

IMPLEMENTATION OF A COMPETENCE-BASED APPROACH IN THE PROCESS OF TEACHER'S PROJECT ACTIVITIES

AUTHORSHIP

Valentyna Bilyk 

Doctor of Science in Pedagogy, Professor, National Pedagogical Dragomanov University, Kiev, Ukraine.

ORCID: <https://orcid.org/0000-0002-6860-7728>

E-mail: mozgh@ukr.net

Liubov Chekhovska 

Doctor of Science in Physical Education and Sports, Associate Professor, Head of the Department of Fitness and Recreation, Lviv State University of Physical Culture named after Ivan Boberskyj, Lviv, Ukraine.

ORCID: <https://orcid.org/0000-0003-3833-5212>

E-mail: t.lutaeva@ukr.net

Zoriana Gontar 

Senior Lecturer of the Department of Social Work, Management and Social Sciences, Lviv State University of Security Life activity, Lviv, Ukraine.

ORCID: <https://orcid.org/0000-0003-1712-7457>

E-mail: ivanna02932832@yahoo.com

Natalia Chernysh 

Candidate of Pedagogical Sciences, Associate Professor of the chair of ukrainian and foreign literature and teaching methods, Pereiaslav-Khmelnytskyi Hryhorii Skovoroda State Pedagogical University, Ukraine.

ORCID: <https://orcid.org/0000-0002-6626-1858>

E-mail: laskav_np@yahoo.com

Tetyana Ravchyna 

Candidate of Pedagogical Sciences, Associate Professor, Department of General Pedagogy and Pedagogy of Higher School, Ivan Franko National University of Lviv, Ukraine.

ORCID: <https://orcid.org/0000-0002-0361-1347>

E-mail: vonso_sg@yahoo.com

Received in:

2021-08-10

Approved in:

2021-09-27

DOI: <https://doi.org/10.24115/S2446-6220202173C1619p.278-285>

INTRODUCTION

It is generally accepted that the ideas, content and moral and ethical standards are professed and implemented today by education, and that this will be the society in the near future. First of all, we are talking about the fact that the updated education is designed to form not only the bearer of certain knowledge, but also a creative person who is able to use the knowledge gained for competitive purposeful activity in any sphere of social life. It is also important that in the post-industrial world the interconnections and mutual influences between educational and other public institutions, which are responsible for the socio-economic and cultural development of modern countries, are changing. Developed societies deliberately strive to organize the educational process so that as much of their community as possible receives the status of a person in the learning process. It is a creative person who has consciously realized himself in the social hierarchy and whose activities society is satisfied with, who is able to influence the upward development of modern countries actively and effectively (MAREK, et al, 2020).

Modern living conditions require a person to think and work creatively, and also be able to make non-standard decisions. This is what is now due to the attention of teachers to innovations. Today, the project method is considered one of the most promising teaching methods, because it creates conditions for the creative self-realization of students, increases motivation for learning and contributes to the development of intellectual abilities, forms the skills of search and research technology (BERGGREN et al, 2005).

The project method is not fundamentally new in world pedagogy. It was used both in domestic didactics and in foreign ones. It originated in the 20s of the last century in the United States. This method is associated with the ideas of the humanistic direction in philosophy and education, put forward by the American philosopher and teacher J. Dewey, as well as his student V.H. Kilpatrick. Recently, this method has received close attention in many countries of the world. The method of projects has become widespread and popular due to the rational combination of theoretical knowledge and the possibilities of their practical application for solving specific problems of reality in joint activities. Everything that I learn, I know why I need it, where and how I can apply this knowledge - the main thesis of the modern understanding of the project method (ELIZONDO et al, 2010).

The final stage of project activity - the presentation (defense) of the project - requires special attention in elementary school. To do this, you need to help students to self-analyze the project, evaluate the design process with the help of questions. Also, children will need help in preparing the project for the presentation. Project defense is the final stage of its implementation, when students report on the work they have done. Usually the defense of projects is carried out in the form of an exhibition of those products that have been created

by students. In addition, it is sometimes advisable to invite children to prepare short talks about their project.

