



Research Article

© 2022 Paños-Castro et al.
This is an open access article licensed under the Creative Commons
Attribution-NonCommercial 4.0 International License
(<https://creativecommons.org/licenses/by-nc/4.0/>)

Received: 25 August 2022 / Accepted: 2 November 2022 / Published: 5 November 2022

A Case Study of Entrepreneurial Intent Among Students of the Primary Education Degree in the Basque Country and the Performance of Education Faculties

Jessica Paños-Castro¹

María José Bezanilla¹

Leire Markuerkiaga²

¹University of Deusto,
Bizkaia, Spain

²Mondragon Unibertsitatea,
Gipuzkoa, Spain

DOI: <https://doi.org/10.36941/jesr-2022-0165>

Abstract

Entrepreneurship is a key competence for anyone intending to be an active citizen and obtain employment. Entrepreneurial education is therefore essential at all levels of education and in every field, not only in business and/or engineering. The aims of this study are: to assess the entrepreneurial intent of students in the final years of the Primary Education degree in the Basque Country; to analyze the factors that influence and hinder these students' development of entrepreneurial intent in their faculties; and to identify actions for improvement. An online questionnaire consisting of 31 questions was used. The participating sample consisted of students in the final years of the Primary Education degree in the Basque Country, Spain. A total of 168 subjects responded to the questionnaire. After conducting reliability and validity tests, the data indicated that the average intention to start a business after completing their studies was 3.47/10. The majority focused on taking a civil-service examination for a job, becoming employees and/or continuing their education, as a sign of their vocation for children, lack of training in entrepreneurial skills and their aspiration to have better working conditions, among others. Faculties of education often fail to encourage entrepreneurship among their students, highlighting these the lack of internationalization, absence of information about entrepreneurship public and private programs and infrastructures, and nonparticipation in entrepreneurship extra-curricular programs and research. However, faculties of education excel in active methodologies, social engagement, and the use of educational resources.

Keywords: entrepreneurship; primary education; entrepreneurial intent; entrepreneurship education; entrepreneurial university

1. Introduction

In November 2021, the youth unemployment rate in Spain stood at 29.2%, the second highest in Europe after Greece, and well above the euro area average (15.5%). The welfare state is now at risk after the last global economic crises (Ibáñez-Cubillas and Gijón, 2021). Youth unemployment in Spain

reached its highest peak in 2013, when more than half of the population (55.5%) were unemployed (National Institute of Statistics, n.d.). A viable solution to address high unemployment rates and generate employment is to promote self-employment and entrepreneurship among young people (Manso and Thoilliez, 2015; Afonso and da Silva, 2019; Ibáñez-Cubillas and Gijón, 2021), although ideally the driving force of entrepreneurship should be to contribute to the economic growth of the region rather than to the financial need to survive (Reyes, 2012). While the state has traditionally been responsible for promoting employment, it has been overwhelmed, and universities can therefore provide much-needed support (Cardozo et al., 2021).

In today's increasingly demanding labor market, it is important to develop knowledge, skills, and differentiating abilities, including the entrepreneurial competence. It is clear that entrepreneurship is a key competence for every citizen of the 21st century, as well as being essential for the development of lifelong learning (Prendes et al., 2020).

Entrepreneurship has multiple meanings. Whereas the term is especially associated with a person starting a business, it can also be related to anyone who decides to carry out a project, whether or not it serves an economic purpose (Formichella, 2004), or it can even be referred to a certain behavior, style, or way of life (Ibáñez-Cubillas and Gijón, 2021). This requires initiative, innovation, and a positive attitude towards change, among others (Manso and Thoilliez, 2015). However, defining entrepreneurship is not an easy task, simply because there is no consensus among academics (GHK, 2011). Entrepreneurship is a broad competence that includes others. A study carried out by Ibáñez-Cubillas and Gijón (2021) identified the 10 most important competences that all future teachers should acquire during their training: resource management, project management, innovation, creativity, risk-taking, problem-solving, decision-making, communication, collaboration, and teamwork.

According to Fernández de Lucio et al. (2000), there are 5 types of universities: academic (mainly oriented towards teaching), classical (combine teaching activities with research), social (play an active role in the discussion and resolution of society's problems), business (knowledge is disseminated through teaching, and through scientific and business channels), and entrepreneurial (use knowledge as potential for meeting the objectives of its socio-economic environment). Globalization requires universities to renew, adapt and change in order to meet social demands. In short, it requires an entrepreneurial perspective and attitude, and therefore, entrepreneurial competences should be developed in the different university courses (Sánchez-García and Hernández-Sánchez, 2018). However, "by their nature, universities are not known for having an overly entrepreneurial and innovative focus" (Torres et al., 2018, p.2).

Universities are facing complex times in a scenario of change and a globalized, competitive environment with great challenges which include shrinking budgets and striving through rankings, among others. Higher education institutions must meet the demands of the 21st century, and in addition to engaging in their classic functions related to the training of human resources and the dissemination of knowledge, they must perform research roles and entrepreneurial initiatives (Camacho, 2007). This phenomenon is also known as the "third mission" (Etzkowitz, 1990; Etzkowitz and Leydesdorff, 2000).

Intent is a psychological state in which one expresses willingness and motivation towards a particular goal (Awwad and Al-Aseer, 2021). Individual entrepreneurial intent has therefore been defined as a conviction to set up a new business venture and consciously plan to do so at some point in time. That time in the future may be imminent or indeterminate and may never be reached. Some individuals with entrepreneurial intent may never start a new business, as a number of personal circumstances and environmental factors may prevent them from doing so (Thompson, 2009).

1.1 Entrepreneurial education within the education system

Entrepreneurship education emerged first in American universities and has gradually been transferred to Europe (Nuñez, 2015). The first courses on entrepreneurship were offered at Harvard in 1945 to stimulate the US economy after the war (Mitra and Manimala, 2008). However, authors such as Katz

(2003) and Kuratko (2005) have argued that the first courses on entrepreneurship took place during the 1970s in Californian universities. Since then, the focus has been on entrepreneurial education at all levels, from primary school to university. This was first enacted in Spain by Organic Law on Education (Jefatura del Estado, 2006) through to the current Organic Law LOMLOE (Jefatura del Estado, 2020). In the autonomous region of the Basque Country, Spain, experts have argued that there are insufficient initiatives aimed at raising awareness of entrepreneurship in the university education system (Basque Government, 2013). In this regard, the objectives of Law 16/2012, on Support for Entrepreneurs and Small Businesses in the Basque Country (Boletín Oficial del Estado, 2012) included incorporating in the curricula skills and abilities aimed at innovation, the promotion of creativity, entrepreneurship and the entrepreneurial spirit; strengthening the connections between universities and businesses; and the interaction of entrepreneurial culture with society as a whole. The 2019-2022 University System Plan approved by the Basque Government (2019) also proposed developing entrepreneurship programs, boosting resources to improve the employability of graduates, promoting University&Business classrooms, and promoting new business initiatives, among others.

