Pedagogical sciences

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USING GOOGLE WORKSPACE FOR EDUCATION FUNDAMENTALS FOR WORKING WITH THE PROJECT METHOD

Summary. *In today's pandemic environment, institutions of professional higher education are facing an important task of creating access to quality education. With the help of modern technology distance learning is confidently introduced profoundly. Electronic means of information exchange, web-services,*

where students and teachers can hold virtual meetings and interact in the learning process, are constantly being used.

The possibilities of distance learning technologies allow to use complex method of project in the organization of educational process using Google Workspace for Education Fundamentals.

Key words: *project method, project classification, Google Workspace for Education Fundamentals, distance education, web services.*

In the new educational paradigm the student becomes a subject of cognitive activity, rather than an object of pedagogical influence. This leads to the necessity of organizing the educational process aimed at searching and developing each student's potential and abilities. The result of the teacher's work is active, creative activity of the student [5].

The Aim of the Work. The aim of the work is to apply the project method as a planned and permanent component of distance education based on Google Workspace for Education Fundamentals, a free set of easy-to-use tools that provide a flexible and safe basis for learning, collaboration and communication [3].

Materials and methods. One of the effective methods that allows you to form for a student certain, coordinated knowledge and skills is the method of projects. In addition, this method helps the teacher to create conditions for the implementation of creative abilities of students, to form the ability to navigate in different life situations, to improve their research potential.

If you provide a leading role in the project technology, you can create the conditions for:

- forming and developing students' intrinsic motivation to master the material and general computer literacy in a better way;
- to increase mental activity of students as well as the acquisition of logical thinking skills;

- to develop students' speech and to improve communicative competence in general;
- to development individual peculiarities of students, their individuality, the need for self-education;
- to change the role of the teacher in a distance learning environment;
- to solve the problems of distance education more effectively.

Results and discussion. E.S. Polat gives the following definition of the project method in modern sense: "...method", implying "a certain set of educational and cognitive techniques, allowing to solve this or that problem due to individual actions of students with the required presentation of these results"[1].

The project method allowing you to move away from authoritarianism in learning, is always focused on the individual work of students. Through this method they do not just receive a set of this or that knowledge, but also learn to acquire this knowledge individually, to it use for solving cognitive and practical problems.

The implementation of the project method and the research method in practice leads to changing of the teacher's position. He is transformed from a carrier of ready-made knowledge into an organizer of cognitive activity of students [5].

Having studied the experience of Ukrainian and foreign scientists in pedagogical design, we can distinguish the following types of projects: by content: monodisciplinary, interdisciplinary, superdisciplinary; by the end result: theoretical, theoretical and practical, practice-oriented; by duration: mini-project, short-term, medium-term, long-term, longitudinal; by number of participants: individual, collective (pair, group); by independence: reproductive and research, partially exploratory, research or experimental research, hevristic; contact-depending, internal, external, international [4].

The following stages can be highlighted in the process of completing an educational project:

I. Goal-setting stage – students awareness of the specific task (project organization).

II. Work planning stage – choosing the best method of action (project planning).

III. Implementation stage – implementation of activities. It is accompanied by ongoing monitoring and adjustment if necessary (implementation of the project).

IV. The stage of checking the results, correcting mistakes, comparing the results obtained with the planned, summing up the work and its evaluation (the result of the project) [2].

The analysis of the stages of project-based learning has shown that the success of the project largely depends on the efficiency of constant contacts between the students and the teacher, as well as between themselves. Therefore, when choosing a web service for distance learning using the project method, one should pay attention to the communicative properties of this environment.

Among the most widespread web services, the Workspace for Education Fundamentals distance-learning educational environment occupies one of the key places. The service allows communication between teachers and students or between students themselves as well as the exchange of files in different formats and simultaneous use by groups.

The implementation of the project method in a distance learning environment using Google Workspace for Education Fundamentals can be represented through the following sequence of stages.

Stage I - goal setting.

Google Workspace for Education Fundamentals - Google Classroom, Google Meet, Chat, Google Docs, Google Calendar.

The teacher develops a training course in Classroom, provides a list of possible topics for projects. After determining the staff of the participants in the project together with the teacher using the service Google Calendar dates for

meetings to discuss the project (using Google Meet), are set. Current issues students and teachers can discuss in Chat.

At the stage of collecting and analyzing information on the project, a general document using is created Google Docs for work with preliminary results and the formation of a completed project solution under the guidance of a teacher.

Stage II - work planning.

Google Workspace for Education Fundamentals - Google Classroom, Google Docs, Google Calendar.

At this stage of project development in the Google Classroom service, the instructor attaches lecture materials and assignments. The lecture provides students with the necessary theoretical material for further study. With the help of Google Calendar, the dates and stages of work on the project are written out in detail, when the discussion with the instructor using Google Meet takes place.

III stage - implementation of the project.

Google Workspace for Education Fundamentals - Google Classroom, Google Docs.

At the stage of project implementation after control checks have been done project participants add their part of work to the common document Google Docs. Working at a shared document is convenient, because project participants can see who and what part of the work has done and have an opportunity to add comments to the work.

Stage IV - the result of the project.

Google Workspace for Education Fundamentals - Google Classroom, Google Meet, Google Docs, Google Slides.

The teacher corrects and analyzes the results of the project with the help of the Google Classroom element "Assignment" and "Assignment with a test". Lecture materials describing the requirements for drawing up the results of project activities are also attached. If it is necessary to control the progress of the project

participants, the teacher can make up test tasks to check the level of knowledge. Such tests are created with the help of Google Forms.

Presentation materials of the project are created by participants using Google Slides; defense and discussion take place in real time in the Google Meet service.

At the end, a Google Forms survey is made up to help to evaluate and reflect the project. It is a stimulus to develop thinking and contributes to find a a common point of view in the study of the problem.

Conclusions. Based on the results of the performed work, a step-by-step project method based on technologies presented by the Workspace for Education Fundamentals distance education system and its services has been developed.

Literature

1. New Pedagogical and Information Technologies in the Education System (Text). / Ed. by E.S.Polat M.: Academy, 2001. 272 p.
2. Polat E.S. Project Method.
3. URL: http://schools.keldysh.ru/labmro/lib/polat2.htm
4. General information about Google Workspace for Education. URL: https://support.google.com/a/answer/7370133?hl=ru
5. Slobodyanik O.V. Analysis of the concept of "project", "project technology", "pedagogical design" in the studies of foreign and domestic scientists / A.V. Slobodyanik // Scientific Notes. Series: Problems of Methodology of Physics, Mathematics and Technology Education. Kirovograd: ROV KSPU named after V. Vinnichenko, 2015. Vyp. 7. P. 3. 306 p. P. 235-243.
6. Using the Project Method in Teaching Students (Summary of the Cyclic Commission's Experience) T.P. Lavrova, I.V. Muntian. Methodical development. Odessa: TPA ODAH, 2011. 22 p.