---English translation---

Research Skills Development in Higher Education Students

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Abstract: This case study presents the development of a research project in a third-year undergraduate course, Family Business Administration. The research project aimed at promoting research skills in students. The authors formed working groups of no more than six students, and each group had to select an original research topic after conducting a literature review. Students were guided by the teachers and provided with initial reading materials, as well as an activity rubric specifying the minimum requirements of a scientific paper. The activity evaluation consisted of two parts, a written article (group assessment) and an oral presentation (individual assessment). After the activity concluded, students were asked to answer an online satisfaction survey. Results showed students viewed the activity as positive and appreciated the chance to develop several competencies, including research skills. The authors conclude several objectives were achieved, including: familiarize students with scientific research; make sure students are cable of finding information through primary sources; have students apply the knowledge acquired during the course; promote responsibility in students; cultivate in students the capacity to summarize ideas and expose them in a reasoned way; have students learn from the experiences and knowledge of others; and develop in students the capacity to synthesize all that information.

Keywords: Family business, initiative research, analysis, team work, research skills

Introduction

The profound changes in traditional teaching methods as a result of the implementation of the European Higher Education Area (EHEA) are widely known. The academic community generally recognizes and accepts the big advantages students have in using new methodologies that promote, not only their own learning process, but also the development of different competences. In this context, competence is defined as the set of skills, abilities, knowledge, and responsibilities that describe learning outcomes of a degree, or a particular subject or course (Gonzalez & Wagenaar, 2006b). To achieve this, it has been necessary for both teachers and students to change their behaviors and attitudes; in other words, teachers assume the role of mentors and students, in turn, must take responsibility for their own learning as the new educational model focuses the basis for knowledge in their own work (Benito Hernandez, Lopez-Cozar Navarro, & Priede Bergamini, 2010; Cano, 2009; Cuadrado Gordillo & Fernandez Antelo, 2008; Martínez, 2009).

Competence development in students, thus, has become the great learning objective, promoting the use of new and different formative activities and influencing evaluation systems themselves (Gonzalez & Wagenaar, 2003). Among these formative activities, one of the most accepted is cooperative learning (Johnson & Johnson, 1999; Slavin, 1996). This tool, developed during the 1960s, has been evolving through the years and adapting to the diverse educational

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needs of the different knowledge areas where it has been applied. It is supported by the belief that student-student and professor-student interaction inside the classroom results in an exchange of skills and knowledge that improve group learning as a whole (Serrano, 1996). Thus, cooperative learning seeks to develop a positive interdependency, to enhance face-to-face interaction, encourage individual responsibility, and improve social abilities (Johnson & Johnson, 1989).

There are numerous studies in the literature related to cooperative learning, showing the benefits of this teaching strategy from experience (Domingo, 2008). Nonetheless, there are few occasions in which such activities are promoted, specifically designed to promote applied research. This study proposes a methodology based on the development of a research project on the subject "Family Business Management", which encourages in a particular way research skills in students. Based on these principles, the authors propose this experience, developed through the 6 ECTS, first semester, third year course *Family Business Management*, for students enrolled in the Management and Entrepreneurship program, which lasts approximately 12 weeks. The authors believe this to be an interesting experience for the university community, as it is an activity that can be adapted to other subjects in degrees related to Business, and even subjects of any other degree.

Justification and Objectives

The so-called family businesses, despite their importance, are in many cases unknown. Given the importance of these organizations in the entrepreneurial fabric of most economies, it is not surprising that in recent years there is growing interest in their study. According to the Family Business Institute in Spain (*Instituto de la Empresa Familiar*, IEF by its initials in Spanish), there are 2.9 million family businesses in Spain, representing 85% of all enterprises, which generate about 70% of jobs in the private sector and contribute 70% of GDP and exports (IEF, 2009, p.19). In general terms, they can be defined as a business in which members of one or more families participate significantly in its capital, are actively involved in the management, and intend to pass on the business to future generations (Astrachan, Klein, & Smyrnios, 2002; Claver, Rienda, & Quer, 2009; Gallo, 1995; Lopez-Cozar Navarro & Priede Bergamini, 2009; Lopez-Cozar Navarro, Priede Bergamini, & Benito Hernández, 2013; Martin & Cabrera, 2007).

Despite their importance, scientific and academic research on family businesses in Spain was not being developed until a few years ago. Through the Family Business Institute (IEF), lectures and professorships developed by various universities, as well as certain specific publications, there have been several research projects aimed to describe, identify, and understand the peculiarities of these businesses. In addition, the new Higher Education Area has allowed universities to incorporate into their curricula specific subjects related to family business management. One of the main conclusions gathered from the analyses of these businesses is their high mortality rate. In fact, according to the Family Business Institute, the average lifespan of a family business is 30 years compared to 40 for a nonfamily business (2009, p 19), and only 10% and 15% of companies manage to achieve transfer to the third generation (Bañegil Palacios, Barroso Martínez, & Tato Jimenez, 2011; Gallo, 1998; Lopez-Cozar Navarro & Priede Bergamini, 2009).

