

THE UPGRADING OF APPLICATION CONDITIONS FOR USING IT IN THE PROJECT ACTIVITY IN SCHOOLCHILDREN'S TECHNICAL PREPARATION

A.A. PODDYMKINA

Scientific director: *L. S. Kyligina (Ph.D., Associate professor)*

The Annotation

The article is devoted to the peculiarities of the usage of the method of projects at Technology classes at school and for out-of-class activities. The author shows how the specially made programme for more efficient usage of the method of projects and for students' achievements of personal and interdisciplinary results at different stages of learning.

THE ACTUALITY

The modernization of the educational system is connected with the profound changes which have been lately happening in the socio- economic structure of our life. The social challenge is focused now on the young people able to adapt to the changing life situations and to do good both to themselves and to the whole society. Among the diversity of the modern innovative pedagogical approaches the organization of the project activity takes a special place, because it gives more opportunities for creative, communicative and organizational skills development and it also forms an interest and a need for creative activity.

Under the conditions of modernization in the Russian education, the educational establishments are rearranging their work in accordance with the new regulatory documents: the Federal state educational standard of basic general education (FSES BGE); Russia's strategy of the innovative development during the period up to 2020; the Priority national project "Education"; the National educational initiative «Our new school», the Federal law "About education" and others. The foundation of the new educational system is focused on the world community and requires profound changes in the pedagogical theory and practice of an educational establishment and also in the pedagogical technologies.

The word "project" comes from Latin "projects", which means "thrown forward, prominent", and in the Greek language this word means "the way of research". On the whole, a project is a plan, an idea, an image, transformed to the form of a description, a justification of calculations, revealing the nature of the plan and a possibility for its practical realization [1]. The method of projects is understood as a set of teaching and learning techniques that help schoolchildren solve one problem or another on their own with a presentation of these results.

Thus, the essence of the method of projects is in laid in stimulating children's interest towards different kinds of problems, for which one should constantly update knowledge and improve practical skills, i.e. to accept a life principal "to study without stopping". This allows to consider the method as one of the most optimal methods for the realization of new educational programmes in school education. First of all, interaction between a teacher and schoolchildren has the character of cooperation, where other subjects of the educational process (parents, for example) can take part in. Therefore, the method of projects makes the educational system open for active cooperative children and their parents' participation. Its main aim is to develop free creative personality in terms of children's research activities where parents and teachers can help to direct their activity.

The method of projects was widely used in the 30's in Russia. However, theoretically ambiguous comprehension of the nature of school projects, their typology, organizational forms of work did not allow to get further development and the researches were stopped. The reflection and the application of this method in a new socio- cultural situation allows us to speak about a school project as a new pedagogic technology which is able to solve the tasks of personality-oriented approach effectively.

At the very beginning of my work at school after graduating the university, I searched for the forms in which children could make their own projects. As a result, "Art-club" (the uniform educational space) was established. The main idea of the organization of work in the club was the conception of spiritual and moral development and the socialization of the schoolchildren. Thus, each organized activity in the club was a vivid event; each activity awakened not only the children's initiative and activity but also gave an opportunity to develop their independence. The following forms of the out-of-class activities in the form of projects were used:

1. *the communicative trainings* (as a form of getting the knowledge) which differ from their analogues by the fact that the participants can learn from their own experience at a given moment;
2. *the family club* as a form of joint children and their parents' activity organized in the form of hand-made and craft-made classes and other creative organizational activities aiming to form emotionally positive attitude to the family values;
3. *the social projecting* as a form enabling to create the conditions for different socializing attempts through taking part in socio- useful projects (making hand-made present for elderly people, cooking treatments for promotion, etc.);
4. *the social partnership* as a form of collaboration with different out-of-school establishments and parents focused on creating the uniform of realization of educational modernization concept;
5. *the museum activity* as a form of work focused on preserving the historical memory and heritage, development of the children's interest in local history, bringing up the civil position. The establishment of the three museum rooms at school was connected with the realization of the projects on renovating the historical documents, exhibits, costumes. Those three museum rooms (The Great Patriotic War exhibition, the museum room devoted to the Russian antique, the room with the exhibition telling the history of the area where the school is situated) were actively used while being held during the out-of-class activities).

While realizing the project "Art-club" on the school base, I came to a conclusion, that every project is a set of goals which life itself challenges to a man when he or she must complete any given task. Through the project activity we can teach a child to be able to solve all the complex challenging problems by himself, using the knowledge given at school at Technology classes. Thus the area of my interests is connected with the methodology of the project activities during the school education for the best social and professional adaptation of a man in the society.

