PROJECT TECHNOLOGIES AS MEANS OF DISTANCE LEARNING EFFECTIVENESS IMPROVING

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Summary.The essence of project technologies applied in educational and upbringing process in high school is examined. Their classification according to Eu.Polat is given as well as the stages of project realization. Characteristic features of distance learning are shown. The existing types of distance learning and the advantages/disadvantages of project technologies application within each of the types are observed.

Key words: project technologies, distance learning, project, projects method, innovations, information technologies.

INTRODUCTION

In modern conditions of high education system development an important meaning obtains introduction of effective innovations into the traditional educational system (full-time education/correspondence courses) as well as the search for new forms of education organization beyond its boundaries (distance learning with the usage of Internet-technologies, organizing short-term schools, forums).

Exactly distance learning in all its variety and richness of opportunities (correspondence conducted through regular mail, telecourses or radio broadcasting, CD/DVD disks with full educational course on them, Internet-course) deserves to be studied deeper by educators.

Characteristic features of distance learning are the following:

1. flexibility – an opportunity to learn when it is convenient for the learner and to spend on it as much time as the learner wants, to learn where he/she wants and to proceed in learner's individual tempo;

2. modularity – an opportunity to form of different independent educational course modules his/her own individual or group learning plan;

3. parallelism - conducting learning activities both with professional ones;

4. information access richness – many users can simultaneously refer to many sources of educational information (electronic libraries, databases, knowledge bases, etc.);

5. economy – effective usage of technical and transport means, educational areas, concentrated and unified delivering of educational information and multi-access to it, that reduces cots for specialists training;

6. high technological level – using in the educational process new achievements of information and telecommunication technologies that promote the interaction of users into worldwide postindustrial space;

7. social equality – equal opportunities for all people to get education not depending on the place where they live, their health, elitism and financial situation;

8. internationalism – export and import of world achievements on educational services market;

9. cognitive orientation – users have to be more persistent in getting knowledge, be more organized, work independently and have computer and telecommunications working skills;

10. diagnostic flexibility – evaluating the level of users abilities, professional qualities development, building corresponding social and psychological portrait with the purpose of choosing effective means and methods of education;

11. humanity – education directed on the personality, taking into consideration personality individual peculiarities, creating favourable conditions for knowledge perception and creative abilities development [Kurlyand R. 2007].

Using Internet in distance learning as undoubtedly dominating resource technology of the end of XX – the beginning of XXI cent. causes many discussions on the advantages and disadvantages of this type of distance learning, but the authors consider it inappropriate to stop at such a controversial moment as Internet has already become the leader of modern technologies of future. Such researches as I.Bohdanova, Eu.Polat, G.Selevko and others have paid much attention to studying Internet as one of the means of introducing pedagogical innovation.

Innovations appear as a response to the demands of society becoming widespread and popular quite soon. Innovations effectiveness is estimated according to the results gained some time later after their introduction.

Recently the so-called 'project technologies' have become extremely popular and widespread. 'Project technologies' are known as 'method of projects' as well. Such top Ukrainian and Russian scientists as Eu.Polat, M.Zaprudsky, S.Shyshov, O.Novikov, V.Guzeyev, N.Kyselyova, D.Levites, G.Petrovsky, I.Chechel and others study them.

RESEARCH OBJECT

Distance learning with the help of Internet is divided into two types: synchronous and asynchronous. An undoubted advantage of this way of education is its speed and easiness, convenient usage. This means of education is interactive, that is the learner can 'communicate' with the lecturer (as well as with other learners of the same course) either in real-time (synchronous sub-type: web-conferences, Internet-chats) or making questions/comments on a particular resource and getting a reply afterwards (asynchronous sub-type: forums, e-mailing, audio-, video- and webcourses) [Pometun O. 2004].

Surely, in such conditions project technologies are of vital importance as they make education more substantial and gripping. The learner can decide what is the most

interesting for him/her within each discipline and what he/she would like to learn independently. That means that project technologies help the learner to learn in-depth that very material, those problems that are the most interesting for him/her. And the process of learning and the results of learning are formed into a realized project.

To be involved into project activity is interesting and useful for full-time students. Such form of work is possible for correspondence-course students as well. Difficulties appear when project technologies are applied in the system of distance learning because this form of education presupposes usage of information technologies. The question is whether the learner should be in this case an experienced computer and Internet user to cope with his/her project task or not.

On one hand, it is a very serious problem: teacher has one and the same course in which he/she deals with project technologies each time making it appropriate to each of the course learners taking into consideration, first of all, the level of person's familiarity with computer and project technologies.

On the other hand, flexibility is a characteristic feature exactly of distance learning as this form of education allows to work with every learner separately, to consult him/her on any questions within the course, direct and correct his/her practical activities.

That means that to provide effectiveness of distance learning with the usage of project technologies one should only construct project activities in such a way that would suit each learner separately because individuality is a characteristic feature of distance learning.

It is known that the effectiveness and flexibility of project technologies are provided through the variety of their types. According to the typology offered by Eu.Polat [Polat Eu. 2001] projects can differ within: 1. form of realization (festival, video-project, performance, excursion, classes); 2. subject area (super-subject, intersubject, mono-subject); 3. duration (long-term, middle-term, short-term); 4. main activity (scientific and research, creative, role-play, applied, informational); 5. character of contacts (of the students of the same age, of the students of different age); 6. character of coordination (with direct coordination, with indirect coordination); 7. number of participants (group, pair, individual).

The aim of this article is to study the essence and peculiarities of project technologies, analyze the opportunities of their full or partial realization within distance learning with the usage of Internet resources and to draw the conclusion on project technologies introduction effectiveness within Internet distance learning.

