









# LEARNING THE SKILLS OF ERGONOMIC KNOWLEDGE IN PRODUCTION THROUGH DIGITALIZATION

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Annotation. The urgency of creating a new ergonomic educational environment in higher education institutions and improving the ergonomic culture of modern higher education students is based on this. In modern higher education institutions, the work functions of the pedagogue are listed in the ergonomic system. The problems of the teacher's participation in creating a comfortable and effective, safe educational environment in modern higher education institutions were considered.

**Key words:** educational ergonomics, teacher's ergonomic culture, ergonomic educational environment.

In addition to socio-economic development, comprehensive work is being carried out in the direction of modernization of education in our country. The state policy in the field of personnel training envisages the formation of a well-rounded person through the continuous education system, which is inextricably linked with the intellectual, spiritual and moral education of a person, as the main tasks of the heads of educational institutions and pedagogical staff. regular knowledge of subjects, subject modules and blocks of students, the need to acquire knowledge in them, basic educational-scientific and general cultural knowledge, spiritual and moral qualities based on national and universal values, professional development, creative determined thinking and a conscious attitude to the environment[1,2].

Selection and systematization of educational materials in accordance with the principles and criteria of determining the educational content, taking into account the ergonomic requirements for the educational material base of the educational institution and educational tools provide an opportunity for effective modeling of educational materials. As a result, the harmony of epistemological, organizational, psychological, didactic, sociological and



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cybernetic laws is achieved in the educational process, provided that the general laws, rules and principles of the whole pedagogical process are followed[3,4].

Effective use of the main and auxiliary forms of organization of the educational process, taking into account the interrelationship and generality of the components of the educational process, effective organization and spending of students' free time, the creative potential of teachers and requires the development of ergonomic cultures. The professional qualification of the head and pedagogic staff working in the educational institution, work experience in relevant functional tasks, compliance with the profession, knowledge of functional tasks in the position they hold, initiative, creative approach to work, being at the level of modern requirements, and its qualities such as objectivity, transparency, personal and professional competence, practical experience, management skills, responsibility, initiative depend on the level of their ergonomic culture[5,6].

Leaders and pedagogues of educational institutions should act rationally based on the requirements of pedagogical ergonomics in order to increase the effectiveness of education and training, be the real owner of the educational institution, perfectly master all aspects of management, and be extremely responsible for their duties. it is important that they have the qualities of being responsible, being able to ensure the safety and comfort of the educational process. Also, from the leaders and pedagogues of the educational institution, professional competence, ergonomic culture, initiative, personal qualities, management skills and experience, systematic analysis and decision-making skills, the optimal performance of duties, first of all, based on the requirements of state policy, it is required to implement effective ways[7,8].

Taking into account modern approaches to the selection and systematization of educational materials in accordance with the principles and criteria of determining the content of education, modeling educational materials in accordance with the requirements of pedagogical ergonomics, following the general laws, rules and principles of the integrated pedagogical process. achieving the harmony of epistemological, organizational, psychological, didactic, sociological and cybernetic laws in the educational process, as well as effective use of the main and auxiliary forms of organizing the educational process, taking











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into account the interconnectedness and generality of the components of the educational process, effective organization and spending of free time of teachers and students, formation and development of creative potential, knowledge and skills in pedagogical ergonomics are among the urgent issues[9,10].

Today's teacher is completely different from the teacher of the last century. At first, it was enough for a teacher to have a classroom, a blackboard and chalk, desks, that is, a teacher's workplace. Nowadays, activity in higher education institutions cannot be imagined without the material and technical base, various district forms of educational tools. This material technical base and educational tools were developed and put into practice on the basis of pedagogical and ergonomic requirements, normative documents.

The question of the suitability of educational tools to serve the development of a student's personality, the formation of specific education and knowledge, skills, and abilities is determined by pedagogical and ergonomic requirements. Also, the ergonomic requirements for educational tools take into account the anthropometric, physiological, psychophysiological and psychological characteristics of a person manifested in the process of using these tools[11,12].

Among the foreign scientists, K. Bikshe, Ya. Gedroviss, R. Smith, L. Sidorchuk analyzed the ergonomic culture of the teacher and improved the professional activity of educational institutions in modern educational conditions, based on the responsibility of pedagogical activity and the ergonomic environment of the educational process. who have demonstrated suitability for the purpose[13,14].

Despite this, pedagogical ergonomics and its role in the teacher's work have hardly been studied. In our opinion, one of the main reasons for this is the lack of ergonomic training for future teachers. Therefore, the need to improve the ergonomic culture of teachers is an urgent problem, and to find a solution to this problem, it is appropriate to provide students with ergonomic training through the topics of pedagogical ergonomics in advanced educational institutions.











