

*N. S. Efimova,  
Doctoral student,  
The Theory and History of Pedagogics Dept. MSPU  
Moscow, Russia*

## The Concept of the Readiness Formation of the Technical Expert to Professional Safety [N. S. Efimova]

**Keywords:** *safety, psychological safety of the personality, safety of the person in professions, professional formation, readiness for professional safety.*

**Annotation:** *The article presents the author's view of the readiness formation of the technical specialists to professional safety, presents the author's model of readiness for professional safety of graduates of technical universities.*

Prompt development and complication of high technologies in modern conditions of information and industrial society changed requirements to professions of the technical profile. Use of information technologies, nanotechnologies connected existing highly specialized science and branch economy into the universe picture of natural science, but on a new level of civilization development, the new way of industrial production.

Special importance is the independence of any specialist, his/her activity, the ability to give own assessment to the found or appeared source of information, its reliability and safety. Self-discipline, self-control, activity in the chosen sphere, and in raising their professional competence, responsibility for the safety of professional activities are essential qualities of any modern widely educated specialist. This independence should be based on the high culture of professional personality, including the culture of professional safety.

Graduates must possess wide erudition that is necessary for the understanding of global and social consequences of emergencies informational, ecological and economic issues and the application of acquired skills, modern technical methods and means in practice. Therefore, it is important to form consciousness of young generations, that must be adequate to new threats and more focused and trained to professional safety.

The concept of readiness formation for professional safety of the experts of the technical profile includes the following key concepts:

- Safety is the combination of internal and external factors promoting preservation of full-fledged ability of the person, society and the state sustainably operates and develops.
- Psychological safety of the person is the subjective assessment of the favorable environmental conditions for the life, preservation of health, development, effective activity by the person.

- Human Safety in the profession activity is the free choice of profession and work places according to abilities, self-realization of the personality in profession, ability to solve professional problems without damage to themselves, others and the environment.

- Professional development is the progressive, dynamic and managed process of entering the profession, leading to personal changes and the formation of professional qualities.

Modeling of readiness of specialists of technical colleges to professional safety is based on the following provisions:

- the formation of readiness of the expert to safe professional activity is the multi-staged process including the system of profile training at school (mathematical or natural-science), professional training in higher education institution and specialization in a magistracy or training on a workplace under production conditions;

- the mechanism of formation of professional safety is self-knowledge development (dangerous/safe characteristics of the personality), self-education (knowledge-information component) and a reflection of the changes in the process of personal development and professional training;

- readiness for professional safety is integration of personal and knowledge-information component in the qualification and the social component of professional competence, the result of the higher professional education.

Knowledge-information component is formed by a specialist in the process of professional training and practice work. IT is an information-orienting basis of professional activities that would be necessary to ensure the safety in the working environment. The leading role in youth is played self-training and self-education, therefore, the role of the teacher; mentor to send students for their own development, to inspire them as their own example and to support the technology of obtaining professional knowledge.

The personal unit, providing readiness for professional safety, includes the following features: self-knowledge safe/dangerous characteristics of the person; the formation of an adequate self-esteem, ability to self-regulation; the goal - the value of developing the humanistic personality.

