**Gorbunov Leonid, Zvyagintseva Oksana, Valentina Varfolomeevna**

**Methodology of iteraсtive learning in higher education**

Information is the main resource for the development of modern society, therefore , the strategy of developing of the advanced countries of the world is aimed at obtaining new knowledge with the aim of developing of the latest technologies. Changing of educational paradigm from authoritarian-reproductive to interactive-productive greatly improves the efficiency of information assimilation, develops competences for solving non-standard problems. The methodology of training-research determines the direction of its conducts from the identification  of the problem to its resolution and application of the acquired knowledge in the systemic activity. Increasing the effectiveness of interactive learning is based on the integrated application of the theoretical (lecture) and experimental (practical) part. Planning methods, and primarily interactive methods of planning, differs substantially from reproductive teaching methods, where feedback is given a passive role in the transfer of knowledge. In contrast, the interactive apparatus of methods for planning learning plays an active role, defining and even, one might say, dictating to the instructor-researcher the rigid scheme of setting the class and the sequence of its conduct. The choice and justification of teaching methods should be done by studying the possibilities of existing methods, teaching and research tools beforehand, paying special attention to the appropriateness and specificity of the system approach. Developing the teaching methodology on the topic, it is necessary: to clarify the specifics of the activity; describe its possible stages, their goals and objectives; indicate the feasibility of methods and means of organizing and conducting each stage, to take into account the interrelation of the chosen ways of applying creative and conceptual thinking.

To increase the effectiveness of the assimilation of information, it is necessary to use different methods от thinking (to conduct parallel studies), which is called a scenario approach.

There are many unstructured methods and technologies of interactive learning.

The methodology of interactive learning developed by us contains a system of methods from setting the educational problem to study to obtain subjectively new knowledge and their innovation The methodology is presented in the form of a scheme with six levels of information assimilation. Each level has the recommended method of training, the criteria for evaluating the result and the assigned competence (knowledge and skills). The teaching process is conducted by the teacher, by analogy with the study, in the form of a combination of lectures and practical exercises. The effectiveness of mastering the material rises from 10 to 90%, with the implementation of the relevant competences at each level: the reproduction of the acquired knowledge; understanding of their mechanism application practice; structural analysis; a synthesis with previously acquired knowledge; creative creation.

**REFERENCES**

1.Gorbunov L. V. Metodologiya provedeniya biotehnologicheskogo issledovaniya / L. V. Gorbunov. – Germaniya: LAPLAMBERT Academic Publishing, 2013 – 263 s. (ISBN: 978-3-659-45286-4).

2. Dudareva V. I. Uchebno-issledovatelskaya rabota studenta: uchebnoe posobie / V. I. Dudareva, T. A. Panyukova – Chelyabinsk: YuUrGU, 2004. – 72 s.

3. Integratsionnyie protsessyi i gumanitarnyie tehnologii: mezhdistsiplinarnyiy aspekt issledovaniya nauchnogo obrazovaniya v evropeyskih universitetah: nauchno-metodicheskie materialyi / V. I. Bogoslovskiy, V. V. Laptev, S. A. Pisareva, A. P. Tryapitsyina. – SPb.:OOO «Knizhnyiy Dom», 2007. – 272 s.

4. Klarin M. V. Innovatsii v mirovoy pedagogike: obuchenie na osnove issledovaniya, igryi i diskussii. (Analiz zarubezhnogo opyita) / M. V. Klarin. – Riga: NTsP "Eksperiment", 1995 – 176 s.

5. Kruglikov V. N. Aktivnoe obuchenie v tehnicheskom vuze: teoriya, tehnologiya, praktika / V. N. Kruglikov. − SPb.: Voen. inzh.-tehn. un-t,1998. − 308 s.

6. Melnikova E. L. Problemno-dialogicheskoe obuchenie: ponyatie, tehnologiya, predmetnaya specifika / E. L. Melnikova // Obrazovatelnaya sistema «Shkola 2100» – kachestvennoe obrazovanie dlya vseh. Sb. materialov. – M.:Balass, 2006. −S. 144–180

7. Panina T. S. Sovremennyie sposoby aktivizacii obucheniya: ucheb.posobie dlya studentov vyssh. ucheb. zavedenij / T. S. Panina, L. N. Vavilova. – M.: Akademiya, 2008. – 176 s.

8. Panfilova A.P. Innovacionnyie pedagogicheskie tehnologii: aktivnoe obuchenie: [ucheb.posobie dlya stud. vyssh. ucheb zavedeniy] / A. P. Panfilova. – M.: «Akademiya», 2009. – 192s.

9. Sovremennyie obrazovatelnyie tehnologii: uchebnoe posobie / pod red. N.V. Bordovskoj i dr. – M.: KNORUS, 2010. – 432s.;

10. Stupina S. B. Tehnologii interaktivnogo obucheniya v vysshej shkole: uchebno-metodicheskoe posobie. – Saratov: «Nauka», 2009. – 52 s.