PROJECT ACTIVITY OF STUDENTS IN THE CONDITIONS OF UNIVERSITY:
EXPERIENCE OF PREPARATION AND INCLUSION

The article analyzes the experience of preparing students for project activities in the University. Training in project, design and innovation, design and research activities as a way to solve professional problems is considered as one of the priorities of modern education.

Analysis of project-oriented technologies used in higher education institutions of Western Europe and the United States in the preparation of engineering specialists in General leads to the conclusion that despite the features inherent in each educational system, there are a number of identical characteristics, such as the presence of a professionally significant task; organization of work in a team; the leading role of the teacher not only as an inspirer and consultant, but also as a role model; interdisciplinary nature of projects. These achievements inspire countries in other regions of the world to pay more and more attention to project-based learning.

The article considers the accumulated in the Commonwealth of Independent States no less important experience in the organization of project activities of students in this aspect. On the basis of the analysis it is proved that special opportunities are opened by project activity in the Union with e-learning.

An in-depth review of the research of Russian scientists on the organization of project activities in the educational environment, including the analysis of what gives the inclusion of students in the project activities.

Considering the Kazakh experience of preparing students for project activities in the University, attention is drawn to the fact that students are actively involved in youth social projects. The activity of al-Farabi KazNU is deeply analyzed on the organization of project activities of students at the University, faculty, Cathedral levels and in the forms of social, research, creative, leisure projects.

The analysis of foreign and domestic experience of preparing students for project activities in the University, shows that the process of formation of project competence of students is a purposeful and organized process of mastering by students the knowledge, skills and experience necessary for them for productive and personal – meaningful implementation of project activities, allowing to develop a wide range of competencies necessary for life in today’s dynamic socio-economic conditions.

Key words: project planning, project competence project activities, innovative education, project team, project teamwork, project-based learning, design research, design thinking style.

Mehmet Ö.¹ G.A. Kassen² N.M. Sadykova² D.I. Mukhatayeva²
¹Erzincan University, Turkey, Erzincan
²Al-Farabi Kazakh National University, Kazakhstan, Almaty, e-mail: gulmira.kassen@mail.ru

PROJECT ACTIVITY OF STUDENTS IN THE CONDITIONS OF UNIVERSITY:
EXPERIENCE OF PREPARATION AND INCLUSION

Мехмет О.¹, Г.А. Касен², Н.М. Садыкова², Д.И. Мухатаева²
¹Эрзинджан университет, Турция, Эрзинджан
²әл-Фараби атындағы Қазақ ұлттық университеті, Қaзaқстaн, Алмaты қ., e-mail: gulmira.kassen@mail.ru

Университет жағдайындағы студенттердің жобалық қызметі:
дайындау және қосу әрекінісі
студентерді жәбілдік іс-әрекетке қіріп құяды. Университет жағдайында студентердің жәбілдік іс-әрекетге дайындауы қатысты құзыреттілігін, құзыреттілік және жаңылықтық құлымдық қызметті, социалдық, ғылыми-және-туындылық, өзара-әлеуметтік құрылыстың неге қатысына жатысына тұмыс жасайды.

Университет жағдайында студентердің жәбілдік іс-әрекеттерге дайындаудың қазақстандық тәжірибесі менен ағартылған, студентердің әлеуметтік құрылысқа жөніндегі қатысқандығына назар аударылады. Әл-Фараби атындағы ҚазҰУ-дің жалпы университеттік, факультеттік, кафедралық, әлеуметтік, ғылыми-зерттеушілік, шығармағының, бос уақытты ұйымдастыру жұмысалары формасында студентердің жәбілдік іс-әрекетерін ұйымдастыруға мүмкіндік береді.

Университет жағдайында студентердің жәбілдік іс-әрекеттерге дайындаудың шетелдік және отандық тәжірибелеріне жүргізілген талдау, студентердің жәбілдік құзыреттілігін қалыптастыру үрдісі – бұл қазақстандық студенттердің жәбілдік іс-әрекетінің қасиеттің жоғары қарайы айырымдамасы.

Түйін сөздер: жоба, жобалау, жәбілдік құзыреттілік, жәбілдік іс-әрекет, инновациялық білім, жәбілдік топтар, жәбілдік топтық жұмыс, жәбілдік оқыту, жәбілдік зерттеу, ойлаудың жәбілдік стилі.

Mehmet Özbaş et al

1Факультет Образования, Эрзинджанский университет, Турция, г. Эрзинджан
2Казахский национальный университет им. аль-Фараби, Казахстан, г. Алматы, e-mail: gulmira.kassen@mail.ru

Проектная деятельность студентов в условиях университета: опыт подготовки и включения

В статье анализируется опыт подготовки студентов к проектной деятельности в условиях университета. Обучение проектной, проектно-инновационной, проектно-исследовательской деятельности как способ решения профессиональных задач рассматривается как одно из приоритетных направлений современного образования.

Анализ проектно-ориентированных технологий, применяемых в высших учебных заведениях Западной Европы и США при подготовке специалистов инженерного профиля, в целом позволяет сделать вывод, что несмотря на особенности, присущие каждой образовательной системе, имеется ряд идентичных характеристик, таких как наличие социально значимой задачи; организация работы в команде; ведущая роль преподавателей не только как идейного вдохновителя, но и как образца для подражания; междисциплинарный характер проектов.