As for Technology classes, a project is a specially organized process by a teacher and self-performed students, this is a set of actions, culminating in the creation of the final product. To ensure that the learner (a schoolboy or a schoolgirl) is able to use their resources optimally and achieve a positive result when creating the project, I developed a specialized computer

programme as "Project for «excellent»", helping a student to navigate the information required for the project easily, without arising any difficulties. The advantage of the programme «Project for «excellent»" is that the child gets acquainted with the information on the chosen topic of the project and makes critical decisions. The program contains sections such as:

1. Type of project (proposed to choose the type of project from the list)
2. Manufacturing product (in the empty field one is to enter a name of a product, which is created by a student; the program can help you to select the following items, taking into account the specificity of the final product)
3. The materials and the history of their appearance (the proposed materials with which the student can create his own item or product)
4. Execution technology (the technology of creating a product is described; it can also provide detailed video with master classes on the selected technologies)
5. Tools for work (a toolset is selected for each offered material).

Thus, the learner is given the opportunity to choose from a huge variety of technologies and materials exactly those that are most successfully suitable for the realization of his project. Also a student can complete each of the sections independently of the found information. Another advantage of the programme "Project for "excellent" is that all the information is systematized and is available in accordance with the age level of schoolchildren and his initial training from simple technologies, materials and tools to more complex.

The programme "Project for «excellent» " will also help students to make the final product calculations, prepare a sketch or a layout of the product and calculate the whole cost of execution of this project. The project will be creative as well if it is done in groups, and students have an opportunity to demonstrate the results of their project and evaluate the work of their comrades. To do this, there is a section "Achievements" in the computer programme in which students can share the results of their work, evaluate the work of other schoolchildren and communicate with other users of the programme. The possibility of online communication is also possible at the stage of creation of the project, where students can create a private group, in which they will discuss the implementation details of the project, distribution-mine duty and post the results of the implementation stages of the project.

The programme "Project for «excellent»" allows to reduce time searching for information and performing calculations of the main project stages: performing market research, information gathering, study of consumer qualities of future products, the development of a work plan, selection of materials and tools, incremental development model of the project, preparation of process maps, feasibility study, project presentation.

The project system is based on the principle of complication; therefore, the programme "Project for «excellent»" contains a number of provisions:

- the gradual increase of student's knowledge and skills;
- the implementation of projects in various fields, ranging from the more familiar (home, school, recreation) to more complex (society, business, industry, etc.);
- the gradual complication of the requirements for the solution of problems (the use of an integrated approach, taking into account many influencing factors, etc.);

- students gradually realize their own abilities and capabilities to meet the needs of their own individuality and society;
- the ability to focus on local conditions as problems for the projects are selected mainly from life;
- the opportunity to exchange experience in world space.

Taking into consideration the nature of the final product of the project activities, we can distinguish the following types of projects created using the programme "Project for «excellent»" in the study of the subject "Technology":

- Projects role, for example, with the passage of the vocational guidance. This section presents information about professions, tests, career guidance, information about educational institutions where you can get a degree in this specialty, assignments and games about professions.

- Informative-research projects, for example, the study of the properties of certain materials. The program includes the description of the properties of different materials, methods of testing these properties, tests for knowledge control.

- Creative projects - for example, fabrication of sets, costumes for school performances, theatrical training and sketches of folk festivals (Carnival, etc.). This section includes information about the history and characteristics of national and state holidays.

- Information projects - for example, development of visual aids, posters, cards-tips. This section includes graphical editors and specialized programs that allow you to develop schemes, layouts and visual AIDS.

- Practice-oriented projects, such as making garments.

Analyzing the presented above practical experience, it can be concluded that the use of specialized programmes can build the project creation process to achieve the highest result.

Today by the phrase "a project method" we understand a certain set of ideas, sufficiently clear pedagogical technology, and specific practices of teachers. These ideas again become significant in the broader educational community. Nobody claims that the project will help to solve all problems in education, but this is an effective means of students' enhancing the cognitive and creative abilities. The project is a real opportunity for personal and professional self-determination of a man.

THE LIST OF THE RESOURCES USED:

1. Б. Райзберг, Л. Лозовский, Е. Стародубцева/ Современный экономический словарь. изд «Инфра-М», 2010 – 512 с.

2. Сасова И. Технология. 5-8 классы. Программа. ФГОС (+CD) изд. «Вентана-Граф», 2015 – 168 с

3. Intel «Обучение для будущего»: Учебное пособие. – М., 2009;

Юдин, В.В. «Сколько технологий в педагогике?» / В.В. Юдин// Школьные технологии. – № 3. – 2009. – С. 111-118

4. Колеченко А.К. Энциклопедия педагогических технологий: Пособие для преподавателей. – СПб.: КАРО, 2008.- 368 с.

5. Поливанова, К.Н. Проектная деятельность школьников / К.Н. Поливанова. – М.: Просвещение, 2010. – 192 с.

Kontaktní adresa

A.A. Poddymkina (a master student): the Techno-economic faculty, the department of Theory and Methodology of Technological Education, group TOM-113, E-mail: ped.tef@vlsu.ru

Scientific director: L. S. Kyligina (Ph.D., Associate professor): the Techno-economic faculty, the department of Theory and Methodology of Technological Education, E-mail: ped.tef@vlsu.ru