

We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists

6,900

Open access books available

186,000

International authors and editors

200M

Downloads

Our authors are among the

154

Countries delivered to

TOP 1%

most cited scientists

12.2%

Contributors from top 500 universities



WEB OF SCIENCE™

Selection of our books indexed in the Book Citation Index
in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?
Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected.
For more information visit www.intechopen.com



The Entrepreneurship in Communication as an Educational-Learning Method: University Teaching and Educommunication

Gloria Jiménez-Marín, Rodrigo Elías Zambrano and
Elena Bellido-Pérez

Additional information is available at the end of the chapter

<http://dx.doi.org/10.5772/intechopen.71369>

Abstract

This text is based on a study that was done with the aim of analysing the development of university training processes through real entrepreneurship projects. The research was carried out using the study case modality, and it was focused on observing the teaching methodology variations according to the implementation—or not—of a real entrepreneurship project as a method in a certain subject, collecting data of both the faculty and the students. Departing from the current situation of economic crisis and unemployment in Spain and from the despondency and discouragement situation of the students in their latest years of university studies, the self-employment is set up as a new job opportunity for the training projects of these university students. This study departs from the inclusion of an entrepreneurship plan as a method of evaluation and teaching in several subjects belonging to Advertising and Public Relations studies. With this entrepreneurship model, we study the formative consequences for the students and the impact on the society. Results showed a common methodological pattern regardless of the training model of the subject—obligatory entrepreneurship versus optional entrepreneurship—and a faculty interest in alternating several methodologies.

Keywords: entrepreneurship, teaching methods, university teaching, OTRI, communication

1. Introduction

1.1. Being an entrepreneur

Being an entrepreneur requires to have—or to acquire—a series of skills at either ways, individual and collective. Because the entrepreneurship is a human being's ability for going forward, moving on and growing in a creative and different way, with renewed ideas—and actions.

For most people, entrepreneurship is a relatively modern and novel concept, but this feature itself has always been present throughout the history of humanity. Nevertheless, it is important to emphasise why this term has become so relevant in the last decade: because of the resurgence of the way in which economic situations have been managed, being led with new ideas. That is, because of the current economic movements and the way to overcome the financial crisis.

The word “entrepreneurship”, from the French word “entrepreneur”, means pioneer: it is the person's ability of making an extra effort in order to reach a goal. The term is also used for referring to a person who starts a new business or project, as well as people who add a value to an already existing product.

We depart from the definition that considers the entrepreneur as a person with inquisitiveness to learn and improve, that is, the definition related to the aptitude and attitude of the person, which allows him or her to undertake new challenges and new projects. If we focus on the well-known strengths, weaknesses, opportunities and threats (SWOT) matrix, an entrepreneur person is able to take advantage of threats, weaknesses, or dissatisfaction situations in order to reverse that condition and give rise to a beneficial and helpful situation. Because the constant search for changes and solutions for problems is a basic feature of the entrepreneur.

In that sense, the university plays an important role in providing a basic and appropriate training to their students, a training that qualifies them to reach their vital or business goals [1–5]. Entrepreneurs are people generating ideas who, at the same time, develop the required competences to be better business people and better citizens.

Nevertheless, Europe is the continent who concedes less importance to the education in entrepreneurship: 25% of EU citizens regard this kind of education as important, a low number if we compare it with the 51% existent in the USA [6]. According to [7], “this gap is not necessarily caused by the EU citizens' rejection of entrepreneurship, but rather the result of a combination of structural, administrative and cultural factors that inhibit entrepreneurial spirit”. In fact, these kinds of barriers were highlighted in the results of this study.