Эти достижения вдохновляют страны других регионов мира на активизацию проектного обучения. По мнению авторов, что особенно важным является включение молодежи в социально значимые проекты, что в свою очередь позволяет студентам получать фундаментальную, углубленную и специализированную подготовку.

Процесс формирования проектной компетентности студентов – это целенаправленный и организованный процесс овладения студентами знаниями, умениями и опытом, необходимыми для продуктивного и личностно-ориентированного выполнения проектной деятельности, позволяющей развивать широкий спектр компетенций, необходимых для жизни в современных динамично развивающихся социально-экономических условиях.

Ключевые слова: проект, проектирование, проектная компетентность, проектная деятельность, инновационное образование, проектные группы, проектные командные работы, проектное обучение, проектное исследование, проектный стиль мышления.
absorbing the achievements and experience of the project culture, which is clearly seen in international and national analytical documents of the last year (NMCHorizon Report: Higher Education – 2017 ”, “ Russia 2025: from personnel to talents ‟, etc.).

In the Republic of Kazakhstan, the requirement to create conditions in the education system to solve the problem of ensuring the rapid and full integration of youth in research and industrial and technological processes is addressed in the Message of the President of the Republic of Kazakhstan N. A. Nazarbayev to the people of Kazakhstan dated January 10, 2018 (Nazarbayev, 2018), the State Program for the Development of Education and Science of the Republic of Kazakhstan for 2016-2019 (State Program for the Development of Education and Science of the Republic of Kazakhstan, 2016), Concepts of the State the youth policy of the Republic of Kazakhstan until 2020 and other important state documents (Concepts of the state youth policy of the Republic of Kazakhstan until 2020, 2013).

In the context of these requirements, design is beginning to be understood by us as one of the conditions, or mechanisms, of changing the quality of education and is considered as an element of innovative education.

At the present stage, research is being conducted on various technologies for organizing project activities of students having a common structure (stages), and at the same time, specific features and tools used for different formats and conditions for the implementation of students’ project activities. Educational organizations set themselves such tasks as: the popularization of science; development of practical skills (technological, design, research, managerial, entrepreneurial), including professional ones, in the process of project activity; creation of creative design teams, development of business communication skills, cooperation, teamwork, etc.

Review of research and scientific literature on the preparation of students for project activities abroad

Training in design, design and innovation, design and research as a way to solve professional problems is one of the priorities of modern education, which we are convinced by analyzing foreign and domestic experience in preparing students for design activities in a university.

In the United States, the vocational training system is devoting more and more hours to project activities: in US universities, the volume of lectures is decreasing from year to year, and more and more time is being allocated to project team work (Ryzhkov, 2015). In universities, the practice of involving students in real research projects is widely practiced, standard knowledge transfer is considered inappropriate, the problematic approach to teaching, which is of a research nature, is widely used. Two effective organizational forms are being developed: the participation of students in the implementation of projects under the programs of the National Scientific Society and the participation of teachers, graduate students and students in projects of research organizations independent from the university administration, funded by private firms. The National Scientific Society considers students’ projects, conducts expert assessments and, if approved, provides the student project team with the necessary equipment, creates the conditions for successful work on the project, and assigns scholarships to its members. Practice has shown that such groups successfully solve assigned tasks and sometimes find very original solutions. The participation of private firms in research funding, the cooperation of universities with industry, design institutes is constantly evolving. U.S. engineering universities practice teamwork on mini-projects that require designing solutions to modern problems that are simplified and adapted to the goals of classes (Glotova, 2005).

In the field of methodology for teaching project activities at a university in the USA, much attention is paid to the selection of project tasks. It is considered completely unacceptable to repeat a once developed project. This allows you to bring freshness to the work on the project and puts teachers and students on an equal footing with researchers who do not have ready-made answers.

American educators hold the belief that if a student is forced to take risks in the design process, then the teacher should be in a similar position. Teachers do not always get a high-level solution, but they develop together with students, increasing their motivation and self-confidence. In the process of educational design work, student assessment is excluded, as it restrains the manifestation of their personality and prevents self-expression. Instead, teachers strive to provide each student with a constructive analysis of the strengths and weaknesses of his work, show ways for personal professional growth and improvement of activity, and inspire for a further fruitful process. The cycle ends with a team final project, requiring significant research, the depth of manifestation of innovative thinking. The result of the final project is the development and creation of a prototype. Evaluation of the results of the final project takes the form of parsing errors and encouraging
certain aspects of the work performed in terms of such parameters as the most creative use of materials; the most creative approach; the most economical solution, etc. (Tukhbatullina, Safina, 2011).

In France, the original practice of students ‘research training using design work is developed through a three-tier structure:’ license – master – doctoral studies “. Since 2002, higher education in France has been implemented in two equal directions: research and professional (Lavrentieva, 2007). Here, the industrial design method focused on market interests has spread, so the choice of project goals and means of achieving them is based on the needs of employers.

The study conducted at the first stage of higher education is educational, but basic for the transition to the second year of study. From the second year of study, French undergraduates in the research direction of magistracy join a certain doctoral school. Their duties include attending interdisciplinary seminars and participating in all educational activities of the doctoral school, including in interdisciplinary projects. The following forms of work are distinguished: 1) seminars that are held jointly with undergraduates from other universities; 2) seminars with supervisors; 3) days of graduate students; 4) work in mixed groups together with supervisors and doctoral students (Brazhnik, 2010 and others).