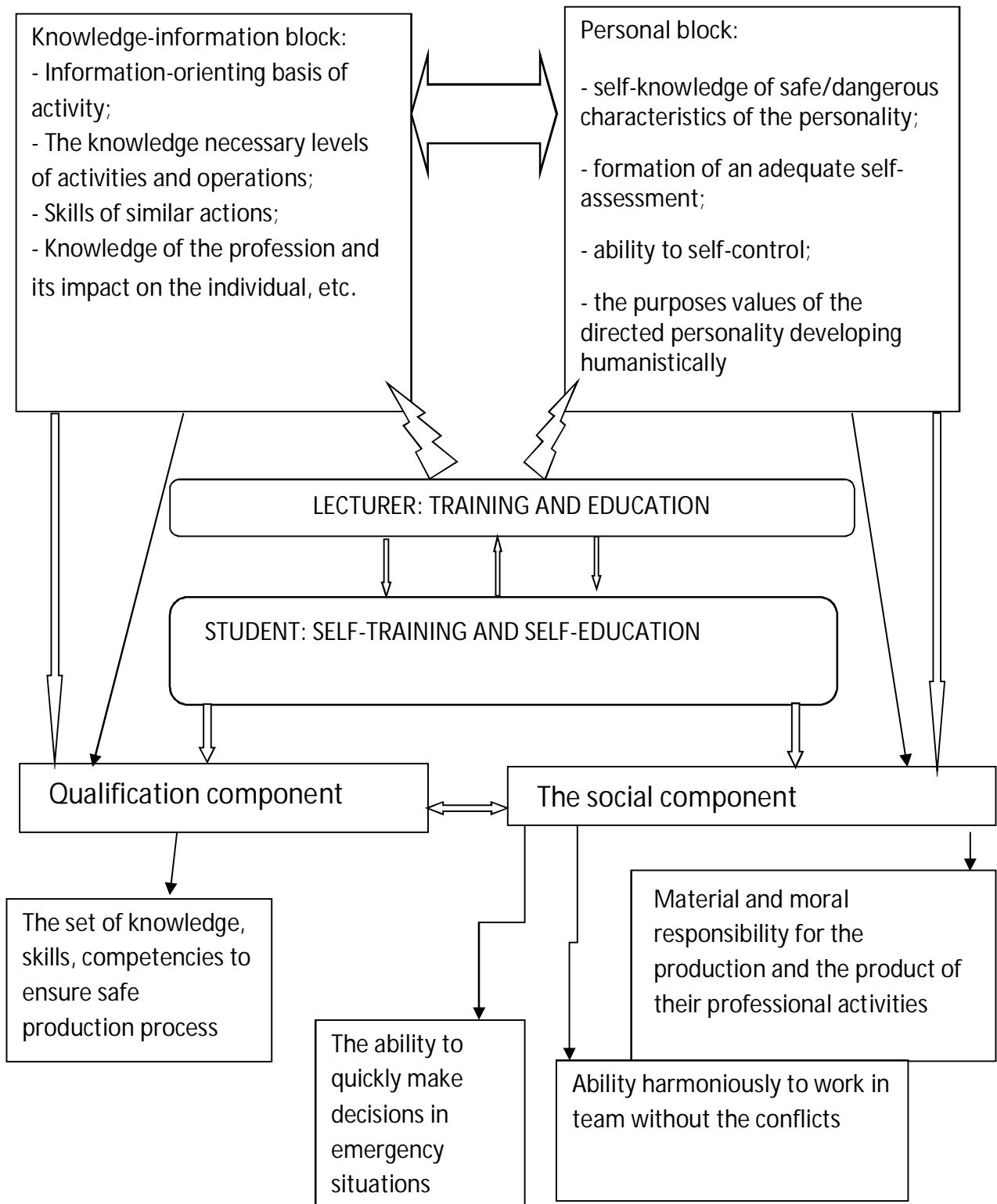
The model of the readiness specialist of the technical college to professional safety, on the one hand, covers the qualification, linking its future activities with subjects and objects of work, on the other hand, reflects the interdisciplinary requirements of the result of education, i.e. ability to work in a group, ability and readiness to apply professional knowledge and abilities; responsibility for independently to make the decisions providing efficiency and safety in interaction of people - technical system (Scheme 1).

On conditions of society development based on knowledge, changes work organization, and workers in enterprises should adapt to the changes, updating their skills and competence. The modern expert needs continuous updating of knowledge and readiness for personal and professional development during all the professional way.

Formation of the readiness for professional safety is multistaged process, at the each stage it is necessary to realize the purposes and the tasks contribute to the successful development of the next stage.

Result of the first (school) stage are the basis of knowledge of health and safety, the valuable relation to human life and health, and the safety professional self-determination.

Readiness for professional safety is the result of professional self-determination, education, self-education, that acts in the form of the mental, active and effective condition of the personality, as the system of the integrated properties defining safety of the expert in professional activity and professional knowledge.



*Scheme 1. Modeling of readiness of specialists of technical colleges to professional safety*

Readiness for safety professional activity consists of compliance of the person and the education-information part that would be necessary to demand the level of professional safety on the specific working conditions.

At the third stage readiness of the graduates for professional safety is defined by specific working conditions. The main task of the young specialist to analyse compliance of personal readiness with safe professional activity demanded for providing in specific conditions and to be ready to self-development, self-training, self-improvement.

The introduction of the model of formation of readiness for professional safety includes:

- Systematic organization of interaction of all elements of the educational process at the stages of "school-university-production", defines the basic terms of the organization and implementation of the process of formation of training for occupational safety;

- Defines the basic characteristics and parameters of the actors involved in the process of training and education;

- Determines the action and function, first of all, members of the educational process (learning and teaching);

- Ensures a high level of confidence to achieve their goals.

**Sources:**

1. Efimova N.S. *Psycho-pedagogical problem professional and personal development students of chemico-technical university.*//*Psychology in university.* 2008. № 4, p. 121-128

2. Efimova N.S. *Occupational safety as psycho-pedagogical problem of training.* // *Journal "Scientific and technical sheets SPbPGU: Humanities and Social Sciences."* Number 4 (136) 2011, P. 145-150.

3. Efimova N.S. *Professional safety as psycho-pedagogical problem* *Профессиональная безопасность of training specialist in technical university.* // // *Journal "Scientific and technical sheets SPbPGU: Humanities and Social Sciences."* 2012. № 4 (136), p. 145-150.

4. Efimova N.S. *Occupational safety as a pedagogical problem.*// *MCPU Vestnik,* № 3 (25) 2013, P. 21-31