CLOUD TECHNOLOGIES IN ART ENTREPRENEURSHIP EDUCATION

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ABSTRACT

The article explores the issue of active implementation of cloud technology in art education. A methodical designing system of cloud technology application for art entrepreneurship education was formed. The complex filling of cloud services with methodical support was substantiated, which will contribute to the mobility of educational technologies and the improvement of the quality of art entrepreneurship education. The possibilities of using the "flipped" technology of education in art entrepreneurship were determined and the methodological advantages of the "flipped" technology of education over traditional art-based business were substantiated.

Keywords: Art Entrepreneurship Education, Information Technology, Cloud Technology (CT), Art Activity, Service Model.

JEL Classifications: M5, Q2

INTRODUCTION

For the development of competitive entrepreneurship in the conditions of modern transformations, it is urgently necessary to take into account the pace of scientific and technical progress, the dynamics of social change. Entrepreneurship education and especially art education should focus primarily not on information reproduction, but on the transfer of fundamental knowledge in its field, finding optimal solutions for the conscious and creative problem situation resolving in art activity. Entrepreneurship education should prepare for social and life changes; form a professional profile of an art specialist, use knowledge and initiate creative abilities. An important role in this process is played by modern information technologies (IT) and especially cloud services.

Problem Statement

In recent years, interest in entrepreneurship education has grown significantly, and specialists are increasingly turning to Internet services in order to use IT technologies for communication, cooperation and organization of corporate work, and the rapid development of cloud services has become the leading trend in solving the problems of educational mobility of all participants in educational activities. Thus, the problem of scientific and theoretical

substantiation and development of the cloud-oriented educational environment of the GEI, taking into account the practical needs of teachers and the requirements of society for the organization of the educational process, is not fully resolved, and this, in turn, negatively affects the level of development of infrared competencies of subjects of the educational process and ensuring mobility of their training.

LITERATURE REVIEW

The basis of the study of the positive use of cloud technologies in art entrepreneurship education is a number of scientific results, reflecting the introduction of IT technologies in educational activities. The problems of development of informatization of education are revealed in the works of (Jackson & Tomlinson, 2009; Reidenberg et al., 2013; Drobyazko et al., 2019). A number of scientific papers reflect the main approaches to the design of entrepreneurship education (Caves, 2000; Parkman et al., 2012; Drobyazko et al., 2019a). The use of modern educational technologies is actively studied by (Anjali & Pandey, 2013; Utomo et al., 2019). However, the issue of using cloud services to improve the organization of the educational process of general educational institutions and the creation of conditions for the mobility of all subjects of study is relatively new, relevant and not fully disclosed.

METHODOLOGY

The leading idea of the study is the provision that the use of CT in art entrepreneurship education is a prerequisite for improving the organizational and methodological conditions of such education, ensuring mobility of training, communication, cooperation, cooperative work, ensuring the development of information and communication competence of subjects of training in the art industry. Methodological provisions are based on a general hypothesis about the growth of motivation for educational programs, ensuring the development of IT competencies of subjects of training, which in turn will lead to positive qualitative changes in the organization of art entrepreneurship education.

FINDINGS AND DISCUSSION

The methodological system of designing CT in art entrepreneurship education is a set of hierarchically related components: objectives, content, methods, forms, means, information, organizational and technological measures for designing and using CT, conducting reflection and adjusting the results of designing and using cloud services aimed on providing educational mobility in art entrepreneurship (Beckman & Essig, 2012). For a cloud-oriented educational environment, the novelty and high dynamism of the formation of a methodical design system is characteristic. At the present time, we are outlining the components of the methodical design system of CT for art entrepreneurship education (Table 1).

