

*Materials of Conferences*

**ROLE OF QUALIFICATION  
IMPROVEMENT AMONG PEDAGOGUES  
OF A MEDICAL UNIVERSITY  
IN REALIZING TRAINING OF DOCTORS  
IN GENERAL PRACTICE**

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This article demonstrates role of qualification improvement among pedagogues of a medical university who train doctors of general practice which has changed completely since new problems arose before graduates of the 7<sup>th</sup> course. A pedagogue must not only be efficient in training a versatile specialist according to his communicative skills and knowledge in demonstrative medicine, but also form their personal qualities. In ancient Greece it was considered that “a pedagogue is not the one who teaches, but rather one who leads his students towards mastery”. Doctor of general practice must be a master of his trade after graduation. It is especially significant in case of differential diagnostics, when he must make a quick decision on where to transfer a patient. A specialist must be able to deliver emergency medical assistance in case of injuries, surficial burns, and frostbites, even treat. According to a new programme of DGP of years 6–7, he must fix displacements of shoulder and maxillofacial joints, perform plaster immobilization in case of uncomplicated fracture of spoke bone, place stitches, remove them, etc. In order to teach these skills, a tutor must develop themselves in problems of pedagogy, learn how it is better to deliver knowledge, master computer technologies, in other words, keep abreast of the times.

In Western-Kazakhstan state medical university of Marat Ospanov, in process of realizing standard of additional education in Republic of Kazakhstan in terms of improving quality of pedagogic work we take all possible measures, tutors of clinical departments take training in Center of continuous professional development from the position of practical significance of education.

Qualification training of a medical university tutor contains an integrated characteristic of a pedagogue's personality with implementation of basic knowledge in informational literacy, possession of skills on new medical technologies within training process in order to achieve the basic objective of training – form personality of a general practice doctor.

Knowledge of a university tutor include: skills in implementing modern technologies within educational process and also readiness to train within new educational conditions in accordance with international standards of training specialists of the new formation, who possess certain specific knowledge in combination with a high professional

qualification. The highest category of a tutor is a foundation for a future development of modern educational system [1].

Tutors of clinical disciplines possess less knowledge and skills on new informational technologies due to their basic education. Therefore, methods of developing informational competence of a tutor in our university are: thematic lectures at conferences on pedagogy, communicative skills, seminars, exchange of experience, and open classes. A special part is devoted to training in training-clinical center of Western-Kazakhstan state medical university of Marat Ospanov. In order to estimate a tutor's knowledge level within the system of qualification improvement, our university facilitates the following methods of control: indicator documents, certificates, and quality of meeting requirements in programme “Sirius”. We also consider published articles in university periodical editions, Kazakhstan and foreign magazines, annual reports of training and clinical work on the given course.

**Conclusion:** Thus, development of a tutor's qualification is determined by objective approach in education in regard to all subjects of educational process in accordance with requirements of informational society. Within the system of qualification improvement this principle is realized in 5-years interval. The basic method of defining competence level among tutors is to establish their knowledge level not only in their profile subjects, but also computer technologies.

#### References

1. ICB IPMA Competence Baseline (version 3); publisher IPMA, ISBN 0-9553213-0-1, edition June 2006.

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**THE STUDY OF THE NEED  
FOR RETRAINING AND ADVANCED  
TRAINING OF SPECIALISTS  
IN THE FIELD OF OCCUPATIONAL  
SAFETY AND IDENTIFY OPTIMAL  
TRAINING PROGRAMS**

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The article deals with the study of the need for retraining and advanced training of specialists in

the field of occupational safety and identify optimal training programs.

According to the law of the Republic of Kazakhstan "On Education" [5] professional development and training are the main forms of additional professional education and be in accordance with educational institutions to deepen students' relevant knowledge, skills and practical skills, the acquisition of new skills and qualifications.

Training and retraining of personnel conducted educational organizations, as well as scientific and educational centers, regional employment agencies. They can be carried out by the state budget, and on a contractual basis.

