

Socio-Pedagogical conditions for the creation of a system of continuing professional education

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Abstract. In the article, the analysis of the modern socio-pedagogical situation from the point of view of determining the conditions and factors that directly and qualitatively affect the development of engineering-pedagogical vocational education today shows that the main directions and objectives of its updating and improvement are mentioned.

1 Introduction

To date, the analysis of the modern socio-pedagogical situation from the point of view of determining the conditions and factors that directly and characteristically affect the development of engineering and pedagogical vocational education shows that the main directions and objectives of its renewal and improvement are determined by the following leading directions of evolutionary development:

– the increasing importance and humanistic orientation of education in modern conditions, in turn, the need for its content and quality, the introduction of optimal forms and technologies of Education;

– the role and role of technology in the development of mankind, their importance in overcoming the crisis situations of techno-civilization and, ultimately, the origin of the need to change the ideology of technical, especially engineering education;

the emergence of the need for the formation of a certain type of socialization, which provides for the stabilization of processes and, ultimately, leads to the transformation of social requirements to a modern specialist.

The first principle is directly conditioned by its dynamism (enthusiasm) as a distinguishing feature of the development of modern society. The interaction of socio-cultural experience and information in the form of a severe flow, the constant updating and rapid change of technologies transforms the need for a person to constantly replenish his knowledge, to increase his level of knowledge, to constantly get acquainted with the news, ultimately this will follow him all his life. This situation is the so-called principle of "education for all life", which in turn caused a radical change in the role of education in the development of society and a separate personality. This new idea was reflected in the

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continuous education system against dependence on the discrete system of education that existed before it [1-3].

The fourth stage of the development of the concept of continuing education is complicated by the definition of *davriy*, or it can be introduced approximately in the early 1980s. At this stage, in private theoretical research, there was a need to clearly restructure the individual forms and methods of the educational process, develop some practical aspects of the implementation of continuous education. At this stage, the goal, which is intended to be achieved by many scientists, is to transform ideas and aspirations into a set of operational (practical) measures and recommendations that have been regulated. In this period, not only the pedagogical, social and psychological aspects of the problem have been intensively developed, but also the structural structure, functions, powers of the educational system, the goals and objectives of individual joints and elements, the ways of intersection have been developed (P.Lindsay, D. Norman, etc.).

The fifth modern stage is characterized by the desire to apply the idea of continuous education in a practical way, starting from 1980 year. The pursuit of the implementation of continuous education is considered as an attempt to reconstruct the individual joints of a simple educational system, to carry out large-scale reforms, which set itself the goal of creating a single system built on the principles of continuous education. A distinctive feature of this stage is that for the first time in general there is an opportunity to learn and perceive the practical experience of continuous education. At this stage, research is increasingly complex, integrative and science-oriented, as well as striving to concentrate the intellectual potential of many research centers [4-6].

Topics of work of foreign scientists specific to this stage: B.F.Skinner, A.Blum, J.Gilbert, J.Fernandez-Balvoa, S.Merriam, S.Wilson, R.M.Gagne, D.E.Berlen, S.Jones, P.Black continuous professional education in the post-industrial society; educational programs of continuous professional education; continuous professional education and higher education; problems of educational policy; education for the new millennium; adult education. According to the above-mentioned scientists, today the term "continuous education" "reflects" not only the reality of its confirmation in life, but also the improvement of its social efficiency by changing the practice of education to the positive side, that is, its adaptation to the logic of human development and human interests at different stages of life activity as much as possible"[7,8].

2 Methods

At the present time, the principles that characterize the development of human civilization and stipulate the need to change the paradigm of education, as well as the development of the entire educational system, all its special areas and specialties, in particular, the improvement of engineering and pedagogical vocational education, are necessary. These principles require the following:

- ensuring continuity in the personal and professional development of all levels of the educational system – structural-organizational, valuable-purposeful, meaningful-essence, activity-process, technological, pedagogical and educational recipients;
- formation of an inalienable link between the goals of humanism and technological worldview in the minds of educators and educators;
- training of specialists capable of rapid adaptation to a wide range of personal and professional competences, as well as to the system of socio-professional relations.

