

Improving the Degree in Business Management: Proposal of a Major Based in the Virtual Firms Applied to University Model

Ana Bilbao-Goyoaga, University of the Basque Country, Spain
M. Lorea Maguregui, University of the Basque Country, Spain
Néstor Lázaro, University of the Basque Country, Spain
Irene Barainca, University of the Basque Country, Spain
Pedro Melchor Flores, University of the Basque Country, Spain

The European Conference on Education 2018
Official Conference Proceedings

Abstract

Nowadays companies must adapt to an uncertain competitive environment where continuous innovation has become a crucial strategy. Higher Education Institutions (HEI) must also evolve to offer the professionals that organizations need. Bearing in mind the gap existing between graduates' profile and what companies demand, we undertook an educational innovation project in our Degree in Business Management (DBM), consisting of the implementation of the Virtual Firm Applied to University (VFAU). Through a four-year application experience, but with a limited scope and extracurricular nature, we could appreciate and assess the clear advantages that students acquire when taking part in this activity, both in their teamwork and management skills, and in their communication and entrepreneurship ones as well. To take full advantage of its potentialities, it is essential that the curricula of university degrees incorporate this methodology to their official contents, and not just use it as an auxiliary tool, without the necessary academic planning for its formal implementation. This paper presents a proposal for the implementation of VFAU in a major offered by the DBM.

Keywords: Virtual Firms Applied to University (VFAU), Higher Education Institutions (HEI), Degree in Business Management (DBM), professionally demanded skills, learning by doing

iafor

The International Academic Forum
www.iafor.org

Introduction

The Degree in Business Management (DBM), offered at the Faculty of Economy and Business of the University of the Basque Country (UPV/EHU, 2017a), stands out from the rest of degrees for a number of reasons: not only is it studied at a different building (Elcano Section, which is 200 years old), but it also focuses on Small and Medium Enterprises (SME), with great emphasis on exports and foreign languages, which are basic activities for this kind of firms (Bilbao-Goyoaga, 2015). We must also keep in mind that the Basque Country, where our University is located, has a long industrial and business tradition, where companies have undergone significant restructuring and a large percentage of its entrepreneurial ecosystem (99.85%) is made up of SMEs. (Ministerio de Economía, Industria y Competitividad, 2017).

Moreover, the Degree offers three different majors in the 4th year, combined with the completion of a 450-hour mandatory internship. However, in most internship experiences, students feel that they are often assigned tasks involving poor responsibility and no decision-making skills.

On the other hand, we must take into account that the Basque Country is the Spanish region with the highest percentage of persons with a degree in Higher Education (63.7%), a fact that forces us to look for solutions for such a large number of graduates.

Among the techniques based on *learning by doing*, the Virtual Firm (VF), also named Virtual Enterprise (VE) or Practice Firm (PF), is certainly one of the most effective methods for students to learn about company operation and to develop entrepreneurial skills (Gualdi, 2016). It aims at enabling students to acquire specific practical skills that can be learnable but not teachable (Weinert, 2001), hence overcoming the limits of traditional teaching based on frontal lectures (Gualdi and Melagranati, 2015; Kiraly, 2014).

The VF methodology consists of a simulated company that is run from a real office by a group of students assisted by tutors (Bianchi and Tampieri, 2013). There is no actual transfer of goods or money, but all the rest of transactions such as orders, invoices, financial records, etc. take place (Tampieri, 2009a). Each student works in an office with other colleagues and performs all company management operations by enabling the virtual exchange of goods and services with other Virtual Firms in national and international networks.

The methodology of VF helps students integrate all the business areas, involving them in all the phases of running a company, from the constitution of the company until its winding up. This enables participants to understand the relationships, dynamics and its operating modes in order to take the necessary decisions for daily management, as well as to verify the specific results obtained in its scope and the more general ones connected to the whole enterprise (Tampieri and Gualdi, 2017).

Therefore, students acquire experience in a real working environment by simulating a real enterprise. The student is bound to implement all the theoretical

knowledge learnt in class by applying it to the management of a company (Tampieri, 2009b).

Under an Educational Innovation Project¹ financed by the University of the Basque Country during the academic years 2014-2015 and 2015-2016, our research group could see the advantages of the virtual firm through the implementation of a pilot group (Gómez et al., 2017).

Due to the success obtained during the last three academic years, the Faculty decided to implement the Virtual Firm Methodology in the Degree in Business Management, in order to provide a number of our students with a percentage of the time devoted to intern practice. This way, each year students create and manage their own firm in the classroom, as an experiment that has supplied this research team with valuable tools to assess first-hand students' development of cross-curricular skills.

