PROJECT-BASED LEARNING AS AN ACTIVE TEACHING METHOD IN EUROPEAN HIGHER EDUCATION AREA: AN EXPERIENCE IN BUSINESS ADMINISTRATION STUDIES

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Abstract

European Higher Education Area (EHEA) implies a new way of planning and organizing the teaching-learning process. The active roles of students in their own learning process, autonomous learning or collaborative work are some of the principles in the new European education space. This scenario calls for a change in teaching methods. One teaching method that promotes these principles is that of Project-Based Learning (PBL). This method engages students in learning knowledge and skills through an extended inquiry process structured around complex, authentic questions and carefully designed products and tasks.

This paper aims to show the use of PBL as a tool for continuous improvement of the teaching practice in the EHEA. Specifically, we present the results of an educational improvement project carried out with undergraduate business students at a Spanish public university (Universitat Jaume I). PBL has allowed us to promote their entrepreneurship and ethics competences. The use of active methodologies based on student learning therefore supports students in learning and practicing skills in problem solving, communication, and self-management.

Keywords: Project-based learning, Higher Education Area, Business Administration.

1. INTRODUCTION

It is widely accepted that business creation initiatives generate wealth for society. For this reason, both private and public organisations commit resources to promote an entrepreneurial spirit, particularly among younger generations. This commitment is mainly reflected in the promotion of training programmes, financial help or business consultation. Given the economic and social importance of fostering a business culture among young people, we present a project to improve teaching for Business Administration and Management degree students, in which we attempt to show how the development of a business project can provide these students with a way to gain access to the labour market. Their success will depend on entrepreneurial values that include aspiration to achieve; keenness to improve and learn; intuition and foresight; communication and persuasion; the capacity to negotiate; and leadership. Many of these values come to fruition during the student's time at university and as lecturers, we believe we should be committed to fostering these values.

It is also our view that an ethics approach should be taken to cultivate students' entrepreneurial skills, since the actions of every entrepreneur must be guided by an ethical perspective if they are to respond to the expectations and demands of today's society. Indeed, in recent years trust in entrepreneurs and managers has been eroded as a result of the accusations levelled at numerous firms following their violation of diverse ethical or legal norms. This has led to a growing concern for business ethics and social responsibility in organisations, to such an extent that business activity is now subject to more ethical scrutiny by society than ever before. In this context, the training activities designed for Business Administration and Management students – future entrepreneurs and managers – must prepare them to take on their roles in society responsibly. This training not only consists of providing them with certain competencies and skills, but also of teaching them the attitudes that foster responsible behaviour. It is therefore necessary to train them in certain values associated with business ethics and organisational social responsibility.

With the aim of fostering entrepreneurial and ethical competencies amongst students we propose the application of project-based learning as an active teaching method. This methodology also encourages the learning and development of practical problem-solving skills and the organisation of students' own learning processes, both basic principles of the new European Higher Education Area (EHEA).

2. METHODOLOGY

Implicit in the European Higher Education Area (EHES) is a new way of planning and organising the teaching-learning process and consequently, the need to experiment with new teaching methods. Some of the principles promoted within the EHES involve the active role of students in their own learning process, autonomous learning and collaborative work. In this vein, project-based learning fosters these generic or basic competencies and at the same time allows students to work on competencies related to the subject studied, in our case entrepreneurial and ethical competencies. Specifically, this methodology encourages students to learn autonomously, and places great emphasis on the research process and the preparation of a project aimed to create a product or resolve a problematic situation through a set of tasks, the application of interdisciplinary knowledge and the effective use of resources [1]. This method places the student in a real situation, encourages learning beyond the university boundaries, and promotes research capabilities through techniques pertinent to the discipline. More specifically, the features of project-based learning may be summarised as follows [1, 2, 3]:

- A real problem is presented, the solution of which necessarily involves a range of areas.
- It offers opportunities for students to carry out research that will allow them to learn new concepts, apply information and represent their knowledge in different ways.
- It encourages collaboration among students and between students and lecturers, to form a "learning community".
- It promotes the use of cognitive tools and learning environments that motivate students to represent their ideas.

The project-based method is planned around a set of interrelated elements or stages. Once the students have been given a situation or a problem to resolve, linked to a real situation, the final aims of the project and their association with the situation or the problem are detailed. The lecturer should also specify the criteria or quality standards the project requires, together with instructions on how it should be carried out (including the time it is expected to take and short-term goals). The students divide into groups and then take on a series of specific roles or responsibilities within their group. Finally, the lecturer determines and informs the students of the criteria he or she will follow to assess their performance; these criteria refer both to the undertaking of the project and the final outcome [4].