In the current socio-pedagogical conditions, the methodological, axiological, ontological and technological bases corresponding to the new, promising social needs are formed from the point of view of the development of engineering-pedagogical vocational education.

There are many points of view regarding the most probable or optimal structure of a continuous vocational education system. such appeared many variants of territorial and sectoral systems, the variety of which can be divided into three types:

- organizational and functional structure of continuous professional education;
- systematic continuous professional content;
- self-developing system.

Advocates of the organizational and functional structure of continuous professional education B.S. Gershonsky, V.G.Osipov, A.A.Verbisky, V.A.Yurisov, H.H.Nechaev, V.G.Onushkin and others have come up with several models of continuing education based on existing theoretical developments.

According to the author, If we consider the entire structural structure of the continuous education system as a concentric circle, it is necessary to place formal (formal) education in its very center; if the next circle directly expresses informal education, and finally the circle divided by the outer two reflects informal education and independent education. The most important element in this context is formal education. It represents basic primary education. This is an education that is obtained by a person before the beginning of professional education [9-12].

In general, continuous education is considered by these authors as a whole system with a certain structural structure. To him, the integration of the properties of a single Whole gives, for example, the consistency of all joints in education. The structural structure of the model of continuing education is presented in Figure 1.

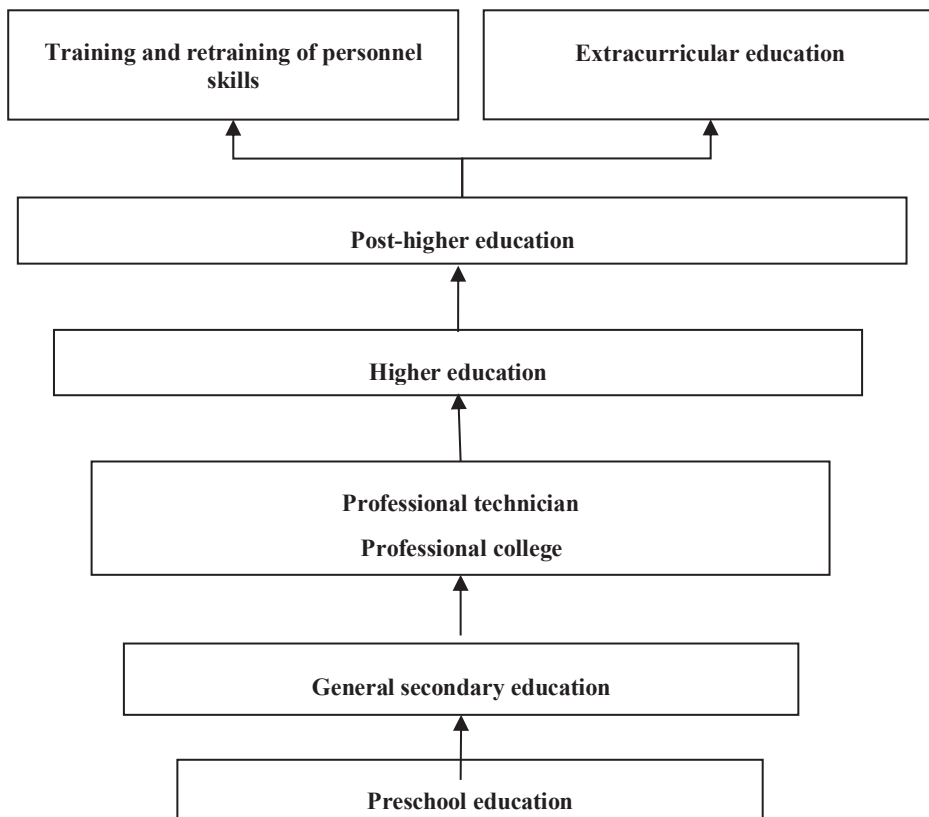


Fig. 1. Structure of the system of continuing education

3 Results and discussion

In our opinion, continuing education actually consists of a new paradigm of the essence of educational development, which represents a rather radical (sharp) break from the old paradigm of education, which is usually called traditional. In other words, the concept of education, its purpose, essence, functions, principles and organizational structure will be revised. Continuing education is a new method of educational activity, the purpose of which is the development of the individual as a whole, the enrichment of his creative potential, the constant improvement of his powers and abilities.

