



## ENTRANCE: Enhancing the ENTRepreneurial mindset of non-business Academics in Europe

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## Project Partners



## 1. Introduction

The European Commission sees entrepreneurship as acting upon opportunities and ideas and transforming them into value for others, which can be financial, cultural, or social. Thus, European Commission aims to improve the entrepreneurial capacity of European citizens and organizations by fostering entrepreneurial learning and the entrepreneurial mindset. Entrepreneurship Education (EE) has been a part of this focus and the development of the European entrepreneurship competence framework (EntreComp) creates a shared understanding of the knowledge, skills and attitudes needed to become entrepreneurial, while at the same time emphasizing that entrepreneurship is a competence that all citizen should have the opportunity to develop. Considering this shift to entrepreneurship, we examine the position of Cyprus in entrepreneurship giving an emphasis in entrepreneurship education (EE) and whether academics and students commercialize their research in order new enterprises or start-ups to be developed in the industry. Furthermore, through this research we aim to identify those best practices that enhance EE and entrepreneurship overall.

The first part of the report is dedicated to a short description of important geographical, cultural, and historical characteristics of Cyprus which help us to understand the context of the country in which the ENTRANCE programme will take place. The second part attempts to describe the entrepreneurial emphasis that has been given within the country. For this reason, some comparisons between Cyprus with other economics will be followed giving us a broader picture of the position of Cyprus in entrepreneurial activities and incentives. Furthermore, the report aims to identify university programmes that are offered focusing on entrepreneurship from the top two universities in Cyprus based on uniRank 2021. In the last part of this report, we present the main results coming from four scientific articles. Specifically, the first two articles provide a series of best practices in EE and in entrepreneurship in general, while the third article provides information about the digital transformation of an entrepreneurship class in a university. The last article highlights challenges that academics face in their effort to commercialize their research and eventually to create their own business. Three national and international programmes will also be presented in which Cyprus was a member of the implementation of these programs. In the end of this report, the results coming from the questionnaires that have been administered to 19 non-business academics in Cyprus will be presented, but also the results from two interviews with entrepreneurs will be followed.

## 2. Background characteristics of Cyprus

Cyprus stands at a cultural, linguistic, and historic crossroads between Europe and Asia. The capital of the island is Nicosia, and it consists of three more cities namely, Limassol, Larnaca and Paphos. The long-standing conflict between the Greek Cypriot majority and the Turkish Cypriot

minority and the invasion of the island by Turkish troops in 1974 produced an actual—although internationally unrecognized—partition of the island and led to the establishment in 1975 of a de facto Turkish Cypriot state in the northern third of the country.

Cyprus lies about 40 miles (65 km) south of Turkey, 60 miles (100 km) west of Syria, and 480 miles (770 km) southeast of mainland Greece. It is the third largest Mediterranean island, after Sicily and Sardinia. The language of the majority is Greek, while English is widely spoken and understood. Cyprus became a part of the EU in 2004. It is important to make clear from the beginning of this report that our work is focused on the areas controlled by the Republic of Cyprus exclusively.

## 2.1 Emphasis to entrepreneurial activity

The following data come from the Global Entrepreneurship Monitor (GEM) which carries out survey-based research on entrepreneurship and entrepreneurship ecosystems around the world. GEM is a networked consortium of national country teams primarily associated with top academic institutions and it is a unique global research source that collects data on entrepreneurship directly from individual entrepreneurs.

An interesting index that comes from the GEM methodology measures the country's early-stage entrepreneurial activity. Total early-stage Entrepreneurial Activity index (TEA) reflects on the country's entrepreneurial potential and therefore it is considered as one of the most important indexes of the GEM methodology. One of the main conclusions coming from this measure is that in 2019/2020 there was a notable rise in the total early-staged entrepreneurial activity in Cyprus. In comparison to the corresponding European average rate Cyprus' TEA rate is higher by 3%. The rise in the TEA index rate could be attributed to the improvement of the socioeconomic conditions and the improved societal perceptions on entrepreneurship as a career choice. Furthermore, the increase recorded in this year's TEA is largely due to the significant increase of the number of nascent entrepreneurs. The number of nascent entrepreneurs has increased more than a 6% compared to last year. This might also indicate that there is an increase of mechanisms providing entrepreneurial support, mentoring or education which seems to potentially assist nascent entrepreneurs in persisting on their entrepreneurial endeavours. Similar results come from the TEA index which does not encapsulate only the nascent entrepreneurs, but also the new business owners. In 2019/2020, 4.6% of Cyprus population has been identified as new business owners. This year's business ownership rate is the highest across the past three years, compared to the rate 2.7% in 2018/2019 and 3.8% in 2017/2018. This year's rate is also higher compared to the corresponding European average which is 3.7%.

