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E-EDUCATIONAL CONTENT DESIGNING AND ITS
INTRODUCTION IN GROUP ACTIVITY CLUBS

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Abstract

In the context of implementation of the information society development strategy and the concept of the school additional education development the main priority is to develop and improve the electronic education process and to use it in the school additional education system. One of the popular forms of additional education is a group activity club with the use of e-learning technologies. The development of electronic group activity is not only the purpose of education, but it is also a means of effective implementation of innovative educational programs. Organization and implementation of the electronic group activity strategy requires competent staff, legal support, educational program support that includes the electronic educational content development, technical and technological support. The electronic educational content is one of the key elements in the organization and implementation of group activity with the use e-learning technologies. There are specific conditions and procedure of e-educational content development. This article deals with the problem of designing and development of electronic educational content that will help to organize and implement the group activity strategy using e-learning technologies; describes the components of electronic educational content. The article focuses on the problem of special teacher training in content development and its application in the educational process. The article provides intermediate results of the research project – “Development and Implementation of the Group Activity Model That Provides a Student with Practical Training with the Use of E-learning Technologies (various exercises, simulators) and Builds a Relevant Material Database”.

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Keywords: Content elements, e-education, electronic educational content, group activity with the use of e-learning technologies.



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1. Introduction

For today one of the main priorities of the information society development strategy in educational process is the introduction of e-education and distance learning technologies in the system of additional education. The organization and implementation of extracurricular activities with the use of e-learning and distance technologies is the main objective of e-education in the additional education system. The current problem is the implementation of group activity in educational institutions with the use of distance learning technologies. Electronic educational group activity as one of the most important elements of additional education shows the level of e-education quality. It is an innovative form of extracurricular activities with the use of modern pedagogical and information technologies and equipment.

2. Problem Statement

The development of additional education system is one of the main priorities of the Russian Federation state educational policy. Under the Presidential Decree №599 dated May 7, 2012 №599 on Measures to be taken to implement the Education and Science State Policy (Ukaz Prezidenta..., 2012), by 2020 the percentage of children aged 5 to 18 involved in the additional general education program should reach 70-75%. Under the Presidential Decree No. 203 dated May 9, 2017 (Ukaz Prezidenta..., 2017) the information society development strategy in the Russian Federation for the period 2017-2030 has been adopted. Its main priority is the improvement of e-education and distance learning systems. The information society development strategy and the concept of children's additional education development (Rasporyazhenie Pravitelstva..., 2014) put forward the following priorities:

- 1) to apply individual approach in the additional education system;
- 2) to make sure the additional education program is available for everyone;
- 3) to enlarge the range of additional education programs;
- 4) to improve the supervision of additional education program quality;
- 5) to enhance the personnel potential of the school additional education system;
- 6) to update the additional education facilities.

To implement the above priorities, it is necessary to introduce innovations in the additional education process. Here we are talking about the widespread introduction of e-learning and distance learning technologies, the formation of electronic educational environment, teacher special training, technical and technological support and the development of electronic educational content. The key element among the above requirements for the e-learning process in the additional education system is the design and development of electronic educational content which is an essential element of the electronic educational process.

3. Research Questions

Today children additional educational programs are implemented in traditional, electronic or mixed forms. Meanwhile the group activity as an element of additional education (groups of interests) is implemented in traditional form with minimal use of e-learning technologies. There is practically no such form of additional education as an electronic group activity club where the educational process is carried

out in an electronic format with the use of distance technologies and involves the electronic educational content designing.

Content (from English word “content”) is necessary, selected information on a particular field of knowledge or human activity, designed in the format appropriate for publication. Educational content means “structured subject content applied in the educational process” (GOST R 52653-2006, 2007). Thus, we can say that electronic educational content is the structured subject content in electronic and digital form that is used in the educational process.

Today more and more teachers begin to design their own electronic educational content which they apply in additional education process along with the content available on the Internet. However, the quality and educational effectiveness of the above mentioned electronic educational materials are, as a rule, not as good and just partially meets the educational program standards. The educational material quality, the quality of education in general and how it meets the educational standards determine the student education quality.

An example of high-quality electronic educational content that is used to organize group activity using-learning technologies is the “smart” electronic educational products, such as content with fixed points of student knowledge assessment and content specially designed to organize and implement group activity using e-learning technologies that takes into account didactic, psychological, destructive features and sanitary and hygiene standards. This electronic educational content is represented by the following educational elements (Galikhanova, Sergienko, & Sergienko, 2018):

1. Abstract is a summary and description of the group activity club. Abstract shows the distinctive features and advantages of the group activity club.
2. References.
3. Glossary is a dictionary of specialized group activity terms with definitions, sometimes with translation into another language, comments and examples. It may also contain personalities and dates.
4. Text is a document that contains the material on the topic of a lesson. This additional material is intended for individual work of a student, detailed material study, knowledge fixation and creative activity.
5. Video lesson is an educational product represented in the form of videos or slides with the information on the topic and educational audio/video recordings. The video lesson is designed for students to effectively learn the group activity program as the materials are clearly defined and presented in visual form. The video lesson is included in the educational program as it is visual (visualization contributes to the knowledge and skill formation, develops thinking skills) and is the most adapted to the speed of knowledge acquisition. The video lesson can be stopped (paused) if a certain practical work given by a teacher needs to be done and then resumed to proceed with the learning.
6. Tests. The test task database is essential in compiling various tests on the topic of the group activity lesson which is used to assess student academic performance. An intermediate test on the topic of each lesson is done after studying the theory and completing practical tasks on the topic of a lesson. The final test question database is formed from the test questions of all topics and the glossary terms.
7. Practical tasks - the educational material that is used to develop the skill of putting theory into practice. The tasks may vary depending on the subject area. It can be a detailed explanation of typical tasks,

exercises with reference to the relevant section of the theoretical course and creative project methodological instructions.