To carry out some educational and design studies at universities in France, a special team organization of the work of undergraduates is characteristic, when the study is carried out by a group of several people according to all standards of scientific research (relevance, subject, hypothesis, research objectives, etc. are determined). In this case, the results of the study are drawn up in an article, and in some cases – in a collective educational monograph in compliance with all requirements for the design of works of this kind (Barlex, Pitt 1999).

Great Britain pays great attention to preparing students for project activities and has achieved recognition of its specialists in engineering and design by the world elite. Analyzing the use of project-oriented technologies in universities in the UK, leading the training of specialists in engineering, researchers (Barlex, Pitt, 1999; Glotova, 2005) identify the following pedagogical conditions that characterize them:

1) “comprehensive design” of the curriculum content, starting from the first course of study and ending with graduation work;

2) a gradual complication of ongoing projects and an increase in time for their implementation: if in the first year students complete one or two mini-projects in separate disciplines, which take a total of two to three weeks, then by the third year the project will last 6-7 weeks and has an extensive interdisciplinary nature;

3) teamwork.

German universities also, thanks to the increased attention of students to project activities, graduate highly qualified specialists who are able to think outside the box, solve non-standard engineering tasks and create modern products for the industry. In the higher education system of this country, the research approach is a priority.

Design technologies also take place, but less time is spent on them than in universities in the UK.

The project method in universities in Finland is developed primarily for the development of students’ social skills, while students are free to determine the specific goals and tools of project activities on their own (Kazun, 2018).

In Australian universities, the method in question is used to acquire professional skills by future specialists; and preferences when choosing design tools are given to the latest technological innovations (Barlex, Pitt 1999).

The experience of the Higher School of Education of Bilkent University (Ankara, Turkey) is indicative of the issue of preparing students for project activities. For several years now, the University has been implementing the International Baccalaureate (IB) program, which is based on the Turkish Schools Basic School (MYP) program, which is designed to shape the design style of thinking based on critical thinking. MYP coordinators and teachers note that student projects are especially important in helping, students become more caring and creative. This program is more innovative because implemented through interdisciplinarity, its implementation uses new strategies (such as “inverted classes”) and technologies (for example, information – tablets and gadgets) to effectively increase student participation in the learning process (Ministry of National Education, 2014).

Also in Turkey, project-based learning has been introduced for a relatively long time in the framework of the study of foreign languages both in schools and universities Akhmadalieva S.M. (Akhmadalieva, 2016), based on an extensive study, substantiates the advantages of working on projects in the language training of students.

In addition, for students studying Turkish language and literature, as well as for teaching specialties in a number of Turkish universities (including Anadolu University, Yeditepe University, etc.), there is a course “Special Teaching Methods”
in educational programs in which the project method is assigned one of the main places (Bülent, Fredricka Stoller, 2005).

So, one of the co-authors of this article, Turkish scientist Mehmet Ozbash (ÖZBASH, 2018) believes that the design competence of future preschool teachers helps them in planning and organizing the learning process.

A study by a number of Turkish authors examines possible models for preparing students for project activities in higher education (ZEKARIYA, Bülent, 2014). According to the authors, the use of projects is currently a more innovative way to optimize the learning process.

An analysis of the project-oriented technologies used in higher education institutions of Western Europe and the USA in the preparation of engineering specialists as a whole allows us to conclude that, despite the features inherent in each educational system, there are a number of identical characteristics, such as the presence of a professionally significant task; organization of team work; the leading role of the teacher not only as an ideological inspirer and consultant, but also as a role model; the interdisciplinary nature of the projects. These achievements inspire countries in other regions of the world to pay more and more attention to project training. For example, project training is gaining popularity in China. Here it is aimed primarily at solving social problems (for example, environmental problems) that are declared at the state level (IBO. International Baccalaureate Organization, 2014).

**Experience in organizing student project activities in the CIS countries**

In the CIS countries, no less important experience has been gained in organizing the project activities of students in the aspect we are considering.

So, in the Republic of Belarus, a higher school has diversified and deeply mastered the organization of project activities, conducts further research to improve the practice of project training. As one of the forms of socio-design activities in universities, research work in the research of N.N. Voroshilina and A.A. Ryzhankova, while the authors argue that the socio-project activity of students involves the implementation of various types of training projects, is problematic, interdisciplinary, productive and creative in nature (Voroshilina, Ryzhankova, 2015).

Project activities are actively developed and researched in the Baltic countries. For example, researchers Jolanta Lasauskiénė and Zita Malženė considered the use of the project method in the structure of pedagogical research in university training for specialists in the field of education (Lasauskiénė, 2013). They note that various educational projects are being implemented in Lithuania. In pedagogical research of pedagogical practice, not only well-known technologies are tested, but also original pedagogical ideas are revealed or new technologies are introduced that are acceptable and attractive to many teachers. This constitutes the essential value of using the design method. The pedagogical project is fixed in the structure of pedagogical research as one of the methods for approving pedagogical ideas. In the studies of eduologists (educators) of Lithuania, the method of pedagogical projects has been used recently. This method does not deny the use of pedagogical experiment, but another alternative to testing pedagogical ideas is also possible. Scientific analysis of pedagogical projects can justify research projects of students (term papers, final works). The methodological preparation of such students is carried out in the implementation of a pedagogical project based on their own pedagogical experience.

In such conditions, projects acquire the character of pedagogical research.