After the project has been defended, the products can be donated to people whose needs were studied by children, to family members of students, and can be transferred to a kindergarten. It is important that children feel the need for those products that they have made on their own, and feel the festive atmosphere during the presentation (Martens, Vogten, 2005; Kryshtanovych, Bilyk, Shayner, Barabash, Bondarenko, 2021).

A very important and stimulating issue is the assessment of completed projects. Students who have achieved special results in the implementation of the project can be awarded with diplomas or mementos, while in elementary school every student who took part in the implementation of the project should be encouraged. Don't turn your presentation into a competition of award projects. It is better to single out several nominations and make sure that each project "wins" in which nomination. For example, the following nominations are possible: "Cognitive project", "Need a project", "Commemorative project", "Bright project", "Fun project" and others. In addition to personal prizes, you can prepare a joint prize for the entire class for the successful completion of projects. This can be a trip to the forest, to an exhibition, to a museum, on an excursion, etc.

METHODOLOGY

The research methodology is formed from the most frequently used methods and principles of scientific and theoretical research. In addition, the article uses the following methods:

- general scientific (system-functional, historical-theoretical)
- methods of theoretical analysis (analysis, synthesis, generalization, comparison, analogy, abstraction, modeling);
- specific scientific methods (technical analysis, clarification, interpretation).

RESULTS AND DISCUSSIONS

The social need prompts the modern school, its teachers and pedagogical scientists to search for new pedagogical ideas, technologies, methods and approaches, to disseminate and implement advanced pedagogical experience. At the same time, it should be understood that education as a social organization, while developing and improving itself, changes its structure and content, according to the changes and relations that dominate in society at this stage of its historical development. Features of the development of modern education in developed countries are determined and primarily depend on (MACLEAN, SCOTT, 2007):

1. vectors of globalization;
2. the nature of transformation processes;
3. features of information achievements;
4. the ability to adequately respond to external changes;
5. distances to the post-industrial society;
6. public awareness of the role and place of education in modern life.

Modern countries, taking care of the ascending socio-economic development, must not only take into account the general trends and principles of the development of education at the turn of the century, but also effectively introduce and improve them in accordance with the requirements of the time. It is educational trends that predict the contours of the future society, and the principles are responsible for the dynamics of its modernization. The main educational trends and patterns today include (SYSOIEVA, OSADCHA, 2020):

- creation of a single European educational space;

- human-centered paradigm of the educational process;
- the desire to unify and standardize all educational approaches;
- creating conditions for education throughout life;
- continuous growth of cost indicators for the development and functioning of educational institutions.

From the above list, we can draw a general conclusion about the presence of dialectical contradictions in these approaches. On the one hand, education is focused on the individual and her special needs, and on the other, she is forced to obey the laws of standardization and conveyorization in teaching and upbringing, which determine the specifics of the development of modern society as a whole. Today's European education is based on the principles (OCHIROV, 2016):

- learn to live together;
- learn to gain knowledge;
- learn to work;
- to learn to live, which, in fact, are the global competences of the individual.
- Against this general background, signs of specific changes in education at the turn of the century should be highlighted (Sangsawang, 2015):
- the formation of an elite education system, which is moving from "mass conveyor" to "one-off" production;
- the transition from the mechanical assimilation of information to the formation of competence qualities necessary for creative activity.

The main reference point of modern education is the formation of a creative personality capable of self-development and self-improvement. Civil society, its democratic principles and values, which Ukrainian society is guided by today, adequately direct a person to high professional competence, active and principled behavior in all vital creative processes.

In this context, it is customary to distinguish three approaches to the development of education at the present stage (ELIYANA, MA'ARIF, MUZAKKI, 2019):

- from the point of view of the content of education - a knowledge-based approach, for which the knowledge that students receive at school is important;
- from the point of view of the peculiarities of the learning process - the issues of organizing training are important, how students learn, what information they acquire, how teachers teach them, how cognitive activity is structured.
- The main question is - what to teach, how to teach, what is acquired?
- from the point of view of the results obtained - a competence-based approach that focuses education on the formation and development of basic and subject competences (knowledge, abilities, skills, attitudes, etc.) that students should have after graduation. The result of such a process will be the formation of a person's general competence in certain issues.