All of the above has led us to weigh up the possibility of consolidating Virtual Firms in our Faculty. The purpose of this paper is the proposal of a new major or specialty in the 4th year of the DBM taught at the Faculty of Economy and Business of the University of the Basque Country (UPV/EHU), consisting of a number of courses focused on entrepreneurial skills, for which the VF would be a valuable tool. In other words, transforming the experience obtained with the experimental implementation of the Virtual Firms Applied to University (VFAU) in our Faculty into curricular content in the Degree.

Background

This section reviews the implementation process of the VFAU methodology in DBM. The essential and differentiating features of the DBM are described; data on the evolution of enrolment along the last five years are provided; the process of implementation of the VFAU methodology is detailed; and finally, the professional skills of graduates in Economy and Business are specified. The primary aim of this background is to contextualize the activities that have been carried out, and to provide evidence of the need to tackle a more ambitious approach in the DBM.

The Degree in Business Management: graduation profile and main characteristics of the curriculum

The DBM at the UPV/EHU was launched in 2010 with the goal of enabling future graduates to perform the duties related to management at any level of a company or organization, as well as of working out reports and providing advice in the areas of Economy, Taxes, Accounting, Human Resources, etc., oriented mainly to SMEs. In addition, they will also be skilled in entrepreneurship and foreign trade (UPV/EHU, 2010; 2014).

¹ Name of the Project: Design, implementation and assessment of Virtual Firm Methodology through active and autonomous learning systems for the acquisition of professional and entrepreneurial skills in cooperative and dynamic settings (UPV/EHU, 2017b).

Moreover, the DBM contains a practical component, which consists of doing an obligatory internship at a company for all future graduates.

In addition to all the above, graduates can choose among three specialties to complete their training, according to their interests:

- Major in International Trade and Marketing
- Major in Accounting and Auditing
- Major in SME Management

Therefore, 4th year students must enroll in 30 elective credits, choosing one of the abovementioned majors or specialties. They must also complete a 450-hour external internship (18 credits) and the Degree Final Project (12 credits), both of which add up the remaining 30 mandatory credits. In these last two subjects, students will be able to apply the theoretical knowledge and the skills acquired in the Degree (UPV/EHU, 2017c).

Main threats for the DBM

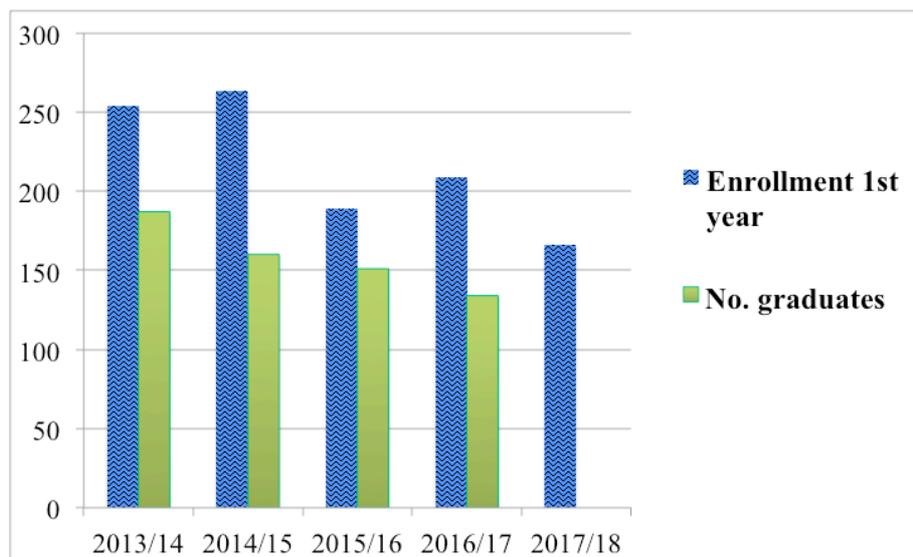


Figure 1. Evolution in the number of freshmen and graduates in DBM

Source: Authors' compilation based on Faculty data

The chart above shows a downward trend in both the number of freshmen and graduates, which could partially be explained by the evolution of the population pyramid due to the low birth rates in our country. However, that seems not to be the only reason for the decreasing figures.