In Russian education, as we have shown, the ideas of project training arose almost in parallel with the development of American educators at the beginning of the twentieth century, but were forgotten for a certain historical period. Since the end of the twentieth century, project training in Russia has received a new understanding and began to be included in the educational process at all levels of education, and above all, university. The Russian experience in the organization of project activities of students is associated with the theoretical foundations of project training, studied in the works of (Abramova, 2017), (Zaire-Beck, 1995) et al.

A retrospective of the use of project activities in the educational process and the possibility of using specialists in the educational process in the context of two-level preparation for project activities were considered in their studies in 2012 by Kazan scientists Yu.A. Kovalenko and L.L. Nikitina (Cyber Leninka, 2018). Some authors critically approach the issue of organizing project activities, focusing on errors and difficulties, thereby raising the question of the substantive and technological side of the applicability of the project method and related activities (Lazarov, 2011).

Project activity is considered as a method of teaching university students S.G. Varlamova (Varlamova, 2017), as a method of forming T.I. Zakirova (Zakirova, 2017). A training manual on pedagogical design has been prepared and published.
Modern university professors see the importance of students’ project activities in their impact on the qualities and professional competencies that will be significant for future professional socialization, which will be demonstrated during the final qualification work, will make it possible to show competitiveness in the labor market, and help quickly adapt to the workplace. Project activities during the years of study at the university are considered by teachers of higher education and as an effective way of training a competent specialist who is able to design their professional activities, solving tasks in accordance with the requirements of a specific production situation, an effective means of choosing their own path of development of professional independence and responsibility M. Taspaeva G. (Taspaeva, 2017).

The inclusion of students in project activities, according to experts of universities and researchers:

– increases the motivation of students to study at a university (Bulan, 2015);

– develops the ability to set goals (Sazanova, 2012), the ability to navigate in the information space (Kasatkina, 2016; Sazanova, 2012) and in the rapidly changing flow of information (Tulokhonova, 2009; Bredneva, 2009);

– forms the ability to solve professional problems with the use of multimedia technologies, design professional activities (Tulokhonova, 2009; Bredneva, 2009), independence (Kasatkina, 2016);

– develops and improves research and creative personality data (Sazanova, 2012), the ability to integrate knowledge from related disciplines (Kasatkina, 2016), the ability to find an effective and optimal way to solve the problem (Kasatkina, 2016), general cultural, general professional and professional abilities necessary for further employment (Zakirova, 2017);

– creates conditions for personal self-development (Kustova, 2017);

– provides the formation of high-level professional competence (Tulokhonova, 2009; Bredneva, 2009);

– allows you to create a willingness to self-development and an active and independent position in training (Kolesnikova, 2005; Sultanova, 2015);

– makes it possible to transform theoretical knowledge into professional experience (Kustova, 2017), acquire competencies and experience (Grigoryeva, 2015) to show one’s intellectual and creative abilities (V.P. Grakhov [36]), to realize creative potential (Kustova, 2017), allows you to join in research activities (Grakhov, 2014);

– forms general and professional competencies, the ability to self-determination (Sazanova, 2017 and helps students to self-determine (S.A. Kustova, 2017), project competence (Yakovleva, 2014);

– helps students to fulfill their potential (S.A. Kustova, 2017) and find a job (Zakirova 2017);

– provides quality training (Bulan 2015).

Special opportunities, according to practitioners, open up project activities in alliance with e-learning:

– makes the process more mobile (performing work anytime, anywhere),

– global (interaction with a large number of people, including experts from other cities, countries),

– independent (without the direct presence of the teacher), interesting (the student is more interested in performing such work, since the electronic environment provides a large number of tools for its implementation),

– allows to provide high-quality training for a modern graduate who has the necessary set of competencies for the implementation of future professional activities (Abramova, Gladkov, Gladkov, Kutepev, Trutanova, 2017).

In the Republic of Kazakhstan, the design activities of students began to develop and be studied from the first days of the development of the sovereign stage of development of the country. Already in 2003, Kazakhstani scientist J.R. Bashirova in her monograph “The Development of University Education in the Aspect of Training a Higher School Teacher” emphasized: “the motivated inclusion of students in the development of projects is currently an alternative way to comprehensively overcome the shortcomings of traditional education and has a number of additional advantages” (Bashirova, 2003: 53) The advantages of design training for students at the university she attributed:

– “the social orientation of project activities, allowing to implement projects that change the face of the faculty and schools;

– the real involvement of students not only in understanding their sociocultural environment, but also in transforming it;

– the ability to solve problems and implement ideas that are personally significant for students;

– obtaining real results of their work, their implementation in the life of the faculty and their own;

– the gradual development of technology for the personal design of their education, future professional activities, solving vital issues;
– free creative expression of students, not limited by the subject and time budget;
– a sense of the real benefits that the developed and implemented project will bring to the school and faculty;
– mastering the experience of an emotional-value attitude to reality;
– a different level, different quality, different content of the problems that the subjects of the educational process have to solve;
– greater freedom of choice of topics and ideas of projects, the possibility of their “separation” from the subject content of a particular academic discipline;
– the need to use when developing projects not only knowledge from different subjects, but also going far beyond the content of traditional education;
– the use of significant in volume and complexity of additional literature in the development of projects;
– great variability in the application of various design algorithms (Bashirova, 2003: 53-54).

Modern Kazakhstani scientists note the need to form a “design style of thinking”, combining in this concept a system of theoretical and practical components of human activity that open up access to information resources of education for everyone, which allows to reveal, develop, and realize the creative potential of a person (Kasen, Mynbaeva, Sadvakasova, 2013)

In all universities of the country, students' project activities are a mandatory and significant part of vocational education, preparing future specialists for practical activities in various fields of the economy and the socio-cultural process, as well as preparing for research and teaching. A special role is played by the experience of the leading university of the country KazNU named after al-Farabi. Students’ project activities here are organized at the university, faculty, and cathedral levels and in the form of social, research, creative, leisure projects.