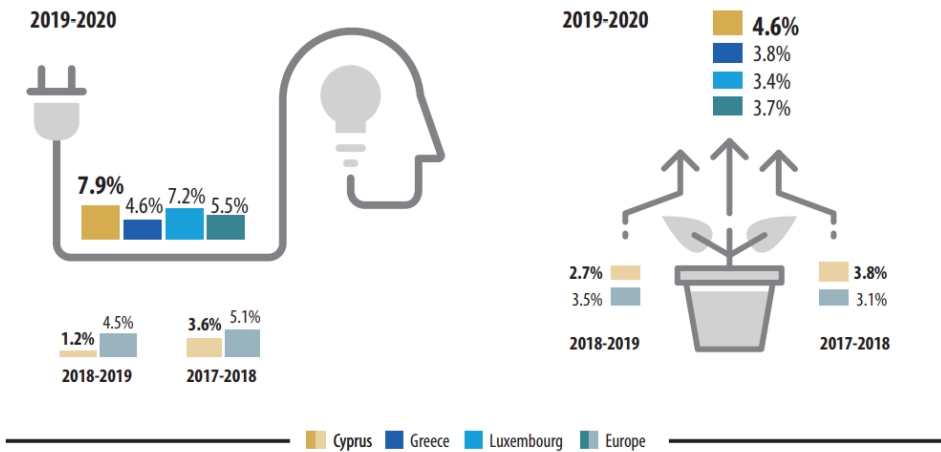


Figure 1.1: Nascent Entrepreneurs in Cyprus and Europe

Figure 1.2: New business owners

We also report the index of R&D Transfer in Cyprus which measures the extent to which national research and development will lead to new commercial opportunities and is available to SMEs. The idea of the Research and Development category is to measure the transfer of the research and development results from academia to industry and the ability to exploit research results is an important proxy of the state of the entrepreneurial ecosystem. R&D transfer for entrepreneurship is lower compared to the previous year (3.9 in 2019/2020, 4.6 in 2018/2019 and 3.9 in 2017/2018). Regarding R&D transfer, experts perceive that technology is not becoming more affordable every day for new and growing firms in Cyprus (5.3 out of 9 in 2017/2018, 5.5 out of 9 in 2018/2019, 3.1 out of 9 in 2019/2020). Similarly, they share the view that new technology, science, and other knowledge are not efficiently transferred from universities and public research centres to new and growing firms (3.5 out of 9 in 2017/2018, 3.6 out of 9 in 2018/2019, 3.9 out of 9 in 2019/2020). Furthermore, the support provided to engineers and scientists to commercialize their results is limited (3 out of 9 in 2017/2018, 3.5 out of 9 in 2018/2019, 3.9 out of 9 in 2019/2020). Thus, however a growth in the development of new businesses in general has been observed in Cyprus, the non-fruitful relationship between research and the industry can be noted.

However, the Republic of Cyprus has created a National Board dedicated to Research and Innovation. This Board aims to develop a strategic framework which its vision is 'Cyprus to become a dynamic and competitive economy, driven by research, scientific excellence, innovation, technological development and entrepreneurship, and a regional hub in these fundamental areas.' (<https://chiefscientist.gov.cy/wp-content/uploads/Innovate-Cyprus-CYRI-Strategy-Framework-2019-2023-NBRI-May-2019-2.pdf>).

## 2.2 Emphasis to Entrepreneurial Education

The Cyprus government policy regarding Higher Education aims to fulfil the local needs for Higher Education and to establish Cyprus as a Regional Educational and Research Centre, a hub for international scholars and students alike. The Higher Education System in Cyprus is shaped by the European Higher Education Area, as outlined by the Bologna Process. Higher Education Institutions in Cyprus consist of Public Universities, Private Universities, Public Institutions of Tertiary Education and Private Institutions of Tertiary Education.

GEM 2019/2020 results show that entrepreneurial training at post-school level has been improved and it is now considered as a strength of Cyprus' entrepreneurial ecosystem. However, a small number of Cyprus' TEA is relevant to the ICT sector or expects that their entrepreneurial activity will generate new job positions, while the imbalance of gender involvement in TEA remains unchanged across the years. Similarly, the results show that entrepreneurial education at school level has been consistently identified as a weakness of the ecosystem across the years. Regarding culture, social perceptions towards entrepreneurship (i.e., career choice, high status to successful entrepreneurs) have improved compared to the previous years, indicating an overall improvement in the culture towards entrepreneurship. Perceived capabilities to embark on entrepreneurial activity have also improved across the years, indicating that the adult population skills have improved. However, the rate of the adult population's perceived fear of failure remains high, which may lead individuals in Cyprus to more secure career options. This is also reflected through the open-ended questions addressed towards the national experts, as they urge for the need to shift away from a "secure government position culture". The national experts highlight the need to further extend entrepreneurial creativity and tech training offered through school, university and life-long learning programmes.

The Department of Secondary General Education at the Cypriot Ministry of Education, Culture, Youth and Sports strongly supports the importance of skills such as critical thinking, analysis and synthesis, creativity, problem solving, the feeling of integrity and self-worth. The notion of focusing on values and attitudes was reinforced by reforms to create a nurturing environment for entrepreneurship development. A national working group has been set up to support improving Cyprus' position regarding entrepreneurship education, in particularly in promoting ICT and digital skills, innovation and creativity. In addition to the governmental efforts to establish entrepreneurship education as a priority, Support Scheme for Youth Entrepreneurship has been successful in developing its activities in the country.