1.2. The Spanish universities' role in entrepreneurship

If we focus on Spain, there is a clear need to foster an entrepreneurial spirit among young university graduates in order to improve the rates of start-ups in the medium and long term, thereby boosting the country's competitiveness and productivity. In this task, universities are

called to participate actively as a training centre par excellence, generating new knowledge [8]. In this last point, the role of the university becomes a great source of innovation and technological development, as [9] points out:

*The transformation of the university as part of the national system of science and technology makes it not only a centre for basic research but also the incubator of new industries in a science and technology dominated economy. The creation of an entrepreneurial culture, of a favourable attitude in young people before the creation of business is the basis of new projects.*¹

In this way, most Spanish universities have taken on the challenge of fostering the entrepreneurial spirit among their students and of supporting the creation of new companies, as [10] affirms. That is why, in Spain, a series of entrepreneurship initiatives have emerged within the University:

- The first initiative to promote entrepreneurship from a Spanish university was in 1992. The *Universidad Politécnica de Valencia*² (UPV), along with *Instituto Valenciano de la Mediana y Pequeña Empresa*³ (IMPIVA), carried out the project “Program of initiatives for the development of new companies (IDEAS)” with the aim of stimulating the entrepreneurs of the UPV to create technology-based companies, becoming the only program of this nature in Spain until 1997.
- On this date, three other business creation programmes were established at the *Universidad Complutense de Madrid*⁴ (UCM), the *Universidad Pública de Navarra*⁵, and *Universidad de Euskadi*,⁶ starting a growing trend that had its highest level in 2000 with the creation of 10 new programmes.
- In 2004, 55% of the 68 Spanish universities already had a programme to create companies. These programmes have contributed to the creation of about 900 new companies technologically and innovative based as well as conventional. Despite these important achievements, there is still a long way to go since, unlike what has been happening for years in universities in more advanced countries, the formation of new entrepreneurs remains a residual and methodologically poor subject to which it is provided little attention in most Spanish universities [11].

1.3. The teacher as entrepreneur in the knowledge society

The training and education in a high level, in a university level, has as its goal to educate the individual in a wide, relevant and qualitative way, that is, not only teaching the individual a profession but also making him or her grow as a person, as an adult, and making him or her

¹Translated from the original text in Spanish: “La transformación de la Universidad es parte del sistema nacional de ciencia y tecnología, la convierte no sólo en centro de investigación básica, sino también en la incubadora de nuevas industrias en una economía dominada por la ciencia y la tecnología. La creación de una cultura emprendedora, de una actitud favourable en los jóvenes ante la creación empresarial es la base de nuevos proyectos.”

²Polytechnic University of Valencia.

³Valencian Institute of Small and Medium-sized Enterprises.

⁴Complutense University of Madrid.

⁵Public University of Navarra.

⁶University of Euskadi.

think. That is why higher education must not only be contemplated with a sole external vision about the teaching-learning process, but also as an internal condition of the teacher. For that reason, education is almost seen in the duty of facilitating the development of new personal abilities, as the abilities of innovating, finding creative solutions or adapting to changes and new realities. This is not an easy task, and that is why “creating an entrepreneurial university requires a multi-dimensional, multi-layered, complex, and long-term focused perspective from policymakers and university administrators” [1].

However, in the latest years, the educative planning is changing. Authors like [12] or [13, 14] support theories that pursue a revolution since their initial idea. These researchers consider that not only the study organisation should be changed, but also its purpose and the dedication time, which should move from being a one-time training and with pre-established times to a lifelong training.

For that reason, we can affirm that a university teacher is a citizen of the knowledge society who faces the challenge in the presence of changes, responding in a positive way with new ideas and new ways of doing things, with initiative and determination when facing several circumstances. This person is an entrepreneur teacher who has developed certain competences to the citizen performance, who is competent and knows what should be done, allowing the so-called “Lifelong learning”⁷ in order to develop specific abilities. First, it is necessary to develop oneself as a person so that you can be able to acquire professional of specific human competences, and later that could be transmitted afterwards.