The concept of "competence-based approach" is understood as the orientation of the educational process towards the formation and development of key (basic, basic) and subject competences of the individual. The competence-based approach directs education to the formation of a whole set of competencies (knowledge, abilities, skills, attitudes, etc.) that students must master while studying at school. The traditional education system emphasized the main efforts on the acquired knowledge, skills and abilities, dogmatically absolutized knowledge and formed a knowledge-based approach to learning. At the same time, the main attention is focused on the knowledge itself, and what it is for is left without attention.

The competence-based approach shifts the focus from the process of accumulating normatively defined knowledge, skills and abilities to the plane of the formation and development of students' ability to practically act and creatively apply the knowledge and experience gained in various situations. At the same time, the school forms in the graduate a high readiness for successful activities in real life. In this conceptual scheme, teachers and students a priori are guided by personality-oriented and activity-based learning models. This requires the teacher to shift the emphasis in their teaching and educational activities on the informational to the organizational and managerial plane. In the first case, the teacher played the role of a "knowledge relay", and in the second - the organizer of educational activities. The student's model of behavior is also changing - from passive assimilation of knowledge to experientially active, independent and self-educational activity. The learning process is filled with a developmental function, which becomes an integrated characteristic of learning. Such a characteristic should be formed in the learning process and includes knowledge, skills, attitudes, experience, and behavioral models of the individual.

In the most general case, a person's competence should be understood as specially structured sets of knowledge, abilities, skills and attitudes that are acquired in the learning process.

A person uses general and professional competencies in various fields of activity to perform certain tasks, they also serve her when choosing a model of behavior in various situations.

The educational systems of modern developed countries consider the orientation of curricula to a competence-based approach and the creation of effective mechanisms for its implementation as one of the ways to update the content of education and educational technologies, to harmonize them with the modern needs of integration into a single European educational space. It is generally accepted that the introduction of vital competencies allows a person to freely and correctly navigate in the modern information society and adequately respond to the dynamics of changes in the competitive labor market. The introduction of knowledge, skills and abilities by young people is aimed at improving their competence, contributes to the intellectual and cultural development of the individual, the formation of her ability to adequately respond to the demands of the time. Competence is an integrated performance-based characteristic of education. In the most general case, the competence-based approach aims a person at adequate responses in (BLASKOVA, BLASKO, KUCHARCIKOVA, 2014):

- modern society;
- information field;
- orientations in the labor market;
- further education.

The introduction of knowledge, skills and abilities by young people is aimed at improving their competence, contributes to the intellectual and cultural development of the individual, the formation of her ability to quickly respond to the demands of the time. This thesis is extremely relevant for countries with economies in transition, which desperately need educated, highly qualified and professionally competent personnel for all parts of the national economic complex.

Among the numerous definitions of the concept of competence, preference should be given to the official, generally accepted definition. Here is the most used (ALEKSIEIENKO-LEMOVSKA, 2019):

- a) Education Commission of the Council of Europe
 - interprets competence as the ability to apply knowledge and skills acquired in the learning process in various situations;
- b) UNESCO:

- the concept of competence is interpreted as a combination of knowledge, skills, values and attitudes used in everyday life;
- c) International Department of Standards: the concept of competence is defined as the ability to competently carry out an activity, perform tasks or work. Experts of the program "Definition and selection of competencies: theoretical and conceptual foundations" with the abbreviated name "DeSeCo" (1997) Define the concept of competence (competency) as the ability to successfully meet individual and social needs, to act and perform assigned tasks. Each competence is built on a combination of interrelated cognitive relationships and practical skills, values, emotions, behavioral components, knowledge and skills, everything that can be mobilized for active action.

Note that experts from the European Union countries define the concept of competence as "the ability to apply knowledge and skills", which ensures the active application of knowledge in new situations. In UNESCO publications, the concept of competence is interpreted as a combination of knowledge, skills, values and attitudes applied in everyday life (ASBARI, PURWANTO, SANTOSO, 2019). This means that the concept of competence is interpreted ambiguously. In 2004, at an international conference held with the participation of UNESCO, the Norwegian Ministry of Education (Department of Technical Education and Training), agreed to consider the concept of competence as the ability to apply knowledge and skills effectively and creatively in interpersonal relationships, in situations involving interaction with other people in a social context as well as in professional situations. Competence is a concept that logically comes from attitudes to values and from skills to knowledge. According to the definition of the International Department of Standards for Teaching, Achievement and Education (IBSTPI), the concept of competence is defined as the ability to professionally conduct an activity, perform tasks or work. At the same time, the concept of competence includes a set of knowledge, skills and attitudes that allow a person to act effectively or perform certain functions aimed at achieving certain standards in a professional field or a certain activity. In order to facilitate the process of assessing competencies, the Department proposes to separate from this concept such indicators as acquired knowledge, abilities, skills and educational achievements.