The examination of two reputable Cypriot universities on the programmes they offer in different disciplines, helped us to identify those that specifically promote Entrepreneurship

Education. University of Cyprus (UCY) is a public university and the number one university in Cyprus for 2021 reported by uniRank. The following programmes have been identified which contribute to entrepreneurship. The Department of Business and Public Administration offers a Minor in Entrepreneurship undergraduate programme to a limited number of students of other departments but is constructed particularly for students from the Faculty of Engineering and the Faculty of Pure and Applied Sciences. However, students from other Departments can also apply for the Minor Degree in entrepreneurship. The programme provides students the opportunity to enhance their knowledge considering aspects such as the technological evolution, business evaluation of technological and other innovations and help them acquire the necessary knowledge that allow them to be effectively engaged in the business field (i.e. the creation of a new business) in various economic sectors (<https://www.ucy.ac.cy/bpa/en/undergraduate/minor-in-entrepreneurship>).

Centre for Entrepreneurship (C4E) has been established by the University of Cyprus as well and its mission is to promote the culture of entrepreneurship in the academic community of the university: students, young researchers, academics, administrative staff and graduates. It also contributes to the development of a healthy, innovative business ecosystem in Cyprus that can exploit research results, infrastructure and expertise available in the University, in order to compete with the international business environment. One of the Centre's activities towards this, has been the organisation of the Student Innovators Competition since 2018, open to University of Cyprus students to submit and pitch their innovative business ideas (<https://www.facebook.com/ucyc4e>).

UCY and C4E together with other organisations also organise the annual 'Cyprus Entrepreneurship Competition', a business plan competition, aspiring to nurture an entrepreneurial culture among - scientists, startup founders and hi-tech entrepreneurs, challenging them to transform their ideas into real business opportunities and to the leading companies of tomorrow. The Competition lasts for 6 months and it includes an acceleration programme delivering business-creation workshops and personalised mentoring to each participant team (<https://www.cyec.org.cy/>). The second ranking university in Cyprus for 2021 is the University of Nicosia which is a private organization. Regarding its contribution to entrepreneurship, the university is a part of a network of 21 universities across Greece and Cyprus supporting the 'Ennovation competition', which features a dynamic lineup of online events and Entrepreneurship Stories. One of the main characteristics of this competition is that it is addressed to researchers and research teams wishing to take the outcome of their research efforts to the market (<https://www.unic.ac.cy/ennovation-14th-university-competition-on-entrepreneurship-and-innovation/>).

Both universities provide bachelor and master degrees in Business Administration in which entrepreneurship classes are included, while the University of Nicosia provides a Bachelor degree



in Business Administration giving a great emphasis on entrepreneurship. Another common characteristic coming from the above comparison of the programmes between the two universities, is that those entrepreneurship programmes, focus mainly on students that pursue a business, engineering or technology related career.

### 3. Collection of best practices from secondary research

#### 3.1 Scientific articles

##### Scientific article 1

**Title:** *Entrepreneurship education programmes: How learning, inspiration and resources affect intentions for new venture creation in a developing economy*

**Year of publication:** 2020

**Journal:** International Journal of Management Education

**Authors:** Tariq Ahmeda, V.G.R. Chandranb, Jane E. Klobasc, Francisco Liñán, Panagiotis Kokkalis

**Aim of the research:** The purpose of this article is to identify those different components of an entrepreneurship course that influence entrepreneurial attitudes and intentions of 348 students from 8 universities in Pakistan.

##### **Main results:**

This study investigated how entrepreneurial intention can be developed among university graduates. The empirical evidence supports the view that entrepreneurship education programmes positively impact the development of entrepreneurial intention and the production of entrepreneurs. As study claims, these findings are in line with previous results indicating the significant of the examined relationships. The main conclusion from the study is that the more students fulfil the examined three elements (EEP learning benefits; EEP inspiration benefits; and EEP incubation resources), it becomes more possible to start their own business. Based on the results and their significance, we identify specific practices and methods that reinforce students' entrepreneurship intention.

1. Specifically, the first factor of Entrepreneurship Education Learning (EEP-L) gives an emphasis on the following characteristics students should fulfil:
  - entrepreneurs' attitudes; values and motivation
  - actions someone has in order to start a business
  - practical management skills in order to start a business.

2. The second factor which investigates the Entrepreneurship Education Inspiration (EEP-I) focuses on the views on e-ship of students' professor, of an external speaker and a visiting entrepreneur.
3. The independent factor Entrepreneurship Education: Incubation Resources (EEP-R) highlights the importance of practices such as, whether a student belongs in a e-ship course where the entrepreneurial-minded classmates build a team, students participate in networking events and to business plans competitions.
4. Last but not least, the availability of getting funding from university is found to be an important element for students' intention to start a business. These three factors represent what an entrepreneurship programme could offer to students.
5. However, there are other elements that capture students' characteristics and personality that affect their e-ship intention, but also it was found that e-ship course could affect at some extent these background characteristics. These characteristics from my understanding could be characterised as background characteristics as students have already developed them before started their course. These background characteristics have been developed from their family attitudes toward e-ship representing the subjective norms which has been found to be an important factor in behavioural models too.
6. Some additional practices that we could include in our report come from the outcome of the Entrepreneurial Behavior (BEH-E) which highlights the students' readiness to create a business plan, to organise a start-up team, the availability of resources and facilities, the awareness of the license patent and the procedure of a business registration.