The development of these competences should take place in a contextualised frame in university environments. In this frame, students are adolescents who are becoming adults and, for that reason, they should experience an active and relevant learning, because it will let them use their acquired competences in others places and context. Thus, they will be able to transmit what they have learned. Besides, this fact becomes even more important if we take into account studies as the one of [15], which has showed that “entrepreneurial characteristics that predict entrepreneurial careers appear early in life”.

The quality of the university education has to be in harmony with the training that prospective graduates are receiving. In that sense, the teacher should think about his or her pedagogical and methodological work, about the appropriateness and applicability of what he or she is teaching. Hence, the teacher will conclude that he or she has to unlearn and learn new techniques and to increase his or her abilities' borders in order to provide the students the training that they need. In that point is where the entrepreneurship appears as a suitable evaluating and teaching technique. As [16] expresses, “as educators it is valuable to understand the effect of one's teaching particularly because this has far-reaching impact not only on students but also on social praxis in terms of fostering new, sustainable entrepreneurs”.

Therefore, the standpoint that belongs to this new paradigm of higher education is focused on a training based on competences. In that way, as [17] explains:

The training based on competences constitutes a proposal that departs from the significant learning and is focused on comprehensive human training as essential condition of all pedagogical project; it

⁷“Lifelong learning” is used to describe a permanent education. This concept refers to a movement that expects to bring the education to all levels and human states—it wants not only to focus on adults training, but on every level of training.

*integrates the theory with the practice in different activities; it promotes the continuity between all educative levels and between them and the labour and cohabitation processes; it encourages the building of the autonomous learning, orients the training and the strengthening of the ethical life project; it looks for the entrepreneur spirit development as the base of personal growth and socioeconomic development, and it settles on the curricular organization with base in projects and problems, transcending hence the curriculum based on compartmentalized subjects.*⁸

This kind of training insists on a different teacher's role from the traditional one, because now the teacher is not the epicentre of the process, but the student—the teacher has as a role of coordinator, companion, guide, advisory and guiding, being the student the true protagonist. In that sense, according to [16], “to promote entrepreneurial awareness and mind-set, we need to move away from entrepreneurship education as being teacher-led to being more student-centred and focused on lifelong learning practices”. This brings a radical change in the teacher's pedagogical task, in the dominant mentality, in the evaluation system, etc. The reason is that, in order to get this kind of training, the teacher should generate places in his or her classes which contribute to reflection, critique, teamwork and self-training, leaving apart the master class as an only tool—an important tool, anyway.

Thus, a good strategy to support and make easier the student's self-training would be the delimitation and definition of the autonomous work in the diverse curricular design using ECTS credits.

- Therefore, we have to guide the student's work encouraging the competences training in this way:
- Focusing the learning on the students and not on the teaching or the teacher.
- Setting up the pedagogical strategies with the own students' participation.
- Guiding the student in the achievement of sources to the execution of activities suggested by the teacher.
- Orienting the students so that they can build the strategies of each competence's knowledge.
- Agreeing with the students what competences they are going to develop, considering the expectations and the social-environmental and labour requirements.

2. Objectives

If, as we have made clear, we depart from an idea in which the student is now the centre of the educational process, moving from being a passive subject in the lecture room to a much more committed student in the learning process, we can also affirm that the student is the

⁸Translated from the original text in Spanish: “La formación basada en competencias constituye una propuesta que parte del aprendizaje significativo y se orienta a la formación humana integral como condición esencial de todo proyecto pedagógico; integra la teoría con la práctica en las diversas actividades; promueve la continuidad entre todos los niveles educativos y entre estos y los procesos laborales y de convivencia; fomenta la construcción del aprendizaje autónomo, orienta la formación y el afianzamiento del proyecto ético de vida; busca el desarrollo del espíritu emprendedor como base del crecimiento personal y del desarrollo socioeconómico y fundamenta la organización curricular con base en proyectos y problemas, trascendiendo de esta manera el currículo basado en asignaturas compartimentadas.”

responsible one of his or her own help relationships with the teacher and the outdoor world, even more when the student is approaching to the latest years of the University.