At the university level in KazNU named after Al-Farabi creates conditions, primarily for research project activities of students, special attention is paid to the scientific and innovative activities of students and young scientists. In KazNU named after Al-Farabi in the form of student self-government there are 135 scientific circles operating in the faculties, 14 student business incubators in the faculties, and the “Intellectual Club” of the university. To a large extent, the system of students’ research work (SRWS) affects the formation and development of project competence. It is a mandatory, organically integral part of the training of specialists at the university and is one of the main tasks of KazNU named after al-Farabi, solved on the basis of the unity of educational and scientific processes.

The research of students and undergraduates is carried out both within the framework of the curriculum – student research and development wor, and outside of the academic work as part of the work of 155 scientific circles coordinated by the leaders of scientific circles, the Scientific Research Council, the Council of Young Scientists and the Scientific Student Society, as well as deputy deans for research and international relations at the faculties.

An important factor in strengthening the design and research culture as an environment for the development of design competence of students is that KazNU named after Al-Farabi takes part in the implementation of state and international scientific and technical programs, and fundamental research projects of the Science Committee of the Ministry of Education and Science of the Republic of Kazakhstan. For example, the university implemented the programs “Development of nanoscience and nanotechnology in the Republic of Kazakhstan”, “Scientific support for the development of the chemical industry”, “Interstate cooperation in the field of science”, joint research projects with international organizations and funds (ISTC, INTAS, TEMPUS, IAEA, NATO), initiative and risky scientific research, developments of the Science Committee of the Ministry of Education and Science of the Republic of Kazakhstan, as well as business contracts (http://www.kaznu.kz/ru/14978/page).

Considering the Kazakhstani experience of preparing students for project activities in a university, it is necessary to pay attention to the fact that students are actively involved in youth community projects. The government of the Republic of Kazakhstan and the country’s leading political parties are making efforts to “create all the necessary conditions under which every young citizen of Kazakhstan could realize his potential, become a self-sufficient and competitive person” (Youth organizations of Kazakhstan). Such youth projects as “Clean Session”, «Жастар жалыны – Отанға, жомарт жүрегі – жастарға», «Тарбагатай мұңы – бұқіл Қазақстандың мұңы», «В слове МЫ – 140 Я!», «Жизнь без наркотиков», «Молодежный кадровый резерв», «Еркин пікір», are widely known. “Youth personnel reserve”, “Erkin pikir” and many others. State funding of projects in the field of youth policy is constantly growing.
Conclusion

Our analysis of the experience of preparing students and their inclusion in project activities in a university environment shows that the process of forming students’ project competence is a focused and organized process for students to acquire the knowledge, skills and experience they need for a productive and personally meaningful implementation of project activities, allowing to develop a wide range of competencies necessary for life in modern dynamically developing socio-economic conditions.

The features of this process are determined by the social order to universities, the age characteristics of students, the objectives of the educational process and the content of project activities, which include subject knowledge in a certain field, the ability to solve problems based on their nomination, substantiation of hypotheses, planning activities, formulating goals, collecting and analyzing information, the presentation of the results of the study, as well as the ability to put this knowledge into practice. Attracting students of higher educational institutions to design and research activities begins with the first course of study and continues until graduation. Students’ participation in scientific conferences (preparation and writing of articles, performance in front of an audience); Work in scientific circles under the guidance of experienced teachers allows us to form general cultural competencies and gain new knowledge in the field of design. The gradual inclusion of students in project activities as volunteers, the participation of students in the competitive selection of various projects at the university, and then the republican level allows you to learn how to correctly formulate a design plan, generate innovative solutions, master the scientific foundations and methods of technology transfer.

Modern specialists of higher education from around the world and researchers in the field of preparing students for project activities in a university are actively exchanging experience and practice models. Of course, the experience of other countries cannot be introduced into the Kazakhstan system of higher education through “direct transfer” due to large differences in the organization of educational systems and training profiles, however, leading ideas can be transformed and introduced into the process of domestic professional training of specialists in the university environment.