Within a narrow definition of entrepreneurship education, the aim is to encourage young people to start their own business, while a broader definition equates entrepreneurship education with the general skills that all students should learn (Fejes et al., 2019). As the 2016 Eurydice report indicated, entrepreneurship education is not only constrained to the context of work and entrepreneurship, but is completed by an individual's life (European Commission/EACEA/Eurydice, 2016). Along the same lines, Wibawo et al. (2018) pointed out the need to build interdisciplinary approaches, not focusing exclusively on training to set up businesses, but making entrepreneurship education accessible to all students.

According to Reyes (2012), entrepreneurship education has multiple benefits. For example, developing an entrepreneurial culture to foster economic growth and contribute to create employment; changing entrepreneurial attitudes and intents; generating better opportunities for professional and career development; stimulating entrepreneurial skills to produce new entrepreneurs; and preparing students for an ever-changing employment market.

Kuratko (2005), Tehseen and Haider (2021), and Pittaway and Edwards (2012) have all stressed the need to transfer the discipline of entrepreneurship to all degrees and faculties, as the attributes and competences of entrepreneurship are useful in all plans for personal fulfillment. Unfortunately, entrepreneurship has mostly been incorporated into courses related to economics and business, and to a lesser extent, into degrees in other fields of knowledge (Fuentes, 2018; Altan, 2015; European Commission, 2008). Thus, the teaching of entrepreneurship should be a multidisciplinary, intradisciplinary and transdisciplinary subject (Gibb, 1993) and not be limited exclusively to the field of business (Torres et al., 2018; Martínez et al., 2016).

Until the 1990s, entrepreneurship was pigeonholed in business studies curricula or business schools (Goddard et al., 2013). Thanks to British influence, entrepreneurship made its way into other studies (Nuñez and Nuñez, 2018), although unfortunately entrepreneurship and entrepreneurship education are still largely tied to business and engineering faculties (Mwasalwiba, 2010). In other words, "entrepreneurship education should not be exclusively reserved for economics or business students but should be offered to all students" (Sánchez et al., 2011, p.21). This needs to change, and it is crucial that all universities provide entrepreneurship as a career option (Afonso and da Silva, 2019) and they adopt a broad and inclusive approach, rather than an exclusively economics-based one (Goddard et al., 2013). It is therefore important to incorporate subjects on entrepreneurship into the curricula, as well as other types of non-formal training, such as lectures, courses, seminars, optional subjects, etc. (Sánchez et al., 2011). However, as Neck and Greene (2011) argued, if this education is neither linear nor predictable, this will not automatically help someone to display entrepreneurial behaviors.

Technical students often produce good ideas that are not taken into account because they have not been taught to champion, question, or develop their ideas (Hynes, 1996). In a study by Lloja et al. (2021) on entrepreneurial intent in different academic faculties (Health, Education, Tourism and Hospitality, Engineering and Architecture, and Economics and Business Administration), the

students with the strongest interest in entrepreneurship were surprisingly those enrolled in the Faculty of Tourism and Hospitality, with a total of 53.3%. As Roberts (2012) argued, musicians, dancers, and visual artists are as capable of learning accounting as business students. Tehseen and Haider (2021) noted that not every student has the same level of interest in becoming an entrepreneur, as this depends on the degree they decided to pursue and their life plans and goals.

Following the governments Entrepreneurial Nation Strategy (Gobierno de España, 2021), all Spanish universities must provide education in entrepreneurial skills, provide a compulsory university subject on entrepreneurship and business creation in all degrees, promote the Master's degree in Innovative Entrepreneurship, and set up entrepreneurship centers, foster an entrepreneurship culture and business creation at the university, business chairs, and encouraging university spin-outs. Moreover, the Spanish government had already suggested in 2012 the need to provide incentives for university students to combine their education with self-employment.

There is an undeniable need for training in entrepreneurial skills: "we urge the institutions involved to (...) encourage both the creation of social networks for entrepreneurship and the training of teachers at all educational stages (...), since the training of future entrepreneurs is crucially linked to the capacity and knowledge that their teachers possess as a fundamental human component of the complex entrepreneurial ecosystem". (De la Torre Cruz et al., 2016, p.141). In fact, personal skills are not enough for entrepreneurship, but other external factors are needed, such as entrepreneurship-related workshops, courses, seminars, lectures, or activities offered by universities (Lloja et al., 2021).

Article 5 of Spanish Law 14/2013, of 27 September, on Support for Entrepreneurs and their Internationalization, on Entrepreneurship in university education, states that there is a need to promote entrepreneurship among young university students. In particular, as far as faculties of education are concerned, "training of trainers has a leading role and entrepreneurship training should be included in the curricula of teacher training faculties, as well as in the Master's degrees for secondary school teachers" (Jefatura del Estado, 2013, p.81). Unfortunately, since the teaching profession is a regulated profession and therefore, the Ministry of Education and Science (2007; 2015) regulates educational planning, "there seem to be no specific entrepreneurship education subjects in the different initial teacher training pathways" (p.34). In the same vein, the European Commission (2008) argued that entrepreneurship education is not yet sufficiently integrated into the curricula of higher education institutions, and it is largely focused on business and economics courses mainly in Spain and the UK. In fact, 55% of entrepreneurship courses are offered within business and economics programs, compared to 21% in technology and 19% in social studies (European Commission, 2008). Only Estonia, Latvia and Finland recommend that prospective primary and secondary school teachers receive an introduction to entrepreneurship education during their initial training (European Commission/EACEA/Eurydice, 2016; Rico et al., 2017).

According to the Observatory of Entrepreneurship in Spain (2021), entrepreneurial education and training continue to be a pending issue. Following its recommendations, it has been proposed to provide a substantial number of high-quality business start-up programs, and to review the contents of business start-up training programs so that they not only include aspects linked to business operations, but also cover business management in digital contexts.

Therefore, the main objective of this study is to assess the entrepreneurial intent of students in the final years of the Primary Education degree in the Basque Country as a work option once they have completed their university degree.

The specific objectives were:

- 1) To analyze the factors that have both influenced and hindered the development of entrepreneurial intent on the part of the faculties of education.
- 2) To analyze whether there are significant differences between men and women, and by type of studies in relation to the factors that make up the Entrepreneurial University from the students' perspective.
- 3) To identify improvement actions for faculties of education regarding the development of entrepreneurship.