Our aim with this implementation of the learning based on entrepreneurship projects pursues several purposes:

- The creation of a possible profitable business idea, so, at the same time, we pursue others objectives:
 - Bringing the business reality closer to the student.
 - Searching for creativity.
 - Encouraging teamwork.
 - Making the student emphatic with the environment.
 - Working for the ability of adaptation.
 - Introducing the student to the participation in public and private tenders.
 - Identifying the contributions that the “Learning based on Projects” introduces in the graduate’s training.
 - Identifying the specific strategies that could get the teaching-learning process better and assigning them to the ECTS credits concept.
 - Instilling in the students the responsibility and cooperation sense in a real-case scenario.
- The self-employment search.
- The improvement of the students’ personal CV in those students who are about to become graduates.
- The orientation of the students in their solvency at the time to face the job search problem.

With this method, we find a different option from the current docent assignment models. Moreover, this option is gaining popularity, circumscribed to the economic and social situation in which we are.

Reference [18] affirms that “nothing is educative per se and, at the same time; all in life is liable of promoting an educative situation”. Besides, [19] claims:

*The education is not a neutral action. Ethical values are in the reason and in the objective of the educative action. Learning is, above all, educating, training the own human being. And this is a process that is developed in a permanent way during all our lives.*⁹

For these reasons, from the conception of this research, we are going to study the education in a different way, applying the entrepreneurship principles to the degree in Advertising and Public Relation and to the degree in Audiovisual Communication.

⁹Translated from the original text in Spanish: “La educación no es una acción neutra. Los valores éticos se encuentran en la razón y el objetivo de la acción educativa. Aprender es ante todo educarse, formar el propio ser. Y este es un proceso que se desarrolla de forma permanente a lo largo de nuestras vidas.”

3. Method

Through an empirical work, we try to delimit the most relevant factors from the standpoint of the several groups that define the university context. Hence, this analysis has been carried out from a double perspective—on the one hand, from the demand perspective, that is, people who show interest in entrepreneurship; and, on the other hand, from the offer perspective, taking into account the available information and existing sources for the business creation, besides the from the Spanish translation of Research Results Transference Office (OTRI's) and the business tenders initiatives.

Therefore, we can point out two main phases in this study. First, there is a phase related to the data collection, in which in-depth interviews with students, university entrepreneurs and university teachers were conducted.

The students sample is composed by students from the Cartuja Campus in the University of Seville, and from the Jerez de la Frontera Campus in the University of Cadiz. At the same time, these samples were subdivided in encouraged students—that means: students with some previous thoughts about becoming an entrepreneur, and non-encouraged students, being interviewed 26 students in total—13 encouraged and 13 non-encouraged.

In relation to the entrepreneurs, they were graduates in Advertising and Public Relations and graduates in Audiovisual Communication from one of the two Universities that we had chosen. Besides, we interviewed several university teachers who had, as a feature, some kind of link with the business or entrepreneurship world, being interviewed six teachers in total.

Once interviews were conducted, recorded and transcribed, we systematically proceeded to collect the information of the main institutions—in Seville and Cadiz—that have programmes to encourage and promote the entrepreneurs or that give students information and personalised advice. The collection of this information was selected according to the university students' interest.

In order to analyse the collected information, and due to the use of the in-depth interview as a qualitative technique, the content analysis was used. In that way, transcribed interviews were analysed and classified according to information groups, in which answers were organised following interviewees' comments. These comments defined the final model that we propose in Section 6.

Hence, the interviewee's own verbalisations were used as qualitative data to support the idea emphasised in results.

4. Results

Obtained results were analysed taking into account three wide thematic groups that were defined according to the several themes that appear in the interviews:

- Factors that can motivate or obstruct the own business creation.

- Factors that define entrepreneur and non-entrepreneur subjects.
- The university role in the learning process for entrepreneurs.