## Scientific article 2

**Title:** *Reconceptualizing the role of the future entrepreneurship educator: an exploration of the content challenge*

**Year of publication:** 2020

**Journal:** Entrepreneurship & Regional Development

**Authors:** Colette Henry

**Aim of the research:** This study aims to explore and identify the content of Entrepreneurship Education highlighting the diversity an EE might hold (e.g., non-business academics such as those in STEMM (science, technology, engineering, maths and medicine) disciplines).

### **Main results:**

The paper highlights different areas of the EE content. For this purpose, the content of EE spectrum was developed which allows us to see the considerable journey that the

entrepreneurship educator is expected to take the students on in his/her EE programme, guiding them from awareness raising right through to business growth and exit strategies.

#### 1. Awareness raising focus

The paper is based on Fretschner and Weber (2013) work which propose a number of guidelines for designing awareness courses in higher education, suggesting that educators should focus on shaping student's entrepreneurial attitudes not skills (the latter should be developed in follow up programmes); emphasize the value of acting entrepreneurially in existing organizations, social settings and daily life (Fretschner and Weber 2013, 423), and strengthen students' beliefs that setting up and establishing their own business is an attainable opportunity and not predetermined by external factors.

#### 2. Business planning focus

The author highlights the finding from Edelman, Manolova, and Brush (2008) who suggest that entrepreneurship educators should place more emphasis on real actions rather than research and business plan writing, and focus on operational activities such as purchasing materials or equipment, establishing credit with suppliers, registering a business with the authorities and signing up to pay taxes.

#### 3. Real world focus

The study argues for more 'real world' content, suggesting that students and educators should be sent out of the classroom as a (real) learning environment designed to help students make a more profound decision either for or against an entrepreneurial career.

#### 4. Competencies focus

Entrepreneurial competences (Morris et al., 2013) which prioritize the more practical and potentially more immediate (in a start-up scenario) 'Guerilla skills' comparing to EntreComp model which emphasizes leadership, management and long-term sustainability.

- Opportunity recognition
- Opportunity assessment
- Risk management/mitigation
- Conveying a compelling vision
- Tenacity/perseverance
- Creative problem solving/imaginativeness
- Resource leveraging
- Guerilla skills
- Value creation
- Maintain focus yet adapt

- Resilience
- Self-efficacy
- Building and using networks

These elements were highlighted by acknowledging that one size does not fit all, Kamovich and Foss (2017) alignment framework (drawn from Cohen 1987; Biggs 1996), allows us to fully embrace the heterogeneity of entrepreneurship programme content (p. 15). This supports Johannisson (2016) who reminds us that there are ‘many roads to training for entrepreneuring’ (p. 418).

Consequently, this content spectrum moves from the *Awareness Raising through to Start-up & Growth* in which the pedagogical foundation also moves from mostly theory- to mostly practice-based teaching.

Awareness Raising		Start Up & Growth		
Competencies				
<p><b>Creating an Entrepreneurial Mindset:</b></p> <p>Teaching strategies in this regard draw on basic economic theories, and use a combination of lectures, guest speakers, case studies and interviews with entrepreneurs to help students learn about the value of acting entrepreneurially in organisational and social</p>	<p><b>Opportunity Recognition:</b></p> <p>Aims to help students develop the necessary skills and abilities to systematically look for and identify potential opportunities for entrepreneurship. Teaching strategies here include activities that enhance students’ entrepreneurial alertness (Shane 2012), idea generation,</p>	<p><b>New Venture Creation:</b></p> <p>Teaching activities invariably cover market research, feasibility, business plan development, resource acquisition and the operational aspects of entrepreneurship, often resulting in the creation of a real campus-</p>	<p><b>Growth:</b></p> <p>Aims to build on these aspects, and will typically include much more competency-based learning, where students are given the tools to help them identify new product and market opportunities for the business, develop their own leadership capabilities and adopt a more</p>	<p><b>Exit Strategies:</b></p> <p>While often neglected in entrepreneurship programmes, content focused on Exit-Strategies aims to develop students’ higher level strategic planning capabilities, realize a return for their investment, look to the future and potentially reinvest in a new venture opportunity as a</p>

settings as well as in daily life (Fretschner and Weber 2013).	problem solving exercises, and team-based projects.	based student enterprise.	strategic approach to business management.	serial entrepreneur (Piperopoulos and Dimov 2015). Teaching strategies here typically draw on scenario planning, financial modelling and more complex live case studies.
Employable skills				
Theory (practice)- based		Practice (theory)-based		

This long list of skills aims to inform EE content, and while it is practically impossible to incorporate all of them into a single entrepreneurship programme, educators need to (and, in most cases do) include many of them, most notably, creativity, problem solving and team working, and skills that relate to the Entrepreneurial mindset and Opportunity Recognition parts of the EE content spectrum. An emphasis should be given to the *practice* category which comprises the various stakeholders involved in developing the entrepreneurship education agenda at the entrepreneurship educator's HEI. This category has a great influence as it comprises actual entrepreneurs, local businesses, large corporates, employer bodies, chambers of commerce and similar actors with real and relevant experience of entrepreneurship.