The concept of a competence-based approach is understood as the focus of the educational process on the formation and development of key (basic, basic) and subject competencies of an individual. The result of such a process will be the formation of a person's general competence, which is a set of key competencies, an integrated personality characteristic. The system of competencies in education has a hierarchical structure, the levels of which are (KOPER, BENNETT, 2008):

- 1) Key competencies (interdisciplinary and supra-subject competencies) - the ability of a person to carry out complex multifunctional, multi-subject, culturally appropriate activities, effectively solving current individual and social problems;
- 2) General industry competencies - competencies that are formed by the student during the assimilation of the content of a particular educational field in all grades of high school and which are reflected in the understanding of "way of life" of the industry - ie the place that this industry occupies in society. ability to apply them in practice in the framework of culturally appropriate activities to solve individual and social problems;
- 3) Subject competencies - a component of general industry competencies, which relates to a specific subject.

The role of the teacher in project activities

Pupils differ from each other not only in different levels of preparedness for the assimilation of knowledge. Each of them has more stable individual characteristics that cannot (and should not) be ignored by the teacher. At the same time, these individual characteristics impose their own requirements on the organization of the educational process. Individual differences also relate to the cognitive sphere of children: some have a visual type of memory, others - auditory or visual-motor, etc. In some, visual-figurative thinking, and in others - abstract-logical. This means that it is easier for some to perceive the material with the

help of sight, for others - by ear; someone needs a specific presentation of the material, others - schematic data and the like. Neglecting the individual characteristics of students in teaching leads to the emergence of various kinds of difficulties in them, complicates the way to achieve the set goals. At the same time, the teacher acts not as a leader, but as a facilitator, that is, as a person who creates favorable conditions for independent and meaningful learning, activates and stimulates the curiosity and cognitive motives of students, organizes group study work, supports the manifestation of operational trends, provides students with a versatile educational material (BAKHOV, RYZHYKOV, KOLISNYK, 2018).

At the same time, the teacher must take into account the contradictory nature of the student's activity itself: it is social in content, in the form of implementation it is individual (the acquired knowledge and skills are the property of an individual student). In this there is a danger of an egoistic orientation of teaching when it loses its social meaning. In order to avoid this danger, the teacher must find ways to apply the knowledge and skills acquired by students in educational activities, socially useful work, the life of class and school collectives.

Thus, in order to activate the search and research activity of younger schoolchildren in the educational process, it is necessary to combine individual and collective forms of work.

The role of the teacher in the execution of projects varies depending on the stages of work on the project. However, at all stages, the teacher acts as a facilitator, that is, an assistant, he does not transfer knowledge, but provides the student's activities, that is (AWE, CHURCH, 2020):

Consults. By simulating various situations, transforming the educational environment, the teacher encourages students to ask questions, reflections, self-assessment of this or that phenomenon, and the like. When implementing projects, the teacher is a consultant who must refrain from prompting, even when he sees that the students are "doing something wrong."

Motivates. A high level of motivation is the basis for successful project work. During the work, the teacher must adhere to the principles that reveal to the students the situation of project activity as a situation of choice and freedom of self-determination.

Facilitates. Helping students in the process of working on a project is not expressed in the transfer of knowledge and skills that can be practically implemented in project activities, the student had to learn the minimum set of them in the lessons prior to working on the project; other necessary information will be obtained by working on collecting information at different stages of the project. The teacher also does not indicate in the evaluation form the shortcomings or mistakes in the student's actions, the inconsistency of intermediate results. It provokes a question, reflections, self-assessment of activities, simulating various situations.

Observes. Observation carried out by the project manager, aimed at obtaining information for him, which will allow the teacher to work productively during the consultation, on the one hand, and will form the basis of his actions to assess the level of formation of students' competencies, on the other.