4. Purpose of the Study

The paper is aimed at designing electronic educational content to organize and implement group activity using e-learning technologies.

5. Research Methods

The problem is dealt with under the research project “Development and Implementation of the Group Activity Model That Provides a Student with Practical Training with the Use of E-learning Technologies (various exercises, simulators) and Builds a Relevant Material Database”. During the study the following methods were used:

- theoretical: analysis of scientific, psychological and pedagogical literature, survey, monitoring, survey;
- empirical: formulation of guidelines on designing of group activity electronic content with the use of e-learning technologies and on organization of group activity with the use of electronic educational technologies.

6. Findings

Designing of Group Activity Electronic Content Using E-learning Technologies 108-hours refresher course was organized to explain teachers the principles of designing and development of electronic educational content. The course program consists of 3 modules: Module 1- Additional Educational Program Organizational Support; module 2 - Designing of Group Activity Electronic Content; Module 3 - Final Assessment. During the refresher course teachers develop the following competence (table 01).

Table 01. Professional Competence and Job Functions

Professional competence	Job functions
-implementation of educational programs in accordance with the educational standards (PC-1); -use of modern teaching and diagnostics methods and techniques (PC-2) -the ability to use the educational environment facilities in achieving personal, meta-subject and subject teaching results and to ensure the high quality of educational process (PC-3); - interaction with the participants of educational process (PC-4); -the ability to organize student team-work, maintain their activeness and initiative, independence, develop their creative skills (PC-5)	1. Organization of additional general education program; 2. Monitoring and assessment of student academic performance; 3. Designing of software and methodological support of additional general education program.

Upon completion of the refresher course 21 teachers of the Republic of Bashkortostan had participated in designing of the content that was published on the Distance Group Activity Clubs website. The content consists of 37 electronic group activity clubs: Pascal Plus, Pascalina, Pixel Art, Watercolor World, Biserinka (Bead), Blah-blah Stage Speech Course, Visiting the Word, In the World of Presentation, Talking about Countries in English, Fashion Design, Entertaining Computer Science, Entertaining Mathematics, Interesting Mathematics, Informashka, Plywood Designing and Modeling, Ethnography, LEGO-Workshop, Master Printers, Cut-Out World, World of Computer Science, World of Logic, Multimedia PowerPoint Presentations, Basic 3D-Modeling, Crayon Technique Teaching, Origami. The Basics, Basics of Ink Drawing, Psychology and Teenager, Makeup Secrets. Secrets of Face Painting, Territory of Joy, Artistic Design, Digital Phonogram Editing, We Draw Inspiration from Pointillism, Debut Chess Club, Chess for a Beginner, School Television, Country of Knowledge, Electric Guitar, The Basics, I Learn the Bashkir Language. These group activity clubs are created according to social, pedagogical, tourist and ethnography, technical and art spheres of interest.

Electronic educational content was designed for 7 group activity clubs in social and pedagogical sphere, for 1 group activity club of tourist and ethnography sphere, for 17 group activity clubs of technical sphere, for 12 group activity clubs of art sphere.

The classification of students according to a group activity sphere is shown in figure 01.

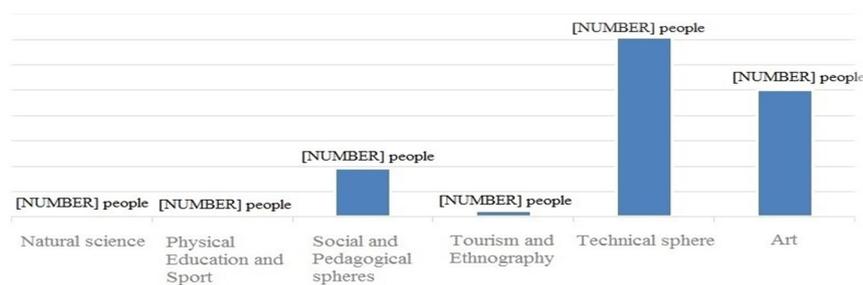


Figure 01. Classification of students according to a group activity sphere

For the period from September 2018 till January 2019 about 1200 students have been registered and studying in electronic group activity clubs, including 10 students with special health needs.

The teacher-designed electronic content meets all the necessary requirements and helps to create electronic group activity clubs with the use of e-learning technologies. The design and development of electronic group activity clubs is a main priority of the system of additional children and adult education. The intermediate results of the collaborative work of Bashkir State Pedagogical University n.a. M. Akmulla and the educational institutions, that have already tested the electronic group activity club program, have shown the relevance of this program, high interest and demand in its results among teachers, students and parents.

7. Conclusion

The intermediate results obtained in the course of the study revealed:

1. High demand of educational institutions in the innovative form of extracurricular activities and additional education programs.
2. The electronic educational content that helps to organize group activity with the use of e-learning technologies enriches the information and educational environment of the educational institution.
3. Teacher special training is required to design the electronic educational content and to organize group activity with the use of e-learning technologies.
4. The teacher special training in designing the electronic educational content and organization of additional education process with the use of distance learning technologies increases the teacher's qualification through the formation of ICT-competencies and the quality of educational process.
5. The formation of electronic group activity clubs and their introduction in the additional education process was highly praised by teachers, parents and students.
6. The electronic group activity clubs provide mass access to group activity in the school additional education system, including students with special health needs.

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