The article argues that the development of a common curriculum approach could be beneficial to both entrepreneurship educators and students, limiting the focus, and presumably the quantity of content delivered, and ultimately reducing the pressure on educators, however recognizes that the phenomenon of education is centred on the human being, the author claims that both the individual educator and the individual student are integral parts of the entrepreneurial learning process. Thus, following Kyrö's (2015) logic, the individual entrepreneurship educator must take on a 'filtering' role with regard to the categories of influence, using his/her own personal perspective on entrepreneurship as the decision making lens when determining not just what to teach but also what to privilege in his/ her programme considering also personal influences on the

entrepreneurship educator (as well as on the student) that shape his/her perception of entrepreneurship; these include one's background, culture, discipline area, previous entrepreneurial experience (and whether or not this was positive), role models and exposure to the entrepreneurial landscape. To sum up, rather than overly promote common frameworks and curricula, there may be value in adopting a more fluid approach that allows future entrepreneurship educators their freedom to deliver entrepreneurship programmes as they see fit, using their own personal perspective, shaped by their own personal experiences of entrepreneurship.

Last but not least, the author highlights some additional areas that EE should be focused on, namely, globalization (e.g., a multi-national student start-up enterprise) and the development of social and non-profit enterprise.

### Scientific article 3

**Title:** *Threat or opportunity? A case study of digital-enabled redesign of entrepreneurship education in the COVID-19 emergency*

**Year of publication:** 2021

**Journal:** Technological Forecasting and Social Change

**Authors:** Giustina SECUNDO, Gioconda MELE, Pasquale Del VECCHIO, Gianluca ELIA, Alessandro MARGHERITA, Valentina NDOU

**Aim of the research:** Description of an entrepreneurship education programme focused on innovative and technology-based entrepreneurship for University students in Italy during COVID-19.

#### **Main results:**

The “Contamination Lab” (CLab@Salento) was developed which includes activities that guide students in the creation and development of their business ideas. The digital activities that were included in the platform are: seminars, case studies, contamination workshop, elevator pitch, business plan simulation, students@abroad, business model canvas, open innovation challenge, prototype development.

The study showed how distance learning modalities impacted the creation of entrepreneurial mindset and offered new opportunities to cope with the outbreak. The study highlights the following important points:

1. The re-design of typical EE learning processes, such as the elevator pitch, business idea presentation, business model canvas and business plan development were to some extent supported by the adoption of digital technologies.
2. A blended learning approach is recommended through all the EE programme.

3. The frequent online involvement of mentors from the local ecosystem within the EE programme was recommended.
4. Entrepreneurship education should be based on experiential learning activities.
5. The distance learning modalities require that entrepreneurship educators utilize their experience and skills to motivate students' commitment to entrepreneurial learning with particular emphasis on doing elevator pitches and writing feasible and viable business plans (Ibidunni et al., 2017).
6. The article recommends angel.com for online support to form the entrepreneurial team and find potential investors and F6s.com which offers online services to connect directly with accelerators, funds and investors, and search talents to complete the team.

#### Scientific article 4

**Title:** *Academic entrepreneurship: Barriers and fears versus wishes and opportunities*

**Author:** Gintaras Binkauskas

**Year of publication:** 2012

**Journal:** International Journal of Technology Management & Sustainable Development

**Aim of the research:** The identification of the attitude of researchers towards entrepreneurialism and academic-entrepreneurs and the main barriers that hinder researchers' entrepreneurialism in universities on three universities in Lithuania.

**Main results:**

The study focused on two areas; Universities' tendency to entrepreneurialism, and Researcher's inclination to entrepreneurialism. The first area tried to identify the reasons universities as organized institutions are reluctant to commercialize innovative research and which are those problems the universities confront in implementation of innovations.

Considering the first question, two problems were predominant out of all related to active university involvement in research commercialization, namely, financial risk and the thinking that research commercialization is not a university mission. Regarding the second question, keeping young gifted researchers was marked by the majority of respondents as the essential or a serious problem, the second gravest problem was chosen as Acquiring research devices and equipment.