CONCLUSIONS

Today, scientific progress increases the importance of tasks and requirements for the quality of professional training of future specialists, their intellectual, scientific and cultural levels, personal and professional self-development, professional skills and creative abilities. The formation of these characteristics and the use of the competence-based approach is effective in the project activities of teachers.

REFERENCES

ALEKSIEIENKO-LEMOVSKA, L. Components of professional competence of educators of pre-school educational institutions: pedagogical excellence, pedagogical creativity. *Pedagogical sciences: reality and perspectives*, 2019, 69, p. 5-9. Available at: <https://doi.org/10.31392/2311-5491/2019-69.1>. Access: August 08, 2021.

ASBARI, M.; PURWANTO, A.; SANTOSO, P. B. Influence of Leadership, Motivation, Competence, Commitment and Culture on ISO 9001: 2015 Performance in Packaging Industry. *Scholars Journal of Economics, Business and Management*, 2019, 6 (12), p. 577-582. Available at: <https://doi.org/10.36347/sjebm.2019.v06i12.005>. Access: August 08, 2021.

AWE, O.A. AND CHURCH, E.M. "Project flexibility and creativity: the moderating role of training utility", *Management Decision*, 2020, Vol. ahead-of-print No. ahead-of-print. Available at: <https://doi.org/10.1108/MD-02-2020-0226>. Access: August 08, 2021.

BAKHOV, I.; RYZHYKOV, V.; KOLISNYK, O. Leadership Abilities of a Military Manager, Professionalism of a Commander as the Guarantee of the Practice of Effective Activity of a Military Organization. *International Journal of Engineering & Technology*, 2018, 7 (4.38), p. 45-49. Available at: <https://doi.org/10.14419/ijet.v7i4.38.24318>. Access: August 08, 2021.

BERGGREN, A.; BURGOS, D.; FONTANA, J.M.; HINKELMAN, D.; HUNG, V.; HURSH, A.; TIELEMANS, G. Practical and Pedagogical Issues for Teacher Adoption of IMS Learning Design Standards in Moodle LMS. *Journal of Interactive Media in Education*, 2005, 2005/02. ISSN:1365-893X

BLASKOVA, M.; BLASKO, R.; KUCHARCIKOVA, A. Competences and Competence Model of University Teachers. *Procedia - Social and Behavioral Science*, 2014, 259, p. 457-467.

ELIYANA, A.; MA'ARIF, S.; MUZAKKI. Job satisfaction and organizational commitment effect in the transformational leadership towards employee performance. *European Research on Management and Business Economics*, 2019, 25 (3), p. 144-150. Available at: <https://doi.org/10.1016/j.iemeen.2019.05.001>. Access: August 08, 2021.

ELIZONDO, L.; KISSELBURGH, L.; HIRLEMAN, E.; CIPRA, R.; RAMANI, K.; YANG, M.; CARLETON, T. Understanding Innovation in Student Design Projects. *Proceedings of the ASME Design Engineering Technical Conference*. 6, 2010. Available at: <http://doi.org/10.1115/DETC2010-28985>. Access: August 08, 2021.

KOPER, R.; BENNETT, S. *Learning Design: Concepts*, 2008. Available at: https://doi.org/10.1007/978-3-540-74155-8_8. Access: August 08, 2021.

KRYSHTANOVYCH, S.; BILYK, O.; SHAYNER, H., BARABASH, O.; BONDARENKO, V. Study of the Experience of the Formation of Professional Competence in Future Managers of Physical Education and Sports. *Revista Romaneasca Pentru Educatie Multidimensionala*, 2021, 13 (1Sup1), p. 162-176. Available at: <https://doi.org/10.18662/rrem/13.1Sup1/390>. Access: September 15, 2021.

MACLEAN, P.; SCOTT, B. Learning design: Requirements, practice and prospects. *Campus-Wide Information Systems*, 2007, 24, p. 187-198. Available at: <https://doi.org/10.1108/10650740710762220>. Access: August 08, 2021.

MAREK, M.; WU, W.-C.; CHEW, C. S. Teacher Experiences in Converting Classes to Distance Learning in the COVID-19 Pandemic. *International Journal of Distance Education Technologies*, 2020, 19, p. 40-60. Available at: <https://doi.org/10.4018/IJDET.20210101.0a3>. Access: August 08, 2021.

