

Project Method as a Basis for Forming Students' Creative and Social Entrepreneurship Skills

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Abstract

The paper is devoted to the project method as an effective tool for practical training of students regardless of their specialty, promotion of students' social and creative entrepreneurship skills, leadership and management skills, their adaptation to the labour market during study and after graduation. The paper deals with the different definition of the "project method" concept and synonyms, the requirements for the organization of educational project activity, the general features of project activity and the classification of projects proposed by various scientists. Particular attention in the work is paid to real-life examples of the project method implementation in the educational and pedagogic activities of students of the Faculty of Economic, Administrative and Educational Technologies of Ukrainian Engineering Pedagogics Academy, classification of skills that students acquire during involvement in various stages of the project activity (from idea formation, project drafting and implementation to defence its results).

Keywords:

Practical education

Project method

Classification of educational projects

Labour market adaptation

Creative entrepreneurship skills

Social entrepreneurship skills

1 Introduction

In recent decades, problems related to human adaptation in society have become especially relevant. This is facilitated by objective social and cultural preconditions. On the one hand, scientific and technological progress brings significant social changes in the humans life, which, along with positive displays, negatively affect emotions, will, intelligence, and mental activity of a person in the intensive work conditions. On the other hand, the information stage of the scientific and technological progress development, which is of primary interest for higher education, leads to an increase in the amount of knowledge and requirements for specialist skills in integrated fields of science and technology. And this, in turn, increases the requirements for educational and professional activities of higher education.

The educational process in higher education institutions on its content and organization should without increasing the length of study provide an instrumental assimilation by the person of the amount of knowledge about the methods of practical activity needed by a highly skilled specialist to work in the rapidly changing conditions of social and economic development of the country. Thus, the priority of the higher education institution today is to solve the problem of students' adaptation to vocational training and education, which in the future will help to accelerate the achievement of optimal results by young professionals in independent professional activity (Kolesnikova, 2008).

A project method in training students for the future demands of the labour market is not sufficiently used today during the educational process of Ukrainian higher education institutions of all accreditation levels.

Research aim is to explore the prospects of the project method implementation in higher education activities as a tool for developing students' creative and social entrepreneurship skills, leadership and team skills, as well as to provide examples of the method application in the educational process at the Faculty of Economic, Administrative and Educational Technologies of Ukrainian Engineering Pedagogics Academy.

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2 Analysis of publications

In the general sense the projecting (from the Latin *projectus* – thrown forward) means closely related to science and engineering activities creation a project, development the image of the future imaginary product. Known most of the products of human labour are made on the basis of their preliminary design. In this context, the concept of "projecting" is the process of creating a project, that is, a prototype, a foretype of a projected object, a state that precedes the concept implementation intended in a real product (Kolesnikova, 2008).

The idea of incorporating it into the educational process was proposed by American educator and philosopher J. Dewey over a century ago. The modern researchers' writings are devoted to various aspects of the project activity of pupils and students in educational institutions, among them T. Bashynska, I. Bem, L. Botko, M. Gorchakova-Sibirskaya, L. Gurye, I. Ermakov, A. Khutorsky, A. Kiktenko, V. Kilpatrick, I. Kolesnikov, O. Kopernik, O. Lyubarskaya, O. Pehota, E. Polat, A. Pulin, A. Samokhin, S. Sysoyeva, Z. Taran, A. Zimbar, Y. Schneider, T. Volkovskaya, I. Zimnya, and many others.

3 Project method in educational activity

According to the National Doctrine of Ukraine Education Development in the XXI century and the Law of Ukraine on Higher Education the main purpose of the state policy in the field of education is to create the conditions for the personality and creative self-realization development of every Ukrainian citizen, to educate the generation of people who are able to work effectively and learn throughout their lives, to be guided in a continuous flow of information. The development of the creative potential of the talented person, the development of appropriate technologies and teaching methods for this purpose, is one of the priority places in the overall strategy of updating all modern education.

The task of a modern educational institution is to educate a competent person, who not only possesses knowledge, high moral qualities, but is able to act independently, non-standardly, creatively in various life situations, applying his knowledge, experience and taking responsibility for his own activities. The great opportunity in solving these problems is provided by the application of the method of educational projects or project method. After all, being able to create, implement, or participate in projects is a great vitality for a person whose foundations can be optimally formed and developed in a person's learning environment.