Литература

Becker A.S., Cummins M., Davis, A., Freeman, A., Hall Giesinger, C., Ananthanarayanan, V. Отчет NMC Horizon: высшее образование – 2017. – Austin, Texas: The New Media Consortium, 2017. – 72 c.
Bülent A., Fredricka L. Stoller. Maximizing the Benefits of Project Work in Foreign Language Classrooms // English Teaching Forum. – 2005. – Vol. 43. – №4. – P. 10-21.
IBO. International Baccalaureate Organization (2014). MYP: From principles into practice // Cardiff, Wales: International Baccalaureate Organization. – 2001. – Vol. 5. – P. 50
Lasauskiënė J. Projektas kaip studijų rezultatų baigiamasis vertinimas // Pedagogika: mokslo darbai. – 2013. – Vol. 109. – P. 86–92.
MoNE. Ministry of National Education. (2013). Regulations of primary education. T.C. Resmi Gazete, 29072, 26 July 2014. Электронный ресурс: www.resmigazete.gov.tr/eskiler/2014/07/20140726-4.htm. (дата обращения: 16.04.2018).
Özbaş M., Mukhatayeva D. Views of Pre-service Teachers Related to the Development of Pedagogical Formation Training and Design Competences // Universal Journal of Educational Research. – 2018 – Vol. 6 (6). – P. 1207-1215.
Zekariya O., Bülent A. Methods of preparing the students for the project activity // Journal of Psychology. – 2014. – Vol. 1. – № 2. – P. 36-42.
Абрамова Н.С. Организация проектной деятельности студентов в электронном обучении // Международный журнал экспериментального образования. – 2017. – № 6. – С. 7-11.
Ахмадалиева С. М. Project activities in English lessons // Молодой ученый. – 2016. – №3. – С. 779-781.
Барлекс Дж. Технологическое образование в школах Великобритании / Дж. Барлекс, Дж. Питт // Школа и производство. – 1999. – №5. – С. 93-95.
Башрова Ж.Р. Развитие университетского образования в аспекте подготовки преподавателя высшей школы: Монография. – Алматы: АГУ им. Абая, 2003. – 160 с.
Бражник Е.И. Организация исследовательской работы магистрантов в вузах России и Франции / Е.И. Бражник, Л.И. Лебедева. – СПб.: РГПУ им. А.И. Герцена, 2010. – 131 с.
Бреднева Н. А. Проектная деятельность студентов в условиях междисциплинарной интеграции: дис. … канд. пед. наук. – М., 2009. – 238 с.
Булан И. Г. Опыт организации проектно-исследовательской деятельности студентов при изучении математики в условиях дистанционного обучения // Молодой ученый. – 2015. – №4. – С. 549-552.
Варламова С. Г. Использование проектной деятельности как метода обучения студентов вуза // Научно-методический электронный журнал «Концепт». – 2017. – Т. 25. – С. 199–201.
Ворошилова Н.Н., Рыжанкова Н.Н. Научно-исследовательская работа студентов в вузах Республики Беларусь как одна из форм социально-проектной деятельности // Психология социология и педагогика. – 2015. – №6. – С. 96 - 109.

Глотова Г.В. Развитие творческого потенциала будущих инженеров в вузах США и Западной Европы: дис. … канд. пед. наук. – Казань, 2005. – 158 с.

Государственная программа развития образования и науки Республики Казахстан на 2016-2019 годы. Утверждена Указом Президента Республики Казахстан от 1 марта 2016 года № 205.

Графов В. П. Проектная деятельность студентов в высшей // Современные проблемы науки и образования. – 2014. – № 5. – С. 25-37.

Григорьева О.Н. Формирование социального опыта студента в проектной деятельности: дисс. ... канд. пед. наук. – Оренбург, 2015. – 229 с.

Жиркова З.С. Основы педагогического проектирования: учебное пособие для студентов высших учебных заведений // Научно-методический электронный журнал Концепт. – 2017. – Т. 25. – С. 199-201.

Заир-Бек Е.С. Основы педагогического проектирования: учебное пособие. – СПб.: Просвещение, 1995. – 234 с.

Закирова Т.И. Проектная деятельность студентов как метод формирования компетенций студентов вузов // Современные проблемы науки и образования. – 2017. – № 5. – С. 68-79.

Каузи А.П. Проектирование проектного метода обучения: опыт разных стран // Образование и наука. – 2018. – Т. 20. – №2. – С. 32-59.

Касаткина Н.Н. Проектная деятельность в контексте будущей профессиональной деятельности студентов: опыт создания мобильного гида // Образовательные технологии и общество. – 2016. – Т. 19. – С. 630-644.

Касен Г.А., Мынбаева А.М., Садыковская З.М. Личностно-ориентированный, проектный и проблемно-ориентированный подходы в обучении: методические рекомендации. – Алматы: Казах университет, 2013. – 78 с.

Кибер Ленинка // cyberleninka.ru/article/n/proektnaya-deyatelnost-studentov-v-obrazovatelnom-protsesse-vuza. (дата обращения: 12.09.2018)

Колесникова И.А. Педагогическое проектирование: учеб. пособие для высш. учеб. заведений. – М.: Издательский центр Академии, 2005. – 288 с.

Концепция государственной молодежной политики Республики Казахстан до 2020 года «Казахстан 2020: путь в будущее». Постановление Правительства Республики Казахстан от 27 февраля 2013 года № 191.

Кустова С.А. Проектная деятельность как одно из условий формирования общих и профессиональных компетенций студентов // http://открытыйкурс.рф /статьи/633155 (дата обращения: 16.12.2017)

Лаврентьева О.Г. Университеты Франции в европейском образовательном пространстве // Высшее гуманитарное образование 21 века: проблемы и перспективы. – Самара, 2007. – С. 194-197.

Лазарев Т. Проектный метод: ошибки в использовании. Трудности использования проектной деятельности в обучении // Молодой ученый. – 2011. – №5. – Т.2. – С. 148-151.

Лазарев Т. Проектная деятельность как одно из условий формирования общих и профессиональных компетенций студентов // http://открытыйкурс.рф /статьи/633155 (дата обращения: 16.12.2017)

Левицкий В.И. Университеты Франции в европейском образовательном пространстве // Высшее гуманитарное образование 21 века: проблемы и перспективы. – Самара, 2007. – С. 194-197.

Лазарев Т. Проектный метод: ошибки в использовании. Трудности использования проектной деятельности в обучении // Молодой ученый. – 2011. – №5. – Т.2. – С. 148-151.