The second area presents a general opinion of foreign scientists and local researchers regarding researchers' involvement in business. An interesting concept is mentioned in this part namely 'academic entrepreneur', those who work at a university and own a company which is related to commercialization of their research findings (Perlman et al., 1988). This area

focused on the reasons that could constrain the involvement of researchers in establishing business enterprises, spin-offs. Answering the question 'How do you evaluate academic entrepreneurs?', the majority (55.29 per cent) opted for the answer Rather positively and Positively (22.35 per cent and 32.94 per cent respectively), 20 per cent selected the answer Negatively or Rather negatively, whereas 24.71 per cent opted for the answer Neutrally. When the same question on the attitude towards academic-entrepreneurs was given to representatives of government and business enterprises as many as 71.43 per cent selected the answer Positively and Rather positively.

Another interesting finding that emerged from examining this area, reveals that the respondents view the problem of Receiving start-up capital as the essential reason that prevents researchers from establishing business enterprises and spin-offs. Other important factors that constrain researchers' involvement in establishing business companies are the fear that the company will have no commercial success and the fear that organizational activity in the company will leave no time for research. Weak links with business partners and unclear university policy regarding relationship with business would have minor influence on researchers' decision to establish business enterprises. The least important reason (according to the sum of the respondents who selected answer variants (4) and (5)) is gathering a reliable team.

Last but not least, the analysis of the questionnaire data revealed that mostly researchers and scientists want to gain legal knowledge and also knowledge of financial management.

## 3.2 National & International programmes

### National programmes

**1. 'IDEA Business Creation Training Program'** is a comprehensive Incubator-Accelerator programme by IDEA Innovation Center which has hosted startups for a period of 9 to 12 months since 2015, offering them the entire spectrum of business support to entrepreneurs from idea-stage to the stage of sales & investment and to the stage of scaling up and expanding abroad. The Program delivers the highest quality of training, workshops, mentoring, consultation, complimentary office space, field trips, networking, business development opportunities, connection with investors, media exposure, seed funding and free professional services, so that entrepreneurs can transform their innovative idea into a viable business. Through the Business Creation Training Program, IDEA has helped create 70 new business, 80+ new job positions and has supported 160+ entrepreneurs over the past 5 years.

**2. 'Cyprus Seeds for technological innovation'** aims to empower Cyprus' most talented academic researchers to make a difference in the world by developing innovative technologies in



the lab and bringing them to the marketplace in the form of breakthrough products and new companies. The programme helps researchers coming from different disciplines. Specifically, 32% of the participants in the last cycle of 2020-2021 come from the Health & Medicine area, 17% from Energy, Environment & Space, 15% of Internet Technologies & Artificial Intelligence etc.

**3. The Performance Enterprise Accelerator & Knowledge (PEAK)** of the European University (EUC), aims to research, support and accelerate efforts of Entrepreneurship. Among other activities PEAK and EUC organise two annual bootcamps involving students and academics. Firstly the **'BootCamp for Young Entrepreneurs'** is a 3-day workshop and competition that provides training, counselling & mentoring to university students and young entrepreneurs that are seeking to create innovative products / services as well as their teachers / academics. Secondly, the **'Connection Cyprus Startup Bootcamp for Young Entrepreneurs'**. The 3-day workshop is co-organised with the Ministry of Education and focused on cultivating entrepreneurship among teenagers and students while reinforcing the development of entrepreneurial skills to teachers and academics.

### International programmes

**1. 'E-mindS-Development of an Entrepreneurial MindSet In Higher Education'** is a programme which uses student centered innovative approaches to develop Higher Education and VET students' entrepreneurial mindset based on the EntreComp competence. Specifically, the programme focused on 5 objectives:

1. Validate EntreComp and use it as the framework.
2. Develop 2 assessment tools in 2 different EQF levels to assess entrepreneurship Competence of HE & VET students.
3. Identify & use innovative student centered learning approaches to be used for the education of HE students & VET. Such approaches are the Action Learning Sets & the ENTRE-Challenges which are challenges to be resolved in an experiential way.
4. Develop materials to be used in non-traditional learning environments, using student centered approaches.
5. Develop a system guide to describe the systematic approach for the development of the entrepreneurship competence.

Frederick University located in Cyprus was the coordinator of the programme.

**2. The 'ICT ENTREPRENEUR'** is an EU-funded project which aims to develop an innovative training package that will help ICT students and graduates to enhance their entrepreneurial skills and put their knowledge into practice. Furthermore, these young people had also the opportunity to develop their transversal skills having an insight into the working environment of an entrepreneur.

The duration of the programme was 3 years (2014-2017) and was implemented by 7 partners including Cyprus. One of the main goals of the programme was the development of an ICT Entrepreneur Training programme which included in-class lectures, role plays, practical exercises and games, visits to companies and guest speakers' lectures. The participants had the opportunity to work in interdisciplinary teams, under the guidance of academic faculty, employers/managers, investors and entrepreneurs, who were involved as trainers, guest speakers and mentors. The train the trainers' handbook developed too as part of the ICT ENTREPRENEUR Training Programme. Furthermore, case studies and success stories were included in the handbook.

