

Project Management as Method of Self-Organization in Educational Activity

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Abstract — The authors of this article consider the process of organizing individual design which is one of the components in the system of quality assurance of education. The relevance of the search for effective approaches in the field of organization and individual design of students of various types of educational institutions is determined. The authors propose a study of the process of implementing an individual design, which allows you to check the effectiveness of methods and methods of organizing independent work of students in educational practice according to the method. For the initial and final diagnostics of self-organization of students' activities, the method of evaluating self-organization of activities (E. Yu. Mandrikova) was used. The authors present an analysis of the student's personality propensity to fixate on a pre-planned structure of organizing events in time on the «Fixing» scale. The authors of the article are of the opinion that due to the purposeful organization of individual design, it is possible to create the necessary conditions for self-organization of student's personality.

Keywords — *project, custom design, independent learning activities of students.*

I. INTRODUCTION

Currently, the competence-based (system-active) approach, which is actively implemented in the Russian education system, implies the inclusion of a certain proportion of independent work when students master certain topics of various educational disciplines, thereby determining the direction of Russian secondary professional and higher education in the training of future specialists in various areas. The introduction of a competence-based (system-active) approach to the Russian education system is due to the need to improve the quality of interaction between young professionals and the labor market, as well as to increase their competitiveness in a dynamic, constantly changing world.

Two global questions that need to be answered to achieve a high level of scientific and practical training of students are how to ensure that students receive deep fundamental scientific knowledge and how to change pedagogical approaches to the process of implementing educational activities to improve the quality of education, develop students' creative abilities, motivate their desire for continuous

learning, take into account the interests of students in the possibility of their self-determination and self-actualization [1].

The relevance of this research is determined by the need to find effective approaches to organizing and conducting classes on individual design of students (students of secondary special and higher educational institutions). The purpose of this research was to develop and test in educational practice the effectiveness of techniques and methods for organizing independent work of students in the process of implementing individual design. In the process of individual design, the student solves acute and topical educational problems. Independence of the student as a subject of education orients his satisfaction of educational needs, achievement of personal and professional aspirations and assumes his active activity in solving his own educational problems.

The conducted research does not claim to be complete consideration of the problem and absolute conclusions but only reflects the author's point of view and contains suggestions for organizing classes with students in this direction to obtain the highest possible result.

II. METHODS

Based on a qualitative analysis of the literature in this area, we can conclude that in pedagogical science at present there are many interpretations and definitions of the concepts of «project», «individual design», the concept of «individual educational trajectory», «individual development trajectory» is also considered [2-5].

A.V. Khutorskiy believes that the educational trajectory is a personal way to realize the personal potential of each student, which includes five main stages of educational activity, they allow you to ensure an individual trajectory of the subject of education in a specific subject area: goals-plan-activity-reflection comparison of the received products with the goals- self-assessment [6].

In turn, the creation and development of an individual trajectory of development of students at I. S. Yakimanskaya should be carried out in two ways. The first is the direction of

adaptability (adaptability) to the requirements of education, and the second is the direction of creativity that allows the student to carry out the process of finding and find out of cash situation, to be able to overcome it and to build a new relying on existing personal experience, knowledge, ways of action [7, 8].

We emphasize that the educational trajectory in a broader sense in comparison with the individual educational route, includes content (variable curriculum and educational program that determines the individual educational route); activity (special pedagogical technology); procedural (organizational component) aspects.

Analysis of the literature [9, 10] shows that the individual educational trajectory assumes the presence of an individual educational route (the content of education), as well as the developed method of its implementation (the process of organization). Individual educational trajectory, in addition to the individual educational route of students, may include its educational goals and objectives, individual curriculum, schedule of additional classes, success, etc.

