The system of higher professional education in Kazakhstan

The education system of Kazakhstan consists of pre-school education and training, secondary education, post-secondary vocational education, higher and postgraduate vocational education, including higher education.  
 The main process of higher education development is to improve the quality of training, to integrate innovative knowledge with intensive research, to improve the education and information technologies that are closely linked to the needs of the higher education institutions in the social sphere and economy.

The purpose of higher education is to meet the interests of the society, the state and the person in obtaining quality higher education, to give everyone the opportunity to choose the content, form and period of teaching.  
Objectives:

- training of a new type of specialist capable of working in team, adapted to basic knowledge and changing demands of labor market and technology;  
- Strengthening the motivation of the higher education system to provide quality educational services through the democratization of the educational process;

- Preparation of higher educational institutions for international accreditation. Creation of objective conditions for the development of higher educational institutions;  
- Formation of new principles and practice of management of higher education institutions, implementation of strategic planning system;  
- Strengthening the rights of students to receive quality education, elaboration and implementation of mechanisms for the responsibility of higher education institution managers to provide quality education services.

Directions of modern education:  
 All current trends can be considered in the context of some general conclusions:  
1) Communication and distance education can be divided on the basis of the coherence between the teacher and the student. Contact training includes all the traditional training directions, and the other - a form of distance learning, which can be used to interact with modern, technical means.

2) Based on the principle of consciousness, it is subdivided into accumulated intuitive education and conscious learning (G.K. Lozanov's suggestopedia direction of the 60-s.).  
 When considering theories based on the principle of consciousness, the answer to the question of what will be the object of the student's perception in the learning process is important.

If only the rules, tools are understood, it is a traditional "dogmatic" teaching, according to N.F. Talyzina. And if the actions are understood, then it is the theory of the formation of mental activity (PY Galperin, N.F.Talyzina). If it is understood as the action program algorithm, then it is programmed learning, algorithmic theory (N.F.Talyzina, L.N. Panda). If it is compulsory, then it is problematic training (V. Okon, M.M. Matsyushkin, I.J. Lerner).

1) Education based on the presence of leadership in the learning process, which is not based on management (e.g, traditional training) and requires management as the main learning mechanism (theory of gradual formation of mental activity, algorithmic learning).

2) The form of education based on teaching and culture and the formation of students’ project activities (theory of project education) and based on subject-based learning (traditional education).

3) Teaching "sign-context" or "context" based on the future learning outcome (A.A. Verbickiy) and traditional non-contextual learning.

4) Active forms of teaching and traditional (informative, communicative) teaching on the basis of organizational teaching methods.

According to the above mentioned justifications, traditional teaching is communicative (noncontigious), communicative based on the principle of perceptions, intentionally unmanageable, non-contingent based on subject principle is a deliberately inaccessible, not context, the process without the future professional activity model in the learning process.

The definition of N.F.Talyzina of traditional education as informational, communicative, dogmatic, passive reflects all the above mentioned characteristics. This is not a "good-bad" price-definition, it's a straightforward reference. According to M.K. Kabardova's research, people who are characterized by the type of intellectual activity as "thinkers" have the ability to learn foreign language by traditional form rather than active forms of game.

In the field of education, along with the traditional forms of education, other trends developed: teaching on the basis of problem-based learning, programmed learning, the theory of progressive mental activity (P.Y. Galperin, N.F.Talyzina), algorithmic training (L.N.Landa), development of sign-context type (A.A. Verbitsky), designing training. Consequently, it is now teaching is a multidisciplinary process (according to V.Okon’)that combines different directions of education.

1.2.2 Training of scientific and pedagogical staff at the University  
  
    An analysis of the development of the higher and postgraduate education system in the world's leading countries is based on a credit education system, showing a widespread three-tier training model: Bachelor's and Master's Degree Programs-PhD (Doctor of Philosophy). This model is used in the US universities and in many European countries. It is more flexible and efficient, providing academic mobility and demand for graduates in the rapidly changing labor market.

Possibilities of higher education institutions are not widely used in professional development of teachers. Exchange of experience in foreign countries on the issues of improving the qualifications and retraining of pedagogical staff is underway. Mechanisms of material and moral encouragement of new knowledge and skills development of managers and staff of educational organizations are not sufficiently used, and the introduction of active training-based learning technologies is poorly implemented.