2. Methodology

2.1 Instrument

The Qualtrics tool was used to administer an online questionnaire. The questionnaire contained 31 questions. The first five questions referred to the context variables (gender, age, Erasmus program participation, university and subject(s) studied). The remaining questions corresponded to the dimensions of entrepreneurial intent, the legal and administrative context, entrepreneurship training for faculty employees, inclusion of professionals from business or organization in the development and delivery of the curriculum, mission and strategy, entrepreneurship training and research, extracurricular training in entrepreneurship, active methodologies and internationalization, resulting from the UEB2 model for the analysis of the Entrepreneurial University (Errasti et al., 2018). There were two qualitative questions on entrepreneurial intent, and short-term employment and training plans. The remaining questions were rated on an 11-point Likert-type scale (from 0 to 10), as they represent the decimal system and therefore they are more intuitive for and familiar to respondents, and considerably improve the sensitivity of the instrument (Bisquerra and Perez-Escoda, 2015). The exception were two optional multiple-choice questions with several responses available.

The validity of the instrument was established through content validity, since it was based on an instrument that had been already validated by the literature in order to ensure the best representativeness of the items (López-Fernández et al., 2019).

Table 1 below shows that the test had excellent internal consistency (0.915) (George and Mallery, 2003). The corrected item-total correlation was greater than 0 and no items were removed, as Cronbach's alpha would barely increase by 0.01. The dimensions of the questionnaire were also acceptable (George and Mallery, 2003).

Table 1: Cronbach's alpha reliability statistics

Dimensions	Cronbach's alpha
General	.915
Legal and administrative context	.781
Training in entrepreneurship for faculty employees	.803
Inclusion of professionals from business or organizations in the development and delivery of the curriculum	.809
Mission and strategy	.785
Training and research in entrepreneurship	.788
Extracurricular training in entrepreneurship	.793
Active Methodologies	.813
Internationalization	.847

A split-half approach to factor analysis was used to determine the reliability coefficient of the instrument (see Table 2). The Spearman-Brown coefficient was 0.798, as the items were of unequal length, and therefore, the results obtained from the split-half method pointed to good reliability.

Table 2: Reliability statistics from the split-half approach

Cronbach's alpha	Part 1	Value	.879
		N of elements	12 ^a
	Part 2	Value	.856
		N of elements	11 ^b
Total N of elements			23
Inter-form correlation			.664
Spearman-Brown coefficient	Equal length		.798
	Unequal length		.798
Guttman Split-half Coefficient			.797

As can be seen in Figure 1, there were 4 outliers outside the box, but none of them were extreme outliers, so it was decided not to remove them.

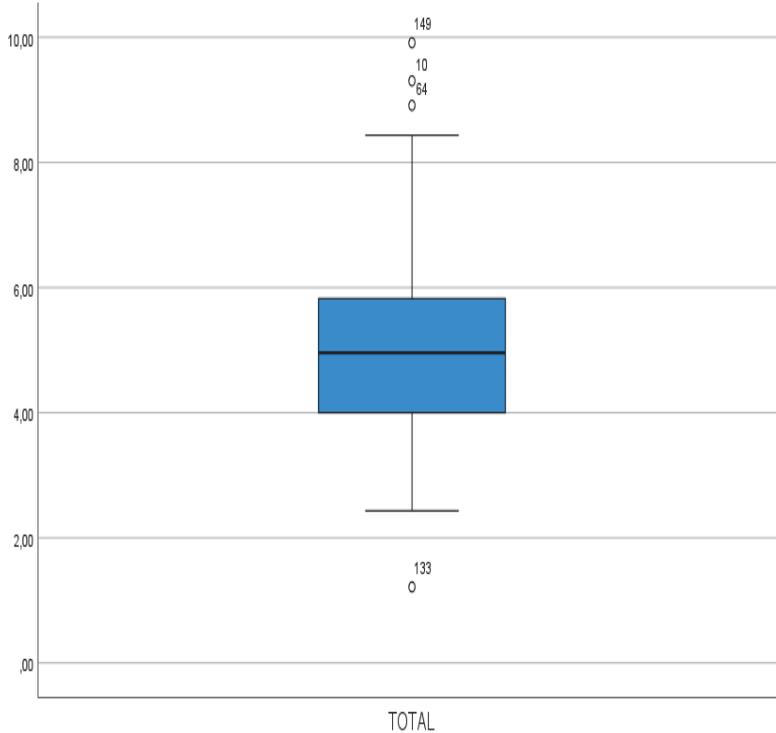


Figure 1: Analysis of outliers

2.2 Sample

The participating sample consisted of students in the final years (4th and 5th year) of the Primary Education degree in the Basque Country, Spain. They were students from the following universities: University of Deusto, Mondragon Unibertsitatea, Begoñako Andra Mari, and the University of the Basque Country. The total population was 1087 subjects: 167 students from the University of Deusto, 260 from Mondragon Unibertsitatea, 140 from Begoñako Andra Mari and 520 from the University of the Basque Country. Nonprobabilistic convenience sampling was used.

2.3 Procedure

The heads of the degree courses (coordinators and deans) were contacted directly to ask them to send the questionnaire to their students. Data collection started on 10 March 2022 and ended on 26 April 2022, after two reminders. In total, 168 students (15.45%) answered the questionnaire.

Ethical principles were followed regarding informing participants about the purpose of the research, its voluntary nature, and the confidentiality and anonymity of responses.

After completing the data collection, statistical analyses were carried out using SPSS Statistics and Atlas.ti software.

3. Results

3.1 General data

Of the 168 subjects who responded to the questionnaire, 64.3% were women and 35.7% were men. A small percentage (17.3%) participated in the Erasmus program during their degree. The highest percentage of students were from the University of Deusto (73.8%), followed by Mondragon Unibertsitatea (10.7%), University of the Basque Country (8.9%) and Begoñako Andra Mari (6.6%). Regarding their course of study, 52.1% were pursuing a degree in Primary Education, 42.4% a double degree in Primary Education and Physical Activity and Sport Sciences, and the remaining 5.5% a double degree in Primary Education and Early Childhood Education.

3.2 Entrepreneurial intent and short-term employment and/or further education plans

The qualitative questions were analyzed using Atlas.ti. following an inductive analysis approach, i.e., the codes, categories and subcategories were not previously defined, but were constructed from the interpretation of the data (see Table 3). Only two people indicated that they would like to become entrepreneurs (they had the highest score on the scale, that is, 10). The vast majority of the subjects indicated that being an entrepreneur was not among their career options. In fact, the average for the group as a whole was 3.47 out of 10.

The reasons why participants were not entrepreneurial were diverse. Some clearly saw themselves as teachers because they were passionate about working with children, or preferred to work as an employee or take a competitive examination to become public servants because working conditions were better. They also pointed to the lack of attitudes and training to be able to start their own business venture. Some of them still wanted to further their education in the short term.

Some subjects interestingly claimed that it is impossible to be an entrepreneur in education, or only linked being entrepreneurial to setting up a school. Participants pointed out that the entrepreneurial process involves a strong workload, stress, time, effort, responsibility, sacrifice, energy, risk, complexity, and job instability.

