Using the MOODLE platform in teaching chemical disciplines

N.V. Branovitskaja, E.N. Dudkina, A.A. Iorbalidi Mogilev State
University of Food Technologies Mogilev, Belarus, e-mail:
e.n.dudkina@mail.ru

Various options for distance learning are dynamically developing at present. This process is primarily due to the urgent demand of the society for the opportunity to live, work and study without the reference to geolocation. Modern means of communication and information exchange allow the society to gain a new level of communication. The COVID-19 pandemic has played an important role in a distance communication development.

To some extent, it is more difficult to organize distance teaching of disciplines that require obtaining practical skills in specially equipped laboratories. These disciplines include chemistry. We have gained experience in using the MOODLE educational platform for full-time and part-time students in order to organize the educational process. The obtained results can be very clearly presented for part-time students. Theoretical and practical material was prepared and systematized for the organization of distance teaching of the discipline «Physical and Colloidal Chemistry». This material includes interactive lectures, lectures-presentations (1 in Fig. 1), virtual laboratory work (2), a set of tasks with explanations and tasks for self-fulfillment (3). This block provided students with the necessary knowledge in terms of distance learning. The activity of its study is shown in Fig. 1. After mastering it, the students passed training testing (4), and then the final testing, the results of which are shown in Fig. 2.
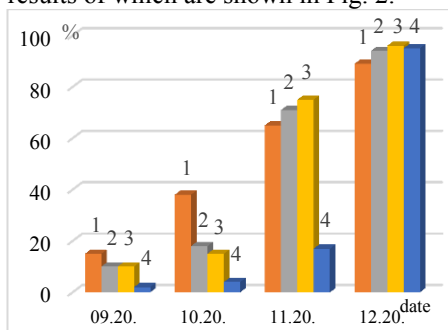

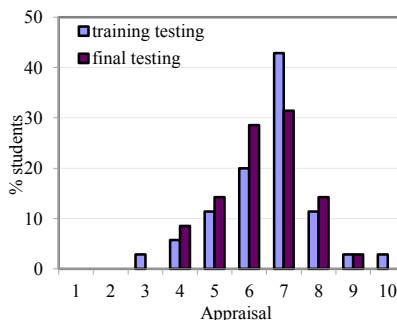Fig. 1 Activity of passing the theoretical block

Fig. 2 Comparison of the test results

The analysis of the results presented in Fig. 1 and 2 shows that the overwhelming majority of part-time students have fully mastered the theoretical block by the end of the semester. A good level of self-preparation was reflected in the test results. About 80% of students have successfully passed the intermediate control.