

Establishment Of Psychological Factors Of Engineering Culture Among Students Of Technical Universities

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Abstract: This article sets out the psychological factors determined by scientific and technological progress towards the role of an engineer in production, and the existing educational forms of a technical university. The theoretical solutions to the problem of the formation of readiness for professional adaptation of students of a technical university and the main criteria for the formation of readiness for professional adaptation are analyzed. Educational activity is stipulated, which ensures the formation of readiness for an effective professional adaptation student of technical university.

Index Terms: conditions, criteria, culture, engineering, psychology, students, technical.

1. INTRODUCTION

The state policy in the field of vocational education implemented by the Ministry of Higher and Secondary Education of the Republic of Uzbekistan is aimed at solving the tasks recorded in the program of "Strategies of Action" of the Republic of Uzbekistan for 2017-2021. The prerequisites for writing this program was that the current situation on the labor market is characterized by an intensification of the trend associated with the gap between demand and supply of labor [1,2,3,4,5]. This imbalance continues to increase, as changes in the structure of training of specialists by educational institutions do not fully reflect the real needs of the labor market.

2 METHODS OF RESEARCH

In modern conditions of economic and social development of society, the system of higher professional education is designed to form a number of non-professional components of knowledge and process-activity character among university graduates, which, in particular, include the following:

- ❖ the formation of students' skills of a holistic perception of the surrounding world and a sense of unity with it, as well as a holistic perception of the process and the result of activity;
- ❖ mastery of technologies for making optimal decisions, the ability to adapt to various changes, predict the development of a particular situation that arose during the course of activity, and prevent the negative consequences of emergency events;
- ❖ mastery of the culture of a systematic approach to activities and the most important principles of its organization, mastery of the principles of designing sustainable systems, as well as the formation of tolerance in opinions and activities of a future university graduate.

In our opinion, one of the reasons for the lack of development of algorithms for the formation of these qualitative characteristics of the personality are those circumstances that:

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- ❖ firstly, pedagogical science today does not sufficiently use quantitative methods for studying the studied objects and processes, mathematical models, does not give clear and unambiguous recommendations on how to achieve the desired result;
- ❖ secondly, the results of pedagogical research are poorly implemented in the practice of university education, and the system of higher education in some cases does not cope with the tasks assigned to it.

Thus, in the aspect of the research problem posed, we highlight the contradictions between:

- ❖ requirements defined by scientific and technological progress for the role of a specialist in production and existing educational models of higher professional schools that are not adequately adequate to the modern requirements of the employer;
- ❖ the need of society for professionals and a low level of readiness of specialists to carry out effective professional activities in the enterprise quality management system.

In addition, the urgency of the problem is determined by the need to fulfill the state order for the training of specialists with a high level of readiness for professional activity in accordance with the specified requirements.

The theoretical prerequisites for solving the problem of the formation of readiness for professional adaptation of technical university students, the level of professionalism of the employee, his socio-cultural status should optimally meet both the interests of the individual and the personnel needs of small, medium and large enterprises [6,7,8,9,10].

The need for personnel to realize their potential in various fields of production raises the question of the holistic formation of the personality in the profession, the establishment of patterns in which it occurs. Without solving this problem, in our opinion, forecasting subsequent effective professional activity is impossible.

The solution to this problem is limited by a number of difficulties:

- ❖ firstly, the doctrine of abilities, including professional ones, is focused on normative activity, which involves a certain way of its implementation. With this approach, an analysis of the holistic personality of a professional fall out, and the periodization of its formation itself is considered to coincide with the stages of the life path and therefore is strictly limited by time frames;
- ❖ secondly, in the disciplines of the socio-economic cycles, state standards do not provide for the professional

specifics of education, and therefore, do not orient teachers to the formation of students' readiness for effective professional adaptation;

- ❖ the third is due to the presence in each specialty of multifunctional and intersect oral specialization of students.

In this regard, the search for pedagogical measures becomes relevant, the implementation of which would ensure both the formation of readiness for professional adaptation of a student in the process of general professional education, and increase its effectiveness [11,12,13,14].

The effectiveness of a person's professional adaptation is associated with the peculiarities of the formation in the process of professional preparation of mental images (models) of both the profession as a whole and professional activity.

The psychological model of professional activity is formed in the process of higher professional education and includes the following submodules:

- ❖ professional environment (as a system of images of the subject of labor, activity algorithm, etc.);
- ❖ professional activities (as a system of images of the interaction of the subject of labor with the professional environment, as well as images of goals, results, ways to achieve them, etc.);
- ❖ the subject of activity (as a set of images that reflect the system of personality properties and relationships).

The factor of adaptation and professional development of the personality, in our opinion, is its integral internal environment, that is, the whole totality of personality properties and characteristics that underlie effective professional adaptation.