The main obtained results were the following.

4.1. University students' interviews

We depart from the huge difference between students in relation to the information about entrepreneurship, grants or tenders that they have. And we also depart from the fact that students, on their own, have low entrepreneurship attitude—besides, this is increased in humanistic degrees.

4.1.1. Factors that help become an entrepreneur

In that sense, which are the factors that stimulate the fact of becoming an entrepreneur? Many factors can favour the student's intention of creating his or her own business.

Between psychological factors, we can underline the following:

- Having the “entrepreneur's spirit”: Students who see themselves as entrepreneurs comment that this is something that it is written on their daily task, on the way of organising and focusing everything that surrounded them. In the same way, non-entrepreneurs seem that they attribute this spirit to a character or a certain personality.
- Self-fulfilment desire: Students consider that subjects who actually have a project and who link themselves to it as a personal development project are the subjects that will find the motivation to become entrepreneurs.
- Possible appearance of an idea.
- Independence and being their own bosses sensation.

Between the sociocultural factors, we can point:

- Job searching.
- Familiar tradition.

4.1.2. Factors that complicate becoming an entrepreneur

Like the last case, factors that prevent students from becoming entrepreneurs are several kinds of factors.

Psychological:

- A fear of taking risks—economic, personal, or social risks-.
- A self-perception of immaturity and lack of qualification and experience.

Sociocultural and institutional:

- Economic problems and the inability of getting the necessary initial funding.
- Excessive bureaucracy.

4.1.3. The entrepreneur's and non-entrepreneur's profile

The psychological aspects of the personal profile of both, the entrepreneur and non-entrepreneur, have been emphasised. On the one hand, the creative and independent personality, besides the individuals' business spirit, strengthens that entrepreneur's profile. From a social point of view, three relevant elements are perceived regarding the role that the entrepreneur executes in the current society:

- Social sacrifice.
- Generation of wealth.
- Social advance.

In addition, from a general perspective, an allusion to the entrepreneur's training or experience is made. As an entrepreneur's feature, it is appreciated his or her ability to face unstructured situations and, even, it is appreciated a preference for the dynamism and changes for getting away from the monotony. This tendency is observed in motivated students, and its cultivation during their stay in the university will make easier their future entrepreneur task.

However, on the other hand, we also analyse and observe the non-entrepreneur's profile. That is because the students pointed out, basically, psychological factors inside of another kind of factors. In that way, students, basing on the lack of creativity between other features, noted that the non-entrepreneur is associated to certain personality characteristics or to innate, static, and passive elements.

4.1.4. The university's role in the training of entrepreneurs

We also collected students' opinions about the business projects proposed by teachers in several subjects related to entrepreneurship and business creation. In that sense, we need to highlight that encouraged students clearly show a bigger knowledge than non-encouraged students.

In a psychological level, the only factor that we have found is the university's role as a motivation source when there are classes or informative talks, or when business projects are suggested as an evaluation method.

In a sociocultural level, we can emphasise the lack of coherent, responsible, and ethical models to follow. Students bring up the necessity of sessions that are more informative and, above all, specific training about the creation of a business as a real project. The opening of a student attention service also was suggested by the students; that is, a place where entrepreneur initiatives demanded by university students can be strengthened.

4.2. Entrepreneur's interviews

4.2.1. Factors that help the entrepreneurship

The entrepreneurs interviewed stressed the business idea as the basic motor. From a psychological point of view, entrepreneurs who were consulted commented as the main element the

knowledge and work experience before the creation and launch of a business. Nevertheless, it is interesting that a certain number of entrepreneurs who did not have any work experience considered the possibility of the entrepreneurship due to internal and innate motivations.

From a sociocultural focus, entrepreneurs point out the Spanish current labour situation and the models and familiar values as elements that can favour the appearance of new entrepreneurs. Besides, they emphasise that in the first moments the institutions role is essential.