F.G. Mukhametzyanova, R.V. Zabiroy consider the main conceptual ideas of the process of development and implementation of individual educational trajectory and individual educational route of students. An individual educational route or independent educational activity is presented as a purposefully designed individually differentiated educational program that provides the subject of educational activity with the implementation of an individual educational trajectory. F.G. Mukhametzyanova, R.V. Zabiroy describes and cites organizational and pedagogical characteristics and educational and methodological conditions for the implementation of an individual educational trajectory [5].

I.V. Panova describes the possibilities of implementing the project method as a form of monitoring the educational success of students, considers options for using the project method as a form of intermediate and final certification [11].

P.V. Sysoev reveals the concept and essence of the term "individual trajectory of learning". He drew attention to the urgency of the implementation of education on individual trajectories, as well as reinforces its regulatory framework, it also illuminates the relationship of cognitive styles with education on individual trajectories, defines the term "learning on individual pathways," offers your algorithm implementing this form of education [12].

O.V. Melkozerova believes that the implementation of individual design will allow students to develop independence in the development of content, to master the methods of areas of knowledge and types of cognitive activity, will allow students to independently apply the acquired knowledge and methods of activity in solving practical problems, to develop the ability to design and implement appropriate and effective activities (cognitive, design, social, artistic and creative) [13].

Independent work of students in the process of education is a form of educational activity that provides an active search and use of information necessary for effective professional tasks, self-actualization and personal growth, creative

perception and understanding of the content of educational material, contributes to the development of analytical abilities, self-control skills and planning of educational time [5, 14].

The process of individual design involves the development and presentation of an individual project of the student, i.e. educational research performed by the student within one or more academic subjects. Let us consider two main features of an individual project: initially, it is an opportunity for students to get acquainted with the basics of research, the principles of building an individual project, the requirements for its design, demonstration and protection. While the student an opportunity to prepare for further implementation of different types of papers (term papers, theses); the end result is an individual project should be the end of this training session by completing a student demonstrates existing subject knowledge, a skills analysis, goal setting, ability to work with information.

Another way to individualize the educational process is to involve students in the design and implementation of individual educational activities, as well as to activate and motivate their participation in various online competitions, olympiads and conferences. The most important task of the teacher when organizing individual design is a competent organization of the educational process, including the specification of independent work of students, since the problem of forming the skills of project activity of students develops into a problem of preliminary increase of educational motivation, education of interest in learning.

In this case, a project means a set of actions specially organized by the teacher and independently performed by students to develop an educational product that is personally significant for the student. Among the many goals and objectives individual design is basic: the development of self-reliance, research skills, creative activity of students; the ability to perform research, to analyze the performed work; development of skills in finding information, as well as the ability to organize, identify important and important for future use; working with new information technologies, in particular working with a personal computer and additional peripherals.

The active introduction of modern information technologies in various spheres of human activity, the development of the Internet and mobile communications, online services is the basic tool for the formation of the information society. An important role in creating an integrated information space of students' knowledge is assigned to computer science as a science and educational subject, since the competencies formed within this discipline are actively used in the study of other disciplines [15, 16].

An individual project as an educational product performed by students must meet certain criteria: the student performs the project independently and individually. The project is a completed work, in the project the student reveals and analyzes an actual problem, in the project of students demonstrates their competence in the topic under consideration; in general, the project has scientific and practical value and contains a certain amount of relevance.

The process of individual design can be divided into several stages: the preparatory (targeted) stage, the main (organizational) stage, the scientific stage, the experimental (practical) stage and the final (reflexive-predictive) stage. At the initial preparatory stage, the teacher offers the student the subject of an individual project, reveals his own vision of the content of this educational product. Further, the student and the teacher combine their ideas and build a single concept of an individual project and its implementation process. The teacher asks the student a series of diagnostics and self-diagnostics that will enable the trainee to self-determination, to obtain information about their individual features and capabilities, inclinations and abilities, life plans and orientations, since custom design requires the demonstration to students of the subject personal position, individual activity analysis and interpretation of empirical information. In the content of the work at this stage, we included: familiarization with the educational and methodological complex of the educational subject "Individual design", with the regulations on the individual educational project.