According to the Ministry of Education, Culture and Sport (MECD, 2017), every year more and more students decide to enroll in Vocational Training instead of University Degrees. In particular, in the Basque Country, students of non-university education have increased by 10% in the last ten years, and more specifically, the number of Vocational Training students increased by 5.1% in 2016/2017 academic year (MECD, 2017). This evolution is evidenced in the following chart:

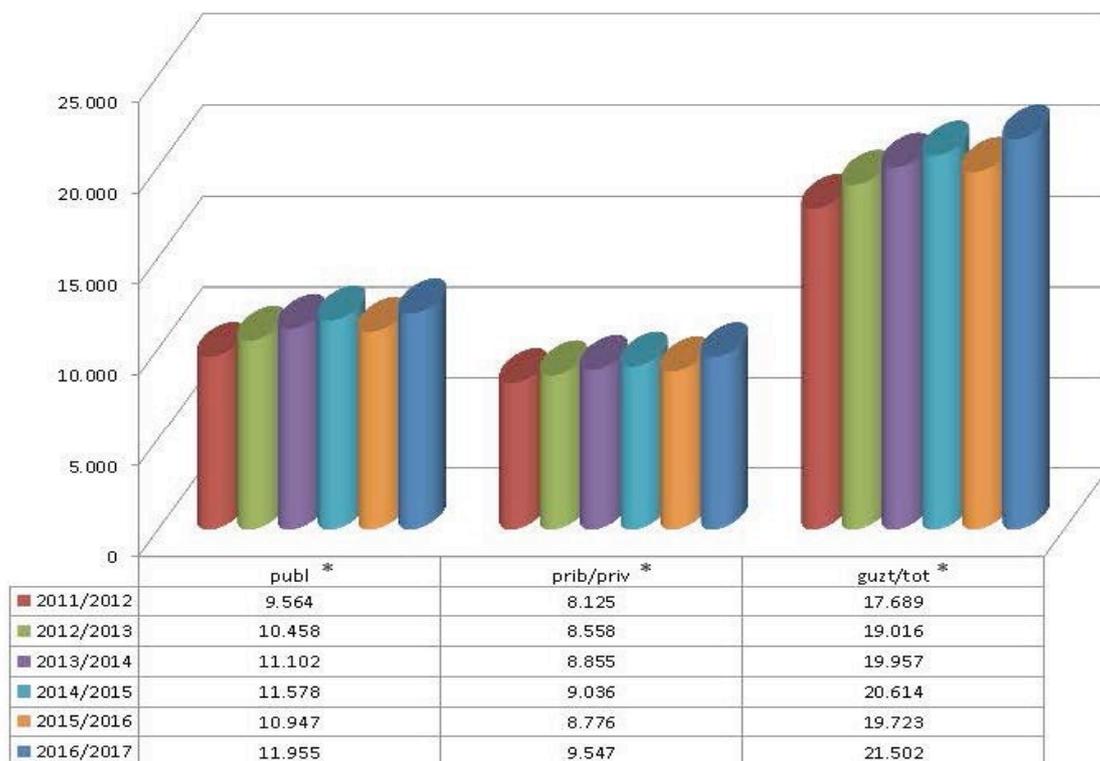


Figure 2. Advanced Vocational Education students in the Autonomous Community of the Basque Country

Source: Basque Government, 2017 (Gobierno Vasco, 2017)

In addition, in the Basque Country, besides our public University (UPV/EHU), there are three private universities, which offer 16 other degrees in the area of Economy and Business, some of them highly- regarded degrees similar to our DBM.

Therefore, there is evidence of a plentiful university education offer in the area of Business Management, both at the UPV/EHU and at private institutions. In the medium and long-term, this highly competitive environment leads to the need for an adequate positioning and differentiation from other degrees, as well as to the enrolment of a steady number of students if these universities wish to maintain the range of degrees they offer.

On the other hand, the chart below shows the enrolment figures for academic years 2014/2015 to 2017/2018 in the three majors offered in the DBM. These data have been broken down for each of the specialties offered to 4th year DBM students.