In modern scientific pedagogical sources (printings, reference literature) there are different terms for the designation of educational project activity: "method of educational projects", "student project", "project method", "project technology", "project activity", "project educational activity", "project education", "project training", "project education", "projecting", which form the scientific context of the theory of mentioned learning. For instance, the Ukrainian Pedagogical Dictionary uses the term "project method", which is defined as "the organization of learning, whereby students acquire knowledge and skills in the planning and execution of practical tasks - projects" (Goncharenko, 1997, 2000).

According to definitions of different scientists, the method of projects is interpreted as follows (Kolesnikova, 2008):

- a method of planning expedient activities in connection with the solution of some educational task in real life circumstances (V. Kilpatrick);
- a system of learning, in which students acquire knowledge in the process of planning and implementation of practical tasks – projects that are progressively complicated ("Pedagogical Encyclopaedia");
- a generalized model of determining the method of achieving the goal, the algorithm of cognitive activity (E. Polat)
- a creative activity, problematic in the form of material presentation, practical in the form of its application, intellectually rich in content, which occurs in the conditions of a constant competition of thoughts (I. Winter).

Contemporary literary sources also identify requirements for the organization of educational project activities (Yermakov, 2006):

1. The presence of a significant problem in the research plan, which requires integrated knowledge, research search.
2. Independent activity of students. It can be group, in pairs or singles.
3. Use of research methods.
4. Structuring the content of the project with staging results.

5. The project activity ends with a real practical result. Research materials are designed in the form of an album, a collection, a map, a movie, an exhibition, a guide and more.

6. Public defence of the project is obligatory (presentation).

7. On the basis of the work a thorough analysis of the design actions and the manufactured product is carried out. If necessary, corrections are offered, an assessment is made, suggestions and recommendations are formed regarding the possible use of the project product.

The concept of "project" combines various activities, characterized by a number of common features, the most common of which are as follows (Yermakov, 2006):

- focus on achieving specific goals, specific results;
- coordinated implementation of many interconnected actions;
- time constraints, with definite beginning and end.

Based on the content analysis of the scientists' and practitioners' works in the writings (Tadeusz, 2017, p. 143) a detailed typology of educational projects on different classification grounds is determined. In (Kołodziejski, 2017, p. 27) the authors provide a shorter and more convenient to use classification of educational projects: creative (constructive), enjoyment (pleasure) giving, problem-related, clarifying learning, which is applicable for projects than take place at the Ukrainian Engineering Pedagogics Academy.

4 Illustrations of Project method implementation in educational activity

The author's practical experience of the project method implementation in the educational process began as an Enactus team mentor in the Ukrainian Engineering Pedagogics Academy since 2012.

Enactus (the organization known until 2012 as SIFE – students in free enterprise, now includes abbreviation Entrepreneurial – igniting business innovation with integrity and passion; Action – the experience of social impact that sparks social enterprise; Us – student, academic and business leaders collaborating to create a better world.) is an international non-profit organization that brings together students, academic and business leaders who are committed to using the power of entrepreneurial action to improve the quality of life and standard of living for people in need.

Enactus is guided by academic advisors and business experts, the student leaders of Enactus create and implement community empowerment projects around the globe. The experience not only transforms lives, it helps students develop the kind of talent and perspective that are essential to leadership in an ever-more complicated and challenging world.

Enactus is the world's largest experiential learning platform dedicated to creating a better world while developing the next generation of entrepreneurial leaders and social innovators. The Enactus network of global business, academic and student leaders are unified by organization's vision – to create a better, more sustainable world.

During this time, the team initiated, implemented and presented at the annual national competitions close to 20 big projects. The team has repeatedly won grant support for its projects, including the landscaping of the Verhniy Saltiv Historical and Archaeological Museum, the orchard creation for the Complex for Children and Adults with Autism, the establishment of a city animal shelter, programming the traffic rules game for elementary school students, development of craft business among students and others. Team members develop and submit their projects to the *Kharkiv is the City of Youth Initiatives* competition, with the support of the Kharkiv City Mayor, where they have won prizes since 2016 and received financial support for the ideas implementation.

