Project Technologies of Education as the Factor of Increasing University Competitiveness

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Abstract—To prepare a competitive graduate is the main goal of modern education. The demand of graduates on the labor market is an external manifestation of the university competitiveness. A key factor in the preparation of competitive graduates is training technologies. The article presents the results of an experiment using project technologies in the process of studying Russian as a foreign language. Based on the results of the experiment, the authors conclude that the most effective methods of training are project technologies which form knowledge, skills and abilities giving to graduates competitive advantages with the purpose of employment and further personal and professional realization. The authors also suggest a model for integration of project technologies into the process of forming the competitive advantages of the university graduates.

Keywords—competitiveness, competitive advantages, training technologies, project method, key competences

I. INTRODUCTION

Currently, towards globalization and internationalization of education trends are observed. In the process of integrating universities in the international educational environment, students’ academic mobility occupies an important role, improving academic collaboration, and is not only one of indicators of the university’s competitiveness, but also offers a competitive advantage to graduates in the international labor market.

In the current conditions, it is necessary to use training technologies in the educational process allowing students to develop self-education skills, the ability to combine theory and practice, as well as search skills and abilities. This is important for learning a foreign language as a tool for obtaining professional education in academic mobility terms.

In this case, it seems appropriate to use project technologies improving all necessary skills in the practice oriented self-study process.

Substantial contribution to study of issues of education based on project methodology was made by such scientists as J. Dewey [3], William H. Kilpatrick [4], L. Moskovkin, E. Polat, E. Tyurina, A. Khutorskoi etc.

The study of literary sources shows that, despite the large number of works on the above problems, aspects have been insufficiently examined and require further study.

II. MATERIALS AND METHODS

Every year competitive environment of the international educational market increases. It is explained by the globalization processes. Under current conditions, universities comply with modern requirements and trends of the global education market. It means that higher education institutions face acute problems of increasing the level of competitiveness. Achievement and maintenance level of competitiveness should be based on a constant and purposeful assessment of competitive advantages.

In our opinion, one of the factors contributing to improvement the competitiveness of universities is the training of graduates. The level of training complies with requirements of international standards, and this can be achieved only by optimizing and increasing the efficiency of the educational process.

Competitiveness of a university is a complex feature which covers the aggregate of internal and external factors (those displayed by specific indicators) beneficial for competitive advantages to ensure strong strategic position of a university [5].

Educational technology is the one of the internal environment factor that influences on the competitiveness of the university as a whole, and the graduate in particular. In academic mobility terms conditions, a graduate must possess not only a foreign language, but also professional competence [1].

In the context of the knowledge economy development, the requirements for participants of the educational services market change, and this is expressed in innovation processes of the education. It results in the modernization of educational technologies [2].

Effective training technology should contribute to the development of students’ research and cognitive skills, prepare graduates able to self-development. Such factors as the development of students’ skills to generalize compile, analyze information, plan their learning activities, work in a team should become an important part of the educational process. The development of all necessary skills for a modern graduate helps to use the project method in the educational process.

Projects Method was created in the 20s of XX century. The founder of the method is an American psychologist
and an educator John Dewey. J. Dewey and his progeny W.H. Kilpatrick believed that training should be built on an active basis and student personal interest, in knowledge acquisition that can be used in practice.

The project training method is significantly different from the traditional training method.

As opposed to the traditional technology, which is oriented to the teacher, the project technology is focused on the student. Using the project technology of education allows to create conditions for self-development of students, because the project technology tasks include material oriented to solving specific practical problems. As opposed to traditional technologies, when the teacher gives assignments oriented only to learning the educational materials.

The main thing in the traditional approach, is the correct performance of the task. Project technologies of education contribute to the realization of students' personal needs in an active, independent, practically oriented training, the desire to learn new things, to exchange information during the team work, increasing the internal students motivation.

Despite the fact that the main part of the project activity is performed during of the self-study, the realization of such training technology of allows to combine and to supplement the classroom work with teacher, extracurricular and self-study of students.

Learning a foreign language, it is useful to apply the following types of projects:

- subject-content: subject, intersubject;
- the number of project participants: individual; team
- kind of the dominant activity: research projects; search projects; creative projects; game projects; practice-oriented projects; information projects;
- the duration of the project: episodic (mini-projects); short-term (projects for one lesson); medium term (thematic projects); long term (semester projects);
- methods of collecting and sources of information: research (work with library resources); text (work with sources of information, not with people); personal (contacts with people);
- results: - reports; catalogs; videos; articles; booklets and etc.

The choice of projects type depends on the level of the language, on the forms and directions of students' training, on the goals of the oriented project.

Team work project can be considered as the most effective, because in the process of teamwork students collect, analyze, evaluate information, discuss ideas, prepare a presentation in a foreign language. There is also a discussion in a foreign language between students from different groups during the defense of project

Mini-projects of individual type are simple for performance, one or two participants can be involved.

Research project is the most effective for improving speaking skills in special disciplines in the training area. Preparing research-type projects, students work with literature the training area in a foreign language. The result of this type of project can be articles, reports, participation in the conference.

