training, internships in leading foreign organizations (educational, scientific, industrial).

- implementation of the modular principle of building educational higher professional education programs;

- development of infrastructure for continuous professional education (multilevel scientific and educational complexes, support service for professional development of personnel in production, etc.);

- transition of institutions of higher professional education to the implementation of targeted educational programs at the request of the consumer;

- development of the infrastructure of in-house training, creation of a network of corporate institutions and training companies on the basis of universities;

- formation of a navigation system for scientific, educational and consulting services;

- widespread introduction and use of electronic resources:

- distance learning, courses, trainings, consultations, etc

The key quality necessary for human capital (hereinafter we will call it human resources) to solve the problem of modernization is innovation. Such a resource needs to be identified, since in the region over the past twenty years a lot has been done in the field of innovation, but at the same time it needs to be formed, since the available resource does not fully satisfy the need for the development of educational practice. Speaking about an innovative human resource, we will consider it as a possible product of the education system [7]. The function of an innovative human resource is that it serves as a source of accumulation of the potential for innovation, being a manifestation of the progress of human abilities, ensures the presence of a subject capable, on the one hand, to develop their abilities, and on the other, to design the future and create it. It is also obvious what exactly the sphere of education can provide, by virtue of its purpose, the

formation of real and potential subjects of innovative development of society.

In order for an innovative human resource to be in the system education in sufficient quantity, it must be produced [8]. Recall that production in the economy is understood as the process of converting resources into finished products. Therefore, we will consider an innovative human resource through the prism of those human, personal and professional qualities (competencies) that act as a resource (capital) transformation of education as a social institution that not only regulates current social relations, but also creates the future.

It is important to answer the question: what opportunities does education have (in our case, we will consider the regional education system) for working with human resources, what methods of its formation are already developed, which ones have yet to be created? This is all the more relevant, since the quality of his (human resource) determines the development of competencies and subjectivity of the younger generation [9].

One of the principles underlying the modern education model is its openness to external demands. Therefore, the ability to carry out an order, a certain the program of socio-economic development of the region, through the design and implementation of the regional program for the development of the education system. It is well known that the introduction of innovations into the educational process of a general education school requires a teacher's theoretical, practical and personal readiness to implement it. Therefore, it is no coincidence that one of the directions is the development of teacher potential, because the quality of solving the strategic and tactical tasks set for the education system in many respects depends on the professional level of the teacher [10-12]. Therefore, the creation of conditions for the development of teacher potential, the involvement of the teacher in the processes of continuing education is an urgent task, both for educational organizations, and the municipal level of education management.

Potential in culture is understood as the totality of available means, opportunities in any area. The potential of any educational system, as a rule, is determined by its resources and the capabilities of their effective use. For example, at the level of an educational institution, the main types of resources are personnel, organizational, methodological, informational, material, financial, etc. The use of various types of resources is determined by the connections and relationships of the structural elements of the system.

In the recommendations for the development of basic educational programs, it is noted that when designing the basic educational program of basic general education, it is necessary to clearly represent "the prospects socio-economic development of the spheres of industrial and scientific production. The main elements of the educational system at any level are the subjects of the educational process.

Therefore, we will focus only on the development of teacher potential [13].

human resources of an educational institution, municipal education systems. A methodological basis for determining the essence of teacher potential and developing directions for its support for us is the normative structure of the activity, where the potential is understood as a structured resource of a certain capacity, and a resource, in turn, as various sources of the subject's possible action.

The resource approach focuses on the strategy of changes from the current state of the teacher to the formation of human capital in the educational industry in general and the educational institution in particular, namely, on improving the quality of professional activity, the formation of such professional and personal qualities as initiative and creativity, as well as the formation of self-design skills. Their presence seems to be systemically important in unlocking the potential of teachers who are focused on working in the face of changes. Therefore, we consider the teaching potential as a set of skills, knowledge, abilities, personal qualities of teachers.

It is also obvious that it is the education system that can ensure, by virtue of its purpose, the formation of real and potential subjects of development of both a particular institution and society as a whole. The national education initiative also it is noted that in an era of rapid technology change, we should talk about the formation of a fundamentally new system of lifelong education, which implies an increase in the dynamism of needs, individualization of demand and the possibilities of meeting it. Moreover, the key characteristic of such education becomes not only the transfer of knowledge and technology, but also the formation of creative and social competences, readiness for retraining.

On the basis of these ideas, the subjects of the education system have developed concepts of socio-economic development, including the section "Education" and programs for the development of educational organizations. Another of the priorities, the governor notes, is continuous education, which allows a person to grow professionally throughout his life. This principle is of particular importance in the education system of teachers, who are recognized to prepare the young generation of Krasnoyarsk residents for the implementation of projects and programs.

Conclusions

Based on the analysis of policy documents and scientific literature, systemic challenges have also been identified that reflect global and internal trends in the development of the education system:

- (1) The growing role of human capital produced by the education system as the main factor of economic development.
- (2) Evaluating the performance of the education system through cluster results.
- (3) The need for the successful development of the regional economy to increase the share of educational institutions using innovative approaches in their activities.
- (4) The focus of innovative activities of the education system on solving the problems of innovative development of the economy and social sphere.

Along with this, we have formalized a number of problems in the development education systems:

- (1) A number of educational initiatives are local in nature and practically does not apply to the entire education system.
- (2) The coverage of the country's residents with quality education necessary to ensure equal starting opportunities for career and personal growth continues to remain insufficient.
- (3) Lack of mechanisms for the dissemination of new approaches to implementation of innovative development programs and, as a result, the non-inclusion of a significant part of educational institutions in innovative processes.
- (4) Low dynamics of personnel renewal of the education system.

Sociological research data prove: if in Ukraine as a whole only 30% of graduates of pedagogical universities come to work in schools and after three years 1/6 of them remain.

The tendencies and problems indicated above determine the directions of the search for a strategy for the development of lifelong education. Therefore, the task is to develop the infrastructure of lifelong education by creating multilevel scientific and educational complexes, support services for the professional development of teachers, training of consultants, tutors.

Thus, based on the analysis of scientific works and policy documents, it can be concluded that in modern conditions the impact of science on all aspects of society is increasing and, in this regard, the main factors of socio-economic development are changing.

Scientific knowledge in the field of the formation of the innovative competence of subjects turns into an integral resource, which, along with natural resources, is capable of influencing the level of socio-economic development of regions. In the field of practical activities the leading is becoming an innovative process that ensures the

transformation of new knowledge into technological innovations. These circumstances actualize the need to develop theoretical and conceptual foundations for the formation of the teacher's innovative competence and their implementation in regional practice.

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