

PRACTICE-BASED LEARNING: ESSENCE, METHODOLOGY OF UPDATING

(Recibido el 10-05-2017. Aprobado el 10-08-2017)

Sergei Vladimirovich Smirnov
Kazan Federal University, Yelabuga Institute

Aiziriak Nailevna Tarasova
Kazan Federal University, Yelabuga Institute

Abstract. Amid the accelerated scientific and technological development, special importance is attached to the need to increase the efficiency of Russian secondary vocational and higher education, due to the growing market demand for efficient, mobile and competitive specialists.

The need to realize this task requires strengthening the applied aspects of Russian education. In the presented paper, respectively, the authors made an attempt to characterize the essential features and methodology of actualization of practice-based instruction of students of higher and secondary vocational educational institutions of modern Russia. The authors associate the expediency of this task with the need to focus modern education on the formation of students' skills of targeted, selective search and use of information necessary for them as future specialists for their personal and professional growth, rationalization of approaches to solving educational and production problems (Gray, 1998).

Objective of this paper is to identify the essence and methodology of implementing practice-based teaching of students of higher and secondary vocational education institutions.

This objective involves the following tasks:

- consideration of the essence of the practice-based approach in education;
- characteristic of the methodology for implementing a practice-based approach to education in existing and innovative forms of contact and extracurricular work of students and teachers.

Keywords. Individualization, education, practice-based learning, problematization, system-activity approach.

1. INTRODUCTION

The scientific and technological revolution that began in the middle of the 20th century led to a sharp acceleration in the rates of scientific and technological development, which required a human to continuously adapt to the flow of innovations in the social, cultural and production environment.

These changes set the task of forming in the individual such personal and professional qualities as complex, analytical thinking, knowledge of ecological, legal, civil, aesthetic and communicative cultures, continuous improvement of creative abilities, development of curiosity and ability to adapt quickly to the constantly changing parameters of social life.

In this situation, the development of the students' skills in the independent search for information required for solving specific application problems becomes very important (Boekaerts, 1999).

The need to achieve this goal, in the context of accelerated scientific and technological development, is actualized by the following circumstances. First, by the disparity between the amount and content of theoretical information assimilated by the student in accordance with the profile of his preparation, which is relatively stable, and those specific skills that he, as a future specialist, should possess and continuously improve, following the constantly changing market situation and branch structure of production. Secondly, by the need to develop the academic mobility of students required to improve their level of education, with the subsequent integration of Russian vocational education institutions into a single global cultural and educational space (Merzon, 2015).

The problem of strengthening the applied aspects of Russian higher education is considered in a number of studies. These include the works by Iu.P. Vetrov and N.P. Klushin, associated with the development of the strategy of transition of education to the subjective learning paradigm: from the values of general education and special training, to the values of subject-personal professional motivation (Vetrov & Klushina, 2002). The works by V.S. Prosalova, which analyze the main directions of introducing practical-oriented technologies into the educational process, are aimed at forming professional competencies corresponding to the profile of training (Prosalova, 2013). The works by P.S.

Kheifets, which substantiate the creation of multifunctional educational centers that will be aimed at training specialists able to meet the needs of the labor market and employment (Kheifets, 2003).

2. METHODS

The following methods are used:

- analysis (identification of the essential specificity of practice-based learning, description of the methodology for its actualization);
- synthesis (consideration of the practice-based approach in education in the unity of its theoretical and applied aspects);
- system method (identification of the methodology for implementing practice-based learning within a complex of various forms of contact and extracurricular work);
- dialectical method (consideration of the educational process in the unity of its fundamental, relatively stable and applied mobile components).

3. RESULTS

The need for transition to practice-based learning is dictated by the need to strengthen the applied aspect of Russian higher and secondary vocational education.

The main reasons for the actualization of this task are the following circumstances.

- growth of market demand for skilled labor resources;
- inadequate qualification of graduates of higher and secondary vocational education institutions, associated with the primary orientation of education on the formation of fundamental, theoretical thinking in students;
- the imbalance of salaries and volume of social benefits for a number of categories of workers employed in the public and private sectors of the economy, largely due to differences in the level of labor productivity;

– continuous modernization of production, outrunning the ability of employees to improve their professional skills;

– inadequate number of centers of advanced training;

– the limited ability of a number of categories of workers to attend advance training courses on-the-job.

Etc.

The expediency of solving these problems poses the task of synthesizing fundamental, theoretical education and applied professional training, the result of which will be the transition of higher and secondary vocational education to a practice-based model.

