

recording should be studied in cases when certain technical complications emerge or the process oscillates from the standard flow, post-surgical complications develop.

• It is necessary to take courses and trainings of thematic improvement in order to improve qualification, participate in various surgical forums, read specialized literature regularly. Nowadays the necessity and reasonability of continuous improvement of expertise among surgeons of laparoscopic profile is proved by the very flow of surgery development, and this direction cannot be doubted.

References

1. Abikulov K.A., Seysembayev M.A., Doskaliyev J.A., Adylkhanov S.A. To the problem of indications during laparoscopic cholecystectomy // Thesis of reports at scientific-practical conference, devoted to 125 years since foundation of South-Kazakhstan regional hospital. – Shymkent, 1993. – P. 81.
2. Tlegenova G.U. Special features of anaesthesia and surgical tactics of laparoscopic cholecystectomy among patients of high risk group // Urgent problems of surgery (collection of scientific works). – Almaty, 1994. – P. 205.
3. Doskaliyev J.A., Adylkhanova S.A., Galiyev I.J., Tlegenova G.U. Problems, hazards, and complications of laparoscopic cholecystectomy // Annals of surgical hepatology: materials of the IV conference of hepatology surgeons. – Tula, 1996. – Vol. I (attachment). – P. 272.
4. Aliyev M.A., Baimakhanov B.B., Seysembayev M.A., Izbasarov R.J. Laparoscopic cholecystectomy among patients who have experienced surgeries before // Russian symposium “Complications of endoscopic surgery”. – M., 1996.
5. Seysembayev M.A., Adylkhanov S.A., Baimakhanov B.B., Galiyev I.J. Characteristic of unusual situations during laparoscopic interventions and ways to solve them // Urgent problems of surgery and transplantology (in honor of 70 years of age of U.O. Aripov). – Tashkent, 1997. – P. 93.
6. Aliyev M.A., Narjanov B.A., Sdykhanov S.A., Galiyev I.J. Complications of laparoscopic cholecystectomy // International Eurasian congress of gastroenterologists. – Almaty, 1998. – P. 45.
7. Alberg G. Developing endosurgical practical skills with implementation of virtual technologies in medicine. – 2009. – № 1 (1). – P. 7.
8. Gorshkov M.D., Nikitenko A.I. Using virtual simulators in training endosurgeons – review of Russian and international experience // Virtual technologies in medicine. – 2009. – № 1 (1). – P. 15–18.
9. Gorshkov M.D., Fedorov A.V. Economic effect of virtual education in endosurgery // Virtual technologies in medicine. – № 2 (4). – P. 8–11.
10. Gorshkov M.D., Fedorov A.V. Classifying equipment for endosurgery training according to levels of realism // Virtual technologies in medicine. – 2012. – № 1(7). – P. 35–39.
11. Dozornov M.G. Modern problems of training centers and ways to solve them // Virtual technologies in medicine. – 2010. – № 2(4). – P. 4–6.
12. Ju M., Che S., Derevianko A., Jones D.V., Sweizberg S.D., Kao K.L. The role of tactile sensitivity in practical training for laparoscopy // Virtual technologies in medicine. – 2013. – № 1 (9). – P. 33–38.
13. Jumadilov J.S., Taigulov E.A., Ospanov E.A., Jumadilov D.S., Saparova L.T., Tuganbeckov T.U. Using virtual laparoscopic simulator “LAPSIM” in programme of postgraduate endosurgical education of doctors // Virtual technologies in medicine. – 2010. – № 1 (3). – P. 23–24.

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IMPROVEMENT OF METHODOLOGICAL PREPARATION OF THE INFORMATICS TEACHER BY A TRAINING TECHNIQUE TO A SUBJECT ON AN INNOVATIVE BASIS

Zhakypbekova G.T., Zhursinbekova D.M.

*South Kazakhstan State university
named after M. Auezov, Shymkent,
e-mail: nurbaxit@mail.ru*

The use of innovative technologies in education has brought many changes in the pedagogical activity of school teachers. These changes affected the purpose and objectives, content, structure, methods of teaching the subject of computer science related to the applied direction of informatics as a science. The role and place of science in education changed, i.e. known methods used in teaching computer science, acquired general scientific sense, and methods used in the forming of knowledge, competencies and skills, focused on general intellectual development.

Studies in the theory and methods of training informatics teachers, have identified the following problems:

- 1) incomplete perfection methodological system according to a new model based on innovative teaching methods associated with the development of modern science and technology;
- 2) inconsistency of the theory and practice of modern information innovative technology to modern informational and software provision;
- 3) insufficiency of psychological, pedagogical and methodological subjects, training the use of innovative technologies in the educational process

Science of teaching informatics covers all stages of information education. This requires a continuous search in the direction of formation of information competence in improving teacher training. Problems of teaching methods with a focus on the individual, differentiated learning, individual learning, specialized education and others became urgent tasks of methodical science. When profile training teachers faced a number of difficulties in organizing and holding of elective courses on various branches of computer science. It was noted that their methodical preparation is insufficient during conducting elective courses. In connection with this occupation by methods of training informatics became the main work of the teacher. This fact shows the importance of armament of teacher by methodological knowledge on the basis of innovation, improving his methodical preparation.

Modern teacher must know the methodological, psychological, pedagogical, subjective and methodological components of teaching informatics, the methodology of scientific research, the theory of teaching and ways of its implementation in practice, be able to justify the innovation model, to apply

at all levels of education informational and communication tools to the teaching techniques used in the present time, to develop innovative methods and tools for learning.

All of the above requires special study methodology training to computer science. The practical significance of this complex problem is increased by the decision of the research in terms of innovation ideas.