The main (organizational) stage includes the selection of students' theoretical material on the topic of an individual project, the main purpose of which is to identify what is currently known in science and practice, and what remains undisclosed, what needs to be done in the study of the problem of interest to the student. At the scientific stage, the student studies modern literary sources, gets acquainted with the main scientific approaches, methods of research, methods of searching and processing information.

The teacher supports the student, provides necessary consultations, answers students' questions, helps the student to master the methods and methods of scientific research, rules for using literary sources.

The content of these stage has included: the development of the theoretical foundations of the research activities, the topic of individual project and approval of her visit to the library of the university and familiarize with the catalogue subscription, with a file of articles in the reading room, to obtain passwords for use of university's e-library systems (ELS), the development of rational techniques and methods of working with information, studying performance issues and issues on the topic of the project already implemented educational projects, including scientific and educational literature.

In the content of the work at this stage, we included: searching for information sources of various types in traditional and electronic libraries, on the Internet, a selection of sources, literature, articles and periodicals, materials of Internet resources on the topic and familiarization with them, making your own list of educational, reference and scientific literature, studying the selected literature, determining its key places, systematization and fixation of information in annotations, plans, theses, summaries, citations, transition to the layout of information material, writing a text.

At the experimental or practical stage of working on the project, the student independently or together with the teacher collects the necessary experimental material. It processes the received data using a personal computer and application

software. In the content of the work at this stage we included: definition of the structure of an individual project, the formulation of the titles of chapters and paragraphs of work, work on the introduction of an individual project, over the first head of the individual project, a report (the introduction and first chapter) on the work of the head of the individual project, the work on the second chapter individual project over an individual project, drawing up a list of sources, literature and Internet resources used in the course of the research, selecting and designing applications for an individual project.

The final (reflexive-predictive) stage involves the design of the final result of the student's activity on an individual project, which includes the preparation of a scientific report, presentation, and defense of the developed individual project. In the content of the work at this stage, we included: conducting self-analysis of the work, submitting the work for review to the project manager, finalizing the individual project taking into account the comments of the manager, binding the work, preparing for the public defense of the individual project, preparing a presentation and defending the individual project.

The success of the development and protection of individual projects by students is largely determined by the ability of the teacher to choose the subject of projects in such a way that at any stage of individual design it is possible to make adjustments, changes, additions to them, which will encourage students to participate in setting new individual educational goals, motivates their need and the need for constant reference to the goals and planned results [17, 18].

III. RESULTS AND DISCUSSION

For the initial and final diagnostics of the level of self-organization of students' activities, the method of evaluating self-organization of activities (E.Yu. Mandrikova) was used [19, 20]. The results of the 1st and 2nd year students were used for a comparative analysis of the results of diagnostics of the formation of skills of tactical planning and strategic goal-setting, features of structuring the self-organization of students' activities based on the results of the author's program of individual design in the East Siberian branch of the Federal State Budgetary Educational Institution of higher education «Russian State University of Justice», Irkutsk.

The results of the study of self-organization of the 1st and 2nd year students before and after the implementation of the author's program of individual design on the scale of «Fixing» are shown in Fig. 1.

Let us consider the results on the example of the «Fixation» scale which measures the propensity of a student's personality to fixate on a pre-planned structure of organizing events over time. Low score (1, 2 points) was demonstrated by 15.56%, 10.00% of 1st year students, respectively, 12.94% of 2nd year students; average score (3, 4, 5 points) 5.56 %, 12.22%, 11.11% of 1st year students, 11.76%, 16.47%, 8.24% of 2nd year students, high score (6.7) 10.00%, 35.56% of 1st year students, respectively, 22.35% and 23.53% of 2nd year students.