Using the model of practice-based learning will allow:

– providing an opportunity for more in-depth mastering of the basics of the discipline in question by students in accordance with those professional tasks they will have to solve as future specialists;

– building educational process proceeding from individual traits of students, expressed, including, in their ability to select and perceive information corresponding to the level of development of their intellect, creativity and cognitive activity (Sabirov, 2017, p. 233). As I.Iu. Kalugina correctly noted in this connection, "the relevance of the development of practice-based learning is that this approach can significantly improve the effectiveness of training. This is facilitated by a system for selecting the content of educational material, allowing students to assess the significance, practical relevance of the acquired knowledge and skills" (Kalugina, 2000, p. 4).

In accordance with the Federal State Educational Standard of Higher Professional Education, the basis of the educational activity of the teacher is now the system-activity approach to the implementation of the teaching of educational disciplines (*Portal of Federal State Educational Standards of Higher Education*, 2017). This approach is expressed in the organization of the learning process in such a way that its basis is the active independent cognitive activity of the student. The teacher here, first of all, acts as the organizer of the educational process (tutor), whose task consists in his/her individualization, in the orientation of the student to the creative search for information.

The system-activity approach is the basis of practice-based learning. The use of this approach in the educational process makes it possible to create in the students' skills and abilities they will need in their future professional activities, such as:

– readiness for self-development, self-organization and continuous education;

– the ability to develop and design the social environment of their development;

– the ability to organize independent educational, cognitive and organizational activities;

– the ability to use the acquired knowledge to develop personal life goals.

We shall consider the methodology for strengthening the practice-based component in education in the course of the educational process.

The main directions of strengthening the practical orientation of the teaching of educational disciplines are actualized in the course of application of new approaches by the teacher using traditional and, at the same time, the introduction of innovative forms of contact and extracurricular work.

For example, during traditional study sessions (workshops, problem lectures, round tables, etc.), it is advisable to use methods that target learners to independently search for educational information. Here, in the first place, it is necessary to include the methods of illustrations and demonstrations, allowing students to give visual information about the subject of instruction; method of heuristic conversation, giving the student the opportunity to broaden his horizons and the level of theoretical knowledge; problem-search method, which allows to activate the student's curiosity and cognitive interest in the solution of the task set by the teacher. Etc.

The application of the above methods is effective subject to sufficient relevance of the issues considered by the students and the teacher; the ability of the teacher to generate cognitive interest in the issues being studied. The effectiveness of methods is that they contribute to the development of students' skills of critical thinking, the ability to argue and logically substantiate the asserted theses, form a cognitive interest in the discipline as a whole.

Innovative methods of contact work are of particular importance in the organization of practice-based learning.

For example, web quests (a web quest is the learning technology associated with finding information by the students on a given topic on websites) make it possible to realize the visibility, multimedia and interactivity of learning. This technology is of decisive importance in the context of the orientation of modern youth to the use of electronic sources of information. When implementing this form of educational work, the conditions of information search given by the teacher enable students to critically analyze the sources, separate them according to the criteria of reliability, objectivity and relevance, in other words, to improve their skills in cyberspace (Popov, 2001, p.158). The use of electronic educational resources, at the same time, allows improving the skills of distance learning, which is especially necessary for the timely adaptation of a person to continuously updated information, which is difficult, amid the focus of today's educational process on traditional forms of knowledge transfer (Martynova, 2015).

Workshops and brainstorms as technologies of active group learning contribute to the development of creative thinking of students based on their personal experience and theoretical knowledge gained. The group work of participants in the workshop and brainstorm motivates each of them to achieve the educational goals set at the beginning of the session, thus stimulating their cognitive process, contributing to the integration of knowledge obtained within the framework of separate academic disciplines (Ibatova, 2016).

Such methods of active learning as trainings aimed at improving knowledge and skills are of particular importance in the organization of practice-based learning. This form of contact work allows you to acquire not only theoretical, but, first of all, practical skills. The peculiarity of trainings is also that they develop sociability, ability to reflect, and skills of group work. And this "baggage" is necessary for a person not only in production activities, but also in everyday life.

Master classes also make it possible to improve, mainly, the practical skills of students. They are interesting in that they enable students to get acquainted with the original methods of conducting training sessions, directly discuss the advantages and disadvantages of these methods, and form a personal, original opinion on the issues under

consideration. This form of contact work forms a motivation for self-training, self-development and self-improvement, contributes to the growth of effectiveness of personal goal-setting.

Self-training is of great importance in practice-based learning. Self-training allows actualizing, problematizing and systematizing general theoretical issues, contributing to the development of multi-paradigm thinking, the ability of the learner to selectively assimilate knowledge in accordance with his personal intellectual status.

Extracurricular activities (preparation and holding competitions, flash mobs, jubilee and festive events, etc.) contribute to the development of teamwork, tolerant attitudes towards representatives of different faiths and nationalities, and the ability to avoid conflicting ways of solving problems. Etc.

