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The effectiveness in distance education for Iranian higher education

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Abstract

Nowadays there are numerous alternatives to the traditional teaching model which generally try to improve the quality of university education. This study aims to demonstrate the effectiveness of experiential learning in distance education in Tehran University. The learning methods based on experience promote the development of certain skills required for student learning like, teamwork, use of logical, knowing how to plan, being participative, motivation, information sharing to achieve goals, knowing how to apply knowledge to practical tasks, analyzing and synthesizing data, among others. As we analyze students learn better when they enter into direct contact with their own experiences.

Keywords: Skills, experiential learning, teaching tool, distance education.

1. INTRODUCTION

Because of the training needs that people have throughout their lives, teaching should be adapted to the new social circumstances and also to the demands of students and businesses. In this respect, it should be noted that the student population is an increasingly heterogeneous entity, meaning that the education system should find the new keys to efficiently satisfy student needs for achieving their objectives. So with this study, we aim to determine the learning method that students consider to be the best. In this article, we present the proposed teaching model: the inclusion of a business simulation game in the distance education model of the "Strategic Management" course given by the Iran National Distance Education University (UNED). This model was developed as part of the research project called "Simulation as a teaching method in Business Administration and Management studies", undertaken in the framework of "Research Networks for Teaching Innovation: Development of Pilot Projects for Adaptation of Teaching to the Iranian Area" (BANA E COSTA, 2009) that was promoted and funded by the Tehran National Distance Education University (UNED). To do so, we propose multi-criteria methodology based on the MACBETH method, which classifies the alternatives on the basis of qualitative judgments about differences of attractiveness between criteria.

2 TYPES OF EDUCATION

Teaching is not only the mere transmission of information, but rather is a process that requires understanding and assimilation by the recipient of the transmitted message. Therefore, it is essential that the channel selected by the teacher (the way to transmit the information) be the proper one to achieve the teaching objectives and the learning

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principles, which to a great extent depend on the effectiveness of the selected method or methods. Therefore, learning enables people to become involved and put all their senses to use, creating spaces for reflection about how they do things. This is the reason why the methods proposed below are especially important; if they are properly used, they lead to highly significant, lasting levels of learning, as the recipient develops a series of crucial skills to make the acquisition of knowledge effective. Several authors propose the use of mixed teaching systems (complementing different methods) to foster the development of skills among students and thus obtain the greatest possible pedagogical performance (BANA E COSTA,1997,b). To explain the different methods that are usually applied to business teaching, and more specifically to Strategic Management instruction, we are going to classify these methods by the type of teaching provided to the student. In this way, we will be able to identify the methodology or methodologies that help to achieve the expected learning results based on the development of skills which we believe are essential for students to expand their knowledge of Business Administration and Management.

2.1 Traditional Teaching

As teaching involves a transmission of knowledge from professors to students, all the different aspects of the traditional teaching system develop certain skills, including the ability to concentrate on achieving the main objectives pursued, the use of analytical and conceptual thinking, the search for information and application techniques, decision making and the ability to think (BANA E COSTA,1997,a). It is necessary to complement this methodology with experiential learning approach which, as we will see here after, is more of a philosophy of education than a tool and which is based on the premise that people learn better when they enter into direct contact with their own experiences (BANA E COSTA,2009). It is learning "by doing" that reflects on the very act of "doing". In other words, it is not limited to a mere exposition of concepts (such as a master class), but rather, through exercises, simulations or dynamics, it encourages people to assimilate the principles and put them into practice in order to develop a greater number of personal and professional skills.