As far as the financial sphere is concerned, some subjects highlighted a number of issues: that self-employed people in Spain pay a high level of contributions to the social security system, the unfavorable economic situation in Spain at present, the lack of financial resources and public support, and precariousness employment, especially during the first years of setting up a business. Other reasons included dislike of, disinterest in, lack of motivation about, and fear of embarking on an entrepreneurial adventure.

Those who did not rule out entrepreneurship were interested in creating their own business and generating employment and capital; if they were unable to find another job, they would do it out of necessity. Others believed that they had the necessary skills to start a business, including leadership, initiative, self-determination, motivation, self-confidence, management, and passion.

Finally, some participants entertained the possibility of being entrepreneurs in order to be able to meet social needs, such as professional experience, a career change, and intrapreneurship within their own organization.

The students had various different short-term employment and/or education plans: pursuing another degree such as Infant Education or Psychology; studying a Master's degree, languages or another specialization; taking a competitive examination; to doing supply teaching; working abroad; working; pursuing education further and working at the same time; continuing their education while preparing for a competitive examination; travelling; setting up their own company (two students); and one student had not yet decided.

Table 3: Categories and codes on entrepreneurial intent

CATEGORIES	SUBCATEGORIES	CODES
Reasons for not being an entrepreneur	Education	Fondness for children Public education School Lack of attitudes Lack of training Lifelong education Teaching vocation Being employed Working conditions Difficulty in setting up a school Entrepreneurship impossible within education
	Entrepreneurial process	Workload Stress Time and effort Job instability Responsibility Complexity Sacrifice Energy Risk Obstacles
	Financial	High social security contribution for self-employed people Current unfavorable situation Lack of financial resources Poor financial support Precarious employment Difficulties faced by the self-employed
	Others	Dislike Disinterest Lack of motivation Fear Poor job prospects Unfeasible
Reasons for being entrepreneurial	Financial	Job opportunities Own business Generating employment and capital Entrepreneurship out of necessity
	Entrepreneurial competences	Leadership Initiative Self-determination Motivation Putting competences into practice Self-confidence Management Passion
	Others	Meeting existing needs Experience Experimentation Intrapreneurship Career change

3.3 Entrepreneurial University Factors

3.3.1 General descriptors (with all participants):

As can be seen in Table 4, the lowest items corresponded to the internationalization dimension, and the highest to the diversity of educational resources used (8.45), the importance of social commitment (7.99) and the development of entrepreneurial competences as part of a degree across

different subjects (7.37). It is remarkable that the overall average for all variables was below 5 (4.98).

Table 4: General descriptors of the full sample

Dimension	Variables	Mean	Median	Deviation	Variance
Legal and administrative	My university has informed me about existing public and private programs to promote entrepreneurship	4.33	4.00	2.566	6.583
	My university has informed me of the infrastructures (incubators, business and innovation centers, technology parks, associations, services...) available for the development of entrepreneurship.	3.65	3.00	2.2224	4.946
Training in entrepreneurship for Faculty employees	The teachers that I have had and the ones I have this year have skills in entrepreneurship	5.66	6.00	2.326	5.411
	The teachers that I have had and the ones I have this year have an educational background in applied research	6.93	7.00	2.146	4.606
	The teachers I have had and the ones I have this year have an educational background in creating spin-outs	5.07	6.00	2.414	5.827
Involvement of professionals from the world of business or other organizations in the development and delivery of the curriculum	In my undergraduate degree I have had teachers who had other jobs outside the university	6.83	7.00	2.365	5.593
	In my undergraduate degree, professionals from the world of work have been invited from time to time to give a guest lecture	5.81	6.00	2.918	8.514
Mission and strategy	My faculty attaches importance to entrepreneurship and includes this concept in its mission statement	5.42	6.00	2.584	6.677
	My university gives importance to entrepreneurship and includes this concept in its mission and in its strategic plan	5.39	6.00	2.642	6.981
	My faculty attaches importance to social commitment	7.99	8.00	2.237	5.006
Education and research in entrepreneurship	I have developed the different entrepreneurial competences in my undergraduate degree across different subjects	7.37	8.00	2.446	5.983
	My university has informed me of the extracurricular programs on entrepreneurship that my faculty/university offers	5.83	6.00	2.564	6.575
	I have participated in some extracurricular entrepreneurship programs	2.96	1.00	2.836	8.040
	I have conducted some entrepreneurship-related research	2.95	1.00	2.760	7.620
Extracurricular training in entrepreneurship	I have participated in courses or workshops on entrepreneurship awareness at my university/faculty	2.98	1.00	2.825	7.982
	I have participated in courses or workshops on identifying opportunities for entrepreneurship at my university/faculty	3.11	1.50	2.721	7.406
	I have participated in courses or workshops on business plan development at my university/faculty	2.77	1.00	2.519	6.347
	I have participated in a course or workshop on launching spin-outs at my university/faculty	2.21	1.00	2.138	4.573
Active methodologies	Teachers have used active methodologies	7.82	8.00	2.210	4.882
	When I did my curricular internships, my tutors at the school were people with an entrepreneurial spirit	6.89	7.00	2.715	7.370
	The teachers in my degree have used a variety of educational resources	8.45	9.00	2.093	4.380
Internationalization	I have had an/some international exchange teacher(s)	2.20	1.00	2.620	6.865
	I have participated in international research	2.05	1.00	2.371	5.620

The methodologies used during the degree were: Cooperative learning (85.1%), Project-based learning (81%), Lecture (72%), Collaborative Learning (60.1%), Problem-based Learning (58.9%), case studies (45.8%), Service learning (13.1%) and Design thinking (12.5%). Participants also mentioned other methodologies (13.7%), including experiences, the flipped classroom, challenge-based learning, gamification, research, and dialogical readings.

The educational resources used were presentations (97.6%), videos (95.2%), readings (88.1%), Information and Communication Technologies (80.4%), portfolios (66.1%), and role-playing games (56.5%). Other resources (7.7%) included real-life examples, talks, guest speakers and day trips.

3.3.2 Data related to participants from the University Deusto only:

Since the sample was not representative except for the University of Deusto, the rest of the universities have been removed from the database for the second part. For a population size of 167 students, a confidence level of 95%, and a margin of error of 5%, the sample size had to be a

minimum of 117, and 124 students responded to the questions.

As shown in Table 5, the lowest items correspond to the internationalization dimension, and the highest to the diversity of educational resources used (8.36) and the importance of social commitment (7.99). The overall average for all variables was above 5 (5.07).

