

TEACHER'S CONTINUOUS TRAINING AS A FACTOR OF INNOVATIONAL DEVELOPMENT OF HIGHER EDUCATIONAL INSTITUTES HUMAN CAPITAL

Speranskaya N.N., Tereshchenko S.V.

Saint Petersburg State Forest Technical Academy, Saint Petersburg, Russian Federation

Abstract: *At the present article we are describing problems of enhancing quality of Russian education under conditions of globalization and internationalization of pan-European educational space on the base of development of continuous training system for higher school teaching staff. Special attention is given to the basic traditional forms of RC for teachers. Analysis of the present continuous training system showed its main disadvantage: of higher school pedagogy and psychology courses. At the Saint Petersburg State Forest Technical Academy (FTA) we elaborated new approach to the teacher continuous training in technical high educational institutions – applying of advanced Russian and foreign specialists experience in this sphere. Academic mobility is also examined as an innovational method in teacher's continuous training development that promotes the enhancing quality of human capital in higher school, and therefore, entire higher education.*

Keywords: *human capital, high education, continuous training, innovational development.*

Current situation in Russian Federation is characterized by transition of Russian economy from raw materials export to innovational socially orientated way of development /1/. This supposes that innovations should cover not only creation of new technologies, their implementation into industry, but also promotion of production at the market, processes of personnel management. Necessity of innovational development entirely refers to educational sphere also. Innovational character of the sphere, priority of the quality of graduates' knowledge and educational services changed requirements to a higher school teacher, raised significance his creative position to the work and high professionalism.

Insufficient level of educational services leads to the weak connection between knowledge, skills and behavioral directions of higher school graduates. This results in difficulties of free integration of young specialists into business space. The guarantee of demand for the graduates at the labor market is at first their knowledge and experience in professional activity. Imbalance between knowledge and skills is defined by such factors as a lack of information about real needs of labor market, insufficient level of a teacher knowledge and experience in the sphere of elaborated current study programs and courses, and also lack of students' ability to make their own decisions.

Large distance between real processes in economy, science, industry is becoming an actual need in the search of new approaches to education. In this meaning a very important thing

becomes the reformation of education in direction of clear notion of final product value – a high creative potential specialist. For the formation of creative, independently thinking personality it is necessary to have an education capable to be mobile, dynamic, flexible, continuous, wide introduction of innovative processes into the system of professional education, ensuring of conditions for establishment of professional personal culture.

Quality of education is an important factor of a person's life and of the society as well. Contemporary researches of premises of high quality education give special attention to the using of advanced pedagogical technologies and to democratization of study process. In this case, democratization means free choice for a student of his/her profession and trajectory of education, scenario of professional activities.

Quality of education at the level of specific actions may be considered as a sum of characteristics which are compulsory factors of organization's activity on educational services. Assessment of education quality is closely connected with solution of a number of problems: what can be called a quality result of professional training; what should be done to make study process closer to demands of modern education approach; what means are needed for implementation of that problems

For solving these problems it is necessary to change strategy of personnel management and of an institute entirely. Many educational institutes of Russia nowadays apply principles of management which do not sufficiently meet current requirements. Administration tends to solve the problems without thinking over the processes causing these problems.

By giving more attention to the processes taking place in education, we may considerably improve quality of education. So, to our opinion, it could be more relevant to replace inefficient calculation of scientific methodical activity rating of teachers with organization of teacher staff retraining which would meet all modern demands. Concerning the rating characteristics, it is much more productive to assess quality of educational programs offered by various institutes.

Thus, at the present stage of society development quality of education depends not only on the condition of material and technical and scientific information base of educational process, but mostly on the level of professional competence of teacher staff and organization of its activity.

Use of innovational methods of the personnel management in higher school is a reality, without consideration of which it is impossible, from one hand, to improve level of higher education development, and, from the other hand, to enter the international education space as equal in rights partners. Innovational methods of higher school management make give special attention to such notions as human capital.

Human capital is a unique economic resource which is increasing with investments into it. It should be noted, that the theory of human capital was elaborated in the end of 50th – beginning of 60th of the last century by American economists – laureates of Nobel Prize T. Shultz, G. Bekker, B. Weisbrod, J. Mincer, L. Hansen. They stressed that human capital consists of knowledge obtained, skills, motivations, and energy which are intrinsic for man and which can be used for a period of time for production of products and services. Human capital increases with financial investments of an institute into enhancing of teachers educational level, with elaboration and realization of continuous training programmes

All above mentioned is entirely applied to higher school teachers. Quality of educational services depends on the level of knowledge, and on the ability of teachers to transfer their knowledge. Human capital may become the source of high incomes and improve image of institutes because of the fact, that those who come to continuous training courses have practical experience, and they make their choice in favor of the institute with high level of the teacher staff.

Human capital represents a long-term economic resource; its economic “depreciation” is inversely proportional to the production value of a teacher (which increases with time, with acquiring of a status of candidate and doctor of science, increasing of length of teaching experience).

Thus, the main factors of human capital are: knowledge, skills and mastery acquired due to special education, professional training, scientific and pedagogical experience.

Development of human capital is a basic of effective and innovational potential of an institute functioning. One of the directions of human capital development of technical higher educational institutions is the elaboration of new approaches to the system of teachers' continuous training, in professional sphere and in the sphere of pedagogy and psychology as well.