Occupational health and safety (OHS) – is a complex, multi-faceted system that should be studied in a complex of interrelated disciplines (natural, technical and social), based on the views of the interaction of society and nature. In developing the theory of health and safety is necessary to identify its purpose and content, and the focus should be focused on the formation, development and functioning of labor and production processes, as an active ingredient of production is the man and his work. Occupational safety has historically been and is continually evolving based on the study and generalization of reality [6].

The labor protection of science at the present stage of development has become a direct productive force and represents a specific sphere of human activity having universal application.

Occupational health and safety as a universal system of scientific knowledge and practical activities aimed to create favorable and safe living conditions of people in the labor process, the preservation of health, prevention of occupational injuries and diseases, ensuring high performance and quality of work.

To implement these tasks discipline "Occupational Health and Safety (OH and S)" studies the structure of labor and production processes, the relationship and interaction with the subject of work environment work environment in all spheres of its manifestation. More precisely, the "Health and Safety" combines theory and practice to control the production process conditions in the interest of the subject of work.

Health and safety, as an organic component of the process of social labor and production reaches its general goal – the creation of favorable and safe working conditions – in two main ways: the constant improvement and development of the material elements of the productive forces and the continuous development of the person as the subject of production.

The content of occupational safety and health varied in accordance with the development of production and social restructuring of society; although no scientific and theoretical foundations to improve it did not exist. It is clear that, labor arises directly from the occurrence of work [7].

At the heart of the science of health and safety is the knowledge and use of the laws of nature. Creating tools and hand tools in order to facilitate the process of human impact on the environment is the material embodiment of human knowledge accumulated in the struggle for the conquest of the forces of nature.

Natural and social factors, which are associated with the flow conditions of the labor process, the relationship between people and the instruments of labor, the formation of the subjective world of the person in the process – all this, in the end, should be the subject study of labor protection science. In order to achieve the objectives of this science is paramount its accelerated development and above all the development of the methodological and theoretical framework, strengthening, streamlining and improving the efficiency of its links with social practice.

Occupational health should be addressed taking into account the interaction between science and differentiation of areas of knowledge.

Solving the problems of occupational safety, it is necessary first of all proceed from the laws of human interaction with the work environment, taking into account the structure of the mode of production.

The complexity, diversity of occupational health requires the allocation of the main objectives of its optimization, i.e., streamline the process of interaction between society and nature in general, as well as between man and the work environment in particular. Consequently, there is reason to talk about the theoretical and applied areas of labor protection science, the need for both basic and applied research.

Basic research should achieve the general goal of occupational safety by systematizing knowledge, establishment of laws and disclosure mechanism of human interaction with the environment in the process of social production. This problem can only be solved on the basis of the insight into, structure and properties of the object being studied, while investigating the process of emerging phenomena in it. Basic research should be organically linked with the natural sciences, engineering, social sciences and practice.

Applied research in the field of occupational safety and health should address specific practical problems.

Health protection, increase efficiency of workers, their personal safety are the subject of the highest concern of society and cannot be put on a par with other factors of production activities. Occupational safety as a set of links in the system of people – the working environment is, ultimately, the people, and with the help of their funds provides the conditions for a favorable and safe flow of labor and production processes. In turn, the informed use of occupational safety and health, as a rule, provides high performance of this system.

Thus, research in the field of occupational health can be carried out successfully only in close cooperation with them in such a search is not only natural, technical, and social sciences.

The successful development of labor protection science necessary developing models of individual work processes, and in the whole system of people – the working environment with direct and feedback.

It is therefore quite natural that at the present stage essential acquired problem of creating appropriate working conditions and activity, enabling the working people – the main productive forces of society – an active position, the desire and the will to carry out their duties productively and efficiently.

Recommendations for training, retraining and advanced training in the occupational health and safety in the sectors of the economy

**Description of the existing training programs for professionals.** At present and in the near future one of the key in solving the problems of industrial safety and health is to improve the quality of vocational training graduates in the occupational health and safety in the industry, especially at hazardous production facilities, targeted and continuous training of managers and specialists.

Security and safety in industrial plants associated with the need to clearly identify the key issues and ways to resolve them. Integral components of occupational safety and health are the legal framework, government regulation, special, technical and economic measures to ensure the safe operation of the enterprise.