4.2.2. Factors that complicate the entrepreneurship

The barriers that prospective entrepreneurs find are, basically, institutional barriers. Entrepreneurs complained about the initial problems that they find when they want to develop their idea, as the lack of funding, the lack of reliable information sources, or the excessive bureaucracy in the moment of the business launch—with the resulting lack of time and efforts.

4.2.3. The entrepreneur's and non-entrepreneur's profile

When the own entrepreneurs were asked which ones of their main features were more suitable to define them and distinguish them from non-entrepreneurs individual, they suggest psychological features: projects implication, entrepreneurship attitudes, creativity, ambition, labour ability, decision-making attitude, autonomy, etc.

In relation to non-entrepreneurs' features, the most used terms were “stereotypical employee”, “conformity”, “low efficiency”, “passivity”, etc.

4.2.4. The university's role in the training of entrepreneurs

In a psychological level, some of the more repeated comments were “the university should promote more conferences, activities, or seminars” or even “the student should be guided from the university”.

At an institutional level, the interviewees commented the university's role from a positive point of view, through the diverse foundations that link the university with the business, making easy to get the contact with other institutions. However, they also criticized the university when they were referring to it saying that “sometimes it is excessively theoretical, there is a lack of real world”.

4.3. University teachers' interviews

4.3.1. Factors that help become an entrepreneur

Between the psychological factors that incite to be an entrepreneur, from the university teachers' perspective, it is highlighted in the interviews the existence of an internal motivation, a personal necessity, an inquisitiveness, or a familiar heritage. Other elements that encourage the entrepreneurship were sociocultural ones, more than other kind of elements:

- Economic-labour necessity.
- Favourable familiar environment.
- Business contacts that encourage the creation of a business idea.

4.3.2. Factors that complicate becoming an entrepreneur

As barriers or obstacles that complicate the entrepreneurship, the university teachers who were interviewed mentioned:

- Politicization of institutions.
- Non-entrepreneur's passive profile.
- Uncertainty and fear of risk.

4.3.3. The entrepreneur's and non-entrepreneur's profile

In relation to what aspects distinguish an entrepreneur from a non-entrepreneur individual, the following were pointed out from the psychological point of view:

- Entrepreneur spirit vs. non-entrepreneur spirit.
- Enthusiasm vs. passivity.
- Excitement vs. pusillanimity.
- Observation ability vs. observation inability.

4.3.4. The university's role in the training of entrepreneurs

In general, these university teachers noticed a lack of information about entrepreneurship in their universities. They were convinced that the student would consider being an entrepreneur as a real option if he or she received more motivation for that from the class. In this line, they subsequently talked about an ideal education model in which the entrepreneurship is taken into account as a job opportunity, encouraging student's entrepreneurship abilities.

Nevertheless, the university teachers also valued and were aware of the emerging tasks related to entrepreneurship that are carrying out several Spanish universities.

5. Discussion and conclusion

This research helped us to define the scarcity and the improvements in relation with entrepreneurship in both campuses of these Spanish universities. With in-depth interviews we could be aware of the importance of the university's role in providing entrepreneurial education to the students; not only to those who already have the "entrepreneur's spirit", but also to those who do not know yet what to do after finishing their university studies. Therefore, entrepreneurship is a job alternative that needs to be encouraged at the University.

From a general perspective, the most relevant and repeated factors that can motivate the own business creation were the internal motivation of the subject, a favourable familiar environment and the Spanish current economic situation. On the other hand, the most powerful factors that obstruct becoming an entrepreneur were the fear of taking risks and, above all, the initial barriers—economic and bureaucratic—that the entrepreneur can face when dealing

with institutions. The university can intercede in these circumstances, in the first place, by encouraging the “entrepreneur’s spirit” of students through an educational model centred on the students, and, in the second place, by providing them support so that they can easily face the bureaucratic obstacles.

