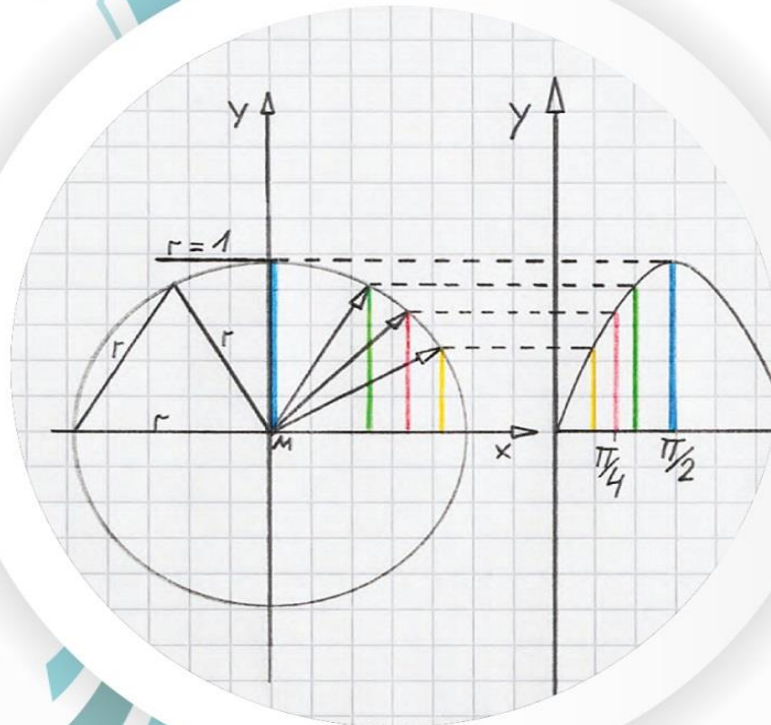


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Associate Professor of Mathematics Calcutta
University
India E-mail: math.mra@gmail.com

János Kurdics
Professor of Mathematics University of Nyiregyhaza
Hungary Academic Member of ATINER
Athens E-mail: kurdics@nyf.hu

CONTACT
Professor of Computational Engineering Mathematics and
Numerical Analysis
Faculty of Engineering
Zagazig University
Zagazig
P. O. 44519
Egypt
<http://iejemta.com/>
Email: sgamil@zu.edu.eg



Methodology of teaching laboratory work in optics based on continuity in the continuous education system

Safayev Ibrohim

Tashkent State Pedagogical University named after Nizomi.
Physics and it teacher of the teaching methodology department

Abstract: This article describes the method of formation of practical competence in the continuous education system.

Keyword: Competence, practical competence, continuous education, teacher, pedagogy, student, physics.

In today's globalization process, education is recognized worldwide as the main factor ensuring sustainable development, and in the international concept of education set by UNESCO until 2030, "Creating the opportunity to receive quality education throughout life" was defined as an urgent task. Today, the quality of education depends on the knowledge of the teachers working in it, that is, on the professional competence of pedagogues. In recent years, the rapid change in demand in the labor market all over the world is determined by the fact that employers began to pay attention not only to his knowledge, skills and qualifications, but also to his personal qualities. In particular, professional and modern pedagogical ideas are implemented in the formation of professional skills of teachers. Therefore, the teacher should not be the only source of learning for the student, but he should be the organizer of the student's independent work process, consultant, active participant in the learning process. One of the most pressing issues today is the training of self-motivated, innovative, enterprising personnel with professional knowledge and skills that meet the requirements of the times.

In the continuous education system, whether it is a pre-school educational institution, comprehensive schools or higher education, all educational institutions have a single goal: the formation of the competence of graduates, quickly adaptable to the next stage of education or production. it is necessary to have qualities such as personnel training and the ability to apply the acquired knowledge in life without difficulty. This is the main factor in having highly qualified teachers in educational institutions, changes in the field of education and improving its quality. Taking this into account, most countries pay special attention to the professional competence of graduates. The reason is that in today's modern educational institution, it is necessary to create a positive educational environment, taking into account the fact that each student is an individual, to determine their needs for learning, and also to teach students to think analytically, creatively and critically. is demanding. On top of that, pedagogues are required to have high professional skills in order to effectively organize teaching and build competence in students. Therefore, first of all, it is necessary to develop the scientific basis for the



development of professional knowledge and practical skills of school teachers, to improve the skills of teachers in the field of professional competence development in order to achieve quality education, to improve the models of professional competence development, effective work is being carried out in directions such as concretization of requirements

In the Action Strategy for the further development of the Republic of Uzbekistan, the task of "further improvement of the continuing education system, increasing the efficiency of training of highly qualified personnel" is defined. It is necessary to help the trainees to use sufficient methods and technologies, i.e. to develop their professional competence, in order to achieve high-quality education while using all their professional skills during the training process. The reason is that development in any field goes through stages that are renewing, improving, complementing, if necessary, mutually negating each other. Of course, this process also applies to the development of science, and in certain periods certain trends take precedence in the development of science.

A deeper study of the issue of improving the professional competence of physics teachers of higher educational institutions and further improvement of the current educational mechanism related to the solution of this issue remains one of the urgent issues facing the science of pedagogy. Accordingly, it is envisaged to enrich this mechanism with unique teaching methods, tools, methods, ways and technologies by identifying the mechanisms of developing the professional competence of students and improving them based on the requirements of the times, and at the end of the research The goal is to achieve the following scientific innovations: – the theoretical and conceptual foundations of the professional competence of physics students are determined. – analytical conclusions are prepared based on scientific literature that illuminates the role and importance of the professional competence approach in physics education; – existing mechanisms of professional competence of physics students will be improved and new ones will be developed.



Used literature:

1. O‘zbekiston Respublikasi Vazirlar Mahkamasining qarori Umumiy o‘rta va o‘rta maxsus, kasb-hunar ta’limining davlat ta’lim standartlarini tasdiqlash to‘g‘risida. O‘zR qonun hujjatlar to‘plami, 2017 y., 14-son, 230 modda.
2. P.Habibullaev va boshqalar. Fizika. 8 sinf darsligi. Toshkent DAVR-2019.
3. P.Habibullaev va boshqalar. Fizika. 9 sinf darsligi. Toshkent G‘ofur G‘ulom-2019.
4. Aripov X.Q va boshqalar. Elektronika. Darslik. Toshkent Fan va texnologiya- 2011.
5. Mirzarahimova, G. I. (2020). Pedagogical and Psychological Bases of Development of Educational Activity in Students. International Journal of Advanced Science and Technology, 7021-7030