Spanish universities cannot remain aloof from this context and, more specifically, Business Administration studies should extend learning and knowledge of the issues affecting family businesses. It is therefore very appropriate to deepen existing knowledge to help understand the variables that generate such mortality and improve the overall performance of family businesses. Moreover, in line with the above, there is a shortage in the development of

research activities for students in the social sciences in the context of higher education. Therefore, this activity presents the development of a research project by third year students in a *Family Business Management* course, with the dual purpose of promoting their critical analysis and research, as well as expand knowledge existing in this sector.

This activity seeks to awaken in students an interest in scientific research related to family businesses. Students must undertake research related to a topic of interest of such organizations and deliver an article that follows the guidelines of scientific journals in the field. Subsequently, the main results of their research are presented in a specific class turned into a *Family Business Seminar*. Following the completion of this task, students should be able to:

- Reflect on some specific aspect of the family business.
- Apply the knowledge acquired throughout the course.
- Learn to carry out scientific research.
- Present ideas and research results.

Teaching Experience Description: Scientific Research of Family Businesses

The Family Business Management course is optional and is taught in the third year of the Management and Entrepreneurship degree. It takes place during 12 weeks over a full quarter. During the first six to eight weeks of class, the teacher introduces students to the concept of family business, their main characteristics, and specific processes. These first theoretical-practical sessions are necessary to lay the foundation that will enable students to later develop the practical work of scientific research of the family business.

To perform this activity, the formation of working groups is necessary, which should consist of no more than six students. They can be formed freely, but once created teams must be approved by the teacher in order to obtain homogeneous groups.

To initiate the investigation, the selection of topics is important, which must be original and will be chosen by students with teacher supervision after group members undertake a literature research to find and read articles. The teacher should assume the critical task of offering reading materials and providing guidance for information research. The teacher should also be mindful during this first contact step, to prevent students from being lost and demotivated, even proposing the assistance and support of the library staff for research tasks.

Once topics are chosen and work teams organized, students are handed a rubric for the activity, which specifies that the research work consists of two parts and it must meet the minimum criteria of scientific publication. The first part is a short written article of about five to eight pages, which necessarily must include: an abstract -in Spanish and English- key words, literature review, research body, results, main findings and conclusions, study limitations, and future research. The article written must meet the formal requirements generally required by scientific journals. This is so that students are faced with this situation and understand that when an investigation of certain level is performed, what you say is important but also how you say it, and that if it does not meet the minimum requirements, will not be accepted by the academic community. Instilling in students seriousness and rigor in what they do helps them mature and become better professionals. On the same note, it is specified that content copied from a source of information should be in italics or inside quotation marks and properly cited. In such cases, it is essential to include a reference at the end of the paragraph with the information pertaining to the sources that have been used, and of course they must be included in the bibliography. There is an emphasis on the fact that



any copied content without proper citations will be grounds for suspension, thereby attempting to eliminate the habit acquired by most students to cut and paste, presenting plagiarized content as original.

Another relevant point regarding the investigation is the choice of methodology for conducting research, which is complex because students are still in their third year and do not have a broad methodological knowledge. However, efforts to find methods available to them should be encouraged, but at the same those methods should be deemed worthy and acceptable. The second part of the project consists of a brief oral presentation in which the main results of the research and main contributions are presented. These presentations take place all together in the form of a seminar or conference, even bringing together students from different class groups, as this practice was developed in parallel by the teachers who taught the same subject. The seminar was titled *The Family Business in the XXI Century* and took place during the last week of the course. During that last week, students receive the final grade for the activity, the evaluation described below, a closing session is conducted where conclusions are presented, and students have the opportunity to evaluate the activity through a satisfaction questionnaire presented by the professor.

Evaluation Method

As just mentioned, the activity consists of two clearly specified parts: writing an article and an oral presentation, each of which will be evaluated independently. Regarding the written article, which must comply with previously detailed theoretical content and formal aspects, the grade obtained will be common to all team members. In regards to the oral presentation, it must meet the detailed specifications and will take place on a date previously set by the teacher. The grade for this part will be individual to each student. This activity is evaluated based on four fundamental aspects:

Written communication skills. They are evaluated from the document delivered by each team, and value is placed on aspects such as: the correct identification of the objective or purpose of the project and knowledge about what is really important when writing on the subject; text organization, coherence, and structure; absence of typos or grammatical or spelling errors; the clear presence of a theoretical and methodological perspective and development of findings, among other.

Oral communication skills. It is intended so that the exposition is clear, concise, and within the stipulated time. The given time is measured by the teacher in order to prevent each group's presentation to extend too long. Aspects valued during the presentations include eye contact with the audience, assurance and clarity of the oral presentation, and posture and body language.

Team work development and cooperation. The result of the overall team work is valued. For the oral presentation part, value was placed on the coordination among team members, as well as how they organized themselves and made transitions among presenters. Specific questions were asked to each member of the group in order to determine their degree of involvement in the overall project. Moreover, the result of the written work is also assessed by analyzing features such as structure, formal aspects, and expression, among other, to determine whether the levels of consistency, uniformity, and meaning were achieved through the required team work.