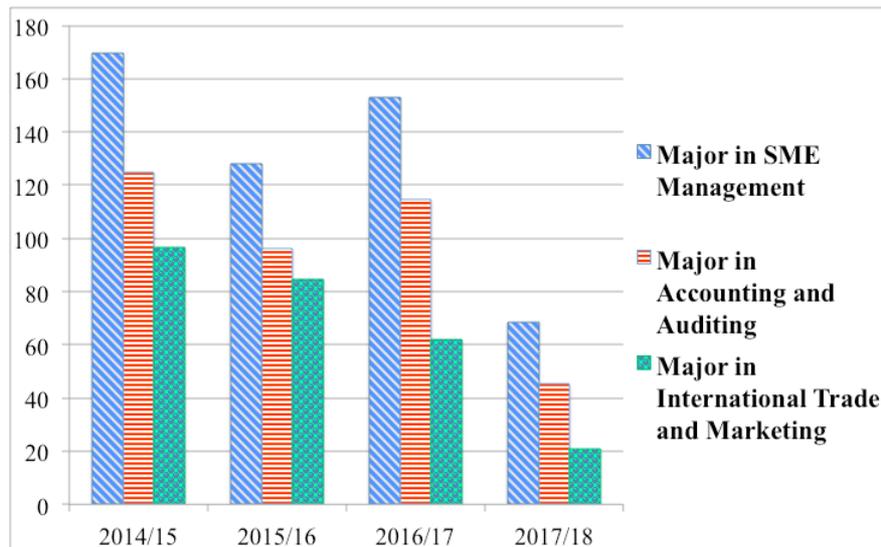


Figure 3. Evolution of enrolment in 4th year majors (DBM)
Source: Authors' compilation from UPV/EHU public information

If we focus on the evolution of average students enrolled in each of the specialties, we will see a downward trend, steeper in the current academic year, and still more worrying in the major in International Trade and Marketing, as shown in the chart above. This trend, together with the strong competition in nearby institutions, and the need to tailor the curricula to the training requirements detected is one of the reasons why this research team has considered the aims of the present study.

With reference to labor integration of graduates in DBM, we would like to highlight the following findings of a survey performed by the Basque Service of Employment (Lanbide) to 135 graduates of the 2013-year promotion (Lanbide, 2016a; 2016b):

- The total unemployment rate was 16% in general and 14% for women.
- Data about the quality of employment are not favorable: only 67% consider their job is quite related or very related to the degree they studied.
- Only 68% of jobs are open-ended contracts.

The abovementioned data ultimately point out the need to introduce amendments in the DBM, to foster the employability of graduates in the current labor context. Thus, the UPV/EHU cannot fall behind and must adapt to the new requirements and demands of the business world.

It is in this context of change and adaptation to the current environment that the authors would like to present the proposal resulting from this study: the creation of a new major related to VFAU in the DBM.

The application of VFAU methodology in the DBM

VFAU is the result of an Educational Innovation Project (PIE) aiming to provide students with the skills demanded professionally, which are difficult to develop in

the conventional classroom. It entails an adaptation of the VF framework to the particular needs of our business graduate students.

Students participating in the VFAU Project leave the conventional classroom to enter a company created and run by them in an international market. Under the motto “*learning by doing, learning by working*” this teaching tool rests on two methodological cornerstones: cooperative learning, and learning based on problems or projects (Lázaro, et al., 2016). Both of them supply the four vital elements of Virtual Firm methodology: strategic management, cross-curricular and generic skills development, international focus and prioritising training over results.

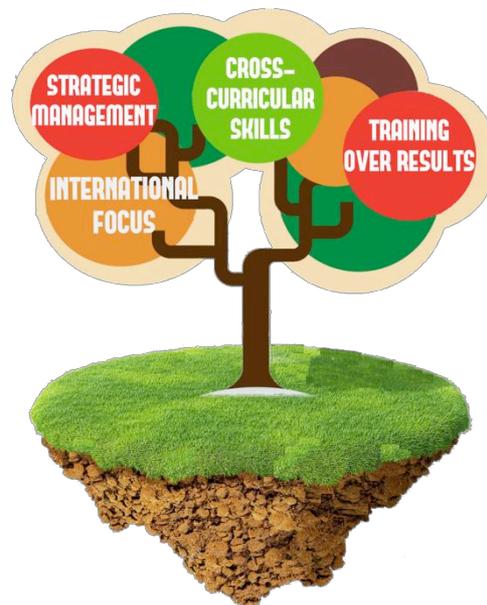


Figure 4: Methodological basis
Source: Lázaro et al. (2016)

Although the company is organized in different areas (Strategic Management, Financial Department, Administration Department and Commercial Management), the students must work jointly to achieve their business goals, which are interrelated. Thus, they can only reach these goals if the rest achieve theirs. Therefore, they are aware of the influence of their decisions in the whole company (positive interdependence and critical thinking) and they understand the importance of coordination, communication and cooperation (positive interaction).

The Coordinator of the activity (as the manager of the company) takes a less active role, acting as a guide and support for students, changing from a leading actor role to becoming a partner of the students during training activities.