2.2 Experience-Based Learning

Many people would agree with the following quotation attributed to Confucius: "I hear and I forget. I see and I remember. I do and I understand". This phrase expresses the effectiveness of experience based learning or experiential learning which, as commented above, is characterized precisely by the belief that "you learn by doing". Consequently, the advocates of this theory consider that students should actively participate in their own learning process in order to boost their ability to learn to learn, i.e., understanding one's own way of learning and the processes required for it (BANA E COSTA,1997,a). Kolb's cycle of experiential learning(BANA E COSTA,2009) perfects the work of other authors in this field, e.g. (BANA E COSTA,2009), (BANA E COSTA,2009)and(GROS and ADRIÁN,2004) .It focuses on the idea that experiential learning exists as a particular way of learning distinguished by the central role that experience plays in the learning process. As we will show later, this model assumes that, in order to learn something, the information that is received must be worked on and processed. According to this idea, we can start with a direct, specific experience, or else with an abstract experience such as the one we have when we read about something or when we are told about it. The experiences we have, either concrete or abstract, are then transformed into knowledge when we elaborate on them in one of two ways: either by reflecting on and thinking about them, or else by actively experimenting with the information received. For this reason, whatever the methods or techniques to be used, they should help the student become involved in his/her learning experience; the student is the one who should observe, test, analyze and participate in the various activities of the process to integrate the new knowledge. Bearing this in mind, experiential learning influences the student in two ways; it improves his/her cognitive structure and modifies attitudes, values, perceptions and behavioral patterns. These two elements of the individual are always present and interconnected. Therefore, student learning is not a development isolated from cognitive development, but rather a change in the whole cognitive affective- social system. It is thus through active, significant and experiential participation that students will build new and meaningful knowledge that will influence their education and result in responsibility for and commitment to their own learning. Only when learning is meaningful does the deliberate intention to learn arise(GROS and ADRIÁN,2004). The pedagogical methods most directly related to experiential learning are the case method and simulation models. Both allow the student to live through a business situation and to learn through the experience obtained from it. The combination of both methods will help to boost the student's learning

in a more effective way, by applying knowledge to practical tasks(BANA E COSTA,2009) and enabling the student to develop skills such as those related to decision making and problem solving, teamwork, negotiation and the use of critical thinking (BANA E COSTA,1997a), (BANA E COSTA,1997b) and(GIRONÉS, MADRID and VALLS,2008). The Case Method: This method can be considered as a pedagogical technique somewhere between traditional teaching methods and practical training(BANA E COSTA,2009).

Business Games: It can be safely said that business simulation games combine the advantages of other methods, especially those referring to student participation and decision making. This is why they are considered as one of the most comprehensive methodologies that best develops the pedagogical skills of the users(GIRONÉS, MADRID and VALLS,2008) . The main difference between these techniques is that, while in the case method the solutions are compared in a group discussion and the students cannot know the results of their decisions, in a business game the simulation provides objective, continuous feedback on the consequences of those decisions, which results in a closer approximation to the reality of business and a greater motivation for the students. Nevertheless, we should be cautious and realize that, at least at present, there is no one game, nor a set of them, that is capable of providing a complete business education because it is not possible to capture all the real day to day problems that businessmen face. In addition to the methods mentioned above, we should include projects and company internships in the experiential teaching techniques, as they are based on the premise of these techniques: "learn by doing"

3 APPLICATION OF THE EXPERIENTIAL LEARNING USING BUSINESS SIMULATORS TO A REAL CASE

Since one of our objectives is to test business management simulators as a suitable teaching method for undergraduate courses, we have conducted a pilot test with a group of students from the Iran National Distance Education University. We should mention that this was a special case because the game would be played in a distance education setting by students who had the advantage of already having some business experience. A pilot test was carried out in the month of March with students from the "Strategic Management" course, a fourth-year course of the Business Administration and Management undergraduate degree program. Since the ideal number of participants for a simulation would be from 25 to 30, 24 students were selected for the test out of a total of 35 applications from students in the course. The methodology used was as follows: The game selected for the seminar was the INTOP simulation game. A message was posted on the student forum of the course webct, and on the course Teaching Staff and General Queries web, which explained the project and requested student volunteers to take part in it. The request explained that 24 students would participate and that the selection would be made in keeping with the order of application. Each of the participants was assigned to a work team with 4 or 5 people who assumed the responsibility for managing one of the computer-simulated market businesses. The first sessions focused on familiarizing the teams with the "rules of the game" and stressing the most useful concepts and techniques for analyzing the information to be provided to each team at the end of each period, and after processing the decisions that had been made. The simulation was developed with a distance teaching model. In an early mail, the coordinator sent to the members of each team the composition of each group, a game manual, some templates for decision making and the rules to be followed, which included the timeline for decision making. After that, and using the e-mail of the WebCT platform, the head of each team would send to the project coordinator his/her team's decision for each period. In accordance with the organization of the game, the coordinator had to send the result of the decision within two days. On the established date, the team, in accordance with the results received and its business strategy, would send the next decision, and so on. The students were evaluated according to their participation and the final report submitted by each simulation team.