## 4. Primary research

### 4.1 Summary of findings from the survey for non-business academics

Nineteen academics responded to the questionnaire prepared exclusively for the needs of ENTRANCE study. The majority of the participants were male (14/19) and only 5 were female. Most of the respondents were 31-40 years old while the rest of the sample was distributed as follows: 5% belonged to the youngest group (26-30 years old), 26% was ranged between 41-50 years old, 11% was ranged between 51-60 years old and 16% were 61 years old or older. Regarding the respondents' affiliation, most of them work in University of Cyprus and the rest of them come from other universities across the country (e.g., Cyprus University of Technology, University of Nicosia, European University).

Regarding their area of specialization, a wide range of disciplines has been observed but most of the participants belong to fields such as Education, Arts and Humanities, Life Sciences and Engineering. Furthermore, 13 out of 19 are professors or assistant professors or associate professors, while the rest of them are Researchers or Lecturers. Most of the respondents had 11-20 years of teaching experience.

Finally, 10 of the participants declared their willingness to participate in ENTRANCE training, 5 declared that they are not sure whether they want to participate and 4 indicated that they do not want to participate. The training design (e.g., course material, sufficient feedback) and the exact time needed to invest on the training were highlighted by the respondents as the criteria that would influence their decision on whether they would participate in the training.

#### **Part I: The relationship of your university with entrepreneurship**

Considering the first part of the questionnaire which examined the relationship of the participants' university with entrepreneurship, we report that the majority of the universities collaborate with local firms for the promotion of entrepreneurship culture within the university or there is a relevant office that supports academics in developing entrepreneurial activities (74%). Additionally, 63%

of the participants declared that university provides to its academics/researchers the opportunity to receive research or innovation funding for the development and exploitation of a business idea.

## **Part II: Your experience in relation to entrepreneurship**

Regarding the academics/researchers' experience, 12 out of 19 declared that they do not hold a previous experience in the development and the exploitation of a business idea. On the contrary, a small number of the participants (20%) selected that they never thought to develop and exploit any business idea until now. However, the challenges that they have faced or have held them back for the development and the exploitation of a business idea are mainly their workload for their research and the lack of time to run a business (74%), the legal complications between the university and the academics when they start a spin-off as they do not want to get into arguments with their superiors (60%), and their lack of experience in developing a business idea (58%). Furthermore, additional challenges deal with academics/researchers' attitudes towards the development of a business idea, such as their fear that they won't be successful in their entrepreneurial efforts since they were not trained in this area before (53%) and that their potential business idea will not be attractive in the market (48%).

The questionnaire also collected information for academics/researchers' entrepreneurial competences based on the EntreComp framework and the results are addressed in the following part.

## **Part III: The development and implementation of an idea/activity**

The majority of the academics reported that they acquire essential competences for the development of an idea/activity. Specifically, we report that most of them indicated that they are capable of the recognition of community's and surroundings' needs while they can also identify characteristics of their idea/activity that promote innovation. Investigating their ability to use and allocate the resources needed for the implementation of their idea/activity, we report mixed results. While almost half of the respondents (48%) declared that they can choose the adequate resources for the development of their idea/activity, 37% of the academics selected that they are not sure if they can complete this task.

An interesting result comes from the appropriate use of social media in order to commercialize an idea/activity. Specifically, 42% of the participants declared that they are not sure whether they can take advantage of the social media. Furthermore, very few academics (3/19) reported that they can look for external help for the development and implementation of their idea/activity. Almost half of the participants declared that they have the ability to keep their team motivated, but 42% is not sure if they are capable of doing so. Similarly, most of the

academics can identify their strengths and weaknesses and those of their team, but 32% of them are not sure whether they have this ability.

Another interesting remark coming from the use of financial resources. 37% of the participants declared that they know how to draw up the budget of their idea/activity but 26% of them are not sure whether they can accomplish this task.

Additionally, 57% of the respondents declared their ability to develop an action plan which includes the basic steps to achieve the goals of their idea/activity (e.g., set milestones), and a relative significant percentage of participants (32%) can recognize in advance possible risks related to their idea/activity. On the contrary, only one participant strongly agreed on how to develop a business plan describing how to achieve the goals of his/her idea/activity.

#### Part IV: Entrepreneurial environment and practices

From the fourth part of the questionnaire we gathered information related to the pedagogical approaches academics use which facilitate entrepreneurial education. Furthermore, we asked them to consider the attitude of their universities as a whole towards entrepreneurship education. Almost 58% of the respondents (almost half of them chose neither agree or disagree) declared that their university stimulate and support the development of entrepreneurial mindsets and skills.

Furthermore only 6/19 (agree or strongly agree) declared that in their university, academics and staff follow an entrepreneurial teaching approach across all the departments, promoting diversity and innovation in teaching and learning. However, from the following questions which investigate particular pedagogical approaches that reinforce entrepreneurship education, we conclude that in individual level most of the academics declared that they do follow entrepreneurial approaches such as encourage academics and students' collaboration for common assignment and ask students to work and examine case studies.