To carry out the project in the subject chosen for improvement, students organised themselves into working groups and took on the role of business consultants; the final outcome was a business plan created according to the guidelines set out in the "business plan guide" provided by the course lecturers. The lecturers followed the projects' progress through regular meetings with the working groups and the evaluation of the progress reports presented by the students throughout the course. Once the project was finished, each group handed in a final report for evaluation and made a public presentation to the other groups. These tasks were organised in three phases:

PHASE I: PROJECT ORGANISATION

The first stage of the project consisted of an organisational session to set up the working groups, select the business activity on which the project would be based, and present the work plan.

I.1. Formation of working groups
The first decision the students had to make was on the composition of the working group. During the first week, the students organised their teams and informed the corresponding lecturer, who in turn began a file for each group.

I.2. Choice of business activity (business idea)

The basic premises the students were given to develop their business ideas were that it should be creative and innovative. To expedite the process of choosing a business idea, the lecturers guided their students with a series of illustrative examples and a lecture in the second week of the semester entitled "Creativity in the generation of business ideas" in which the students were shown techniques to promote creativity when working on a business idea.

I.3. Work plan

In the initial phase, students were also presented with the guide to "undertaking a business plan project" prepared by the lecturers to orient students in their work.

PHASE II: PROJECT DEVELOPMENT

The object of the second phase was to encourage active learning and cooperation among students, based on activities undertaken outside the classroom (searching for information, interviewing experts, etc.), and student-lecturer interaction. To this end, the lecturers followed the groups' work through a system of project tutoring sessions that went on over the entire course. The lecturer analysed the project's development through regular meetings with the working groups and evaluation of the progress reports the students presented throughout the course.

Specifically, the working plan structure was divided into three parts that were overseen by the lecturers responsible through compulsory tutorials in which each team met with the corresponding lecturer, and optional tutorials in which students were able to clarify any doubts they had.

The development of ethics related competencies was approached widely across the whole project. In some of the activities involved in the business project, the students were asked to provide an ethical reflection on the decisions they had to take, and they were also required to choose from three levels of corporate social responsibility in which the firm may be placed.

PHASE III: PROJECT PRESENTATION

The students presented three progress reports during the second phase. These were then summarised in their final report, which also included the final outcome and was presented at the end of the course. In a maximum of 15 pages, this report presented the results of the analyses carried out and the main conclusions and recommendations, together with a bibliography and the corresponding annexes.

In addition, all the projects were presented to the other students on the course. The final two weeks of the course were devoted to project presentations. These sessions were carried out in class in the presence of all the working groups. The students prepared a PowerPoint presentation with the following structure: 1) presentation of the project activity and working group; 2) project objectives, activities and reports; 3) conclusions and recommendations. They were also offered the option of recording their presentation on video and exhibiting the material in class. Some of the groups chose this option, and the resulting video material is now available as a resource for students on future courses.

3. CONCLUSIONS

This education improvement programme, based on business creation projects, has enabled us to develop the entrepreneurial and ethical competencies of Business Administration students. Specifically, the following objectives were achieved, ordered according to the extent to which they were attained: 1) to awaken students' concerns when generating business ideas; 2) to promote contact between students and their socio-economic and business environment; 3) to encourage students to consider socially viable business ideas; 4) to cultivate students' capabilities to take decisions from a socially responsible perspective; 5) to conceive the firm from a systemic perspective; 6) to improve individual and group skills through teamwork methodology.
The results of this project can be specified in the following outcomes: 1) the generation of "socially viable" business ideas, that is, essentially addressed to attending to social demands. Thus, the initiatives put forward included ideas on household budget savings, environmental issues, services for the elderly, etc.; 2) the promotion of team working based on interaction among students and between

lecturers and students. Key to this initiative was the system of weekly virtual tutorials that attracted a high student participation; 3) the presentation of the final projects to the rest of the students who took the role of potential investors, and generated highly interesting interactions among the students; 4) the preparation of a final report and PowerPoint presentations that will form part of the course's permanent archive resources available for students to use as a starting point on future courses.

The experience of this project leads us to consider that training in entrepreneurial and ethical aspects should be encouraged among students from the first year of the Business Administration and Management degree. The creation of a culture oriented towards values such as the need for change, innovation, grasping opportunities, social responsibility, etc., will allow students to tackle subsequent courses on their degree with a greater willingness to acquire the capacities they will need to become entrepreneurs and managers capable of running firms in the future. Furthermore, this project has also brought students closer to the business reality through the development of projects within the framework of the University's socio-economic environment. By making contact with real firms and institutions, the students were able to acknowledge the usefulness of the theoretical concepts they had learned in class, and at the same time recognise the relevance of the subject for their professional development.

The following improvements may be considered for further attention in the next academic course: 1) Guide students during the idea generation phase. We consider it would be useful to offer techniques for generating business ideas that may be applied in class with a certain degree of detail; 2) Make available the projects undertaken in previous years to give students a suitable frame of reference when deliberating their business creation projects; 3) Encourage student participation in the continual evaluation of their fellow students by carrying out joint sessions involving all the groups during the course; 4) Create a final course report covering all the projects and presentations undertaken during the course, to be published as material for future students.

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