The diagnostic results show that the number of students with a low level of personal propensity to fixate on a pre-planned structure of organizing events in time has decreased by 2.61% and 5.29%. These students can be characterized as flexible individuals, who can easily switch to new activities

and relationships, but in some situations they may show themselves as insufficiently mandatory and consistent individuals.

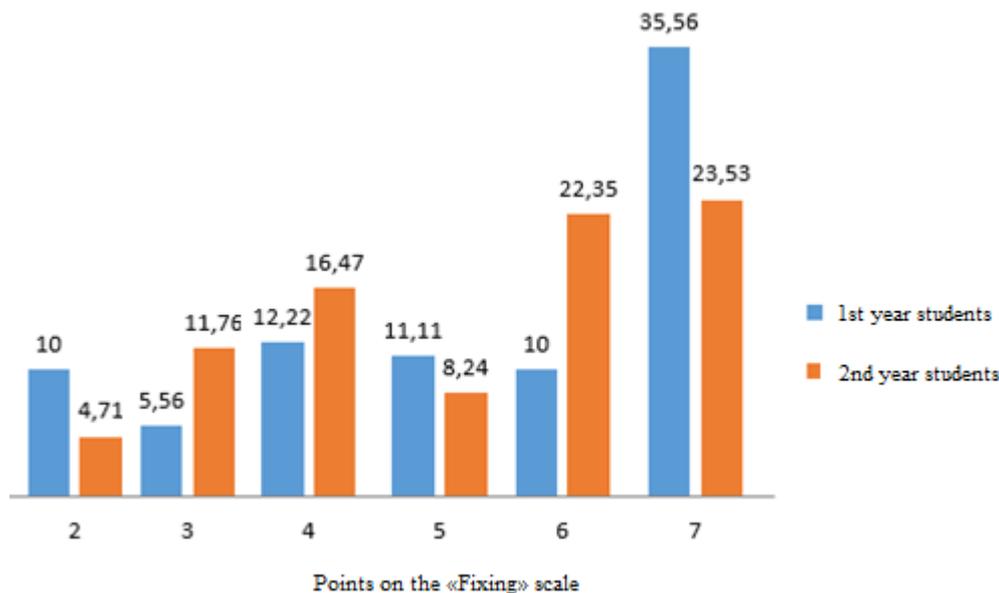


Fig.1. The results of implementation of the author's program of individual design on the scale «Fixing»

The number of students at the current level decreased by 6.21%, 4.25% and increased by 2.88%, these individuals are quite flexible in planning their activities and in building relationships with others, they can be perceived by the team and teachers as responsible and organized students, because they strive to fulfill certain obligations. The number of students with a high level of self-organization increased by 12.35% and decreased by 12.03%. This category of students is quite executive and mandatory, they constantly strive to complete the tasks they have started in every possible way, but they are often not flexible enough in planning their activities and in building relationships with others.

Thus, we can draw the following conclusion. Analysis of the results of the implementation of the author's individual design program confirmed the validity of the development of this author's approach to the preparation of an individual project by students as a methodological basis for solving the problem under study

IV. CONCLUSION

The teacher needs to develop a clear structure of activity on an individual project and regulate the interaction of all subjects of educational activity. This activity is carried out on the basis of a work plan which clearly indicates the content of the work, deadlines and necessarily mark the teacher on the implementation. The main functions of the teacher as the head of the individual project of the student are: consultation

guidance to the student on the object of the research, joint planning of activities, support and assistance in the work of the student on educational resources; control and organization of the self-activity of the learner; identifying deficiencies and assisting in their elimination, the rehearsal of the presentation of individual project for general discussion.

In the process of individual design, two subjects of education interact: the teacher who acts as a coordinator, manager, consultant and the student, the performer of the individual project and the creator of the educational product. Teacher's efforts to implement the personal development of the student, support students in the process of activities on the individual project and the realization of his individual and professional life's trajectory – that is an indicator of the high interest of the university and society in a competent, professionally trained expert.

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