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PROJECT ACTIVITY IN HIGHER AND SECONDARY EDUCATION

Abstract. The article is devoted to the problem of project activity in the educational environment, which allows in practice to consolidate and test the theoretical knowledge of pupils, to work on practical skills, ensures a productive connection between theory and practice in the learning process, and contributes to the formation of students life skills. Theoretically and methodologically, the project activity is substantiated as a constructive and productive activity of the individual, aimed at solving a vitally important problem, achieving the final result in the process of goal setting, planning and implementation of the project.

The article analyzes project activity, which belongs to the unique ways of human practice related to ensuring the future, creating its ideal image, implementing and evaluating the consequences of the implementation of ideas.

The importance of the ways of education development in Ukraine for the coming years and for the future, which are defined in the National Doctrine of Education Development, provide for its thorough reformation in the direction of introducing a person-oriented approach into educational practice.

The set of pedagogical conditions for effective problem solving is characterized, provided that the educational process in the educational institution is

aimed at developing the activity, independence, and creative abilities of each student. The theoretical provisions of conducting project activities in the educational space are described.

A model of student project activity in distance learning conditions is presented. Scientific sources devoted to various aspects of project activity in the educational space have been analyzed.

Keywords: project activity, research project, informational project, creative project, practically oriented project, role-playing project.

Introduction. The problem of project activity in modern pedagogical science is quite important and relevant, as many researchers consider the XXI century to be the era of project implementation in educational activity. Project activities in the educational environment allow students to consolidate and test their theoretical knowledge in practice, practical skills; provides a productive link between theory and practice in the learning process; contributes to the formation of life skills of students. Project activity is a constructive and productive activity of an individual, aimed at solving a vital problem, achieving the final result in the process of goal setting, planning and implementation of the project. Design activity belongs to the unique ways of human practice related to ensuring the future, creating its ideal image, implementing and evaluating the consequences of the implementation of ideas. Ways of development of education in Ukraine for the coming years and for the prospect defined in the National Doctrine of Education Development, provide for its thorough reform in the direction of introduction into educational practice of a person-oriented approach. This problem can be solved if the educational process in the educational institution is aimed at developing the activity, independence, creative capabilities of each student, student. Today's society requires initiative persons capable of consciously acting, making their own decisions, and quickly adapting to change. Therefore, modern pedagogy is actively searching and testing different forms and methods of activity of the subject of cognition, thereby laying the objective preconditions for the qualitative transformation of pedagogical education. The teacher should be not so much the source of knowledge and the controlling subject, but the organizer of independent active cognitive activity of students, their consultant and assistant. For this purpose, in the process of university training it is necessary to involve students in the active cognitive process, the application of the acquired knowledge in practice, cooperation in solving scientific tasks [1]. Given the relevance of pedagogical technologies and the efficiency of using technology in higher education, we consider it appropriate to cover the possibilities of using project activity in teaching disciplines.

Problem statement. In modern pedagogical science, many scientists have developed classifications of educational projects. One of the most common were the

projects of American educators - J. Dyuyi, V.H. Kilpatryk, who took as the basis the development of cognitive, creative skills of students, the ability to construct their knowledge independently, to navigate in the information space, to think critically [2]. Kilpatric proposed the following project classification:

- a productive (creating) project related to work activities (design, layout, plant and animal care);

- consumer project (preparation of excursions, provision of services, organization of leisure);

- research project (biological, physiological, technical, solving historical or literary problems);

- training project (project management) to acquire certain skills [2].

Background. The theoretical basis for solving the outlined scientific problem are the ideas presented in the scientific achievements of Ukrainian and foreign scientists: Kovtun A. V., Zhernovnykova O. A., Peretyaha L. Y. (application of digital learning tools in project activities); Barron, B. J., Schwartz D. L., Moore A., Vye N. J. (theoretical foundations of project technology implementation); Bell S. (organization of the educational process on the basis of project activity); Boss S., & Krauss J. (connection of project activity and digital environment); Abdullah M. C. & Daud S. M. (provision of collective interaction was studied in the conditions of project activity).