4. DISCUSSION

Thus, in the course of the author's study of the essential foundations and methodology of actualization of practice-oriented learning, the following results were obtained:

- the content aspects of practice-based learning were considered; its main tasks were listed;
- the expediency of introducing practice-based learning in the educational process of higher and secondary vocational education institutions was justified;
- the methodology for implementing practical-based learning in traditional and innovative forms of training activity of students and teachers was characterized.

5. SUMMARY

Summarizing our research, we can formulate the following conclusions:

- practice-based learning is the learning based on the synthesis of fundamental, theoretical education and applied vocational training;
- the need to introduce practice-based learning in the educational process is conditioned by the task of continuous improvement of professional skills that a future specialist must possess;
- the implementation of the model of practice-based learning requires a combination of traditional and

innovative forms of contact and extracurricular work.

6. CONCLUSION

The materials of the study can be used for further conceptual study of the essential aspects and methodology for implementing practice-based learning.

The results of the research can be applied in didactics to develop innovative and improve traditional methods of teaching the academic disciplines, determine their structure and internal content.

In the long term, the results of the study can serve as the basis for developing a strategy for the modernization of Russian secondary and higher vocational education in the direction of strengthening its practical orientation.

During the research, problems were identified that need further conceptualization. These include: the determination of the ratio of fundamental and applied components in the content of the taught academic disciplines; the development of technologies for the implementation of practice-based learning, methods to improve its effectiveness; and identification of the main directions of the implementation of the system-activity approach in the educational process.

ACKNOWLEDGEMENTS

The work is performed according to the Russian Government Program of Competitive Growth of Kazan Federal University.

REFERENCES

- Boekaerts M. Self-regulated learning: Where we are today / M. Boekaerts // *International Journal of Educational Research*, 1999. – № 31. – pp. 445-457.
- Gray K. *Workforce education: The basics* / K. Gray, E. Herr. – Needham Heights, MA: Allyn and Bacon, 1998. – 326 p.
- Ibatova A. Z. Using Interdisciplinary Integration in Teaching English of Oil and Gas Students in Russia / A. Z. Ibatova, A.G. Ilin, N.V. Ippolitova, M. A. Stavruk, N. L. Ivanova // *International journal of environmental & science education*, 2016. – Vol. 11. – №15. – pp. 8055-8061.
- Kalugina I.Iu. Educational opportunities of the practical-based learning of students: Author's abstract. Cand. Ped. / I.Iu. Kalugina; Urals State Professional Pedagogical University. – Yekaterinburg, 2000. – p. 20.
- Kheifets P.S. A modern complex of basic vocational education [Electronic resource] // *Education through life: continuing education in the interests of sustainable development*. V.2, 2003 – URL: <http://cyberleninka.ru/article/n/sovremennyy-kompleks-bazovogo-professionalnogo-obrazovaniya>(accessed date: 05.05.2017).
- Martynova V.A. Distance Learning in Training of PE Specialists / V.A. Martynova, R.F. Aktarieva // *Procedia-Social and Behavioral Sciences*, 2015. – pp. 67-74.
- Merzon E.E. Organizational and pedagogical conditions of academic mobility development of students at school of higher professional education / E.E. Merzon, A.R. Fayzullina, R.R. Ibatullin, D.A. Krylov, N. K. Schepkina, T.V. Pavlushkina. // *Review of European Studies*, 2015. – 7(1). – pp. 46-51.
- Popov I.J. Education in the light lieberspace evolution and transition to cyberspace / I.J. Popov // *Journal of Science Education and Technology, USA, New-York, Plenum Publishing Corporatio*, 2001. – Vol.10. – № 2. – pp. 155-163.
- Portal of Federal State Educational Standards of Higher Education. FSES HE for undergraduates [Electronic resource]. – URL: <http://fgosvo.ru/fgosvo/92/91/4> (accessed date: 05.05.2017).
- Prosalova V.S. The concept of introducing a practice-based approach [Electronic resource] // *Internet-journal "NAUKOVODENIE"*. No.3 (16), 2013. – URL: <http://naukovedenie.ru/PDF/10pvn313.pdf> (accessed date: 05.05.2017).
- Sabirov A.G. The mechanism for implementing a competence-based approach in teaching the general cultural disciplines // *Russia and Europe: the connection between culture and economics: Proceedings of the XVII International Scientific and Practical Conference (February 28, 2017)*. - Ch. Editor Uvarina N.V. – Prague, Czech Republic: Publ. house WORLD PRESS s.r.o., 2017. – p. 479. P. 233 – 237

Vetrov Iu.P., Klushina N.P. Practical-based approach [Electronic resource] // Higher education in Russia. No.6, 2002. - URL: <http://cyberleninka.ru/article/n/praktikoorientirovannyy-podhod> (accessed date: 05.05.2017)