On the other hand, the lecturers (as the Board of Directors) represent an element of control to the learning process, being periodically reported to by students and assessing students' learning outcomes during the activity, as well as offering them feedback and challenges in every meeting, not acting as teachers, but providing the program with further doses of reality. Students participating in VFAU must

immediately forget about finding the right answer to problems and focus on facing the real business contingencies (Unstructured Problems) that continuously arise in the company, being aware that there is usually no systematic or linear process to do it (Non-Established Solutions). Therefore, they must define, apply and evaluate plans to solve them. The Coordinator advises the students, but also provides them with the freedom to make mistakes and encourages them to do so. This way, they will lose their fear of failure and develop their critical ability as well as divergent thinking (Gómez et al., 2017).

The benefits they acquire from the methodology, both professional and personal, turn into those learning outcomes, in line with the strategic objectives of Europe 2020, which help develop the skills sought get closer to employability, as they add the necessary abilities to progress in life and professional contexts.

The professional skills of Economists

In this changing environment, featured by an intense competition in the offer of degrees related to Economy and Business, and by an evolution towards innovative learning and teaching methodologies, it has been deemed appropriate to present not only our analysis, but also the point of view and the needs of companies offering labour opportunities to university graduates.

The main conclusions extracted from the report recently published by the Basque Professional Association of Economists (Periáñez et al., 2017) indicate that *“the most demanded profile will be that of a person with a multidisciplinary vision on problem-solving, a good team-player who can express fluently both written and orally in several languages, and with a positive and optimistic attitude. A person with ethical principles and integrity, a high level of commitment, responsibility and maturity”*.

At this point, we would like to mention the cross-curricular competencies of the DBM (UPV/EHU, 2017b), which evidence the total adequacy of the degree to the skills listed above:

- To be able to express both orally and in writing, fluently, correctly and using reasoning and critical abilities in matters related to business activities
- To integrate ICTs and foreign languages in the performance of their professional activity
- To be aware that professional practice must be based on solid ethical principles, commitment and responsibility

It is worth mentioning that for several years, Elcano Section has been working on different projects and developing initiatives aligned with the three suggestions indicated above. The present study is an example of our philosophy aimed at bridging the gap between university and businesses.

Proposal for the integration of VFAU model in the syllabus of the DBM

As previously explained, we deem it convenient to carry out a review of the current syllabus with the aim of responding to students' needs, and at the same

time, of going forward in the development of contents and teaching methodologies that will serve the purpose of enlarging the acquisition of the competencies and skills they need for their professional development. More specifically, the purpose of this paper is to revise and update the offer of elective subjects offered to our students in the 4th year, so that they can shape their curriculum in a more flexible way.

So far, our experience implementing the VFAU methodology has mainly consisted of offering the students the possibility of joining a team in order to develop all the practical activities related to the creation of a company and its daily management (purchases, sales, administration, etc.). It has been an experience where students were not awarded any ECTS credits for elective courses, but for the mandatory internship hours instead.

The University grants students a formal acknowledgment through the validation of the time they participate in VFAU, but this seems insufficient, considering the vast amount of multidisciplinary work they do, the type of skills they develop and the time they devote to all the activities, both inside and outside the classroom. In the same way, the work carried out by the teaching staff collaborating in the implementation of the VFAU does not either have a formal acknowledgment in the teaching assignment comparable to that of the official subjects in the curriculum. Hence, it is difficult to have a teaching staff large enough to extend this methodology to a more significant number of students, degrees and university centers.

On the other hand, in order to integrate this model within the formal structure of the degree curriculum, it is necessary to adapt all the activities (individual and group work, face-to-face and non-face-to-face tasks, monitoring and assessment systems, etc.) to the Teaching Guide.

These reflections had led us to find out the need to create a major in the fourth year, in which, in addition to the central activity that gives meaning to this training model, VFAU, a series of subjects that will respond to the aforementioned problems are taught. That way, VFAU itself will have to fulfill all the requirements to be considered as another subject within the curriculum, with its allocation of credits and teaching staff, Teaching Guide, assessment system, etc.

According to university regulations, each academic year of the DBM consists of 60 ECTS credits. The credits of the fourth year are distributed as follows:

- Elective subjects: 30 credits
- Degree Final Project: 12 credits
- Compulsory internships in a company: 18 credits

The new major proposed as a new offer for fourth-year students will be called Company Creation and Management (CCM). It will consist of a block of contents that will be offered, like the other existing specialties, to a limited number of students who will be able to choose it to complete their degree. For this specific major, it is proposed that three groups be offered (one per language: Spanish,

Basque, English) with ten students per group.