Development of creativity and innovation. This competence is directly related to the activity. Creativity and initiative will be evaluated through the analysis of the quality of information sources proposed by the students for the preparation of the article. The creativity in the oral presentations of the work to the university community will also be assessed. The more appealing and distinctive presentations will receive higher valuations.

Final grading of the team work for each student will be the arithmetic mean of the grade obtained in the written article and the oral presentation. In turn, the overall grade obtained with the development of this activity will represent 30% of the course's final grade.

Results and Conclusions

The students evaluated the activity through a satisfaction survey conducted via the Internet, and 12 responses were obtained². The questionnaire is based on a series of variables to be valued –based in the objectives presented before- in a Likert-scale from 1 to 5. Specifically, respondents were asked their opinion on the issues that are presented in Figure 1, which presents the results of the survey.

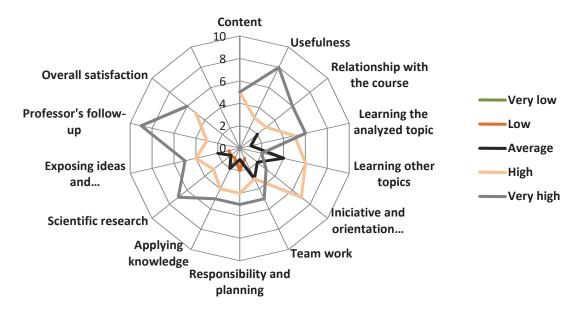


Figure 1. Satisfaction level with the described activity.

In view of the data presented, it can be observed that, in general, most students valued the activity in a very positive way. Students considered learning from the subject analyzed as important. The high valuation of the usefulness of the practice by most students stands out. Students have been able to appreciate as well learning from the development of a scientific research work, which was the main objective of this pedagogic activity. Competence development has also been highly valued; teamwork, initiative, and focus on results stand out among the most valued, although it is generally considered that this practice provides the opportunity to develop various competences satisfactorily. Also noteworthy is the work of the professor in following up with the projects, which was highly valued by the students. Finally, it should be stressed that no

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²A priori it seems to be a reduced number of responses; however, it is necessary to clarify that just students in one of the courses could participate in the questionnaire. Thus, it is 12 responses out of 26 students, which comprises 46% of students.



variable showed a "very low" rating, which shows the overall student satisfaction with all the aspects developed in this initiative.

A section for comments and recommendations was provided in the survey so that students could freely present their point of view. Comments have mainly emphasized the positive aspects of the project, welcoming the initiative and highlighting its usefulness. A specific comment should be mentioned, as it brings an interesting proposal for the future: "more motivation to students, perhaps with an internal magazine, or with the possibility of directly publishing to other places." This student proposed to launch a magazine within the University, in which students can publish their research or, alternatively, to receive support in order to be able to publish externally in a journal of interest. The idea has been well received as the best article could be selected and, with the support of the professor, sent to a journal so that students go through that experience.

With respect to research topics proposed by students, the "Analysis of the degree of knowledge UEM students have regarding the family business and its main characteristics" is first cited, which sought to demonstrate through a student survey on campus the lack of knowledge and misconceptions students have about the family business and its importance in the economy. In second place, there was an "Analysis of transfer from first to second generation in the Spanish family business: Keys to continuity on the basis of the Codorniu case," in which the students delved into one of the most important issues that family businesses face: generational transfer, and they did so with the study of one of the most ancient and interesting Spanish family businesses. Thirdly, an interesting and opportune work was presented regarding "The use of technology in the family business: Analysis of its influence in times of crisis", which showed the current state of information and communication technology use in family businesses through an empirical study, reaching interesting conclusions. Finally, there was a "Case study: When is the best time for integrating professionalism in a family business," which focused around the objective of investigating and analyzing the professionalization of family businesses, conducting surveys directly with family business managers, and concluding that the best solution regarding professionalism depends on the situations and possibilities of each enterprise.

The scores obtained were very high and ranged between 8 and 9.5 in writing assignments, and 8 and 10 in oral presentations (on a 1-10 scale). The day of the presentation, the class became a true *congress of experts* on the subject and the students thoroughly enjoyed their participation and each other's experience. In sum, this is a very interesting and recommended pedagogic proposal since, as shown, students learn to cope with the completion of a real research project, allowing them to grow and learn in a very active way, which impacts in a very positive way on their overall training. This was for a third-year elective course with an agenda that is ideally suited to educational innovation and the development of educational alternatives, in an ideal time for students to learn to investigate.

With the development of this educational initiative, the following objectives have been achieved: to familiarize students with scientific research; make sure students are cable of finding information through primary sources; to have students apply the knowledge acquired during the course and be able to delve into the aspects they find most interesting; to promote responsibility in students, so they are capable of setting goals and planning the necessary work to achieve them; to cultivate in students the capacity to summarize ideas and expose them in a reasoned way; to have students learn from the experiences and knowledge of others; and to develop in students the capacity to synthesize all that information. Ultimately, the students become the center of their own learning. It has been an interesting experience, very enriching for both all

students and professors. Undoubtedly, it will be repeated with some improvements in subsequent courses.

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