

**THE PRACTICAL WORK
IMPLEMENTATION, AS ONE MEANS
OF COMPETENCES FORMATION ON
“WORKSHOP ON NEUROPHYSIOLOGY”
ACADEMIC DISCIPLINE**

Tzyganok T.V., Zashikhina V.V.,
Sovershaeva S.L., Sherstennikova A.K.,
Kostrova G.N., Yushmanova L.S.

*Northern State Medical University, Arkhangelsk,
e-mail: physiolog29@nsmu.ru*

In recent years, the activities of the Higher School teacher and lecturer have already been changed, in connection with the tendencies and trends in the further development of education. The actual change challenges in the educational process are connected with the FGOS APA implementation, the new academic disciplines introduction [2]. Due to the methodological support lack on the part of the academic disciplines, there is the task of the methodological – educationally complexes creation, having taken into account the competence approach in the education. And this is also applied to the “Workshop on Neurophysiology” academic discipline on the “Clinical Psychology” specialty.

The “Workshop on Neurophysiology” academic discipline specificity is in the fact, that the students’ ability presence to be used the different sources of the information to be gained the knowledge: the textual, statistical, and the others, is the necessary condition for its mastering. The practical work, the implementation of which is ensured such skills formation, as the analysis, generalization, results presentation, conclusions formation are the integral part of the neurophysiology teaching process. As a result, the students are learnt to be applied the theoretical knowledge in practice, the individual thinking is being developed at them [1, 3].

The practical work is focused on the general cultural and vocational competences formation, having related with the ability to be used the terminology in the neurophysiology; to be described and characterized the neurophysiological functions, the relationships between the nervous system structures; to be predicted the possible directions of the activation, the development and correction of the various processes relationship in the nervous system, the sections functions of the central nervous system under the conditions change of the external and internal environments of the human organism.

At the beginning of the course, the introductory lesson is conducted, at which the special attention is practically paid to the students’ understanding such fundamental notions and concepts of the practical work, as “the purpose of the work”, “the work’s tasks”, “the progress of work”, “the results”, “the conclusions”. In addition, the recommendations are given for the registration of the

works. At the subsequent lessons, the students are proceeded to the practical work fulfillment, having related with the neurophysiological parameters study in the humans. For example, the practical work, in comparison with the bone and air conduction of the sound, the gustometriya carrying out. When working in pairs, one student is played the volunteer’s role, the other – in the role of the experimenter. At the end of the study, the students must present and describe the final results, to draw the conclusions. Exactly, the conclusions formulation, in accordance with the goals and objectives, is practically required the results generalization skill, their comparison, change tendencies and trends analysis. This ability is gradually being formed, on the basis of the knowledge on the neurophysiology, which is allowed the students to be learnt, how to draw the theoretical knowledge for the practical activities realization.

The general direction of the education change are associated with the learning process intensification, the introduction of the interactive forms of the teaching, and the information technologies using, for example, the certain computer programs, the software and hardware devices.

The “Virtual Physiology” is one of such simulation programs, which is allowed the experts and specialists to simulate the practical work with the laboratory animals. The students are used the virtual instruments and they are modeled the neurophysiological experiment. All the student’s actions are practically analyzed by the computer with the subsequent visualization of the virtual tissues and animal’s internal organs reactions in response to the manipulation. After the experiment realization, it is possible the actions analysis be carried out, to be drawn the conclusion and, if the errors are revealed, then to be repeated the practical part.

Thus, the different types using of the practical work is practically allowed experts and specialists to be formed the competences, having related with the students’ ability and preparedness to the analysis skills mastering of their activities, with the ability to be developed the study design, with the analysis techniques possession, the evaluation and interpretation of the research results.

References

1. Gashenko A.S. The Independence Development at Students when Teaching in the Higher School // “Standards and Monitoring in Education”. – 2006. – № 6. – P. 53–55.
2. Seryakova S.B. The Reform of Higher Education through the Eyes of Teachers / S.B. Seryakova, L.F. Krasinskaya // “Higher Education in Russia”. – 2013. – № 11. – P. 22–30.
3. Smetatina N.V. The Independent Work of Students: Ways and Conditions Improve Efficiency. – M.: “The Moscow Institute of Law”, – 2006. – P. 1–38.

The work is submitted to the VI International Scientific Conference “Science and education in modern Russia”, Moscow, November, 13–15, 2014, came to the editorial office on 17.11.2014.