At the moment Saint Petersburg State Forest Technical Academy (FTA) offer various opportunities to improve professional skills for teachers. They include:

- post-graduate courses;
- PhD examinations, preparation and defending of PhD degree thesis, doctor degree ;
- second higher education;
- training course in other high school institutes, at the enterprises and other organizations;
- retraining in the institutes and centers of continuous education including those on the base of the Faculty of continuous education of FTA Forest business school;
- participation in various seminars:
- participation in scientific research, sessions, conferences (as reporters as well), round tables, presentations, supervising scientific research work of personnel;
- participation as experts in making expert conclusions.

Nowadays teachers of high technical educational institutions improve their professional skills mostly in the professional sphere. Programs for continuous training are lacking problems of high school pedagogy and psychology. A good illustration of this phenomenon is given in Table 1 which reflects results of inquiry conducted among the students of Petrozavodsk State University concerning qualities characteristic for “an ideal teacher”.

The first place here, on the students' opinion, takes knowledge in the sphere of pedagogy and psychology and the ability of a teacher to apply them practically. A special role belongs to communicative skills of a teacher. Therefore, full-fledged continuous training programs for higher educational institution teaching staff should contain courses on pedagogy and psychology as well. Understanding of importance of the problem led to the creation of school for young teachers on the base of The Faculty of Continuous Education of the FTA.

Table 1.Characteristics of “an ideal teacher”

№	Characteristics of “an ideal teacher”	Share of students who noted this quality, %
1.	Ability to transfer knowledge	76,9
2.	Communicative skills	63.6
3.	Sense of humor	56.1
4.	Sympathy and sensitivity	47.2
5.	Good knowledge of business	28.1
6.	Refinement, high general culture	20.6
7.	Democratic views	16.6
8.	Keenness on the science	5.3

In the frame of such school we organized continuous training courses for teachers using experience of foreign and Russian teachers. At the FTA there are opportunities for continuous training for higher school and college teachers. Improving of professional skills is realized with the help of experienced specialists from the University of Applied Sciences from Tampere and Mikkele (Finland), from Swedish University of Agricultural Sciences , Russian State Pedagogical University named after Gertsen and others.

The educational process is organized in module system. Each module allows to improve qualification in the volume of 36 hours. The main themes are: innovational methods of teaching, realization of the competency approach in education, psychology of teaching, role of practical component and using of visual means in the education process.

After finishing training in the frame of each module participants were interviewed about importance of the problems which could be interesting for studying.

On the base of the analyze of the results obtained it should be noted that all the participants notes the necessity of such courses. 60% of participants consider that training on pedagogy and psychology among higher school teachers should be conducted annually, 27% - once in 2-3 years, 7% - once in 5 years, 6 % - depending on the situation.

All participants notice importance of such courses, novelty of information obtained.

Among the themes offered for next seminars are the following:

- Application of innovational methods in education.
- Training on application of new programs.
- Survey of modern methods of teaching applied at higher school.
- Teaching of various groups of students.
- Two-level system of education.
- Establishment of contacts.
- Interpersonal communication.
- Innovational methods of teaching
- Time-management.
- Organization of scientific research.
- Psychology of modern student.
- Testing and assessment of students' knowledge.
- Teaching of humanitarian disciplines in technical higher school.
- Conflict science.

Special interest of Russian teachers every time is caused with studies conducted by foreign specialists: they learn a lot of information about the content of study programs, application of the newest technologies of education, links between higher school and enterprises, opportunities offered to graduates of foreign institutes.

Foreign specialists invited to the FTA for conducting seminars with Russian teachers notice that they acquire new experience themselves. Foreign specialists learn more about approaches to the teaching in Russian higher educational institutions, begin to understand better typical features of communication between Russian people, relationship between teachers and students. Apart of that, they obtain a good opportunity to visit Saint Petersburg – cultural center of Russia. The main difficulty of realization of such schools is often connected with language barrier, necessity to involve translators for high-quality communication between teachers and audience.

One of the new directions of improving professional skills is academic mobility. Mobility of teaching staff promotes enhancing of quality of pedagogical activities and scientific research by means of comparison of different approaches in education.

Academic mobility at the moment could be realized in the form of “summer” and “winter” schools, various exchange programs in the frame of agreements of international cooperation, elaboration of “double degree” programs, dissemination of distant learning programs, through development of teachers’ continuous training system involving advanced Russian and foreign specialists.

Saint Petersburg State Forest Technical Academy has certain experience in realization of academic mobility among teaching staff in various forms. Firstly, about twenty teachers of the FTA annually visit foreign countries for delivering lectures, in such countries as Finland, Sweden, Germany, Italy, Estonia. In turn, an equal quantity of foreign teachers visits the FTA. The geography of universities which they represent is vast enough. This is Finland, Sweden, Germany, Italy, Estonia. Secondly, joint conferences of Russian and foreign teachers are organized on the base of FTA. And, finally, Russian teachers participate in various international projects, requiring various forms of academic mobility.

The latter becomes a variant of continuous education, exchange of pedagogical experience. It is an essential element of pan-European academic space. Memorandum of European Board commission “Life-long learning” from 30 October, 2000, says that the two strategic tasks of life-long learning are: development of adequate civil position and development of professional skills necessary for adaptation to the requirements of new society, which is built on knowledge allowing entirely participate in social and economic life.

It should be noted, that continuous training for higher school teachers is also one of the opportunities of life-long learning. Improving professional skills is necessary for European citizens to acquire instruments allowing self-development and active participation in the life of modern society, including skills of innovational development. Thus, continuous training for teachers becomes the key factor of improving education quality, without that is impossible innovational development of any higher educational institution.

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