Table 1
METHODOLOGICAL SYSTEM OF DESIGNING CT IN ART ENTREPRENEURSHIP EDUCATION

Main components	Content of the design methodology	Content of the use methodology
Objective	Formation of the cloud-oriented educational environment and IT competence in art entrepreneurship	Creation of conditions for education mobility, cooperation, ensuring comprehensive development, formation of new forms and methods of training
Content	Substantiation and development of CT model in the art entrepreneurship education	The basic component has an aspect of practical direction and is associated with the formation of subject competencies using various CT services
Methods	Substantiated procedures of the design stages	Reference and illustrative, informational, search, research
Means	Software packages, the Internet, various gadgets (computer peripherals, tablets, etc.), multimedia hardware	
Forms	Forms of educational activity: trainings and interactive methods	Forms of educational activities: individual work, creative and training tasks, practical work, audio, video courses, forums, virtual tour, distance counseling
	Forms of organization of activities: individual, collective, group work, one-on-one job	

The use of CT for art entrepreneurship education becomes a means of complex filling with methodological and didactic software, and contributes to the mobility of all participants in the educational process, improving the quality of art education.

The cloud service includes all functions related to cloud services, ensuring compatibility, configuration, as well as operations necessary for the implementation of art entrepreneurship education. Service instrumentation contains three components:

1. Service layer (defines the basic services that form the educational system).

2. Resource abstraction and control layer (provides software elements, virtual data stores, associated functional modules for training).

3. Layer of physical resources (including computer equipment, technical capabilities).

Figure 1 presents the service infrastructure model of the CT architecture, which can most effectively provide for art entrepreneurship education.
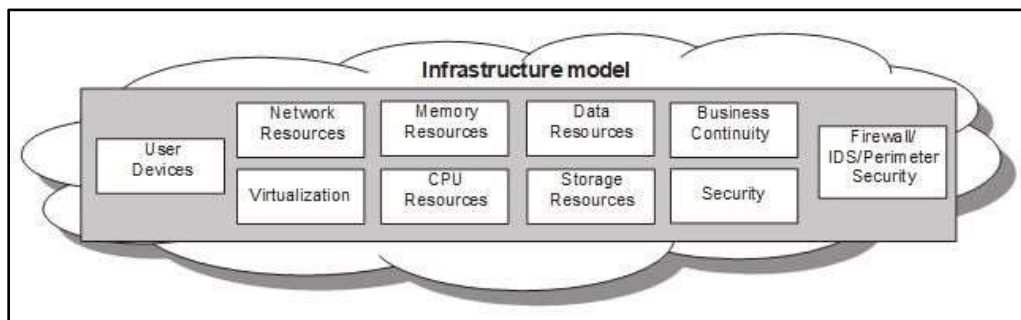

FIGURE 1
INFRASTRUCTURE MODEL OF THE CT ARCHITECTURE FOR ART ENTREPRENEURSHIP EDUCATION

The model of providing software as a service for art entrepreneurship education provides the ability to use application packages that are accessed via the Internet. As a result, the user can work with ready necessary software on a computer of any configuration. All functions and tasks are configured and updated on the cloud server.

Currently, special attention in the art entrepreneurship sphere is drawn to the meta subjective results of educational activities, involving the formation and development of personal qualities and the general culture of the participants, an understanding of the value of education, intrinsic motivation and responsibility. One of the effective ways to perform such a task is quite legitimate to consider the targeted use of IT technologies and cloud services (Hussein & Khalid, 2016). The use of modern IT allows not only to diversify educational art activities, but also to introduce new learning technologies, in particular, *"flipped"*.

Flipped learning–is a technology for the implementation of the learning process, in which it is assumed that students using CT listen to and watch video tutorials, master additional sources on their own (outside of school hours), and then collectively discuss new concepts and ideas, and the moderator helps to put their knowledge into practice. The organization of such educational mobility encourages learning from each other (Makedon et al., 2019). We believe that for art entrepreneurship education it is important to identify and substantiate the technology of *"flipped"* and traditional education using CT (Table 2).