Table 5: General descriptors for University of Deusto students

Dimension	Variables	Mean	Median	Deviation	Variance
Legal and administrative	My university has informed me about the existing public and private programs to promote entrepreneurship	4.58	5.00	2.440	5.953
	My university has informed me of the infrastructures (incubators, business and innovation centers, technology parks, associations, services...) available for the development of entrepreneurship	3.81	4.00	2.147	4.608
Training in entrepreneurship for Faculty employees	The teachers I have had and the ones I have this year have skills in entrepreneurship	5.88	6.00	2.070	4.286
	The teachers that I have had and the ones I have this year have an educational background in applied research	6.98	7.00	2.188	4.788
	The teachers I have had and the ones I have this year have an educational background in creating spin-outs	5.32	6.00	2.360	5.570
Involvement of professionals from the world of business or other organizations in the development and delivery of the curriculum	In my undergraduate degree I have had teachers who had other jobs outside the university	7.02	7.00	2.258	5.097
	In my undergraduate degree, professionals from the world of business have been invited from time to time to give a guest lecture	6.19	7.00	2.691	7.242
Mission and strategy	My faculty attaches importance to entrepreneurship and includes this concept in its mission statement	5.53	6.00	2.339	5.470
	My university gives importance to entrepreneurship and includes this concept in its mission and in its strategic plan	5.65	6.00	2.399	5.757
	My faculty attaches importance to social commitment	7.99	8.00	2.181	4.756
Education and research in entrepreneurship	I have developed the different entrepreneurial competences in my undergraduate studies across different subjects	7.58	8.00	2.267	5.140
	My university has informed me of the extracurricular programs in entrepreneurship that my faculty/university offers	5.88	6.00	2.431	5.912
	I have participated in some extracurricular entrepreneurship programs	3.00	1.00	2.846	8.098
	I have conducted some entrepreneurship-related research	2.88	1.00	2.737	7.489
Extracurricular training in entrepreneurship	I have participated in a course or workshop on entrepreneurship awareness at my university/faculty	3.03	1.00	2.891	8.357
	I have participated in a course or workshop on identifying opportunities for entrepreneurship at my university/faculty	3.16	1.50	2.783	7.746
	I have participated in a course or workshop on business plan development at my university/faculty	2.82	1.00	2.570	6.602
	I have participated in a course or workshop on launching spin-outs at my university/faculty	2.23	1.00	2.209	4.880
	Teachers have used active methodologies	7.67	8.00	2.163	4.678
Active methodologies	When I did my curricular internships, my tutors at the school were people with an entrepreneurial spirit	6.98	7.00	2.630	6.918
	The teachers in my degree have used a variety of educational resources	8.36	9.00	2.104	4.428
Internationalization	I have had an/some international exchange teacher(s)	2.10	1.00	2.603	6.778
	I have participated in international research	2.02	1.00	2.431	5.910

The active methodologies used by students at the University of Deusto were: Cooperative learning (82.3%), Project-based learning (79.8%), lecture (75%), Problem-based learning (56.5%), collaborative learning (56.5%), case study (41.9%), service learning (15.3%), other (13.7%) and Design thinking (11.3%). The other methodologies noted in the “other” section were: challenge-based learning, flipped classroom, gamification, dialogic readings, and research.

The educational resources used were presentations (97.6%), videos (96.8%), readings (90.3%), Information and Communication Technologies (79%), portfolios (62.1%), role-plays (54%), and others (7.3%), namely: examples, day trips and guest speakers.

In summary, the averages rose significantly in practically all the items from the University of Deusto, except for the items related to the use of active methodologies; the use of the diverse educational resources; internationalization; and research related to entrepreneurship, which fell

slightly, while the importance of social commitment remained the same.

To address the third objective, concerning whether there were any differences between male and female participants, and by type of degree, in relation to the factors that make up the Entrepreneurial University from the students' perspective, first it is necessary to ascertain whether our sample followed normal distribution. For this purpose, the Kolmogorov-Smirnov normality test was performed, as the sample size was larger than 50 cases. As the significance level was less than 0.05, the null hypothesis was rejected, and therefore it can be stated that the sample does not follow a normal distribution and therefore nonparametric tests have been used (Table 6).

Table 6: Normality tests

TOTAL	Kolmogorov-Smirnov ^{to}			Shapiro-Wilk		
	Statistics	Df	Sig.	Statistics	Df	Sig.
	.086	124	.025	.962	124	.001

a. Lilliefors significance correction

As the assumptions of normality were not met, the Mann Whitney U test was used to meet the third objective. As the p-value was greater than the significance level (p-value 0.297 > 0.05), the null hypothesis was accepted, and therefore it can be stated that there were no significant differences according to gender (Table 7).

Table 7: Mann Whitney U-statistics according to gender

	TOTAL
Mann-Whitney U test	1675.000
Wilcoxon W	4231.000
Z	-1.043
Signed rank test (two-tailed)	.297

The same applied to the type of degree. As the p-value was greater than the significance level (p-value 0.578 > 0.05), the null hypothesis was accepted, and therefore, it can be stated that there were no significant differences according to the type of degree (Table 8).

Table 8: Mann Whitney U-statistics according to type of degree

	TOTAL
Mann-Whitney U test	1779.500
Wilcoxon W	4264.500
Z	-.557
Signed rank test (two-tailed)	.578

4. Conclusions, Future Directions of Research and Limitations

Undoubtedly, future teachers need to be trained in and sensitized to entrepreneurship education (GHK, 2011). Su et al. (2021) found that university students were more entrepreneurial after entrepreneurship education had been implemented. However, the majority of students in this study did not think about becoming entrepreneurs. They expressed a greater predisposition towards being employed and/or being a civil servant in a school, partly because they saw this option as providing better working conditions, and also due to the unfavorable legal and economic context in Spain (high social security contributions payable by self-employed people, lack of support and job insecurity), the complicated processes involved, and their lack of training in entrepreneurship. Perhaps this is due to

the fact that entrepreneurial education has not been sufficiently developed in these faculties. In research conducted by García (2010) with first-year university students studying for a degree in primary education in Mexico, the subjects referred to their choice of career as vocational, based on their interest in working with people (particularly with children), and in serving others. The results from the present study are very similar, except for the fact that the participants were in the final years of their degrees.

The discussion of whether a person is born or becomes an entrepreneur goes back years. According to Drucker (1994), entrepreneurship can be taught, hence both curricular and extracurricular training at university are necessary to generate entrepreneurs: "studies indicate that the probability of a pupil or student creating a business at some point in his or her life is three to six times higher if he or she has received education in entrepreneurship" (Unión Europea, 2014, p. 4). Moreover, training must be sustained over time and, therefore, a one-off talk does not provide the necessary tools to raise awareness, create an entrepreneurial culture and/or develop entrepreneurial competence. To this end, it is important to note that "teachers cannot teach their students to be entrepreneurial if they are not entrepreneurial themselves" (Unión Europea, 2014, p.9), which is why initial teacher training is essential. Consequently, "investment in initial and ongoing teacher training is the best guarantee that initiatives that stimulate entrepreneurial talent will achieve their objectives" (Pellicer et al., 2013, p. 53).