Table 1 provides a comparative description of the validity and development of the principles of educational development in the traditional and continuous paradigm. In particular, he argues that the continuous system of education in dialectically negates the discrete system of education that had previously occurred traditionally.

The traditional system of Education deepens and determines the social gap between people. It is valued as a means of obtaining certain social benefits. Therefore, only a small number of people reach the higher levels of Education. The system of continuous education allows to cope with the social differences between people by developing the abilities of each person.

Table 1. Am of education in the traditional and continuous paradigm

Description of the principles of validity and development of Education	Traditional education system	System of continuous education
Interaction with material production	Ordered by production, separate from it	Growth rates, determines the description of development, integrates with it
Interaction with the social structure of society	Strengthens social status	Helps to overcome social differences
Goal orientation	Prepares a person for the fulfillment of certain tasks of the existing conditions	Prepares a person for social activities that are constantly changing
Content of Education	Absorbs a certain amount of ready-made knowledge in favor of	Helps to master knowledge for the purpose of a particular practical application
Method of teaching	Bibliographic-colloquial	Problematic-practical
Organization of Education	Individual team	Team-individually
The state of the content of forms and methods of Education	Stable	Quickly
The validity of the system	The peculiarity of the practice of pre-school, school and post-school joints; the peculiarity of general, professional and special education	Integration, consistency of all joints and forms of Education

The existing system of education is aimed at the performance of certain tasks that are clearly present in production and social conditions. And the new system of Education aims to prepare

for social activities in its own way. It increases a person's chances of adaptation in a rapidly changing world.

The traditional paradigm of education represents the content of teaching as the volume of Ready knowledge that is needed to be meticulously mastered for further application by learners. And from the point of view of the new paradigm, the content of education implies the acquisition of knowledge in a creative way and the practical application of them in addition to production. Having denied the assimilation of New ready-made knowledge, it is the direction to independently acquire the methodological knowledge necessary at that or that period of life.

In the second half of the XX century, not only the object of engineering activity changes (a separate technical device, instead of a machine, that is, a complex technical system becomes an object). Today, within its framework, unconventional technological issues that require new engineering thinking have begun to be solved. Unconventional types of engineering activities and thinking are characteristic of:

- 1) relevance of engineering activities aspects to social, economic and environmental aspects. After all, it is necessary for an engineer to develop (design and prepare) not only technical products, that is, machines, machines, devices, but also other non-technical complex systems, the development of which should be addressed in such disciplines as engineering psychology, design, engineering Economics, Applied Ecology and sociology.
- 2) to be able to model and calculate not only the basic processes of the engineering object under design, but also to foresee the probable, especially negative consequences of its implementation. Such consequences are usually of three types: changes in the environment and nature, changes in the activities of infrastructures under the influence of new techniques and, finally, "anthropogen changes", that is, the impact of new techniques on a person: needs related to it, living conditions v.h. change of credits.
- 3) new engineering thinking, which implies a higher professional culture of the engineer, having a sufficiently developed reflex of his activity, using the imagination of modern methodology and applied Humanities in the process of work. The third problem: to engage in the ideas of natural scientific thought or more broadly – only the direction of technical culture.

The concept of assessing the results of education as part of continuous professional training is simple and is based on the assumption of everything, and in the process of preparation, its results should be reflected, that is, the student is trained and something is studied in this process. The purpose of assessing the level of professional training in the process of training is to examine the knowledge, skills and competences of the student and learn how to use it in his future professional activities, that is, it has led to the development of his or her preparation for professional activities.