The purpose of the article is the theoretical and methodological characterization of the complex of pedagogical conditions for the effective application of project activities in the educational environment. The following classification of educational projects has developed in modern science:

1. According to the nature of the dominant activity:

• research project - it includes justification of the relevance of the chosen topic; definition of the purpose, tasks of the hypothesis research with its subsequent verification, analysis of the obtained results; use of research methods such as laboratory tools, sociological survey modeling and others;

• informational project - aimed at collecting information about some object, phenomenon with the aim of its analysis, generalization and presentation to a wide audience. The result of such a project can be publications in mass media and on the Internet;

• a creative project involves the most free and non-traditional approach to designing the results. These can be almanacs, theatrical performances, works of fine and decorative arts, video films;

• a role-playing (gaming) project in which designers take on the roles of literary or historical characters. The result can be the creation of a visual guide for the educational process;

• a practically oriented project is aimed at the social interests of the project participants themselves or the external customer. The result is determined in

advance and can be used in the life of a social class, school, city, state. The result can be a visual guide for the classroom, birdhouses, and so on (Lopushynska, 2020).

2. According to the subject-content features:

• monoproject within the framework of one field of knowledge;

• an interdisciplinary project (at the intersection of various fields of knowledge).

3. According to the number of participants (individual, pair, group, collective, mass).

4. According to the duration:

• mini-project (half a pair - lesson);

• short-term (up to 1 month);

• long-term (semester, academic year).

An educational project, from the point of view of a student (pupil), is an opportunity to do something independently in a group or by yourself, making maximum use of your capabilities; it is an activity that allows you to discover yourself, test your strength, apply your knowledge, bring benefit and publicly show the result; this activity is aimed at solving a significant problem, formed by the students themselves in the form of a goal and task, and when the result of this activity has a practical nature and important applied value [6].

Design activity from the teacher's point of view is a didactic means of development, training and education, which allows you to develop and form specific design skills, namely to teach: problematization (identifying the main problem and setting tasks for its solution), goal setting and activity planning, self-analysis and reflection (self-analysis of the success and effectiveness of solving the project problem), presentation of one's activities and results, search for the necessary information, identification and assimilation of the necessary knowledge from the information field, practical application of knowledge, abilities and skills in various situations, conducting research (analysis, synthesis, hypothesis, detailing and generalization).

In the scientific pedagogical literature, there is a whole series of mandatory requirements for the modern definition of the project, namely:

• the presence of an educational problem, the complexity and relevance of which corresponds to the educational requirements and life needs of students, pupils;

• the research nature of finding ways to solve the problem;

• structuring of activities in accordance with classical design stages;

• simulation of conditions for students to identify an educational problem;

• spontaneous nature of the creative activity of participants in the educational process;

• practical or theoretical significance of the activity result and readiness for implementation;

• pedagogical value of the activity (what new knowledge and skills the students acquired during the implementation of the project).

The final result of the students' project activity can be presented in the form of a website, sociological survey data analysis, business plan, video film, video clips, electronic newspaper, collection, model, package of recommendations, advertising prospectus, article, collective creative work of decorative and applied arts [3].

Methodology. In our opinion, there should not be too many criteria for evaluating the quality of project implementation. Their content is informed in advance and explained to the project participants, for example, the criteria for evaluating the project activity of pupils may be as follows: independence of work, relevance and significance of the topic, creativity of problem solving, presentation of the content of the project, use of visual and technical means, educational significance of the project, complete disclosure of the topic, accuracy of answers to questions, educational and educational significance of the project, quality of approval of versions.

Worthy of attention is the experience of the Applied College "Universum" of the Borys Grinchenko Kyiv University in implementing design activities into work practice. The resource support of the development program consists of the following innovative projects: "Model of the institution of life competence", "Establishment and development of a preventive educational space", "Educational system of the college", "Education of gender culture of youth in an educational institution", "Education in the field of human rights and freedoms", "Education in the field of culture of peace and tolerance", "Health me through education", "Creative giftedness", "Portfolio in an educational institution", "Development of student self-government of the college", "Steps to the information society", "Development of social partnership", "Image of the college of work" and others [7].