The academic content of this new major will consist of 42 ECTS credits distributed in this way:

- 30 credits for elective subjects
- 12 credits for the Degree Final Project

Taking into account the type of skills worked in VFAU, the business management activities that are carried out, the need to replicate the actual operation of a company in the classroom, the intended learning outcomes, and the desired profile from both the academic and the professional point of view, we propose the following list of contents that should be taught in the elective subjects of this major, in order to facilitate, expand and complete the practical learning that the students will receive in VFAU:

- 12 credits for the practical activity of VFAU
- 18 credits for training content related to:
 - Entrepreneurship
 - Advanced management tools and procedures (ICT, ERPs, Strategic Planning, Marketing, data analysis, etc.)
 - Planning, financial and accounting management of the company (Finance, Accounting, specific software, etc.)
 - Administration and commercial running of the firm (Human Resources, Taxation, purchases, sales, customer service, etc.)
 - Management of external communication (English, social networks, online advertising, etc.)

The proposed curriculum intends to facilitate, expand and complete the practical learning that the students will receive in VFAU. Regarding the teaching schedule and its programming within the semester, there should be flexibility in the timing of formal teaching and the practice of VFAU, since it is possible to find advantages and limitations in whatever approach is taken into consideration in this regard.

Likewise, it is considered appropriate to link the Degree Final Project (DFP) with this new major, since it is meant to take advantage of the synergies between these two learning tools. The content and orientation of the DFP in this major will refer, deepen or develop a project to create a company or professional activity in the future, being useful to improve the performance, skills, and competencies referred to in the curriculum.

In this sense, we propose maintaining and respecting the contents, regulations, and criteria that regulate the development, enrollment and defense of the DFP for the students that attend this major. However, it would be necessary to make some adjustments in the tutor assignment procedure, since we consider that the work these students will do should be supervised by lecturers directly or indirectly linked to the VFAU model.

With the application of this proposal, VFAU would continue having a major in

the curriculum and several specific subjects that will focus on the fundamental aspects of the theoretical and practical contents of what the creation and management of a company entails.

The practical activity of VFAU will imply 12 teaching credits for students, which means that it will no longer be validated, as it is now, by the equivalent compulsory internship hours. That is, in this new model, students must fully credit the 18 credits assigned in the curriculum to internship, i.e., the practical work carried out in VFAU develops from being a (partially) 'substitute' activity to a 'complementary' activity, an approach that seems more appropriate to us.

Finally, as for the teachers who participate in the new major, their acknowledgement will no longer come from tutoring internships in companies, whose weight and importance in the teaching assignment is minimal, but by teaching credits with the same weight and value as the rest of subjects taught in the degree. With this new situation, we consider that it will be easier to get a more significant base of teaching staff interested in participating and collaborating in this training model.

To conclude, we believe that betting for this training tool, VFAU, leads us to the need to ensure that it will have a stable and broad presence within the curriculum. This will be possible by overcoming the current limitations and arriving at a model in which it is possible to integrate its contents, resources, activities, and approaches into the essential elements of any curriculum: the subjects.

Moreover, we believe that only this way will it be possible to set up a Company Creation and Management (CCM) major in the curriculum of the DBM. Besides, it will also be easier to extend this type of teaching to other degrees of the Faculty and, why not, to other Faculties and Schools where it is possible to apply it for the improvement of the competencies and skills present in the graduation profiles of their respective students.

Conclusions and limitations

The purpose of this study was twofold. On the one hand, we have concluded the relevance of Virtual Firms to foster generic and specific managerial skills. As has been proven by previous works carried out by other researchers (Bianchi et al., 2015; Gómez et al., 2017) and by the experience carried out in our center (Lázaro et al., 2016), students participating in this innovative methodology obtain substantial progress in the achievement of this type of skills, values and attitudes compared to other students who do not benefit from this experience.

On the other hand, we seek to transform the experience obtained during the Educational Innovation Project into curricular content in the Degree, proposing a new major at the DBM taught at the Faculty of Economy and Business of the UPV/EHU. It consists of a number of elective courses focused on entrepreneurship skills for which Virtual Firms Applied to University would be a valuable asset. This study contributes to theory and practice of educational approaches adopted by Higher Education Institutions with a focus to *learning by doing* of entrepreneurial competencies and to a better understanding of

knowledge about the management of VF implemented at a university level for didactical purposes.

We can state that, due to the abovementioned key features defining the VFAU methodology (Lázaro et al., 2016), participants obtain benefits in terms of learning outcomes that help develop those soft skills that prepare them to access the labor market in better conditions.

We must point out that this methodology, as stated in this paper, offers students the opportunity to carry out tasks that go beyond the mere development of processes and administrative procedures, focusing particularly on decision-making. This way, they obtain a graduation profile more clearly and deeply aligned with the needs and demands expressed by employers.