The process of "personality professionalization" is characterized by three components: substantive, value-motivational, and functional-activity. The content component reveals the basic meaning of professionalization. It can be informative, professional, ideological, political, etc. The value-motivational component shows the forms of manifestation of a person's professionalization, structural elements through which one can determine its qualities: principles, attitudes, beliefs, ideals, attitudes, needs, motives, interests, desires and attractions. Functional-activity component characterizes the dynamic trends of professionalization, its functions in the structure of human activity. Then the definition of "professionalization of personality", on in our opinion, life can be formulated as follows: professionalization of the personality is an integrative substructure of the personality that provides the ability to survive and achieve professional success in certain socio-cultural conditions of activity and is expressed in its needs (turning labor into culture), principles, views, beliefs (personal choice based on freedom and responsibility).

Personal development in the process of adaptation is creative self-realization, creative adaptation to the changing conditions of the professional environment through innovative, creative activities. Creative activity is an indicator of effective professional adaptation. "Professional adaptation of personality" is a subordinate concept for the concept of "schedule professionalization." We consider this and it, as a generic concept, also characterized by three components: substantial, value-motivation, and functional-activity. It is they who determine its integral characteristic, make it possible to ensure the development of mechanisms adequate to its content to form the readiness of a technical university student for professional adaptation in the process of professional education. Creative activity is an indicator of effective

professional adaptation. By "readiness for effective professional adaptation" we mean the result of professional training of students in the context of the introduction of a new educational paradigm, taking into account the requirements of modern socio-economic development of the labor market. The readiness of students of a technical university for effective professional adaptation is considered by us as a dynamic, integrative system of personal formations, including the personal, functional, psychophysiological and social levels of the organization and ensuring its competitiveness in modern socio-economic conditions when performing professional activities. The formation of readiness for effective professional adaptation is a process of mastering a person's knowledge, skills, and experience of professional activity, the process of developing components of personal potential.

3 RESULT

A high level of development of these characteristics is a condition necessary for a person to achieve the adapted TM state in the process of its interaction with a professional environment. Therefore, the purposeful formation of a professional's personality, the formation and development of his abilities for effective professional adaptation in the enterprise's quality management system should become an integral part of the process of training university graduates for their future activities. Signs of students' readiness for effective professional adaptation at the same time are the level of activity (performing, planning, designing); level mastered by professional activities (layman, specialist, professional); "Breadth of focus" - a creative approach to relevant activities; sustainability of activity development - consistent activity; value motives of activity. The formation of readiness for effective professional adaptation is possible within the framework of design activities to build in the educational process part of the professional environment of the enterprise (system the volume of images of the subject of labor, the algorithm of activity, etc.), the center of which becomes the student (sub model of the subject of activity). The formation of readiness for professional adaptation is more efficiently carried out within the framework of a personality-competency-based system approach, which is aimed at developing an individual's activity, its self-development, self-government and self-realization.

4 CONCLUSION

Consequently, in our opinion, the readiness of students of a technical university for effective professional adaptation characterizes:

- ❖ the level formed among students of professional knowledge and skills for performing organizational, managerial, industrial and technological, research and design engineering activities;
- ❖ active identity level: closeness of ideas about one's own personal qualities and qualities inherent in a professional; the closeness of the values of the individual and the professional; job satisfaction and job satisfaction;
- ❖ level of professional maturity: level formed of planning mechanisms active, programming of actions, evaluation of results and their correction;
- ❖ level of professional productivity: assessment of reliability indicators and productive professional active.

REFERENCES

- [1] Azizhodzhaeva N.N. Pedagogical technologies in teacher training. - PH., 2018.
- [2] Allayarov O.N. Didactic foundations of active training in managerial disciplines. - PH., Fan, 2017.
- [3] Bepalko V.P. Pedagogy and advanced learning technologies. - PH., 2005.
- [4] Bepalko V.P. Components of educational technology. - PH., 2004.
- [5] Bordovsky G.A., Izvozchikov V.A. New teaching technologies: Issues of terminology /Pedagogy. - 2003. - No. 5.
- [6] Halperin P.Y. The theory of programmed learning. - PH., 2002.
- [7] Zagvyazinsky V.I. Innovative processes in education and pedagogical science. - Tyumen, 2000.
- [8] Innovative Learning: Strategy and Practice. - PH., 1999.
- [9] Innovative teaching methods in high school: Collection of scientific papers. - Murmansk, 1998.
- [10] Kan-Kalik V.A., Nikandrov N.D. Pedagogical creativity. - PH., 1997.
- [11] Clarin M.V. Innovative models of the educational process in modern foreign pedagogy. - PH., 1994.
- [12] www.strategy.uz
- [13] www.president.uz
- [14] ww.uza.uz