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The scientific essence of the article. The main leading factors that make up the ergonomic culture of the teacher are the ergonomic knowledge, skills, and orientation of the thinking frame. If the teacher has formed an ergonomic culture, then he can use the objects of educational and educational aspects (natural objects and models, educational tools and equipment, video-audio training) in modern educational institutions. materials, printed educational materials, machines, tools, equipment, computer equipment, electronic school textbooks, internet, student and teacher workplace, lighting, safe and comfortable heating, furniture, activity planning, lesson schedule and design of the like) can implement organization on the basis of ergonomic requirements and follow these requirements without deviation, i.e.[15]:

- 1. Creates safe and comfortable workplaces and educational environment for personal development of students in a higher education institution.
- 2. Effective performance of the teacher's professional duties in a safe and comfortable educational environment at his workplace.
- 3. As a result of the strict adherence to ergonomic requirements for health care, technological and educational equipment, it ensures the operation of science offices and educational institutions in comfortable and safe conditions.

Pedagogical ergonomics is one of the scientific directions of pedagogy and is based on adaptation of teachers and students to workplaces. The organization of educational work in the pedagogical team, that is, the organization of the activities of pedagogues who can achieve safe and convenient processes of training and knowledge acquisition, has its own characteristics. Therefore, creation of innovations and their implementation, effective use of the potential of inventors, promotion of best practice, popularization, evaluation of the results of innovative activities, especially the acquisition of the necessary knowledge, skills and competencies of the audience, as well as the ergonomic culture of the audience improvement of the level is determined and carried out by the educational institution[16].

In pedagogical ergonomics, it is difficult to clearly determine the ways, means and deadlines for achieving the goal without having the knowledge, skills and abilities of the



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culture. Conclusions and recommendations of the science of pedagogical ergonomics and experiences on an integrative basis are a source of new ideas, which in turn have an impact on the effectiveness of innovative processes[17,18,19].

The object of the study is the ergonomic culture of students and managers of educational institutions.

The topic of the study is the mechanisms of improving the ergonomic culture of teachers and managers of modern educational institutions.

The hypothesis of the research: training students in the system of training and retraining on the module "Pedagogical ergonomics" as one of the indicators of their culture, to satisfy the need for continuous ergonomic and educational self-improvement. If we establish the practice of creating a convenient educational environment for students to acquire ergonomic knowledge, skills and abilities in a training institution, then ergonomic education will become a leading condition for the formation and development of ergonomic culture for teachers in the future. becomes In this regard, it is necessary to determine the essence of the phenomenon "Ergonomic culture of the teacher", which is an integral part of the professional and pedagogical culture of teachers of modern educational institutions, and the components of ergonomic culture in order to create a new educational ergonomic environment.

To be able to rationally choose various methods of education and modern pedagogical technologies, to ensure the compatibility of methods and technologies with the national mentality based on a creative approach, to improve skills in the organization and management of pedagogical processes based on the requirements of pedagogical ergonomics, and the tasks of the departments of the retraining system, pedagogue - a systematic approach to the continuous improvement of ergonomic skills of employees, organization and management of experimental work on pedagogical ergonomics with students, theoretical and methodological bases of organization and management of experimental work on pedagogical ergonomics, organization and management of the activities of the audience group based on ergonomic requirements, the tasks of pedagogues in increasing the professional activity of students, the content of ergonomic training of









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students in a professional development educational institution, the design of professor-teacher and staff resources according to the requirements of pedagogical ergonomics, education It is necessary to solve the tasks related to working time and its use in ssasa [20,21,22].

Modern socio-economic reforms, innovations implemented in the direction of improving the education system require the development of "theoretical and methodological foundations of improving the ergonomic culture of teachers in the system of professional development and retraining". These, in turn, eliminate existing conflicts in the direction of educational institution leaders and teachers in the direction of organization and management of pedagogical processes based on ergonomic requirements, identify factors affecting the effectiveness of pedagogical processes, improve the activities of the participants of this process or requires the need to study the existing situations, subjects' inclinations, needs and interests when making decisions. Nowadays, as one of the main factors affecting the improvement and development of pedagogical processes in educational institutions, the need for qualified specialists who have mastered the requirements of pedagogical ergonomics and developed ergonomic culture remains an urgent problem [23,24].

In conclusion, it is possible to say that regularly improving the ergonomic culture of students in advanced educational institutions is the fulfillment of several tasks, that is, creating the necessary conditions for the subjects of the pedagogical process, organizing, coordinating, controlling, analyzing and evaluating their activities. , also includes the implementation of a number of tasks, such as creating and strengthening the material and technical base for the implementation of this process, arming with new pedagogical and information technologies, and providing highly qualified specialists.

Therefore, managers and pedagogical staff responsible for the organization and management of pedagogical processes and ensuring their effectiveness in a professional development educational institution have not only pedagogical experience, but also sufficient understanding of a number of areas such as ergonomics and management, pedagogical ergonomics must be.



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For this reason, special training is necessary for trainees in a vocational training institution to teach ergonomic knowledge that ensures the performance of labor functions in accordance with the teacher's professional standard.

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