As VFAU methodology aims at reducing the gap between the profile of graduates offered by universities and the demands from the business world, this study further contributes to build a model that integrates academic contents oriented to the professional world. This new major will achieve its completeness and exploit the synergies offered with the writing and defense of the Degree Final Project every student must fulfill, but in this case with a content linked to enhancing the entrepreneurial learning outcomes acquired in the VF experience.

Our Faculty is located in an environment that has experienced significant changes in recent years, among which a growing offer of degrees in the field of Economy and Business stands out, together with the progressive incorporation of approaches and practical contents in the curricula of the degrees offered. All of this, together with the decreasing tendency experienced in the number of students enrolled in the different degrees, as well as the increase in enrollment in Vocational Training, makes it necessary to define our degree with differentiating features.

In addition, taking into account we now belong to a new Faculty where the DBM has been integrated into the academic offer, and bearing in mind a context like the one presented in the previous paragraph, it is unavoidable to advance in a more explicit positioning within the map of degrees offered. That is, we must orient ourselves towards greater differentiation, with highly innovative and practical components meeting this way the educational requirements of the companies in the Basque Country. Given the characteristics of Elcano Section, the center where the DBM is taught, the profile of its teaching staff and the content of the current curriculum, we consider it appropriate and necessary to expand on these dimensions as a basis for a consolidation of the degree in the medium and long-term.

The main limitation is of an administrative nature, since it entails introducing changes in the annual reports of the degrees. These modifications affect the Degree Definition Report in important elements such as the entry profile, the cross-curricular competencies, the curriculum, the offer of subjects and majors, multilingualism, internships in companies, the regulations for DFP, etc., as well as the progressive incorporation of innovative teaching and learning methodologies, with a more significant presence of ICTs throughout the training

period.

Another limitation can come from the difficulty in the allocation of academic resources, because there are many different areas and departments involved. Also, it would be relevant to consider that frictions and conflicts may take place among the teaching staff in charge of lecturing at the new major in Company Creation and Management, and also when adjusting the procedures for assigning a tutor for the DFP and the members of the examining panels.

Taking a chance on this training tool, the VFAU methodology, leads us to the need to ensure a steady and broad presence within the curriculum. At the same time, we must produce a final model that enables the integration of contents, resources, activities and approaches into academic subjects.

Moreover, we believe that this is the only possible way to introduce the model in the curriculum of DBM. At the same time, it will also be easier to extend it to other degrees of the Faculty of Economy and Business and, even to other Faculties where it can be applied for the improvement of the graduation profiles of their respective students. All these ideas constitute relevant research lines to be developed in the future.

Acknowledgements

The authors of this article would like to sincerely thank Pedro Manuel Gómez Rodríguez, Vice-Dean Coordinator of the Elcano Section for the Degree in Business Management (UPV/EHU), for his help in providing data, writing parts of it, leading the VFAU project and proofreading the text. His assistance has been paramount for carrying out the activity and writing this article.

References

Basque Government. (2017). *Datos de matrícula: gráficos evolutivos* [Data File]. Retrieved from http://www.euskadi.eus/contenidos/informacion/graficosmatr1314/es_def/EAE_sarea_ES PO.pdf.

Bianchi, M. & Tampieri L. (2013). Simulated management in the start-up of new public organizations. *US-China Public Administration Journal*, 10(5), 475-487.

Bianchi, M.; Hernández-Lara, A.B. & Gualdi, D. (2015). The contribution of virtual enterprises to competence-based learning: an assessment from the students' perspective: Case study. *Technology, Innovation, and Education*, 1(4), 1-16.

Bilbao-Goyoaga, A. (2015). *Enseñanza-aprendizaje del inglés en las PYMES exportadoras de Bizkaia: identificación de necesidades y propuestas de mejora* (Doctoral dissertation). Bilbao: UPV/EHU.

Gómez, P.; Bilbao-Goyoaga, A.; Lázaro, N.; Barainca, I. & Maguregui, M.L. (2017). Proyecto Empresa Simulada Aplicada a la Universidad (ESAU): metodología, práctica y tecnología. *Teknologia berriak eta Hezkuntza joerak/ Nuevas tecnologías y tendencias en la Educación* (pp. 289-300). Bilbao: UPV/EHU.

Gualdi, D. & Melagranati, F. (2015). Metodologie innovative nell'accounting education. La simulazione d'impresa. Indagine sulle motivazioni e aspettative degli studenti universitari di Forlì e Parma. *Quaderni DEM*, 4, 1-25.

