INTEGRATED TEACHING METHODOLOGY FOR PHYSICS STUDENTS IN PHYSICAL SPECIALTIES OF HIGHER EDUCATION INSTITUTIONS OF UKRAINE

Recently, a quite successful attempt has been made to combine classical forms of face-to-face education with the use of computer technologies and elements of distance education. This type of training was called mixed and in our opinion is one of the most promising educational technologies. So, blended learning is a form of learning that combines the latest technologies (elements of distance learning) with traditional forms of full-time learning. However, the analysis of scientific works shows that blended learning is often understood as a mechanical combination of traditional and modern technologies, which is unacceptable.

We have shown in a large number of scientific works [7, 8, 10, 11, 15, 17-19, 27, 28] that computer technologies and elements of distance education should be organically woven into various types and forms of full-time. Full-time training (lecture, practical, laboratory, seminar classes, independent work, various types and forms of monitoring students’ educational activities, etc.). The examples show that the combination of various forms of traditional face-to-face training and the latest educational technologies is possible only if there is and the use of high-quality educational and methodological support for the disciplines, which today is ENMKD. Therefore, the combination of elements of traditional and modern teaching methods should become the basis of the educational process of students in any educational institution. This is the demand of time.

On the basis of own experience and analysis of scientific works devoted to this problem, an integrated methodology of teaching and learning of physics by students in physics specialties of the higher school during the period of its reformation is proposed. In particular, the vision of the authors of one of the main problems of the higher school methodology - educational and methodological support for the study of physics in all types of educational classes (practical, laboratory and seminar classes, independent and individual work, distance and mixed learning, computer testing, etc.)
is revealed. Since the concept of "blended learning" does not reflect the true essence of the methodology of educational classes, we propose to replace the concept of "blended learning" with the concept of "integrated methodology of conducting educational classes in higher education", which both in terms of content and form is more suitable for the characteristics of the methodology of student education in higher education school.