During the application of the project method, the important role is not only determining the typology of project tasks, but also the phases of the project activity, because the type of project influence on the project structure.

We propose the following main phases of project activities:

1. Case study (theoretical phase) involves preparing, choosing a topic, formulating a problem, choosing methods, determining project participants and assigning responsibilities, collecting information;
2. Problem solution (practical phase) involves the analysis, processing and evaluation of information, the formulation of conclusions;
3. Activity assessment involves correction, forming final conclusions, determining the form of implementation and defense of the project.
4. Project defense involves the presentation of the finished project, its defense, assessment of the quality and results of the work, analysis of successes and failures

It should be noted that at the foreign language lessons, project technologies contribute to the effective learning of vocabulary within the project, because the language is used in situations the most close to real.

In our opinion, an educational project implemented at university is a training technology which solve professionally significant practical problem in the process of students’ joint activity and personal interest.

In the training process based on the project approach, students not only get knowledge, they have the motivation to knowledge acquisition.

Based on the experience of using the project method, we have developed a model for integration of training technology into the process of forming the competitive advantages of the university graduate (refer with: Fig.1).
Figure 1. Model for integration of project technologies into the process of forming the competitive advantages of the university graduates

GOAL
Formation of competitive advantages of university graduates

TASK
Formation of graduates of the university key competencies based on the project technology in the educational process

Integration of project technology in the educational process
Creation of pedagogical conditions for the integration of the project technology in the educational process

Evaluation of readiness for the project technology
Deciding on the type of project, the duration of the project and the type of occupation during which it will be implemented

Role of the teacher
Motivation, support, direction, advice, observation

Organization, coordination, observation

Results examination, work correction

Observation, evaluation and recommendation

Phases of the project
1. Case Study
2. Problem solution
3. Activity assessment
4. Project defense

Role of the student
Choosing of the topic, allocation of responsibilities in the group, acquisition

Analysis of information, discussion of decisions, research

Results preparation of for defense and presentation

Project defense, discussion and self-evaluation, analysis of successes and mistakes

Formation of key competencies
Evaluative and semantic
Educational and Cognitive
Informational
Communicative

Professional
Self improvement

RESULT
Formation of competitive advantages of university graduates

Reasoning skills
Decision making ability
Educability

Improvement in the profession
Self-confidence
Creative thinking
Independence

Working through information
Using modern information technologies

Self-development
Self-education
Innovation

Teamwork skills
Sociability
Managerial ability

Note: *Compiled by authors
In this research we applied the project method in the educational process of Shandong Transport University, Department of International Education (China, Shandong Province, Jinan City) during teaching Russian as a foreign language. Students’ specialty “Transport” of the 2nd course, who study Russian as a foreign language were participated in the experiment. Students of the second course were involved in the experiment, because by the second year students in general had formed communicative competence (basic skills).

During the experiment, the students were divided into two subgroups: experimental and control. Knowledge and number of students were similar in both subgroups. Both subgroups learned the same material in different methods. Control subgroup students were taught in the traditional training method, and the experimental one used the project method.

Several mini-projects and medium-term projects were proposed to students. These projects are the part of a long-term project “Chinese cities”.

The goal of the long-term project was to create a guidebook on China, in the form of a multimedia presentation “Chinese cities. History and Modernity”. Long-term project included two groups of related projects.

The first group had projects (including mini-projects), which were developed in a collaboration of the teacher and students. These projects were united in one group named “Chinese cities. Transport”. This activity helps students improve the skills of speech in Russian language in communication process, and ability to communicate with classmates and teacher.

The second group, students had projects, united by the theme “Chinese cities. History and Modernity”.

In this part of the long-term project, the students prepared booklets about the historical sights of China, based on the previous projects. The booklets have been made by the students, became the basis of the guidebook (multimedia presentation on the theme “Chinese cities. History and Modernity”)

Analysis of the work results of the experimental and control groups showed that the compulsory Russian language program was learned by all students of the experimental and control groups. However, students of the experimental group were more successful than their colleagues from the control group in receptive types of speech, especially listening: they could listen without particular effort and, in general, understood audio texts that they had not previously studied. They naturally communicated in spontaneous dialogical speech with native Russian speakers. Students of the control group listened unknown audio texts with great effort, and also found it difficult to answer general questions. It was difficult for them to make a spontaneous dialogue with native Russian speakers.

Based on research we conclude that the project methodology allows students to study the topic deeper, and broadening one’s horizons, to train communication skills, ability to find and select the necessary material by themselves, to develop collective creativity and individual talents. Project technologies provide to learn a foreign language involuntary and effective.

III. CONCLUSION

Training projects help to solve the following important tasks

- skills and knowledge acquisition included in practice
- collecting, analyzing and processing information in a foreign language help to develop communicative competence during creative work involving in professional sphere,
- team projects help to develop self-assessment skills, self-correction skills, ability to assess the effect of made decisions, ability to work in a team, to be responsible for teamwork, and ability to present the results of their work and evaluate the activities of other participants.

Thus, using project technologies in educational process helps to create students’ key competencies which developing all the knowledge, skills and abilities giving to graduates competitive advantages in the labor market

REFERENCES