Gualdi, D. (2016). *Manuale di Simulazione di Impresa. Handbook of Practice management by Simulimpresa*. Cesena: Il Ponte Vecchio.

Kiraly, D. (2014). *A social constructivist approach to translator education: Empowerment from theory to practice*. USA: Routledge.

Lanbide. (2016a). Informe de Inserción Laboral 2016. Gestión de Negocios, Promoción 2013. Retrieved from http://www.lanbide.euskadi.eus/y94-estadist/es/contenidos/estadistica/insercion_laboral_univers_2016/es_def/adjuntos/D557_GESTNEGOCIOS.pdf.

Lanbide. (2016b). Informe de Inserción Laboral 2016. Titulaciones Económico-Jurídicas, Promoción 2013. Retrieved from http://www.lanbide.euskadi.eus/y94-estadist/es/contenidos/estadistica/insercion_laboral_univers_2016/es_def/adjuntos/D10_ECONOMICO_JURIDICAS.pdf.

Lázaro, N.; Bilbao-Goyoaga, A.; Barainca, I.; Gómez, P.; Larrieta, I. & Maguregui, M.L. (2016). *Bridging the gap between University and Business: the ESAU project*. Paper presented at the Improving University Teaching 2015 Conference - Ljubljana. Slovenia. <http://www.iutconference.com/2016/01/bridging-the-gap-between-university-and-business-the-esau-project/>

Ministerio de Educación Cultura y Deporte. (2017). *Indicadores y publicaciones de síntesis: Datos y cifras. Curso escolar 2017-2018*. Retrieved from <https://www.mecd.gob.es/servicios-al-ciudadano-mecd/estadisticas/educacion/indicadores-publicaciones-sintesis.html>

Ministerio de Economía, Industria y Competitividad. (2017). *Estadísticas PYME. Evolución e indicadores*. Retrieved from <http://www.ipyme.org/publicaciones/estadisticas-pyme-2016.pdf>

Periáñez, I.; Charterina, J. & Pando, J. (2017). *Situación actual y tendencias en las competencias profesionales de economista*. Bilbao: Colegio Vasco de Economistas.

Tampieri, L. & Gualdi, D. (2017). The management of Practice Firm in entrepreneurship education. *European Academy of Management (EURAM) 2017. -Making Knowledge Work Conference* (pp.1-39) University of Strathclyde, Glasgow, Scotland.

Tampieri, L. (2009a). *Simulazione in Second Life e business virtuale nello start up d'impresa del sistema moda*. Bologna: CLUEB.

Tampieri, L. (2009b). The enterprise simulation in Second Life. The case of Perting Ltd. In Newell, Whitley, Pouloudi, Wareham, and Mathiassen (eds.) *Proceedings of the 17th European Conference on Information Systems in a globalizing world: challenges, ethics and practices*. Verona: University of Verona.

Universidad del País Vasco / Euskal Herriko Unibertsitatea (UPV/EHU). (2010). *Memoria del Grado en Gestión de Negocios*. Retrieved from <http://www.ehu.es/es/web/enpresa-bilbo/ikasketa-plana-2017/18-irakasgaiak-ordutegiak-azterketak>.

UPV/EHU. (2014). *Informes oficiales del Grado en Gestión de Negocios*. Retrieved from <http://www.ehu.es/es/web/estudiosdegrado-graduokoikasketak/grado-gestion-negocios-verificacion-seguimiento-y-acreditacion>.

UPV/EHU. (2017a). *Facultad de Economía y Empresa de la UPV/EHU*. Retrieved from <https://www.ehu.es/es/web/ekonomia-enpresa-fakultatea/hasiera>.

UPV/EHU. (2017b). *Resolución Proyectos de Innovación Educativa 2014-2016*. Retrieved from https://www.ehu.es/documents/1870360/3188036/Ebazpena_Dirulaguntzako+proiektuen+zerrrenda.pdf/c26095d7-0eb7-43d2-8c77-c761a76608d9

UPV/EHU. (2017c). *Competencias transversales del Grado en Gestión de Negocios*. Retrieved from <https://www.ehu.es/es/web/estudiosdegrado-graduokoikasketak/grado-gestion-negocios-competencias>.

Weinert, F. (2001). Concept of competence: a conceptual clarification. In Rychen and Salganik (eds.), *Defining and Selecting Key Competencies* (pp. 45-66). Gottingen, Germany: Hogrefe & Huber Publishers.

Contact e-mail: ana.bilbaogoyoaga@ehu.eus