

**THE FEATURES OF THE BUSINESS SIMULATION APPLICATION
IN THE PROCESS OF
PROFESSIONAL COMPETENCE FORMATION**

***Annotation:** The article is devoted to study of the characteristics of the business simulation application in the educational process of professional competence formation of the specialists in economics.*

***Keywords:** information technologies; business simulation; the educational process.*

I. Introduction. Taking into account the increasing role of new information technologies in the educational process of the professionals economy preparation, the organic combination of the theoretical business training with business simulations application that clearly reflect the virtual enterprise activities is going on. The most appropriate use of computer simulations seems that use them for a supplementary tools for classroom instruction and laboratory. Multimedia supported, highly interactive, collaborative computer simulations appealing growing interest because of their potentials to supplement constructivist learning.

Literature review. The results of complex analysis of the scientific literature suggest that among the priorities of higher education at the present stage it is appropriate to allocate the orientation on the formation of professional competence through the computer business simulations application [1 – 8].

II. The purpose of the article. The purpose of the article is to study of the characteristics of the business simulation application in the educational process of professional competence formation of the specialists in economics.

III. The results. Computer simulations give students the opportunity to observe a real world experience and interact with it. Computer simulations are programs that contain a model of a system (natural or artificial, e.g., equipment), or a process [1]. A common definition of a simulation is a reproduction of an item or event. Simulations can be produced in all fields through computer games, role-plays, or building models, to name only a few. But a true simulation has a specific goal in mind – «to mimic, or simulate, a real system so that we can explore it, perform experiments on it, and understand it before implementing it in the real world» [2]. This last step, applying knowledge gained through exposure to simulation, is the main purpose of simulation education. Simulation makes imitated situations available to the learner to practice and hone necessary skills, rather than having them jump right into the real experience.

Alassi and Trollip describe simulations in educational context as a powerful technique that teaches about some aspect of the world by imitating or replicating it. Students are not only motivated by simulations, but learn by interacting with them in a manner similar to the way they would react in real situations [1].

The scholars from constructivist pedagogy, Wilson and Jonassen, describe educational simulations as a simulated real life scenario displayed on the computer, in which the student plays an authentic role carrying out complex tasks [2]. Simulations should reflect the complexity of the real life so that students struggle and learn higher order cognitive skills such as inquiry, which is viewed as essential for science learning [3; 4].

Thus, business simulation is a close to reality computer model that simulates various situations, management enterprise processes and decision making processes related to the goal of the professionals economy education. Business simulation is subjected to strict script to perform actions in which students receive specific comments, recommendations to achieve this goal [1; 2].

An appropriate way for simulations in the educational process is to use them as a supplementary material [2; 5]. The combination of simulations and laboratory offers advantages in time so that the laboratory portion can be reduced in length and

students using the simulations have a slightly better knowledge of the practical aspects directly related to practical work.

The conceptual foundations of this approach have been formulated in the early XX century by the American philosopher and educator John Dewey. He explained that the traditional system based on the knowledge learning and assimilation, must be countered teaching «by practice», that knowledge must be obtained in practice and personal experience [6].

The concept of «learning by doing» involves the integration of the educational process with business simulations – computer business games that on the computer modeling base are simulating the dynamic competitive market business environment. Business simulation is one of the most effective educational technologies, as it allows participants to obtain practical experience in the learning process. That is why simulation is widely used in the educational process of the best business schools worldwide.

Today's students of the economy do not represent the educational process without a computer business simulations application. There is nothing surprising in the fact that the business simulation becoming one of the most important parts of the Master of Business Administration programs and even start to displace such convenient tool exchange experiences as case study [1].

Online simulations and online games allow students to perform typical administrative functions, such as the monitoring of the operations progress of the virtual factory, the controlling of the level of the virtual business financial results for example [7]. This is used in the preparation of specialists in economics. Teachers can follow the action of each student, monitor them and use these data to assess students' management skills.

Often, online simulations help to create healthy competition among students, because everyone wants his virtual company finished with better performance than a company comrade.

The participation in some business simulations can take a day or two, and completely replace lectures. Some of them are given on the homework, they can

continue throughout the semester without depriving students of their classroom time. Computer simulations are potentially useful for simulating labs that are impractical, expensive, impossible, or too dangerous to run. Simulations can contribute to conceptual change, provide open-ended experiences, and provide tools for scientific inquiry and problem solving. Computer simulations also have potentials for distance education [3; 5-7]. Thus, it is appropriate to allocate the following features of the business simulations application:

The practical orientation. The necessary skills are explored and developed in similar to the real-world circumstances and even in situations that may be more difficult than usual. It is possible to move from level to level to eventually «get the game to the end», which encourages and supports the students interest.