In Ukraine, there is a tense situation with the replenishment of scientific institutions with young personnel, which indicates the ineffective use of the intellectual and creative potential of gifted pupils and students, the lack of favorable conditions for the realization of their abilities.

The decline in the prestige of scientific work is accompanied by the outflow of promising creative youth to the private sector of certain branches of the economy of our country or outside Ukraine. The "aging" of science already today has a negative effect on the pace of innovation and technological development of the economy and the social development of society.

There was a need to overcome disunity and inconsistency in the work of various institutions and organizations with talented and gifted students (students) in order to increase the level of efficiency of this work and create a state policy favorable to the realization of the creative abilities of children and youth.

Main results. The purpose of educational design is to gain experience in practical activities. Tasks: teach to independently acquire knowledge and apply it to solve new cognitive and practical tasks; promote the development of communication skills; expand the circle of communication. The main requirements for the use of technology: the presence of an interesting and significant social problem; predictability of results (report, report, album, etc.); independent activity of performers (individual, pair, group); structuring of the content part of the project (with indication of phased results); use of research methods and a certain sequence of actions: definition of the problem and tasks of the research; proposing a hypothesis; choice of research methods; discussion of methods of design of final results; collection, systematization and analysis of received data; summarizing, design of results, their presentation; conclusions, proposing new research problems. The ways are the study and implementation of innovative pedagogical technologies for the optimization, intensification, integration of learning, in relation to the development of a creative personality in the practice of the college in 2022-2023. It is also important to create online consultations of a psychological-pedagogical service for parents on raising and teaching creatively gifted children with a high level of intellectual development (using interactive online platforms Meet, Zoom, Webex, MOODLE). It is necessary to promote the expansion of ties with higher education institutions of Ukraine and with international universities such as: the University of Ioannina (Greek Republic); Ignatianum Jesuit University in Krakow (Republic of Poland); Faculty of Management of the University of Tampere, Republic of Finland), as well as with scientific institutes of the National Academy of Pedagogical Sciences of Ukraine [7].

The model of implementation of project activities of education seekers within the framework of studying social disciplines has shown significant results in improving motivation to study and increasing work capacity. It should be noted that the implementation of project activities in digital format shows high indicators of student involvement in the educational process. With a constant number of students studying in the second year of the specialty "012 Preschool Education" of the Applied College "Universum" of the Borys Grinchenko Kyiv University, which is approximately 45 people every year, the number of applicants who take part in the project activity is 37 people (note that performance or non-performance of project tasks is the choice of the students themselves, which the teacher publicly declares at the beginning of the course). Let's consider in more detail the algorithm for the organization of project activities of second-year students of the specialty "012 Preschool Education" Applied College "Universum" in the 2022/2023 academic year in the conditions of forced distance learning. The teaching of social studies in the second year begins in the spring semester (February-June) and includes 3 credits for assimilation, classroom work is 32 hours for each group, of which 16 hours are

lecture classes and 16 hours are seminar classes, the discipline ends with a four-level control (exam). It should be noted that applicants have 58 hours for independent work on the "History of Ukraine" course, which requires the search for meaningful and interesting works of a creative nature.

The model of educational interaction in project activity is based on such principles as: primary organization, ongoing control of success, public protection and presentation of results, design of obtained results into digital content. Let's consider this process in more detail. At the first lecture, the teacher familiarizes the winners with the evaluation system and notes that for "creative work" the winners will be able to receive a maximum of 20 points, which is 1/5 of their total number of points. We emphasize that it is advisable to conduct preparatory work within the framework of the organization of interaction between the teacher and students in the digital space. The most effective, in our opinion, is the creation of groups in digital messengers, because it is digital applications for communication and content exchange that occupy a dominant position in communication between applicants. Getting to know the elders and clarifying the rules and evaluation criteria in advance allows you to significantly improve communication with the students of the group in the future. Another important aspect of effective execution of project work is the clear definition of deadlines for sending works and checking them for integrity.