Training in health and safety for the various sectors of the economy in the universities should be done in full compliance with the State educational standards for the specialty 050731 “Safety and Environmental Protection” curriculum included in the syllabus.

It should be noted that the level of preparedness of young professionals’ universities shows poor knowledge in the field of industrial safety. This is understandable, since in university curricula SYLLABUS such discipline is not provided. When training in specialties “Occupational safety and activity” (higher professional education) and “Safety” (bachelor) prevailing social trends.

This is certainly important, but not sufficient to ensure industrial safety. Therefore, you need a thorough training on industrial safety of young professionals, particularly taken at hazardous production facilities. Training courses should prepare young professionals to act in case of accidents and to provide additional training on industrial safety.

After analyzing the training and professional development of existing training centers, it is necessary to note the following: educational programs and technical center apprenticeship SAIT-Kazakhstan training and improve the professional competence of local specialists not covering the legal framework of the Republic of Kazakhstan on health

and safety. NEBOSH program also focused only on the international level in the field of occupational safety and health.

At the same time, it should be noted many positive data in educational programs. The program SAIT-Kazakhstan, for example, to address the challenges of learning and improving professional competence of local specialists to implement the State nationalization program of Kazakhstan. Together with representatives of industry and the Government of Kazakhstan, Kazakhstan SAIT-program generates industry standard training and certification. The program NEBOSH, internationally recognized qualification for professionals in the field of industrial safety, as well as other professionals responsible for TB issues in organizations. The training course is designed for multi-national organizations working to international standards and regulations adapted to local conditions and needs. Staff training in this program allows companies to go global standards of TB and health.

Popular management training of labor protection and industrial safety courses are DNV. The courses studied practical methods used in modern safety management. Formed a proactive approach to risk management and loss control. DNV recommended courses for professionals’ health and safety, middle and senior level, which are responsible for ensuring the safe operation of the enterprise. However, among the subjects studied in courses not provided: topical issues of health in different sectors of the economy and the best practices of leading companies to improve conditions of work and rest; industrial and fire safety; providing first and first aid.

Working curriculum of the Institute of Labor Organization and Safety KSTU to improve the skills of specialists Coal Department of JSC “Metal Steel Temirtau” at the proper level covers the issues of industrial safety, open industry-specific topics of modern mining equipment and information and measuring equipment [8].

However, do not study the laws “On compulsory insurance of civil liability of an employer for causing harm to life and health”, “On industrial safety at hazardous production facilities”, “On Technical Regulation”, the Labor Code of Kazakhstan, the international standard OHSAS 18001: 1999 rules of certification of production facilities in terms of labor, hygiene criteria for evaluation and classification of working conditions in terms of hazards and risks in the industrial environment, the severity and intensity of the work process, and does not cover issues providing first and first aid to victims of various types of injuries and drowning.

Training topics oil and gas industry to improve the skills in matters of health and labor protection built in that branch and includes only the issues of industrial ecology, fire and explosion on the oil and gas companies.

Subject workers training programs training in occupational safety and activity of the East

Kazakhstan State Technical University, the most comprehensive and contain volumes of information in accordance with state educational standards, but they are designed to educate and train students in higher education.

**The training program for professionals' health and safety in modern conditions.** To managers and specialists of enterprises, Research Institutes and design organizations have a comprehensive understanding of the various manufacturing processes; it is necessary to continuously improve staff qualifications, which should be an integral part of the training and retraining in the field of health and safety in various industries.

This largely relates to hazardous industrial facilities. In these industries among the main targets for health and safety is the willingness of companies to localize the accident occurred and the elimination of its consequences, the maximum minimization of injury deaths among staff. Moreover, in addition to knowledge and skills to act in emergency situations requires appropriate psychological preparation.

The knowledge of managers and the basic concepts of specialists, principles and general industrial safety requirements – a necessary condition for ensuring safety at hazardous production facilities.

However, no less important, and for middle and junior management levels is particularly important, knowledge of special security requirements, which are assigned to their competence. To managers and specialists at the proper level focused in addressing contemporary issues of industrial safety and health, could ensure reliable operation of control systems and procedures to prevent accidents, you need a refresher course for professionals to carry out the

three main categories of employees: management, engineering and technical personnel, and working specialty.