MARTENS, H.; VOGTEN, H. A reference implementation of a Learnin Design engine. In: KOPER, R.; TATTERSALL, C., *Learning Design: A Handbook on Modelling and Delivering Networked Education and Training*, 2005, p. 91-108. Berlin-Heidelberg: Springer Verlag.

OCHIROV, G. Formation of professional competence of the future teachers of initial classes by student teaching means. *Historical and social-educational ideas*, 2016, p. 8. 205-208. Available at: <https://doi.org/10.17748/2075-9908-2016-8-1/2-205-208>. Access: August 08, 2021.

SANGSAWANG, T. Instructional Design Framework for Educational Media. *Procedia - Social and Behavioral Sciences*, 2015, 176. Available at:

<https://doi.org/10.1016/j.sbspro.2015.01.445>. Access: August 08, 2021.

SYSOIEVA S.; OSADCHA K. Formation of ICT competence of the tutor in the process of future teachers' training, *Information Technologies and Learning Tools*, 2020, vol.80, no.6, p. 369-85. Available at: <https://doi.org/10.33407/itlt.v80i6.4182>. Access: August 08, 2021.

Implementation of a competence-based approach in the process of teacher's project activities

Implementação de uma abordagem baseada em competências no processo de atividades de projeto do professor

Implementación de un enfoque basado en competencias en el proceso de las actividades del proyecto del profesor

Resumo

O objetivo do artigo é estudar a abordagem baseada em competências no processo de atividade de projeto do professor. A metodologia de pesquisa é formada a partir dos métodos e princípios de pesquisa científica e teórica mais utilizados. Além disso, o artigo usa os seguintes métodos: científico geral; métodos de análise teórica; métodos científicos específicos. A sociedade moderna requer a formação de cidadãos independentes, proativos e responsáveis, que sejam capazes de interagir efetivamente na implementação de tarefas sociais, industriais e econômicas. O cumprimento dessas tarefas requer o desenvolvimento das qualidades pessoais e habilidades criativas de uma pessoa, a capacidade de adquirir de forma independente novos conhecimentos e resolver problemas e navegar na vida em sociedade. O resultado da pesquisa é a identificação de aspectos fundamentais da implementação da abordagem baseada em competências no processo de atividades de projeto do professor.

Palavras-chave: Educação. Pedagogia. Abordagem baseada em competências. Instituições de ensino superior. Atividades do projeto do professor.

Abstract

The purpose of the article is to study the competence-based approach in the process of project activity of the teacher. The research methodology is formed from the most frequently used methods and principles of scientific and theoretical research. In addition, the article uses the following methods: general scientific; methods of theoretical analysis; specific scientific methods. Modern society requires the upbringing of independent, proactive, responsible citizens who are able to effectively interact in the implementation of social, industrial and economic tasks. The fulfillment of these tasks requires the development of personal qualities and creative abilities of a person, the ability to independently acquire new knowledge and solve problems and navigate in the life of society. The result of the research is the identification of key aspects of the implementation of the competence-based approach in the process of project activities of the teacher.

Keywords: Education. Pedagogy. Competence-based approach. Higher education institutions. Teacher's project activities.

Resumen

El propósito del artículo es estudiar el enfoque por competencias en el proceso de actividad proyectual del docente. La metodología de investigación se forma a partir de los métodos y principios de investigación científica y teórica más utilizados. Además, el artículo utiliza los siguientes métodos: científico general; métodos de análisis teórico; métodos científicos específicos. La sociedad moderna requiere la formación de ciudadanos independientes, proactivos y responsables que sean capaces de interactuar de manera efectiva en la implementación de las tareas sociales, industriales y económicas. El cumplimiento de estas tareas requiere el desarrollo de las cualidades personales y las habilidades creativas de una persona, la capacidad de adquirir de forma independiente nuevos conocimientos y resolver problemas, y navegar en la vida de la sociedad. El resultado de la investigación es la identificación de aspectos clave de la implementación del enfoque por competencias en el proceso de actividades del proyecto del docente.

Palabras-clave: Educación. Pedagogía. Enfoque basado en competencias. Instituciones de educación superior. Actividades del proyecto del profesor.