Besides, results also show that the entrepreneur is a well-considered person in the society, always related to creativity and ambition, just the opposite of the non-entrepreneur person, who is seen as a passive and conformist individual. In that sense, the university has to take advantage of that thinking adapting the commented entrepreneur’s characteristics to the objectives to reach in subjects. In that way, even if students do not consider themselves to carry the “entrepreneur’s spirit”, at least they see themselves with the ability of searching new solutions to same problems.

Finally, in relation to the university’s role in the training of entrepreneurs, it is clear that all groups that were interviewed agreed with the need of more activities focused on the entrepreneurship, as informative talks or projects about creating your own business. At this point, the pressing needs of carrying out entrepreneurship projects in the bosom of the university are confirmed, introducing new focus on the subjects, new ways of teaching, and new places where the student can be informed and oriented.

In general, the growing consciousness about entrepreneurship can be highlighted from this study. People are looking at the option of becoming an entrepreneur as a real job opportunity. Besides, it can be appreciated that this fact is mostly encouraged by the current Spanish economic context, in which graduates are having their expectations of working in something related to their field frustrated. Thus, the university’s role is essential. The university needs to set methods of teaching focused on students, trying to make them discover the potential of their entrepreneur’s abilities. Moreover, there are certain competences that students normally relate to the entrepreneur—as it has been observed in the study—and these competences can be learned and developed at the university, as a useful tool in their daily life.

As a result of this study, fruit of the *II Plan Propio de Docencia de la Universidad de Sevilla*¹⁰ and done in collaboration with a call of *Proyectos de Innovación Docente de la Universidad de Cádiz*,¹¹ we find ourselves deep into the creation of an office of entrepreneur’s attention. It is being established in the Campus Cartuja of the University of Seville and in the Campus Jerez of the University of Cadiz. This project, which is currently in the height of its development, has had a specific funding in order to support the entrepreneur through:

- Organisation of conferences and seminars.
- Creation of a prize to the best business idea.
- Tutorship of a business project.
- Bureaucracy information for the business launch.

¹⁰II Own Plan of University Teaching of the University of Seville.

¹¹Projects of University Teaching Innovation of the University of Cadiz.

Because supporting the entrepreneur implies wealth generation in both an economic and social sense, and, in a labour environment of uncertainty as the one in which we are currently involved, the researchers of this project firmly believe in the power of business creation as both: personal self-fulfilment and job generation and social and community welfare.

Author details

Gloria Jiménez-Marín^{1*}, Rodrigo Elías Zambrano² and Elena Bellido-Pérez¹

*Address all correspondence to: gloria_jimenez@us.es

1 University of Seville, Seville, Spain

2 University of Cadiz, Cádiz, Spain

References

- [1] Beyhan B, Findik D. Student and graduate entrepreneurship: Ambidextrous universities create more nascent entrepreneurs. *Journal of Technology Transfer*. 2017;[**Online First**]:1-29. DOI: 10.1007/s10961-017-9590-z
- [2] Castro OAP, Arias CLR, Ibáñez JEJ, Bulla FJM. Universities fostering business development: The role of education in entrepreneurship. In: Information Resources Management Association, editor. *Entrepreneurship: Concepts, Methodologies, Tools, and Applications*. Hershey: IGI Global; 2017. p. 466-496. DOI: 10.4018/978-1-5225-1923-2
- [3] Gallardo-Vázquez D, Pajuelo-Moreno ML. How Spanish universities are promoting entrepreneurship through your own lines of teaching and research. In: Information Resources Management Association, editor. *Entrepreneurship: Concepts, Methodologies, Tools, and Applications*. Hershey: IGI Global; 2017. p. 1344-1368. DOI: 10.4018/978-1-5225-1923-2
- [4] Miranda FJ, Chamorro-Mera A, Rubio S. Academic entrepreneurship in Spanish universities: An analysis of the determinants of entrepreneurial intention. *European Research on Management and Business Economics*. 2017;**23**(3):113-122. DOI: 10.1016/j.iedeen.2017.01.001
- [5] Roach M. Encouraging entrepreneurship in university labs: Research activities, research outputs, and early doctorate careers. *PLoS One*. 2017;**12**(2):e0170444. DOI: 10.1371/journal.pone.0170444
- [6] Eurobarometer. *Entrepreneurship in the EU and Beyond*. Analytical Report [Internet]. 2009. Available from: http://www.data.europa.eu/euodp/data/dataset/S765_283 [Accessed: 2017-07-06]
- [7] Roman T, Maxim A. National culture and higher education as pre-determining factors of student entrepreneurship. *Studies in Higher Education*. 2017;**42**(6):993-1014. DOI: 10.1080/03075079.2015.1074671