The education system is the most suitable channel for the expansion of entrepreneurial culture (Oliver et al., 2016; Nuñez and Nuñez, 2018). This is especially true for the university, because given "its role in society, its commitment to the development of knowledge and the training of entrepreneurial citizens, as well as its ability to bring people together, it is called upon to play a decisive role in the strengthening of these entrepreneurial ecosystems" (Martínez et al., 2016, p.259). However, as the university "is an old institution, it is slow changing, and there are still many problems related to resources (time and money) in using a pedagogical approach in teaching that is aligned with the new demands" (Sánchez et al., 2011, p. 26). This idea is reflected in the findings of this study. Although universities currently have sufficient physical infrastructure to promote entrepreneurship, including technology parks, incubators, accelerators and business chairs, it seems that Spanish society has a great fear of failure. This is an important inhibiting factor of the decision to be entrepreneurial, in addition to the fact that entrepreneurial people do not enjoy a high social status in Spain, and therefore do not opt to engage in entrepreneurship (Asociación RED GEM España, 2020). The entrepreneurial competence is a key competence that future primary school teachers will need to put into practice with their pupils; consequently, initial teacher training at university level is essential. Thus, "training from primary school onwards is one of the points that requires the most attention if we want to prevent labour market imbalance and ensure entry into the labor market" (de Castro et al., 2008, p.130). It is important that the student perceives that it is not just about learning how to run a business, but about developing a general set of competences applicable in all areas of life: "from promoting personal development to actively participating in society, (re)accessing the labour market as an employee or self-employed and also creating enterprises (of cultural, social or commercial value)" (Bacigalupo et al, 2016, p. 6).

It is undeniable that students in non-business studies often have interesting ideas (Martin and Lucu, 2014). As seen in the conclusions of the study, the university should mainly promote internationalization (having international exchange lecturers and participating in international research) and improve extracurricular training in entrepreneurship. To improve the legal and administrative context, suitable regional and country conditions are essential. Further boosting public programs for awareness-raising, training, financing and strengthening entrepreneurial and innovative initiatives is therefore needed (Asociación RED GEM España, 2020). The effects of these resources and investments may not yet be reflected in students' self-perception, and the results may be seen in the short and/or long term. However, the use of active methodologies, diverse educational resources, social commitment and the development of entrepreneurial competences are highly regarded in education faculties. In this way, students are able to develop entrepreneurial

competences, since the use of active, student-centered and participatory methodologies allows them to experience first-hand competences such as innovation, creativity, teamwork and decision-making, among others (Paños-Castro, 2017). According to Pellicer et al. (2013) "project work, problem-based learning, service learning and cooperative learning strategies" (p. 50) are some of the active methodologies that guarantee effectiveness in stimulating entrepreneurial competence. In this study, the same results are maintained in practice, with the exception of the lecture, which continues to predominate with 75% at the University of Deusto and 72% in the universities of the Basque Country as a whole.

The most surprising result was that of internationalization, which obtained a low score. While there are internationalization programs and calls for internationalization for lecturers to engage in exchange schemes (e.g., Erasmus +, staff weeks and mobility agreements, among others), as well as international research, the problem seems to lie in two factors. Firstly, the language, since both Basque and Spanish are official languages in the Basque university system (Law 3/2004 of 25 February on the Basque University System). Many lecturers and researchers may not choose Basque universities for their research visits due to their lack of linguistic ability in these languages. And secondly, student participation in the university should be much broader than traditional attendance to sessions and exam taking. In this sense, the educational community should be given the opportunity to participate in research tasks, as well as in complementary leisure, cultural and other activities.

Some recommendations for how the university can promote entrepreneurship from the university are made for the future. These include making entrepreneurship a compulsory subject in primary education degrees, as the "initiative and entrepreneurial spirit" competence is key in the Spanish educational curriculum; promoting networks of educational entrepreneurs and disseminating successful educational entrepreneurial experiences to students as examples of good practice to encourage students to become entrepreneurs; and offering advice and information on the services, extracurricular programmes and infrastructures available at the university to promote entrepreneurship from the earliest stages of degree courses.

The main limitation of this study is that the sample is not representative of the rest of the universities in the Basque Country. Therefore, it is suggested that the study be replicated in all Spanish universities in the future at any degree, and that a longitudinal study be carried out to see how students' self-perceptions evolve in their final years.

References

- Asociación RED GEM España (2020). *Global Entrepreneurship Monitor: informe GEM España 2019-2020*. Editorial de la Universidad de Cantabria. https://www.gem-spain.com/wp-content/uploads/2020/06/Informe-GEM-Espa%C3%B1a-2019_20.pdf
- Afonso, P. & da Silva, H.M. (2019). Entrepreneurial intention at university. *Ciencias Psicológicas*, 13(1), 134 - 149. doi: <https://doi.org/10.22235/cp.v13i1.1815>
- Altan, M.Z. (2015). Entrepreneurial teaching & entrepreneurial teachers. *Journal for Educators, Teachers and Trainers*, 6(2), 35-50.
- Awwad, M.S. & Al-Aseer, R.M.N. (2021). Big five personality traits impact on entrepreneurial intention: the mediating role of entrepreneurial alertness. *Asia Pacific Journal of Innovation and Entrepreneurship*, 15(1), 87-100. <https://doi.org/10.1108/apjie-09-2020-0136>
- Bacigalupo, M., Kamylyis, P., Punie, Y., & Van den Brande, G. (2016). *EntreComp: The Entrepreneurship Competence Framework*. Publication Office of the European Union. <https://doi.org/10.2791/593884>
- Bisquerra, R. & Pérez-Escoda, N. (2015). ¿Pueden las escalas Likert aumentar en sensibilidad?. *REIRE, Revista d'Innovació i Recerca en Educació*, 8(2), 129-147. <https://doi.org/10.1344/reire2015.8.2.828>
- Boletín Oficial del Estado (2012). *Ley 16/2012, de 28 de junio, de Apoyo a las Personas Emprendedoras y a la Pequeña Empresa del País Vasco*. Retrieved May 7, 2022, from https://www.boe.es/diario_boe/txt.php?id=BOE-A-2012-9666
- Camacho, D.Y. (2007). Hacia un modelo de emprendimiento universitario. *Revista Apuntes del Cenes*, 27(43), 275-292.