We emphasize that the projects of previous years can be used in the process of conducting classes, especially in the lecture format, to regroup the attention of the applicants to another type of activity. In the future, it is necessary to clearly define the conduct of consultations for applicants who have expressed a desire to participate in project activities. The Russian invasion had a negative impact on communication between applicants, so the presence of another platform for their interaction is an important factor in supporting students in difficult conditions. When developing an opinion on improving communication and interaction between applicants, the teacher usually recommends uniting in project groups of up to 5 people. Such an approach allows for the development of communication and understanding between students. However, there are options where applicants perform project work individually. A special place in the system of project activity in a digital format is occupied by the research activity of the acquirers. Before the start of the course, the teacher, conducting preparatory work, can choose the academic groups with the highest success rate among the entire flow of the course. As a rule, these are 2 groups, which are given the opportunity to conduct project work in the format of a current topic of modern scientific research. In this case, the teacher must show special attention and integrity towards the applicants, that is, give the opportunity to participate in this work to the entire group (for example, in the 2022/2023 academic year, the average number of participants in such groups was 6 students). Such a number of participants is due to the complexity of conducting project activities in

the format of research and processing results. Conducting research requires a lot of attention and the number of participants to process the received information. Evaluation of the results of the conducted research takes place on a separate day and includes scheduled debates between representatives of different project groups of researchers, which significantly increases the time for the defense of works. This kind of activity of the acquirers makes their further scientific search especially valuable. As a rule, the most proactive students from the project group in the next academic year express their desire to conduct research already in the format of more thorough scientific investigations and publication of the results in specialized university publications.

Observance of systematicity and consistency in work with students allows to maximally reduce the risks of misunderstanding and technical difficulties that very often occur in such a process. For example, due to the lack of professional video or audio recording equipment for many users, there are cases when the video is not audible or the video is recorded in an unsupported format. In such cases, preliminary work is needed to identify and eliminate such problems. Building a model of successful project activity in the digital educational space includes the following stages: preparatory (establishing communication between applicants and the teacher), operational (creating a project), corrective (making changes and additions) and final (public protection and design of results). One of the most important tasks of implementing the project activities of education seekers in the digital space, along with the development of "soft skills" and increasing interaction, is the development of digital competence. It is very difficult to imagine the effective implementation of the above-mentioned project works without the formed skills of work in education in the digital space. In addition, it is important to emphasize that digital means of communication can be used in the educational process.

Conclusions and prospects. Thus, the conducted research shows an effective model of construction of the project activity of students, both in the conditions of traditional education and other forms and methods of educational interaction. The most valuable recommendations regarding the organization of project activities in the digital space are: preliminary preparatory work by the teacher to clarify the requirements for studying the course and organizing project activities (the emphasis here is on group leaders due to the large number of applicants, an average of 45 people); vivid presentation of requirements and previous achievements in creating creative works (projects); determination of a clear sequence of actions of this process. Provision of topics, selection of topics, independent organization of creative teams in accordance with the stated requirements, creation of a project, its verification, public defense, registration of results; clarification of the sequence of actions and communication between the participants of the process: teacher-student, teacher-group of students, student-student. Feedback support at consultations and in

messengers (with an emphasis on convenience for both parties); ongoing verification of the obtained results, i.e. support and correction of project works with mandatory clarification of problematic points for applicants; organization of public defenses of creative works (projects) on proven digital communication platforms; compliance with the principles of academic integrity in the conditions of distance digital learning through the verification of works in generally recognized digital information verification programs; allocation of time for separate consultations for research projects as such, which require special attention due to their complexity; application of cloud services for recording the results of applicants' success.

The conducted research does not exhaust all aspects of project activity in the digital space, because the technological apparatus of educational services and platforms is rapidly developing and provides many ways of implementation in the educational and project work process. But the basis of interaction and organization of this process remains unchanged and is aimed at the development of educational skills, team interaction and assistance, as well as qualitative presentation of the obtained results. In further research, it is planned to complete and present the results of the study of the influence of the project activities of the applicants on the formation of their digital competence.

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