Scientific novelty of the Project lies in the fact that, in research on teaching computer science for the first time the problem of the study of the methodological training of teachers on the basis of innovation raises.

Methodical and methodological training teacher begins with an examination of textbooks and manuals on methods of teaching science. However, textbooks and manuals on teaching computer science, devoted to elective courses on the basis of innovation, are not enough. In elective courses in profile training informatics subject and object of a methodical science have not been disclosed, research methods are described superficially, information about hypothesizing, formulating and solving methodological problems, carrying out experimental work, etc. is not enough.

Many scientists, teachers conducted a study on the use of informatization in computer science education. The scientist-pedagogue U. Pervin [1] developed and proposed now a popular system of effective learning algorithmization and programming through an original tool for the development of students' cognitive initiative – computer artists. Under the leadership of V.S. Lednyov [2], A.A. Kuznetsov [3] basic provisions and principles of content selection continuous course of the school of computer science have been formulated. In the works of A.A. Kuznetsov [4] applied general and vocational aspects of computer science teaching in educational institutions of higher learning are investigated. Test control system based on the use of computer technology is described in the works of Avanesov [5], V.P. Bepal'ko [6] and other researchers. Currently, under conditions of informatization of education training of future informatics teachers, training teachers to use information technology in the educational process are discussed in the writings of M. Zhaldak [7]. Researches of scientists and educators M.P. Lapchik [8], S.K. Kariiev [9], M.V. Shvetski [10] are devoted to traditional methodical preparation of science teachers for multi-level system of education.

In Kazakhstan, a number of studies on the learning of pedagogical possibilities of informational and communicational technologies in education was performed. For example, the concept of modular technology and functional design of electronic textbooks and multimedia tutorials were developed G.K. Nurgalieva [11]; design of methodical electronic systems for primary school

teachers; analysis of the impact of information technology on the research activities of the future teachers; formation of professional competence of teachers in the use of electronic textbooks in the learning process, methods of teaching computer science, pedagogical informatics K.Z. Khal'ykova [12], and others works.

Researches of russian scientist, pedagogue I.V. Robert [13] aimed at the realization of psychological and pedagogical goals of training and upbringing in the field of education. They considered the direction of information industry of pedagogy, ensuring optimal use of the methodology, technology and implementation practices of modern information and communication technologies.

The analysis of the works of the above-mentioned domestic scientists and educators as well as scientists from near and far abroad have shown that there are problems to be solved, one of them is to improve the methodological training of teacher on the basis of innovation. It has been observed that the problem of improving the methodological preparation of teachers for the teaching of computer science discipline of innovation-based are still not fully formed in systematic manner.

In this regard, in our country, scientific and pedagogical, methodological, regulatory, technical and technological prerequisites for the development of education in improving the methodological training teacher on teaching discipline is required to show, to assess the content of education; to develop optimal innovative models for the learning process; to apply by innovative models at all levels of education; to develop traditional learning technology on the basis of innovation, to develop methodological training system development of the intellectual potential of the students and the formation of skills self learning.

Also in the formation of electronic, virtual laboratories and demonstration programming environments need to be developed; to use data base, electronic libraries on the Internet; to use pedagogical software in the information network; to create automation tools, control and monitoring system; to improve methodological training teacher in the organization and implementation of a global work towards the control of the intellectual potential of students in the systemic form.

Noble influence the results of the research work on enriching the content of the subject methods of teaching computer science through improved teacher training methodology on teaching discipline, improving teacher training methodology is indisputable.

Methodical and methodological preparation of teacher related to the content of computer science, teaching methods, teaching aids. However, elective courses on the basis of innovative textbooks and manuals on teaching computer science are not enough. In elective courses in profile training science subject and object of a methodical science

have not been disclosed, research methods are described superficially, information about hypothesizing, formulating and solving methodological problems, carrying out experimental work is not enough.

In this regard, in the case of the transition to a multi-level system of training teachers of computer science it is necessary to form their methodological, psychological, pedagogical, subjective and methodological competences, aimed at innovation. Methodological competence of the teacher will provide motivational and value the participation of students in training. Psycho-pedagogical competence of teacher is characterized by a professional orientation of students' learning activity, increasing their cognitive interests in the direction of humanity and benevolence. Subject component of teacher competence is characterized by a system of theoretical education students and preparing them to practice. Methodological component competence provides specialized scientific, psychological and pedagogical knowledge and skills of teachers and the ability to apply them in preparation for their professional activities.

Positive impact of research results to improve the quality of textbooks and electronic textbooks, video lectures and tutorials, virtual laboratories,

multimedia, electronic reference books, electronic dictionaries, etc., didactic tools and learning environments on teaching computer science is no doubt.

References

1. Pervin U.A. The course «Fundamentals of Computer Science» for primary school // *Education and Informatics*. – 2002. – № 12. – P. 7–12.
2. Lednyov V.S. The content of education. – M., 1989.
3. Lednyov V.S., Kuznetsov A.A., Beshenkov V.S. Status and prospects of development of computer science course in secondary school // *INFO*. – 2000. – № 2., 1998, № 3. – P. 76–78.
4. Kuznetsov A.A., Beshenkov S.A., Rakitina A.E., Matveeva N.V., Milokhina L.V. Continuous Course of Informatics (concept, system modules, sample program) // *INFO*. – 2005. – № 1.
5. Avanesov V.S. The theoretical basis for the development of tasks in the test form: Textbook. – M.: MGTA, 1995. – 149 p.
6. Bepal'ko V.P. Summands of pedagogical technology. – M.: Pedagogy, 1989. – 190 p.
7. Zhaldak M.I. System of training teachers to use IT in the learning process: Author's abstract of doctoral. diss. – 1989. – 35 p.

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