In determining the content of vocational training, we bring together engineering personnel with several tamoils that hinder their professional development:

- to study the scientific-methodological basis of preparation of future teachers of vocational education for professional activity on the basis of pedagogical integration and the basic requirements for their preparation, advanced experience on diagnostics of the quality and effectiveness of professional training;
- at present, the ever-increasing demand for the teacher of vocational education of the society integrated pedagogical and technical knowledge in the process of vocational education;
- development and justification of theoretical foundations for the construction of a Dual system of professional training of specialists in vocational education in higher educational institutions and production enterprises;
- creation of a contextual model of the Dual system of vocational education in higher education institutions and production, determination of didactic conditions of

implementation of the Dual system of vocational education in the continuity of higher education and production;

- integrated education, which serves to increase the effectiveness of vocational and pedagogical training, and the implementation of the method of diagnosing its result, should take into account the need to eliminate such problems as the fact that the algorithm is not considered an important factor in resolving these conflicts.

The use of a systematic approach in Dual education allows not only to understand the various stages, but also to imagine the interdependence of these stages in the management and implementation of training, from the identification of training needs to the evaluation of the implementation of the program. The structure of the preparatory cycle, built according to this approach, is presented in Figure 2.

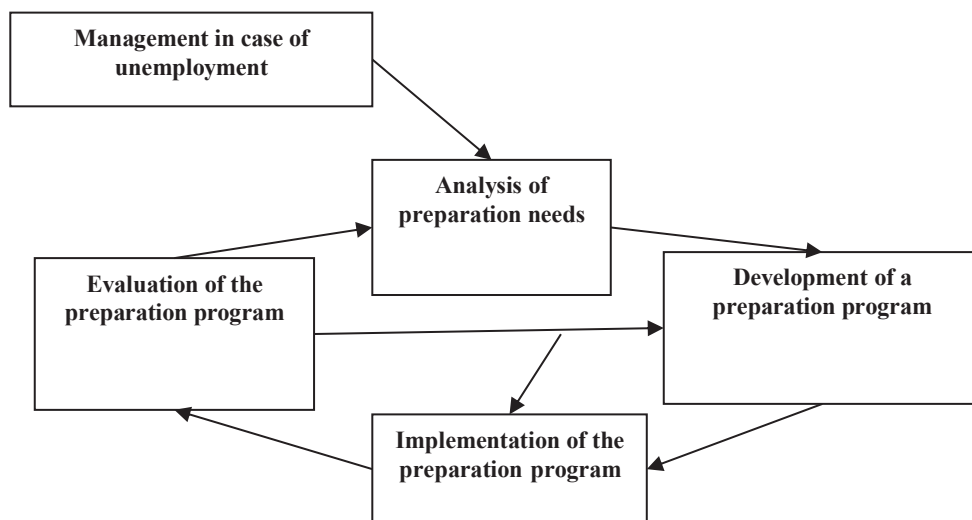


Fig. 2. Structure of the training system preparation cycle

Stages of the preparatory period in the Fig. 2 give an example in the schematic form. The learning process was divided into its components to provide a deeper understanding of the structure of these stages. It should be noted that training is not one of the stages of this preparatory period, but the implementation of training. In addition, it is important to identify the relationship between the identified preparedness needs of the evaluation and the results of the implementation of the developed program, as well as to pay attention to the manifestation in the improvement of the work of individual listeners and the organization as a whole.

The scheme of the life cycle of the group, which includes a description of each stage, is presented in Fig.3.