Advantages of applying the project method in educational activities are mastering students of modern methods and technologies of project management in any field and industry, for example, SMART goal setting, Gantt chart, KPI assessment of the project members and the project as a whole effectiveness, functional distribution of team responsibilities by modern positions (fundraiser, content manager, HR manager, SMM manager, etc.), developing a business project canvas, mastering the rules of effective presentation and more. Conditionally the process of work on the project is divided into four big stages. In Fig. 1 a list of basic skills that students of the Faculty of Economic, Administrative and Educational Technologies of the Ukrainian Engineering Pedagogics Academy (hereinafter – UEPA) acquire during the project method application in the educational process is drawn. It should be emphasized that shown in Fig. 1 skills meet current business trends, mastering them allows students to quickly adapt to the job market, regardless of their specialty and field of activity.

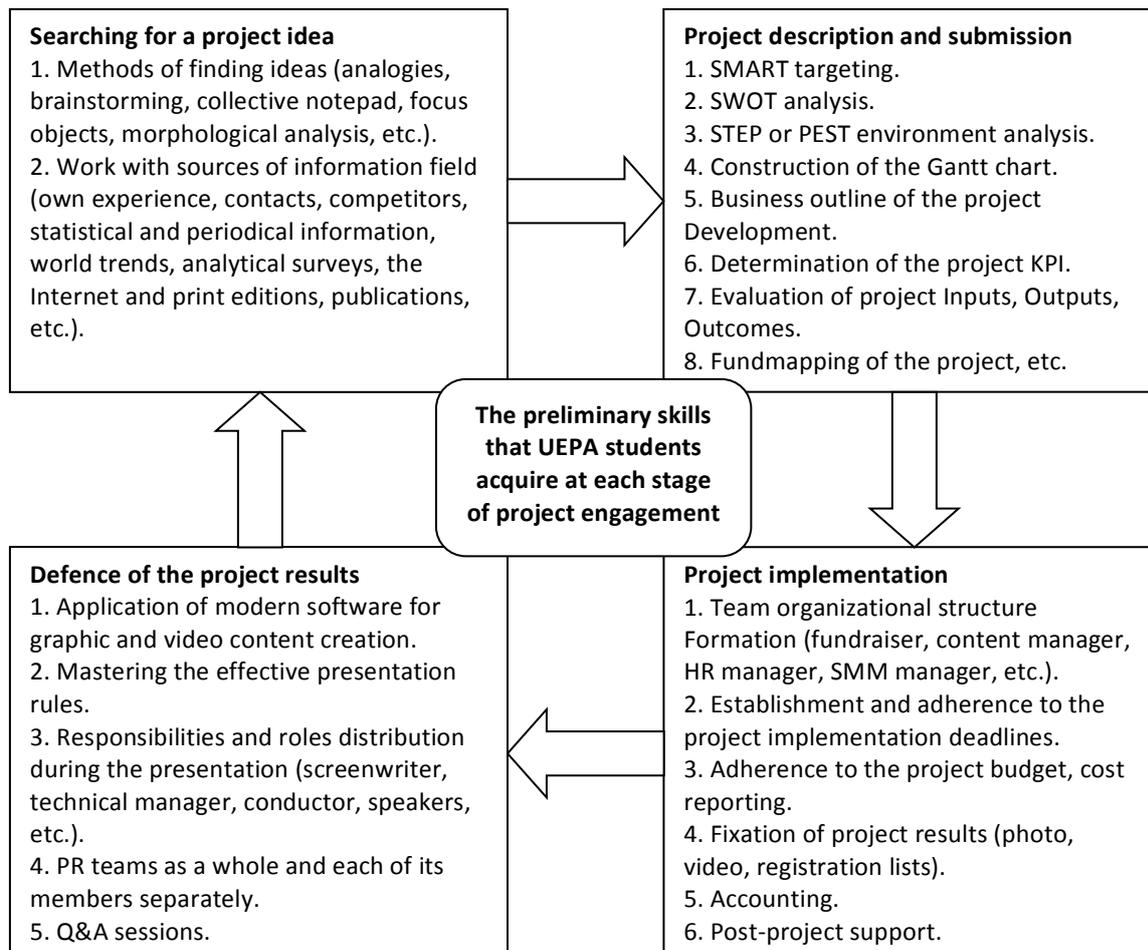


Fig. 1: List of preliminary skills that UEPA students acquire at each stage of involvement in project activities

Today, in addition to the Enactus team, there is a YEP startup club in the UEPA, whose members are also involved in project activities. In 2018, upon an initiative of the Enactus team students, a competition for start-up projects *You Must Try!* was held for students of the I-II accreditation levels higher education institutions. The competition became one of the key activities of the Creative Spark: Higher Education Enterprise Program supported by the British Council, whose coordinator is the author of the paper, started in the UEPA in cooperation with University of Bedfordshire (Great Britain) in 2018.