The Higher School of Kazakhstan should build its modernization potential in line with world practice, based on the state practice of world experience. In addition, it is necessary to focus on the training of specialists from the world leading universities in Germany, Great Britain, France, USA, China and CIS countries.

New types and principles of thinking are moving forward. We present a new model of a unified pedagogical process and training of specialists who are in line with today's thinking.

This model is the principle of integration of the euro-centric and spiritual-minded thinking, i.e. the principle of unity of Western and Eastern methods of education system, and secondly, the principle of the discovery and exploitation of the internal dynamics of science in truth recognition, its harmonization with human nature, thirdly, the whole pedagogical process, as a self-organizing system, and a new paradigm such as subject-matter-to-entity relationships.

The problem of personnel training was studied by foreign, domestic scientists. For example, the formation of professional training of teachers in different directions of pedagogical activity were made by V.A.Slastenin, K.M. Duray-Novakova, K.A. Kertaeva, N.V.Kuzmina, K.M.Mukhametzhanov, Zh.R. Bashirova, etc., specialists with multi-stage preparation such as N.A. Zavalko, M.A. Kudaikulov and others; pedagogical activity in the context of pedagogical process from the standpoint of N.D.Hmel, K.S. Uspanov and others and with the formation of the following teachers' research skills: S.K.Arkhangelskii, Sh. T. Taubaeva, Z.A. Issayeva, R.Ch. Bekturganova and others.

The history of development of universities in Soviet Kazakhstan is largely associated with profile higher education institutions. Such educational institutions include: pedagogical, medical, technical, agricultural and others. The organization of the higher education system at the beginning of the republic was quite effective. But at that time there was no master degree, but the level of development of university education had a low role in the interaction of science and industry, the use of high school potential in the development of the people's cultural and intellectual development, and the formation of civilizational intelligentsia.

The main focus of professional training in the higher school is the formation of a person with analytical thinking and highly developed creative backgrounds, with a fundamental professional background, rapidly changing labor market and rapidly adapting to the requirements for a professional level, ideological culture, and a system of common values.

Personally oriented education is of special importance in the training of specialists. Implementation of this idea is directly related to the self-education and self-improvement of future professionals, the development of pedagogical activity into a tool for self-development of cultural, moral and intellectual potential, the formation and maintenance of interest in self-determination of a teacher in the system of social and professional values.

That is, in the process of personal-oriented learning, it is supposed to create an ideal educational environment for the development of each student's personality.  
  A teacher who considers himself as a personality tries to take the others (staff, student) in the same way and does not try to change them. The main objective of pedagogical education is to educate a teacher, who can form the ability of students to use their own qualities properly, to get independent thinking, to solve problems independently.

Historical analysis shows that in the long term of university education, the following historical variables of university education can be demonstrated: a) classical; b)rationalistic.  
 The classic model of the university consists of educational, research, cultural -humanitarian services.

The university-wide educational activities that have been taking place since the emergence of the University and are relevant throughout the development of society are characterized by the use of procedural teaching methods in the formation of students' knowledge. This service involves the acquisition of knowledge, skills, business skills and skills necessary for personal development. The content of education, its level is determined by individual, social and state needs.

The university research service identifies the university education, because the development of students' creative abilities is directly related to their participation in scientific work.

Today, the situation has changed dramatically: every educational institution has to prove its necessity and ability to live. Humanitarization of the learning environment is a major necessity of the university.

The main purpose of university education in the new humanitarian paradigm is the ability to understand one's own place. That is to say, that knowledge is of personal value. As a result of interaction with the world, the trainee's personality becomes more and more developed.

V.A. Kozyrev's idea of ​​humanitarization of education cannot be overlooked by the general approach. It is, first, the individual-creative and polysubjectiveness nature of education, where the content and learning methods are based on the past experiences of students and their needs for essential education; secondly, to create conditions for the implementation of a new educational process for the individual as a process of mastering and creating subjective knowledge of the new knowledge.

The classic model is the academic education system as a process of delivering the younger generations of universal elements of culture, education and science, the best models and practices of human activity.

This model should be the basis for creativity for the further development of society, state, science, technology and culture.

It should be oriented towards the preparation of a highly educated, cultured person for the future society. The purpose and content of the classical education model is the rational identification of the past, present and future of science, technology, culture and human life.

The rationalistic model of university education is aimed at optimal adaptation to society and civilization, high quality of universal training, profound specialization in future professional activities, readiness to create advanced technologies and creativity.