4 SELECTION OF THE MOST ADEQUATE METHOD

Having analyzed the teaching methods considered as most suitable for teaching Business
Administration and having presented the teaching project, we can now proceed with an analysis of the ideal teaching methodology from the students' point of view.

Obviously, none of the teaching methods described above is comprehensive enough to succeed in sufficiently developing the indicated skills and transforming the student into a true manager. We stress that the ideal thing is to

combine methods1; therefore, in the case under study, we have chosen to combine business simulators with the traditional distance education provided by the UNED.

4.1 Description of the Methodology Used

The methodology used in this work is based on a multi-criteria analysis to obtain a classification of the previously analyzed teaching methods (which act as classifiable alternatives) in terms of the pedagogical skills developed by them (which act as criteria or variables to be considered). The selection of a multi-criteria methodology is based on the existence of multiple criteria (in these case, skills) which should be evaluated and classified from a uniform perspective. As a result, the decision maker's objective will be to identify an alternative – in this case, a teaching method – which satisfies all the selected criteria as far as possible. However, it should be noted that there will be no absolute "best solution" that is valid for all decision makers, since the results of the multi-criteria problem will depend on the individual preferences of each evaluator or group of evaluators. These preferences may be quantitatively or qualitatively expressed, and there are different methods for processing the information. In the case under study, qualitative information is available (expressed in affirmative and negative terms) on the opinion of a group of students regarding the extent to which certain teaching methods develop a series of pedagogical skills. This information was compiled through a survey taken of a total of 24 students from the Strategic Management course given in the UNED by the Business Organization Department2. To process the data, we have used the MACBETH method introduced by Bana e Costa and Vansnick

in 1994 and developed in the autumn of 2002 via the M-MACBETH software by the same authors, together with De Corte3 ((GIRONÉS, MADRID and VALLS,2008). This selection is motivated by the fact that this technique requires exclusively qualitative judgments about the differences of attractiveness between elements, to generate scores for the options of each criterion and to weight the criteria (BANA E COSTA, 2009). The application of this technique includes a series of phases that begin with a first stage of structuring, which establishes the criteria and options that should be evaluated, along with their respective performances. In a second phase, the attractiveness scores or preferences of each option are evaluated with respect to the different criteria on a semantic scale of 7 categories: null, very weak, weak, moderate, strong, very strong and extreme, thus enabling the evaluator to express indecision(BANA E COSTA,2009. It is from this scale that the acronym MACBETH is derived: "Measuring Attractiveness by a Category Based Evaluation Technique". In this second stage, weights should also be generated for the criteria. In the third and final stage, the consistency of the evaluator's judgments is verified as the judgments are entered into the software, which suggests different possibilities in the cases of inconsistency. Once the matrix of qualitative judgments is consistent, the software evolves towards a quantitative evaluation model that provides an overall score scale which reflects the attractiveness of the alternative in question with respect to the whole set of criteria and which should be confirmed by the evaluator(BANA E COSTA,2009). Finally, the sensitivity and robustness of the model results are analyzed, considering a key factor in the multi-criteria method: data uncertainty.

5 CONCLUSIONS

This experience with distance teaching of the "Strategic Management" course is the result of a desire to change the teaching of skills that a person preparing for a management post should have, and also the need to adapt the Business Administration teachings to the Iranian Higher Education Area. Using a business simulator, the students have had the chance to learn business management concepts and skills and put their knowledge of the subject into practice. This article proposes a method for distance teaching of management skills that uses a dual methodology: traditional teaching and experiential learning. When judging the benefits of the different teaching methods for the distance teaching of the "Strategic Management" course, the students give the highest scores to the experiential learning approaches.

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