We offer the best training programs for the three categories of employees for the purpose of uniformity in conducting training and retraining of specialists in the field of health and safety for specialized courses.

Based on the analysis of training programs and advanced training should be for production managers, the main part of the program is to study the laws of the Republic of Kazakhstan in the field of occupational health and safety, and for engineers and technical workers – the emphasis in education should be directed to the study of the basic rules of work on the health and safety of various technological processes. For working specialties proposed program includes at its core regulations and standards necessary for the direct reference works and maintenance of equipment in the workplace.

Based on the basic qualification requirements for specialists of different levels, it is recommended to install the following durations:

1. The executive staff – search and implementation of solutions appropriate for the formation and functioning of technological systems for monitoring and maintaining the efficiency of the enterprise in a safe condition – 24 hours (Table 1);

2. Mid-level professionals (ITR) – the use of methods of organization of the process to ensure its safety and efficacy – 36 hours (Table 2);

3. Worker – the use of safe practices and compliance with technological procedures in operations to ensure adequate behavior in normal and abnormal situations – 24 hours (Table 3).

### Training programs to improve the skills of specialists in the field of health and safety

Table 1

The program for executives

Category of students	Labor Code of the Republic of Kazakhstan "from 15.07.2007 year	On civil protection. RK Law ot11. 04.2014g. № 188.	Law "On compulsory insurance of civil liability of an employer for causing harm to life and health"	Model provision training and checking safety.	The order of investigation and registration of accidents and other injuries to health workers, work-related	Rules of certification of industrial facilities on labor conditions	Organization and management of work for health and safety in the enterprise International standard OHSAS 18001: 1999 and ISO 9001: 2000 and the implementing rules "Quality Management Systems" at work sites	Training and auditing health and safety	Fundamental International Labour Organization Convention ratified by the Republic of Kazakhstan (№ 81, 148, 155)	Civil, administrative, criminal codes of the Republic of Kazakhstan on issues of security and safety at work	Test	Total hours
											1	2
1	2	3	4	5	6	7	8	9	10	1	2	
Leaders	4	2	2	2	2	2	5	2	3		4	

Table 2

## Program for engineering and technical personnel

Category students	Labor Code of the Republic of Kazakhstan from 15.05.2007y. Law "On civil protection" from 11.04.2014y. Occupational injuries. Causal factors and mitigation measures Rules of certification of industrial facilities on labor conditions The order of investigation and registration of accidents and other injuries to health workers, work-related Ergonomics and physiology of labor International standard OHSAS 18001: 1999 and ISO 9001: 2000 and the implementing rules "Quality Management Systems" at work sites Preparing and conducting audits, health and safety Fire Safety Companies Operating Rules hoists, electrical equipment and appliances, vessels under pressure, and others. Organization and management of work for health and safety in the enterprise Rules for the development and approval of instructions on safety and health organizations (Prov. MT SPP RK № 278-p of 02.12.04y.) Instruction and work permit in the occupational health and safety Industrial ecology and occupational medicine Fundamental Conventions of the International Labour Organization, ratified by the Republic of Kazakhstan (№ 81, 148, 155) Civil, administrative, criminal codes of the Republic of Kazakhstan on issues of security and safety at work Criteria for high-risk production in various sectors of the economy, creating a threat to life and health	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Engineering and technical		4	2	2	2	2	2	4	6	2	2	2	2	2	2	2	2	36	

Table 3

## Program for working specialties

Category students	The technical operation and technical safety rules when operating equipment Guidelines and standards for businesses of workers (in the field) Fire safety enterprises First medical care, in different occupational injuries and drowning Industrial hygiene and occupational health foundations Maximum permissible sanitary norms and levels (MPC, RC) concept of systems standards безопасности труда (ССБТ) Working clothes, shoes and other personal protective equipment Technological documents (passports, industrial projects, technological maps) Test Total hours:	1	2	3	4	5	6	7	8	9	10	11
On working specialties		2	4	2	4	2	2	4	4	4	24	

Working curricula training of workers should take into account the specifics of the company, which employs a work of the profession and provide for verification of knowledge on safe methods of work in the amount of instructions, related to their employment duties.