Today's new system of teaching at the higher school raises the level of requirements for teachers' methodological training and sets them tasks in this area. The issue is so legally as the future specialist training is directly related to the effective implementation of teachers in higher education institutions and through their professional activities.

The researchers have found that the issue of the future professional training of future professionals is diverse:  
The first direction is characterized by making a professiogram that defines the system of content of pedagogical skills and abilities needed for theoretical knowledge of the future specialist and educational work (V.A.Slastenin, L.F. Spirin and others).

*The second direction* is determined by the study of the structure of pedagogical activity (N.V.Kuzmina,A.I.Shcherbakov, etc.).

       Representatives of *the third direction* intend to strengthen the didactic orientation of disciplines in higher education, as well as to improve the teaching of special disciplines (K. Aimagambetov, S.E. Arhipova, T.V. Amelchenko, T.Sh. Domaev, L.S.Podyimova, S.I. Tadijan, etc.), focusing on their professional-pedagogical training.  
     The content and structure of the methodological training of future teachers will be disclosed in three documents - *curriculum, textbooks and manuals*.

The curriculum is the main document reflecting the structure of the future teacher training of highly educated future teachers. Discipline of the curriculum provides a systematic, sequence of actions.

In general, based on the analysis of professional training and the practice of future researchers, it can be seen that the requirements for teachers related to the development of pedagogy and science have been identified, the modeling of their personal models today and studies are being conducted to improve their professional training.

*Methodological training* is an integral part of the future teacher's vocational training, the learning process in the university, and the student's own behavior as a future professional. Methodological training should not only teach the future teacher the techniques used in the individual classes, but also teach them to master the system of all pedagogical activity, work on the subject and out-of-class work. Thus, *the future training of the future teacher* is a set of special knowledge, skills that enable students to work in this area of ​​activity.

Methodological training of future teachers requires students to be conscious of the ultimate goal of this training. Therefore, it is crucial for students and undergraduates to become professionals in the field of education, business and skills development.

In general, the professionalism of a future teacher to pedagogical activity is measured by the degree to which a person is able to demonstrate self-actualization and practical knowledge. Consequently, the conclusion is: the teaching of any discipline at higher school requires the teaching staff to provide methodological training for pedagogical activity.

Methodological training, in its turn, forms the theoretical teaching and research component of the profession of teachers. *Theoretical training*: any subject course; general course of discipline teaching method; higher school pedagogy, psychology and so on.

*Educational and research training includes:* writing reports on general issues of the subject, carrying out scientific work on the theory and methodology of teaching on the following issue, conducting pedagogical experiments at the higher school, collecting, analyzing and summarizing new facts and materials from scientific point of view, project design, participation in scientific seminars, scientific practical conferences, etc..

*Practical training* consists of pedagogical, professional, scientific-research practice, where it is possible to apply the learned theoretical knowledge in practice.

The complex structure of the methodological preparation of future teachers requires a careful overview of the correct formation of each component during the educational process in the higher educational institution.

Vocational training is measured by the degree to which knowledge is used in practice. The pedagogical education of the future specialist in the structure of pedagogical education includes three aspects: knowledge on specialty, skills and psycho-pedagogical knowledge. In this regard, bellow you can observe a structure of professional and pedagogical training.

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| --- | --- | --- |
| Content aspect | Technological aspect | Personality aspect |
| Professional and pedagogical training of future teachers | | |
| Profound knowledge of discipline; formation of the world outlook on social and humanitarian disciplines and society | Able to apply knowledge gained in practice, to apply their own methods, to receive and analyze information | Psychological-pedagogical specialty quality, which is based on knowledge, skills |

Table 1 Structure of professional-pedagogical training

     In the light of the foregoing, modern university education provides not only knowledge but also the theoretical knowledge, which is a creative tool for the world.

In the aspect of higher education teachers' training, university education is based on the continuity of development from the quantitative change to the law of quality transition. The preparation of a higher school lecturer includes consistent and continuous transition in the university education system based on past experiences, reflection, and designing future activities.

In the current system of education in the Kazakhstani education system it is the goal of transition to the second level of education in all universities. In our opinion, the second and third levels in higher education, especially in large universities, can extend their base and show a higher index than the preparation of masters and doctors at universities.

Training of scientific and pedagogical staff in higher education institutions is carried out on the basis of bachelor, master and doctoral PhD. Bachelor degree is higher education, master degree, PhD-postgraduate education. At each level special disciplines are studied.