Молодёжные организации Казахстана // http://shaak.kz/index.php?Itemid=134&catid=11&id=211:molodezhnye-organizatsii-kazakhstana&lang=ru&option=com_content&view=article (дата обращения: 16.12.2017).

Послание Президента Республики Казахстан Н.А. Назарбаева народу Казахстана от10 января 2018 г.

Яковлева Н.Ф. Проектная деятельность в образовательном учреждении: учеб. пособие. – М.: ФЛИНТА, 2014. – 144 с.

References

Adams Becker, S., Cummins, M., Davis, A., Freeman, A., Hall Giesinger, C., Ananthanarayanan, V. «Otchet NMC Horizon: vysshee obrazovanie, 2017». [The NMC Horizon report: higher education, 2017]. Austin, Texas: The New Media Consortium, 2017, 72 p.

Abramova N.S. (2017) Organizaciya proektnoi deyatelnosti studentov v elektronnom obuchenii. Mezhdunarodnyj zhurnal experimentalnogo obrazovaniya. [Organization of project activity of students in e-learning]. International journal of experimental education, no 6, pp. 7-11.
Barlex J. (1999) Technologicheskoe obrazovanie v shkolakh Velikoritani. J. Barlex, J. Pitt. Schkola proizvodstva [Technology education in UK schools]. School and production, no 5, pp. 93-95.

Bashirova Zh. R. (2003) Razvitie universitetskogo obrazovaniya v aspekte podgotovki prepodavatelia vysshei shkoly. [Development of University education in the aspect of higher school teacher training]. Monograph, Almaty: ASU. Abaya, 160 p.

Brazhnik E. I. (2010) Organizacija issledovatel'skoj raboty magistrantov v vuzakh Rossi i Francii. [Organization of research work of undergraduates in universities of Russia and France]. St. Petersburg: RSPU. A. I. Herzen, 131 p.

Bredneva N. A. (2009) Proektmaya deyatel'nost' studentov v usloviyakh mezhdisciplinarnoi integracii [Project activity of students in the conditions of interdisciplinary integration]. Thesis for cand. ped. Sciences., M., 238 p.

Bulat I. G. (2015) Opity organizacii proektno-issledovatel'skoj deyatel'nosti studentov pri izuchenii matematiki v usloviiakh distancionnogo obuchenii. Molodoi uchenyi. [Experience of the organization of design and research activities of students in the study of mathematics in distance learning]. Young scientist, no 4, pp. 549-552.

Cyber Leninka/cyberleninka.ru/article/n/proektmaya-deyatelnost-studentov-v-obrazovatelnom-protsesse-vuza. (date accessed: 12.09.2018)

Glotova G. V. (2005) Razvitie tvorcheskogo potenciala budushikh ingenerov v vuzakh SSHa I Zapadnoi Evropy [Glotova G. V. Development of creative potential of future engineers in universities of the USA and Western Europe]. Kazan, 158 p.

Gosudarstvennaya programma razvitiya obrazovaniya i nauki Respubliki Kazakhstan na 2016-2019 gody. (2016) Uterzhden Uzakom Prezidenta Respubliki Kazakhstan ot 1 mart a 2016 goda № 205. [State program of development of education and science of the Republic of Kazakhstan for 2016-2019. Approved by the decree of the President of the Republic of Kazakhstan dated March 1, 2016 № 205].

Grakhov V.P. (2014) Praktika proektmnoi deyatel'nosti studentov v vysshei shkole [The practice of project activity of the students in the universities]. Modern problems of science and education, Vol. 5, pp. 36-49.

Grigorieva O. N. (2015) Formirovanie socialnogo opesta studenta v proektnoi deyatel'nosti [Formation of social experience of the student in project activity]. Orenburg state University. 229 p.

IBO. International Baccalaureate Organization, (2014). MYP: From principles into practice. Cardiff, Wales: International Baccalaureate Organization, Vol. 5, 50 p.

Kasen G. A. (2013) Lichnostno-orientirovannyi, proektnyi i problemno-orientirovannyi podkhod v obuchenii: metodicheskie rekomendacii [Personality-oriented, project and problem-oriented approaches in teaching: methodological recommendations]. Almaty: Kazakh University, 78 p.

Kazun A. P. (2018) Praktiki primeneniya proektntogo metoda v obuchenii: opyt raznykh stran [Practical application of project method of training: experience of different countries]. Education and science, Vol. 20, no2, pp. 32-59.

Kolesnikova I. A. (2005) Pedagogicheskoe proekтирвание: ucheb. posobie dlya vyssh.ucheb. zavedeni [Pedagogical design: studies. manual for children. studies institutions]. Moscow: publishing center Academy, 288 p.

Koncepciya gosudarstvennoi molodezhnoi politiki Respubliki Kazakhstan do 2020 goda «Kazakhstan 2020: put v budushchee». (2013) Postanovlenie Pravitelstva Respubliki Kazakhstan ot 27 fevralya 2013 goda № 191. [The concept of the state youth policy of the Republic of Kazakhstan until 2020 "Kazakhstan 2020: the way to the future"]. Resolution of the Government of the Republic of Kazakhstan dated February 27, 2013, no 191.

Kustova S. A. (2017) Proektmaya deyatel'nost' kak odno iz uslovii formirovaniiya obshikh professionalnykh kompetencii studentov. [Project activity as one of the conditions for the formation of General and professional competencies of students]. Retrieved from: http://otkrytyi urok RF. articles/633155 (accessed 16.12.2017).