- Cardozo, C., Monroy-Perdomo, L., Flórez-Forero, D.F., Pinzón, L., & Romero, L. (2021). Emprendimiento universitario: El nuevo valor agregado de las universidades desde la aplicación de sistemas. *Risti, Revista Iberica de Sistemas e Tecnologías de Informação*, E39(01), 268-284.
- De la Torre Cruz, T., Rico, I.L., Escolar, C., Palmero, C., & Jiménez, A. (2016). La figura del profesor como agente de cambio en la configuración de la competencia emprendedora. *Revista Interuniversitaria de Formación del Profesorado*, 86(30.2), 131-144.
- Drucker, P. (1994). *La innovación y el empresario innovador: La práctica y los principios*. Edsa.
- Errasti, N., Bezanilla, M.J., García-Olalla, A., Auzmendi, E., & Paños-Castro, J. (2018). Factors and maturity level of entrepreneurial universities in Spain. *International Journal of Innovation Science*, 10(1), 71-91. <https://doi.org/10.1108/IJIS-05-2017-0043>
- Etzkowitz, H. (1990). «The Second Academic Revolution: The Role of the Research University in Economic Development». In S. Cozzens, P. Healey, A. Rip & J. Ziman (Eds.), *The Research System in Transition* (pp. 109-124). Kluwer Academic Publishers.
- Etzkowitz, H. & Leydesdorff, L. (2000). The dynamics of innovation: from National Systems and 'Mode 2' to a Triple Helix of university-industry-government relations. *Research Policy*, 29(2), 109-123. [https://doi.org/10.1016/S0048-7333\(99\)00055-4](https://doi.org/10.1016/S0048-7333(99)00055-4)
- European Commission (2008). *Entrepreneurship in higher education, especially within non business studies. Final Report of the Expert Group*. Retrieved April 23, 2022, from http://ec.europa.eu/enterprise/policies/sme/files/support_measures/training_education/ent_r_highed_en.pdf
- European Commission/EACEA/Eurydice (2016). *La educación para el emprendimiento en los centros educativos en Europa*. Oficina de Publicaciones de la Unión Europea.
- Fejes, A., Nylund, M., & Wallin, J. (2019). How do teachers interpret and transform entrepreneurship education?. *Journal of Curriculum Studies*, 51(4), 554-566. <https://doi.org/10.1080/00220272.2018.1488998>
- Fernández de Lucio, I., Castro, E., Conesa, F., & Gutiérrez, A. (2000). Las relaciones universidad-empresa: entre la transferencia de resultados y el aprendizaje regional. *Espacios*, 21(2), 127-148.
- Formichella, M.M. (2004). *El concepto de emprendimiento y su relación con la educación, el empleo y el desarrollo local*. Retrieved April 27, 2022, from <http://municipios.unq.edu.ar/modules/mislibros/archivos/MonografiaVersionFinal.pdf>
- Fuentes, M.M. (2018). Coordinación general de emprendimiento de la universidad de Granada-UGR emprendedora: un modelo de gestión para lograr una universidad emprendedora. In J.C. Sánchez-García & B., Hernández-Sánchez (Eds.), *Emprendimiento en las universidades: perspectivas actuales y proyecciones futuras*. Ediciones Universidad de Salamanca.
- García, J.M. (2010). Los determinantes de la elección vocacional de una semiprofesión. Un estudio de estudiantes de primer ingreso a la carrera de profesor de educación primaria. *Revista Latinoamericana de Estudios Educativos*, 40, 95-110.
- George, D. & Mallery, P. (2003). *SPSS Statistics for Windows step by step: A Simple Guide and Reference*. Allyn & Bacon.
- GHK (2011). *Mapping of Teachers' Preparation for Entrepreneurship Education – final report*. Brussels: Retrieved April 27, 2022, from https://www.ab.gov.tr/files/ardb/evt/1_avrupa_birligi/1_9_politikalar/1_9_4_egitim_politikasi/mapping_en.pdf
- Gibb, A. (1993). Enterprise culture and education: Understanding enterprise education and its links with small business, entrepreneurship and wider educational goals. *International Small Business Journal*, 11(3).
- Gobierno de España (2012). *Estrategia de Emprendimiento y Empleo Joven 2013-2016*. Retrieved April 8, 2022, from https://www.mites.gob.es/ficheros/rse/documentos/eeej/EEEJ_Documento.pdf
- Gobierno de España (2021). *Estrategia España Nación Emprendedora*. Retrieved May 3, 2022, from https://www.lamoncloa.gob.es/presidente/actividades/Documents/2021/110221-Estrategia_Espana_Nacion_Emprendedora.pdf
- Gobierno Vasco (2013). *Plan Interinstitucional de Apoyo a la Actividad Emprendedora (2013-2016)*. Retrieved April 8, 2022, from https://www.euskadi.eus/contenidos/noticia/xleg_plan_departamento/es_p_depart/adjuntos/plan%20apoyo%20actividad%20emprendedora%202014.pdf
- Gobierno Vasco (2019). *Plan del Sistema Universitario 2019-2022*. Retrieved April 23, 2022, from https://www.euskadi.eus/contenidos/plan_gubernamental/10_planest_xileg/es_plang_10/Plan_del_Sistema_Universitario_2019-2022.pdf
- Goddard, J., Kempton, L., & Vallance, P. (2013). The civic university: Connecting the global and the local. In R. Capello, A. Olechnicka, & G. Gorzelak, *Universities, Cities and Regions, Loci for Knowledge and Innovation Creation* (pp. 43-63), Routledge.