Getting personal feedback. Business simulations are characterized by means of personal feedback. A powerful channel for feedback is the reactions of the virtual simulations members on the various processes that are studied.

Situational wealth. Simulations allow us to consider the whole variety of situations in order to highlight the entire process of enterprise functional activity in the educational process of training in economics. Thus students must be active.

A variety of the possibility shapes. Business simulation can be strictly linear scenario in which the student chooses the answers of several proposed and comes to the end of the script. However, it allows making the educational process of the future specialist in economics training exciting adventure with an exciting plot, unpredictable twists and lots of branches and possible alternatives. The consequences depend on the students' actions and decision making results. This causes the students are not less interested in the educational process than in a good computer game, book or movie, and the learning results are impressive [8].

The literature suggests that the success of computer simulations use in the educational process depends on how they incorporated into curriculum and how teacher use it. The most appropriate use of computer simulations seems that use them for a supplementary tools for classroom instruction and laboratory. Computer

simulations are good tools to improve students' hypothesis construction, graphic interpretation and prediction skills [2; 3; 6].

Business simulations have several advantages: risk-free zone – the games errors do not lead to the collapse of the whole business; change of scale – it is possible to change the position of role during the educational process; improving financial literacy – the formation of professional skills based on the innovative format of getting new knowledge; comprehensive development of professional competencies; team work – improving the skills of communication and the team interaction.

There are practical reasons to use simulations but there are also reasons that have a direct relation with the learning process. Compared with real system experimentation, simulations have several advantages: safety: there are aspects of real experiments, which cannot be conducted safely in educational settings except with simulations; cost: when factoring in the cost of expensive equipment and materials for real experiments, simulations often provide a more efficient means of achieving the same objective; independence of time, and place: students can use a simulation at the place and moment of their own choice; time: dimensions of time can be altered in ways that are not possible with real lab experiments [8].

The main differences between business simulations from other training forms can be expressed in such terms:

- do not provide the participants of the standard theoretical knowledge;

- the main training factor is the decision making by the simulations participants directly;

- allow to the complex work out on the practical skills forming;

- is concentrated in the game form simulating of the real business conditions;

- allow to generate of the numerous practical strategies and tactics of enterprise activities;

is characterized by an essential part of business and the game – gambling to beat a competitor, make more money, gain more market share [6].

The first business simulation training in Ukraine appeared in the International Management Institute in Kiev in 1995 as a result of partnerships with leading

European business schools. There are many computer simulations to find on the Internet, but they seldom provide the correct educational support, or any integration with educational use (such as curricula, or lesson plans). Well-known business simulations are:

MarkStrat – Strategic marketing business simulation developed by French business school INSEAD and implemented in the International Management Institute in Kiev, with technical and methodical assistance by Lovanium International Management Center (Brussels, Belgium). Participants marketing simulations serve as senior managers, which operates in an intense competitive environment within 7-12 years [3].

FAST (Financial Analysis and Security Trading) – a computer simulation developed in the early 90's by the business school of Carnegie Mellon University (Pittsburgh, USA). It is based on the exchange trading system used by Wall Street [3].

Global Management game – is the business simulation that imitates the company activities in the international competitive environment. Business game developed at the Interactive Computer Center of Carnegie Mellon University, USA, and is described in the international and local formats [3; 5]. The teams should to develop the adaptive competitive company strategy and introduce them to life within virtual 2-3 years based on their decisions making in management, marketing and finance. The international game is conducted via the Internet by its main developer, David Lamont, a professor of strategic management and Interactive simulations Center director, in conjunction with faculty of business schools which are taking part in the course.

IV Conclusions. Thus, there are following basic professional competence formed by business simulations application: the ability to create effective business model; the ability to the business problems proxy authentication; the ability to develop enterprise activity strategies; the ability to make decisions under conditions of insufficient information; the ability to carry out long-term and short-term budget planning; the capacity to risk assessment, to forecast of the decisions consequences;

the ability to act proactively; the ability to teamwork; the ability to efficiently time management realisation. Computer simulations cannot replace science classroom and laboratory activities completely, they offer various advantages both for classroom and distance education. Business simulation today create a huge competition with business case but it should be highlighted that development of the training programs with the ability to integrate business cases and business simulations are one of the most important areas in the educational researches.

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