Lasyauskiené J. (2013) Proektas kaip studijų rezultatų bgaimasis vertinimas. Pedagogika: mokslo darbai, Vol. 109, pp. 86-92. Lavrentieva O. G. (2007) Universitetty Francii v evropeiskom obrazovatelnom prostranstve. [Universities of France in the European educational space]. Higher humanitarian education of the 21st century: problems and prospects, Vol.3., pp. 194-197.

Lazarev T. (2011) Proektnyi metod: oshibki v ispolzovanii. Trudnosti ispolzovaniya proektnoi deyatel'nosti v obuchenii. [Project method: errors in use. Difficulties of using project activity in training]. Young scientist, 2011, no 5, V. 2, pp. 148-151.

Molodezhnye organizacii Kazakhstana (2013) http://shuak.kz/index.php?Itemid=134&catid=11&id=211:molodezhnye-organi-zatsii-kazakhstana&lang=ru#option=com_content&view=article (data obrasheniya: 16.12.2017).

MoNE. Ministry of National Education. (2013). Regulations of primary education. T.C. Resmi Gazete, 29072, 26 July 2014. // www.resmigazete.gov.tr/eskiler/2014/07/20140726-4.htm. (16.04.2018)

Ozbaş M., Mukhatayeva D. (2018) Views of Pre-service Teachers Related to the Development of Pedagogical Formation Training and Design Competences. Universal Journal of Educational Research, 2018, Vol.6 (6), pp.1207-1215.

Poslanie Prezidenta Respubliki Kazakhstana narodu Kazakhstana ot 10 yanvarya 2018 g. (2018) [Message of the President of the Republic of Kazakhstana N. A. Nazarbayev to the people of Kazakhstana dated January 10, 2018.

Ryzhkova E. V. (2015) Formirovanie proektnoi kompetentnosti budushikh bakalavrov turizma v vuze iskusstv i kultury na osove metodiki skvoznogo proekтирвания [Formation of project competence of future bachelors of tourism in the University of art and culture on the basis of the methodology of end-to-end design]. Personality, family and society: questions of pedagogy and psychology: sat. LVIII mezhdunar. science. - pract. Conf. Novosibirsk: Sibak, no 11(56), pp.86-93.

Sazanova A.V. (2012) Genesis i sushnost ponyatiya «proektmaya deyatelnost». Psikhologiya, sociologiya i pedagogika [Genesis and essence of the concept "project activity"]. Psychology, sociology and pedagogy, no 6, pp. 673-689.

Sultanova L. F. (2015) Pedagogicheskoe proekтирвание: uchebno-metodicheskoe posobie [Pedagogical design: educational and methodical manual]. Ufa: BSPU named after M. Akmulla, 95 p.

Taspaeva M. G. (2017) Organizacija soprovozhdeniya proektnoi deyatel'nosti budushhego tekhnika programmista [The organization of support of project activity of the future technician-programmer]. Bulletin of Orenburg state University, no 6 (206), pp. 18-23.
Tukhbatullina L. M., Safina L. A. (2011) Ispolzovanie metoda proektov dlya razvitiiya kluchevykh kompetencii specialistov polimernogo profilya [The use of the project method for the development of key competencies of polymer profile specialists]. Bulletin of Kazan technological University, no 20, pp. 356-361.

Tulokhonova I.S. (2009) Formirovanie proektnoi deyatelnosti studentov tekhnicheskogo vuza v usloviyakh predmetnoi informacionno-obrazovatelnoi sredy [Development project activities of technical University students in terms of the subject of information educational environment]. Ulan-Ude, 187 p.

Varlamova S. G. (2009) Formirovanie proektnoi deyatelnosti studentov tekhnicheskogo vuza v usloviyakh predmetnoi informacionno-obrazovatelnoi sredy [Development project activities of technical University students in terms of the subject of information educational environment]. Ulan-Ude, 187 p.

Varlamova S. G. (2017) Ispolzovanie proektnoi deyatelnosti kak metoda obucheniya studentov vuza. [The use of project activity as a method of teaching University students]. Scientific and methodological electronic journal Concept, Vol. 25, pp. 199–201.

Voroshilina N. N., Ryzhankova N. N. (2015) Nauchno-issledovatelskaya rabota studentov v vuzakh Respubliki Belarus kak odna iz form socialno-proektnoi deyatelnosti [Research work of students in universities of the Republic of Belarus as one of the forms of social project activity]. Psychology sociology and pedagogy, no 6, pp. 96-109.

Yakovleva N. F. (2014) Proekttnaya deyatelnost v obrazovatelnom uchrezhdennii: ucheb. Posobie [Project activity in an educational institution: studies. benefit]. Moskow: FLINT, 144 p.

Zair-Bek E. S. (1995) Osnovy pedagogicheskogo proektirovaniya. Uchebnoe posobie. Prosveshenie. [Fundamentals of pedagogical design: textbook]. SPb.: Enlightenment, 1995, 234p.

Zakirova T. I. (2017) Proekttnaya deyatelnost studentov kak metod formirovaniya kompetencii studentov vuзов [Project activity of students as a method of forming competences of University students]. Modern problems of science and education, no 5, pp. 125-139.

Zhirkova Z. S. (2017) Osnovy pedagogicheskogo proektirovaniya: uchebnoe posobie dlya studentov vysshykh uchebnykh zavedenii [Fundamentals of pedagogical design: a textbook for students of higher educational institutions]. M.: Publishing house Varlamova S. G., 201 p.