Table 2 METHODICAL ADVANTAGES OF "FLIPPED" EDUCATION TECHNOLOGY OVER TRADITIONAL FOR ART ENTREPRENEURSHIP ACTIVITY		
Stages of technology	Flipped learning technology	Traditional learning
Preparation for a lesson based on CT	View answers to tests, identify tasks for the cloud service, select training tasks	Preparation of the lesson test material, preparation of training tasks
Learning technology	Independent viewing of video, presentations placed in the *"cloud"*, implementation of individual tasks.	Help and consideration of new material, oral support.
Information transfer	The listener acquires knowledge independently, the clarification of the *"hard"* questions is carried out using interactive learning technologies.	The training material is transmitted in the form of passive perception.
Methods	Methods of informational communication, interactive (on-line and off-line) training on the basis of CT	Methods of interactive learning, built on personal contact
Approaches	Personalized and differentiated	Differentiated

The cloud environment constitutes a platform for introducing a *"flipped"* education technology and provides for the use of presentations, visual materials, the latest educational videos and interactive tools, to develop art entrepreneurship education (Sultan, 2010). The recommended applied model of such a cloud service is shown in Figure 2.
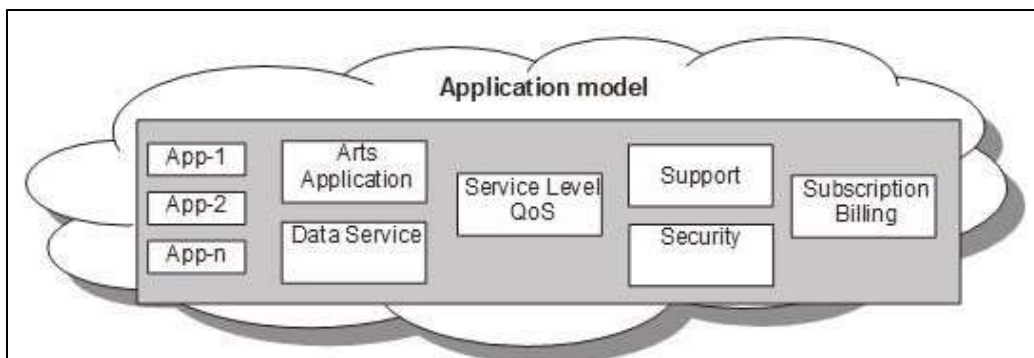
FIGURE 2
RECOMMENDED APPLIED MODEL OF A CLOUD SERVICE FOR THE USE OF A
***"FLIPPED"* EDUCATION TECHNOLOGY IN ART ENTREPRENEURSHIP**
EDUCATION

The main fields of using cloud services in art entrepreneurship education:

1. Synchronization: The user, saving the file in the cloud with a computer, can access it from any other device (smartphone, tablet, laptop). All changes in the file will be displayed on all devices.

2. Backup: To prevent the loss of important information, you can send data to a remote server. You can also keep backup copies of blogs and sites in the cloud.

3. Cooperation: You can allow access to specific files. (Lin & Chen, 2012).

Thanks to the introduction of information technologies into art entrepreneurship education, new opportunities are emerging for the individualization and differentiation of the development of entrepreneurial activity, oriented towards the development of independent thinking and effective organization of business interaction. Information and communication technologies deserve special attention as one of the most effective means of interactive communication and support of art entrepreneurship.

RECOMMENDATIONS

The result of the use of cloud technologies in art entrepreneurship education should be the construction of dynamically changing information content, and this, in turn, will contribute to the activation of the art industry in the issue of transition to new IT technologies The problem of applying the latest IT technologies in art entrepreneurship education is relevant and requires further development. The research and introduction of cloud technologies into art entrepreneurship will allow them to effectively create their own information space and personal educational environment.

CONCLUSION

The concept of designing CT for art entrepreneurship education is based on the understanding of the cloud-oriented environment as an artificially constructed system, which, using cloud service, provides educational mobility, group collaboration for the effective, safe achievement of didactic goals and the development of IT competence. The development of CT in art entrepreneurship education and the integration of various professional services in it opens up

the possibilities for introducing innovative educational technologies, including the technology of *"flipped"* learning. In the context of the implementation of the *"flipped"* learning, the leading role is passed to the business environment, which forms a preference for personalized education.

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