In the educational process, it is necessary to form an atmosphere of mutual trust and respect between the audience and the teacher. To do this, it is necessary to ask questions or participate in the study of subjects if teachers are afraid to be taken seriously or laugh; in the audience, fear, superstition and various thoughts arise because of the lack of knowledge; all listeners should be equally respected;

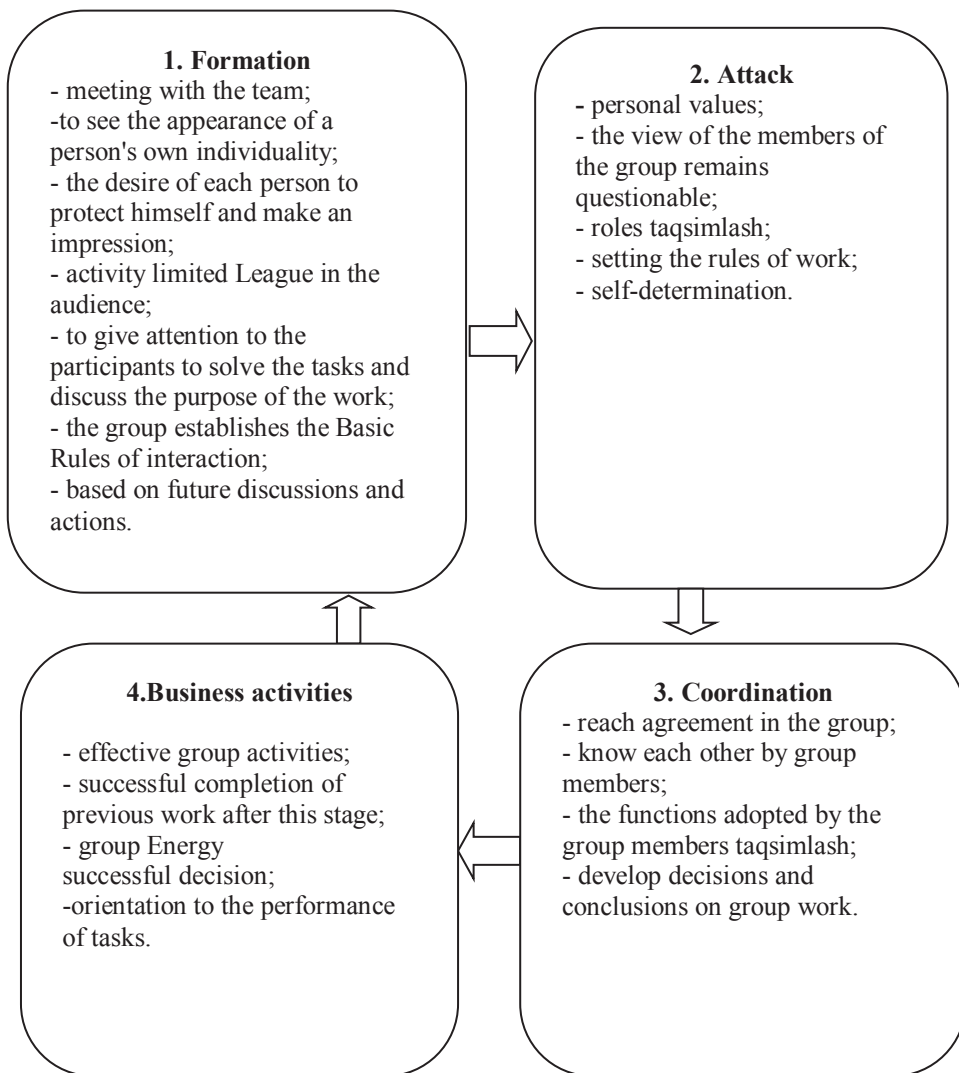


Fig. 3. Team group cycle in the organization of continuing education

- to ensure the high level of participation of the audience in the educational process involves the selection of such methods, first of all, it will attract the audience to the maximum level. It is important to explain to them this, any statement of personal values, beliefs and opinions will be accepted only with pleasure such methods of teaching as interviews, discussion of unexpected ideas, discussion of specific examples, demonstration of various aspects of this problem, role-playing, group work that allows you to organize an exchange of experience, etc. are the most useful. The speed of teaching can be small, but the ability to learn in this case does not depend on age. Most adults prefer to actively study the usual lectures;

-to give the audience the opportunity to share the responsibility for the training, to give the audience the opportunity to share with you the volume means that the audience will participate in the training themselves;

-concentration of Education, play the role of educational stimulator, balkif sayunaqat not to convey knowledge and evaluate learning. The teacher does not have to know all the answers, but he must show himself well in the management of the audience and get the answers;

-the process is based on the daily work experience of the audience on the process of education of Aries. As you know, it is necessary to direct education from simple to complex.