- [8] Pleitner HJ. Entrepreneurship- fashion or driving force? In: Genescá E, Urbano D, Cabelleras JL, Guallarte C, Vergés J, editors. Creación de Empresas. Entrepreneurship. Homenaje al Profesor José María Veciana Vergés. Bellaterra: Universitat Autònoma de Barcelona; 2003. p. 33-47
- [9] Cuervo A. La creación empresarial. De empresarios a directivos. In: Genescá E, Urbano D, Cabelleras JL, Guallarte C, Vergés J, editors. Creación de Empresas. Entrepreneurship. Homenaje al Profesor Jose María Veciana Vergés. Bellaterra: Universitat Autònoma de Barcelona; 2003. p. 49-73
- [10] Jiménez-Marín G, Silva Robles C, Elías Zambrano R. Docencia universitaria y proyectos de evaluación aplicados. El emprendimiento como modelo de evaluación y aprendizaje. In: Rodríguez Terceño J, editor. Nuevas Perspectivas Modales Para la Enseñanza Superior. Visión Libros: Madrid; 2014. p. 77-94
- [11] Dalmau JI, Alonso JL, Colomer J. Programa IDEAS. In: Un Modelo de Éxito Para Fomentar la Creación de Empresas Desde las Universidades. Valencia: Universidad Politécnica de Valencia; 2003
- [12] Gerver R. Creando hoy las Escuelas del Mañana: La Educación y el Futuro de Nuestros Hijos. Madrid: SM; 2010. p. 176
- [13] Robinson KR. El blog de Eduard Punset [Internet]. 2011. Available from: <http://www.redesparalaciencia.com/wp-content/uploads/2011/03/entrev87.pdf> [Accessed: Jul 6, 2017]
- [14] Robinson K. The Element: How Finding Your Passion Changes Everything. Grijalbo: Barcelona; 2009. p. 288
- [15] Viinikainen J, Heineck G, Böckerman P, Hintsanen M, Raitakari O, Pehkonen J. Born entrepreneurs? Adolescents' personality characteristics and entrepreneurship in adulthood. *Journal of Business Venturing Insights*. 2017;8:9-12. DOI: 10.1016/J.JBVI.2017.05.001
- [16] Robinson S, Neergaard H, Tanggaard L, Krueger N. New horizons in entrepreneurship: From teacher-led to student-centered learning. *Education and Training*. 2016;58(7-8): 661-683. DOI: 10.108/ET-03-2016-0048
- [17] Sáenz Garza M, Zambrano Chávez N, Torres Muñoz O, Pereyra Luna M, Hernández Contreras E. Sistematización de la enseñanza: formación basada en competencias [Internet]. 2008. Available from: <http://www.slideshare.net/guest7be72d/formacin-basada-en-competencias-447490> [Accessed: Jul 6, 2017]
- [18] Lagardera F. Sobre aquello que puede educar la Educación Física. *Revista Interuniversitaria de Formación del Profesorado*. 1992;15:55-72
- [19] Duart JM. Aprender en la Virtualidad. Gedisa: Barcelona; 2000