It is advisable to refresher training for managers GRO introduction of new forms of education, computer technology, the intensification of the educational process. At the same time must be used active forms of employment: discussion seminars, business games, training and protection of final works on specific and relevant to the business issues. In the future, it is desirable introduction of individual training programs and distance learning.

The quality of teaching in educational institutions provided by the presence of highly qualified personnel. This requires refresher training for managers as lecturers to attract leading scientists from universities and research institutes with a degree of not less than PhD and leading industry experts.

**Assessment of the quality of education.** Assessment of the quality of education is desirable to perform testing. Traditional test is a formal method of assessing the level of preparedness of attestation.

Subjects may be issued sheets of paper with printed tests. Testing can be used as a means of current, topical and final control.

During the final control testing is desirable to use as the primary stage of certification, and the final decision taken after an additional interview with the attestation, which allows determining the level of qualification of the expert.

In the present effective control test, this objectively reflects the knowledge test.

Study of the evolution of forms of employment of executives and specialists in various sectors of the economy of Kazakhstan shows that health and safety is an objective necessity that stems from the very nature of man, his biological structure, general and social character of modern production.

Health and safety, as an organic component of industrial and other human activities, reaches its general goal – the creation of favorable and safe working conditions, going two ways – constant improvement and development of both production and the people themselves.

Type of labor determines what methods and means should be used to effectively achieve the general objectives of the production activities. Means of labor are thus real element of labor protection economics, development and improvement of which occur on the upward trajectory. Therefore, the nature of the impact on the results of production safety, comfort and safety are its intense reserves.

Mechanization, automation (robotics) and computerization of production processes accompanied by a further decline in physical effort of man with the steady growth of the role and importance of his intellectual effort. In this context, the problem of control, regulation and control of technological

processes in manufacturing are privileges and value all the time increases, and employment rights is becoming increasingly creative and innovative.

**Conclusion.** After analyzing the training and professional development of existing training centers developed recommendations on the need for specialist training courses for the three main categories of employees: management, engineering and technical personnel, and working specialty.

The optimal training programs for the three categories of employees for the purpose of uniformity in conducting training and retraining of specialists in the field of health and safety at the specialized courses.

#### References

1. Message from the President of the Republic of Kazakhstan Nursultan Nazarbayev to the people of Kazakhstan: Kazakhstan on the way of accelerated economic, social and political modernization // Industrial Karaganda № 23 from 22.02.2005.
2. The Bologna Declaration: On the European region of higher education. – Bologna: Italian media, 1999. – 141 p.
3. The Lisbon Convention: On the Recognition of Qualifications concerning Higher Education in the European Region. – Lisbon: Portuguese media, 1997. – 112 p.
4. Fundamentals of credit system of education in Kazakhstan / S.B. Abyganparova, G.K. Akhmetov, S.R. Ibatullin et al. – Almaty: Kazakh University, 2004. – 184 p.
5. Education: Law of the Republic of Kazakhstan. – Almaty: Lawyer, 2002. – 172 p.
6. Zotov B.I. Life safety on proizvodstve. – M.: Kolos C 2004-314 with. Labor Code of the Republic of Kazakhstan dated 15.05.2007 year № 251-III.
7. The law “On civil protection in the Republic of Kazakhstan” of 11042014y. № 188-V.
8. Rules and dates of training, coaching and testing knowledge on occupational health and safety of workers from 28.10.2011 year. № 1225.
9. The Labour Code of the Republic of Kazakhstan dated 15.05.2007 year № 251-III.
10. Rules of mandatory recertification production facilities in terms of labor from 05 years 8.12.2011 № 1457.

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#### PEDAGOGICAL CONCEPT FOR THE MUSICIAN-PERFORMERS LEARNING IN THE ENVIRONMENT OF INFORMATION-EDUCATIONAL MOBILITY

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We are investigated the complex of pedagogical approach through systematic analysis of the dynamic components of the informational and educational environment for the musician performer learning. In a study to identify the problems of systematization the structure and content of environment of information-educational mobility for musician-performer