In a short-term educational setting, when a teacher meets students for the first time, they are usually unable to work effectively together because they do not know how to work with each other as a team.

Accordingly, the first task of the teacher is to carry out constructive work in the educational process with the help of methods and techniques of assisting the audience in the formation of a group. Limited training time requires the final optimization of this process, taking into account the process of the group life cycle, involves the development of the following four stages: formation; attack; normalization; work.

4 Conclusion

The object of modern organization of the educational process is its modernization, the choice of pedagogical technologies on the basis of its didactic conditions was an important task. It is desirable to focus the main attention on technology, which includes the maximum number of structural components of the educational process on the basis of the formation of the principles and ideas of humanitarian pedagogy, as well as the organization of technological education.

One of the features of the continuous education system is the importance of educational methods, which are aimed at improving the quality and universal formation of the independent importance of educational methods, which have become important pedagogical tools (unlike cognitive - oriented education, role-playing and supporting techniques). The application of this methodological supply relationship in the process of Education in the Dual system remains another important didactic condition for the application of it in the higher educational institution of engineering and pedagogical vocational education, professors and students.

Reflecting the functional goals and principles of training production staff and students for professional activities on the basis of the Dual system, the contextual model incorporates strategic and tactical goals, ideas and takes vocational education to a new level. The contextual model allows you to identify system descriptions and links in the system structure, as well as conflicts, its solution ensures the optimal development of the system as a whole.

References

1. G. G. Andreeva, Preparation of pedagogical university students for professional diagnostic activity: Dis. Candidate of Pedagogical Sciences, Cheboksary, 223 (2003)
2. L. V. Antropova, Formation of a teacher's professional readiness for pedagogical activity in an adaptive school: Dis., Doctor of Pedagogical Sciences, Moscow, 396, (2004)
3. V. I. Baidenko, Standards in continuing education: the current state, Moscow, Research Center for Quality problems of training specialists, 249 (1998)
4. I. A. Zimnaya, Key competencies – a new paradigm of the result of education I.A. Zimnaya, Higher education today, 5, 34 – 42 (2003)
5. Yu. N. Petrov, S. M. Markova, Organizational and pedagogical foundations of management of continuous multilevel vocational education: Monograph, N. Novgorod: VGIPI, 172 (1999)
6. Yu. N. Semin, Integration of the content of vocational education, Pedagogy, 2, 20-25 (2001)

7. R. K. Choriev, Formation of professional competencies of high-tech industry specialists in the conditions of dual education. *European Journal of Research and Reflection in the Field of Educational Sciences (EJRRES)*, Part II ISSN 2056-5852, **8(4)**, 112-114 (2020)
8. J. Gilbert *The model for the development of teachers'*, New York: Routledge Falmer, 258-278 (2004)
9. R. K. Choriev, Z. K. Ismailova, Peculiarities of professional self-development of a future teacher in the context of personality-oriented pedagogy, *journal of research and reflection in Educational Sciences*, ISSN 2056-5852, **7(12)**, 505-508 (2019)
10. S. Muzafarov, A. Isakov, R. Choriev, Z. Ismailova, D. Mustafoyeva, *E3S Web of Conferences*. **264**, 04089 (2021)
11. I. Z. Karabaevna, K. D. Omonovich, K. N. Murodillaevich, S. U. Normuminovna, A. O. Mahmatqulovich, Formation of a system of methods of technical thinking future engineers. *J. of Critical Rev. Innovare Academics Sciences Pvt. Ltd.* (2020)
12. O. Glovatskii, J. Rashidov, B. Kholbutaev, K. Tuychiev, Achieving reliability and energy savings in operate of pumping stations. In *E3S Web of Conferences, EDP Sciences*, **264** (2021)