- Hynes, B. (1996). Entrepreneurship education and training - introducing entrepreneurship into non-business disciplines. *Journal of European Industrial Training*, 20(8), 10-17.
- Ibáñez-Cubillas, P. & Gijón, J. (2021). Competencias para la Formación Inicial de los Docentes en la Enseñanza del Emprendimiento. *Archivos Analíticos de Políticas Educativas*, 29(138).
- Instituto Nacional de Estadística (n.d.). Retrieved April 4, 2022, from <https://ine.es/index.htm>
- Jefatura del Estado (2006). *Ley Orgánica 2/2006, de 3 de mayo, de Educación*. Retrieved May 8, 2022, from <https://www.boe.es/buscar/pdf/2006/BOE-A-2006-7899-consolidado.pdf>
- Jefatura del Estado (2013). *Ley 14/2013, de 27 de septiembre, de apoyo a los emprendedores y su internacionalización*. Retrieved March 17, 2022, from <https://www.boe.es/boe/dias/2013/09/28/pdfs/BOE-A-2013-10074.pdf>
- Jefatura del Estado (2020). *Ley Orgánica 3/2020, de 29 de diciembre, por la que se modifica la Ley Orgánica 2/2006, de 3 de mayo, de Educación*. Retrieved May 17, 2022, from <https://www.boe.es/boe/dias/2020/12/30/pdfs/BOE-A-2020-17264.pdf>
- Katz, J.A. (2003). The chronology and intellectual trajectory of American entrepreneurship education: 1876-1999. *Journal of business venturing*, 18(2), 283-300.
- Kuratko, D.F. (2005). The emergence of entrepreneurship education: Development, trends, and challenges. *Entrepreneurship theory and practice*, 29(5), 577-598.
- Lloja, H., Chugnas, E.S., Tello, Z., & Cruz, J.J. (2021). Intención emprendedora: percepción desde los estudiantes universitarios. *Comuni@ccion: Revista de Investigación en Comunicación y Desarrollo*, 12(4), 269-281. <http://dx.doi.org/10.33595/2226-1478.12.4.563>
- López-Fernández, R., Lalangui, J., Maldonado, A.V., & Palmero Urquiza, D.E (2019). Validación de un instrumento sobre los destinos turísticos para determinar las potencialidades turísticas en la provincia de El Oro, Ecuador. *Universidad y Sociedad*, 11(2), 341-346.
- Manso, J. & Thoilliez, B. (2015). La competencia emprendedora como tendencia educativa supranacional en la Unión Europea. *Bordón*, 67(1), 85-99. <https://doi.org/10.13042/Bordon.2015.67106>
- Martin, C. & Lucu, R.B. (2014). Teaching entrepreneurship to educational sciences students. *Procedia, Social and Behavioral Sciences*, 116, 4397 - 4400. <https://doi.org/10.1016/j.sbspro.2014.01.954>
- Martínez, F.X., Bajaña, J.X., Chávez, C.E., Guerrero, M.R., & Oña, B.E. (2016). Ecosistema del emprendimiento en la universidad contemporánea. *Didasc@lia: Didáctica y Educación*, 7(6), Edición Especial, 249-261.
- Ministerio de Educación y Ciencia (2007). *Orden ECI/3857/2007, de 27 de diciembre, por la que se establecen los requisitos para la verificación de los títulos universitarios oficiales que habiliten para el ejercicio de la profesión de Maestro en Educación Primaria*. Retrieved May 20, 2022, from <https://www.boe.es/eli/es/o/2007/12/27/eci3857/dof/spa/pdf>
- Ministerio de Educación, Cultura y Deporte (2015). *La educación para el emprendimiento en el sistema educativo español. Año 2015*. Retrieved May 17, 2022, from <https://sede.educacion.gob.es/publiventa/d/20842/19/0>
- Mitra, J. & Manimala, J.M. (2008). *Higher education's role in entrepreneurship and economic development*. In J. Potter (ed.), *Entrepreneurship and Higher Education* (pp. 45-64). OECD Publishing.
- Mwasalwiba, E.S. (2010). Entrepreneurship education: a review of its objectives, teaching methods, and impact indicators. *Education + Training*, 52(1), 20-47. <https://doi.org/10.1108/0040091011017663>
- Neck, M.H. & Greene, G.P. (2011). Entrepreneurship education: Known worlds and new frontiers. *Journal of Small Business Management*, 49(1), 55-70. <https://doi.org/10.1111/j.1540-627X.2010.00314.x>
- Núñez, M. (2015). *La educación emprendedora en la enseñanza escolar: medidas e indicadores de la situación de España en el contexto europeo* [Doctoral Thesis]. <https://www.educacion.gob.es/teseo/imprimirFicheroTesis.do?idFichero=nftUUXad%2F6o%3D>
- Núñez, L. & Nuñez, M. (2018). Papel del profesor motivado en la educación emprendedora en España. *Revista empresa y humanismo*, 21(1), 7-40. <https://doi.org/10.15581/015.XX1.1.7-40>
- Observatorio del Emprendimiento de España (2021). *Global Entrepreneurship Monitor. Informe GEM España 2020-2021*. Universidad de Cantabria.
- Oliver, A., Galiana, L., & Gutiérrez-Benet, M. (2016). Diagnóstico y políticas de promoción del emprendimiento en estudiantes. *Anales de psicología*, 32(1), 183-189. <https://dx.doi.org/10.6018/analesps.32.1.186681>
- Paños-Castro, J. (2017). Educación emprendedora y metodologías activas para su fomento. *Revista Electrónica Interuniversitaria de Formación del Profesorado*, 20(3), 33-48. <http://dx.doi.org/10.6018/reifop.20.3.272221>
- Pellicer, C., Álvarez, B. & Torrejón, J.L. (2013). *Aprender a emprender. Cómo educar el talento emprendedor*. Grupo Planeta.
- Pittaway, L. & Edwards, C. (2012). Assessment: examining practices in Entrepreneurship Education. *Education + Training*, 54(8/9), 778-800. <https://doi.org/10.1108/00400911211274882>

- Prendes, M.P., Solano, I., González, J., & Cerdán, F. (2020). Competencia de emprendimiento en educación secundaria: percepción del profesorado sobre el estado actual y las posibilidades futuras en el contexto Europeo. *Bordón*, 72(2), 153-172. <https://doi.org/10.13042/Bordon.2020.67626>
- Reyes, L.E. (2012). Análisis de la actividad emprendedora en España. *Revista de Estudios de Juventud*, 99, 117-127.
- Rico, L., Torre, T., Escolar, M.C., Palmero, C., & Jiménez, A. (2017). Educación para el emprendimiento: situación actual y perspectivas de futuro. In *Simposio Internacional El Desafío de Empezar en la Escuela del Siglo XXI* (pp. 41-57). Universidad de Sevilla.
- Roberts, J. (2012). Infusing entrepreneurship within non-business disciplines: preparing artists and others for self-employment and entrepreneurship. *Artivate, A Journal of Entrepreneurship in the Arts*, 1(2), 53-63. <https://doi.org/10.1353/artv.2012.0005>
- Sánchez, J., Caggiano, V., & Hernández, B. (2011). Competencias emprendedoras en la educación universitaria. *International Journal of Developmental and Educational Psychology, INFAD Revista de Psicología*, 3(1), 19-28.
- Sánchez-García, J.C. & Hernández-Sánchez, B. (Eds.) (2018). *Emprendimiento en las universidades: perspectivas actuales y proyecciones futuras*. Ediciones Universidad de Salamanca.
- Su, Y., Zhu, Z., Chen, J., Jin, Y., Wang, T., Lin, C.L., & Xu, D. (2021). Factors influencing entrepreneurial intention of university students in china: Integrating the perceived university support and theory of planned behavior. *Sustainability*, 13(8). <https://doi.org/10.3390/su13084519>
- Tehseen, S. & Haider, S.A. (2021). Impact of universities' partnerships on students' sustainable entrepreneurship intentions: A comparative study. *Sustainability*, 13(9), 5025. <https://doi.org/10.3390/su13095025>
- Thompson, E.R. (2009). Individual Entrepreneurial intent: construct clarification and development of an internationally reliable metric. *Entrepreneurship Theory and Practice*, 33(3), 669-694. <https://doi.org/10.1111/j.1540-6520.2009.00321.x>
- Torres, R.M., Espinoza, H.B., Macías, R.K., Chávez, C.E., Fajardo, J.R., & Martínez, F.X. (2018). Interacción universidad-entorno. Una mirada para el emprendimiento en el siglo XX. *Didasc@lia: Didáctica y Educación*, 9(2), 1-15.
- Unión Europea (2014). *Educación en emprendimiento. Guía del educador*. Unidad «Emprendimiento 2020».
- Wibawo, A., Saptono, A., & Suparno (2018). Does teacher' creativity impact on vocational students' entrepreneurial intention? *Journal of Entrepreneurship Education*, 21(2), 1-7.