In the framework of this project, together with the students, a second competition was held, the special theme of which was *Entrepreneurship in the creative industries*, a few projects were prepared for participation in the Creative Spark Big Idea Challenge, a roadshow was conducted with the involvement of young creative entrepreneurs of the city.

Briefly describe some important competencies that are mastered by the involving students into the project.

One of the most effective motivation formation methods is competently organized goal-setting. Setting goals by the SMART method helps to set specific, measurable, realistic (achievable) and limited by the specific timeframe goal. Very often, the SMART method is the most popular among other alternatives. SMART goal is a goal that is specific, measurable, achievable, realistic, and time-bound.

As part of the project preparation, students develop a business outline that is equally relevant in education. Business model canvas is one of the strategic management tools for entrepreneurs working within L.E.A.N., which makes it possible to describe the project. Business model canvas is first and foremost a tool that helps to describe, analyze and discuss structure. The business model canvas methodology has nine components: key partners; key activities; key resources; value propositions; customer relationships; channels; customer segments; cost structure; revenue streams.

The Key Performance Indicators (KPI) system is an evaluation system that helps determine strategic and tactical (operational) goals, which allows evaluating the status and assessing the strategy implementation.

Today, KPI technology is mainly used by leading international companies and developed Ukrainian companies, often with international capital.

5 Conclusions and prospects for further research

In modern society the requirements for quality, content of modern education, which is now in the process of finding new alternatives, new educational and upbringing models, have changed dramatically. Modern education system should be determined by giving students the opportunity to think, compare different points of view, formulate and argue their own point of view, based on knowledge of facts, laws, trends, made by science, own observations, experience, ability to design and implement their own educational projects, creative and non-standard, solve learning problems, be tolerant of another point of view. Therefore, the importance and feasibility of project method implementing is greatly enhanced by the transition of the modern education system from the management of the end-to-end education process, aimed at the formation of knowledge, skills and competences, to a competent approach related to the education and development of a competent personality, that is, capable of acting in a meaningful way, guided in the changing world with values produced. Such a transition is justified by the social order of society, which is changing rapidly and requires quite rapid changes from the education system.

Project method implementation in the educational process allows preparing a competent personality, to form the students' skills of creative and social entrepreneurship, to facilitate their rapid adaptation in the labour market.

References

- About the National Doctrine of Educational Development.* - URL: <https://zakon.rada.gov.ua/laws/show/347/2002>
- Create Creative Entrepreneurs.* - URL: <https://ccespark.info/>
- Enactus.* - URL: <https://enactus.org/>
- Goncharenko, S. (1997) *Ukrainian Pedagogical Dictionary* (Гончаренко С. У. Український педагогічний словник).
- Kolesnikova, I.A. Gorchakovo-Siberian, M.P. (2008) *Pedagogical design.* Moscow, Academy (Колесникова И.А. Горчакова-Сибирская М.П. Педагогическое проектирование).
- Kołodziejcki, M., Przybysz-Zaremba, M. (2017) *Project method in educational practice.* *University Review*, Vol. 2017, No. 11, P. 26-32.
- Law on Higher Education.* - URL: <https://zakon.help/law/1556-VII/edition01.01.2019/>
- Tadeusz, O.M. (2017) *Project Method as a Form of Productive Student Learning.* - URL: <http://enpuir.npu.edu.ua/bitstream/123456789/19155/1/Tadeush.pdf> (Тадеуш О.М. Метод проектів як форма продуктивного навчання студентів).
- Vocational education: vocabulary* (2000). Tutorial. S. Goncharenko and others. Kyiv. High School (Професійна освіта : словник)/ уклад. С. У. Гончаренко та ін.
- Yermakov, I. (2006) *Competent potential of project activity.* Kyiv. School World (Єрмаков І. Компетентнісний потенціал проектної діяльності).