RESULTS OF EXPERIMENTAL RESEARCH

Thus, let us deal with the usage of project technologies on the example of definite distance learning courses types. If distance learning is conducted through regular mail correspondence the process of tasks performing and project realization becomes more complicated as too much time is spent on sending letters and it hampers the whole educational process. In our times of computerization this type of distance learning is not widespread. But we should point out that this means presupposes more independent work of the learner over the project (compared to other types of distance).

learning). It gives more freedom when making choice and more opportunities for person's self-realization. But on the other hand this type of distance learning makes impossible realization of the IV-th project stage – summing up as at this very stage the most important part is realized project results presentation which is rather difficult without involving other information technologies.

Television course or radio broadcasting as a separate type of distance learning is an effective but too expensive type of learning because most of higher institutions of Ukraine do not have their own TV channels or radio stations. That is why we will not stop on using project technologies in this type of distance learning.

A separate type of distance learning is getting a CD/DVD disk with full learning course. It makes the course unified and the communication within the course is conducted on the level 'user – computer'. It also does not give enough space to use project technologies in the process of learning.

Now let us proceed to the most popular type of distance learning that is conducted through Internet.



Fig. 1. Distance Learning Course

Any distance learning course consists of a range of components [Polat Eu. 1998] which are movable and can be replaced one with another (Fig. 1).

Remembering about this characteristic feature of distance learning the teacher can on his/her own consideration offer the learners instead of one of the course components to perform a practical task – to work out and realize a project.

The guarantee of project technologies using effectiveness in distance learning are the following factors: 1) learners' understanding of the concept 'project'; 2) cognition of all the stages of project elaboration and realization; 3) searching for important problem interesting for the learners; 4) determining the project type according to all the features; 5) creating plan of work over the project; 6) teacher's project plan approving; 7) current consulting the teacher during the project work; 8) approving the way of project final realization; 9) preparing a report on project work; 10) presenting project results.



Fig. 2. Factors that Influence Project Technologies Using in Distance Learning

Within distance learning through Internet quite real is to fulfill all 4 stages of project realization: organizing the project (includes determining project type, choosing the topic, formulating corresponding problem and didactic purpose); project planning (learners choose the activity direction and the ways of problem solving, working groups are formed, the type of future result and presentation are selected, working plan is worked out by the learners, learners project activity evaluation criteria are chosen); project realization (determining the sources of necessary information, learners independent research work, creating educational product); project summing up (mainly – project results presentation) [Polat Eu. 2001].

Dealing with the results of project activity there should be mentioned the fact that the results of project work owing to Internet-technologies can vary: from creating and fulfilling with proper content blogs and web-sites to making forums and conducting web-conferences [Bogley W. 1996].

Thus, owing to distance learning diversifying with project technologies the learners get higher independence in their choice that motivates them for further learning. As the research has shown [Bogley W. 2000], project elaboration and realization promote: 1. the development of learners intelligence skills; 2. practice of work with modern technologies; 3. developing and realizing their creative potential; 4. increasing motivation for learning; 5. interest directly in the process of learning and deeper studying of separate courses; 6. increasing time and attention devoted by the learners to the course; 7. changing learners' attitude to knowledge as a conceptual thing; 8. developing thirst for research; 9. more active cooperation of persons; 10. more active integration and knowledge absorbing in the process of learning; 11. more active interaction 'teacher - learner'; 12. more active interaction 'teacher – group'; 13. changing students attitude to the process of teaching and learning; 14. evaluating the process of learning by the learners; 15. more active searching for and getting rid of particular subjective difficulties in the process of learning.

CONCLUSION

Project technologies or method of projects is that necessary component that gives variety to the process of learning and has indirect influence on the process of their upbringing indirectly correcting it through practical activity of learners via creation and realization of particular projects.

Thus, to conclude we can say that project technologies are an ideal instrument of work within distance learning through Internet. In the basis of project technologies there is the development of learners cognitive abilities, abilities to construct their knowledge independently, to find their way in the information space, the development of critical thinking and the ability to concentrate on something that is the most interesting for the learner. Project technologies are always oriented on the independent activity of learners – individual, pair or group which learners conduct during definite period of time. Project technologies always demand the solution of some problem. It presupposes, on one hand, using different methods, means of learning, on the other hand, it demands integration of knowledge, skills from different branches of science, technics, technology and creative areas. The results of performed projects are to be obvious, that is if it is a theoretical problem then there should be its definite solution, if it is a practical one then there should be a definite result ready to be applied.

Creating projects allows learners to be creative, absolutely free in their choice and further work upon the project.

Hierarchical structure of roles that changes from project to project allows learners to try themselves in different social roles, show initiative in creating new temporary hierarchies (for the time of working over the project) and more adequate to modern realities then strict hierarchical structures of society.

Project technologies in distance learning presuppose scrupulous work of teachers with the learners demanding from him/her constant knowledge of all the possibilities of Internet and how they can be used within this very discipline. But project technologies are visual reflection of teacher's work results: according to the results of presented project the teacher knows for sure whether the learners have mastered the course material or not.

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ПРОЕКТНЫЕ ТЕХНОЛОГИЙ КАК СРЕДСТВО ПОВЫШЕНИЯ ЭФФЕКТИВНОСТИ ДИСТАНЦИОННОГО ОБУЧЕНИЯ

Дядичев В.В., Бурцева И.И.

Аннотация. Рассмотрена сущность проектных технологий, используемых в учебно-воспитательном процессе в высшей школе. Приведена их типология по классификации Е. Полат и этапы реализации проекта. Рассмотрены характерные черты дистанционного обучения. Рассмотрены существующие типы дистанционного обучения, их преимущества/недостатки использования проектных технологий в рамках каждого типа.

Ключевые слова: проектные технологий, дистанционное обучение, проект, метод проектов, инновация, информационные технологии.