### 4.2 Summary of findings from the interviews with industry experts

Interviews	
Date	
24/03/2021	23/04/2021
Interviewee 1	Interviewee 2
Co-Founder & CEO on the creation of bespoke and mobile applications with world-class standards.	CEO at a R&D Biotechnology start-up company
Educational Profile	

Bachelor in Economics and Master in Computer Science	PhD in Biology
Entrepreneurial experience	
From 2010	From 2018

## Part I: Challenges and the role of universities

Interviewee 2 mentioned that the collaboration between industry and research is vital as universities provide the knowledge and their research expertise paying attention on innovation. Interviewee 2 also claimed that it is important universities to collaborate with the industry in order to commercialize their idea and see whether this idea can gain profit, but also universities should benefit financially from this collaboration. Interviewee 2 also highlighted the importance of universities to cultivate students' entrepreneurial mindset as after their studies they might decide on running their own business. The same interviewee suggested that universities should learn students how to communicate efficiently with people that come from different educational backgrounds as this diversity could lead to a fruitful collaboration or to a new idea. Finally, interviewee 2 mentioned that if university students think to run their own business but they do not hold an MBA or a business degree, they should first state clearly their business goal and then to ask for help and mentorship from established firms and experts in business.

Considering the last year and the pandemic of COVID-19, the interviewees mentioned the challenges they have faced. Interviewee 1 mentioned two challenges that are contradictory. Specifically, in the beginning of the pandemic, interviewee 1 faced financial difficulties, but after some months and due to the shift to digital transformation, he/she felt the need to hire more people as the work load was increased. On the contrary, interviewee 2 mentioned that in general they did not face many challenges as they do not provide services but mainly they build products. However, a drawback was that the investors and banks were holding back to provide funds for investment.

## Part II: Entrepreneurial skills

### *Ideas & Opportunities*

While talking about *what is more important to you: the novelty of a product/idea or its meaning*, both of the interviewees believe that the usefulness of an idea is more important as a product might be innovative but in the end it may not gain profit at that time. Interviewee 2 mentioned that their innovative characteristic is that they build machines that work and do research 24/7 but at the same time this is also something that industry needs.

## **Resources**

Both of the interviewees agreed that people are the most important asset of a company. Interviewee 1 has a team of 13 people and he/she highlighted that it is crucial to support the team, challenge it in order to make it better. Interviewee 2 mentioned that the networking helps them significantly to achieve growth by communicating with other people in their industry and potentially work on other projects. Interviewee 1 also mentioned that networking may be important later as it is possible to meet someone in an event but ‘you may collaborate with him after 5 years.’ The later interviewee suggested that the participation to events, competitions and becoming an NGO member could facilitate firm’s networking.

Both interviewees stated that the diversity of the team (educational backgrounds, expertise, experiences, countries) is a key element for their firms as they can listen to different perspectives and new ideas could arise. Additionally, regarding the resources interviewee 1 stated that in the beginning they did not need to invest a lot of money on tangible resources as they could work on their laptops and use their knowledge and expertise. On the other hand, interviewee 2 stated that in the beginning the most important factor in order to develop their start-up was the cashflow, as without it they could not build and design the product. For this purpose, they managed to receive a grant.

## **Into Action**

Interviewee 1 supported that business plan is important, but a new company needs to focus on developing short goals and check their progress frequently (every 6 months). This strategy could prevent some potential risks as well. Interviewee 2 mentioned that a business plan is important and the lack of knowledge of how to develop such a plan could be a limitation. That is the reason interviewee 2 sought for external help and advice. The later suggested that it is important new start-ups to be careful in the beginning on how to prioritize their investment and that is one of the reasons they need to develop a business plan at the first place.

## **5. Conclusions**

Considering the results of the primary research, the following conclusions could be drawn. First, the results emerged from the questionnaires revealed that non-business academics without prior experience in entrepreneurship have a good knowledge on how to identify an idea/activity and that they can use at some extent the adequate resources to support the development of their idea/activity. However, we report that they lack of how to commercialize their idea/activity to the market by using, for instance the dynamic of social media. These findings could be attributed to the fact that academics have a strong knowledge and experience on how to organise and develop a project, as it was also found that academics hold important competencies that someone needs to develop a project, such as create a team based on the project’s needs and motivate this team, at

some extent to draw up the budget they need. However, the fact that only one person declared his/her competence of the development of a business plan, it is obvious that non-business academics need support and guidance on how to develop this plan defining its objectives and how to achieve its goals.

Interesting insights come also from the two interviews. Two people with different educational backgrounds, experience in entrepreneurship but also with different type of firms were compared trying to identify those challenges that they have faced during the early stages of the development of their business, their opinion about the collaboration between research and the market, but also the identification of those entrepreneurial competences that an entrepreneur without a previous experience needs to have. First, the cultivation of an entrepreneurial mindset has been characterised as an important skill that should be considered in universities. It was also supported that collaboration between universities and the industry is also important as universities can provide their knowledge and research on a particular topic but the industry could make this idea a reality and enter it to the market.

Considering the competencies an entrepreneur should acquire, is the development of a business plan as, among others, it can prevent some potential risks and organize the way a firm should invest its money by setting priorities. It was also stated that new firms should focus on short-term goals and reflect on them frequently.

Additionally, innovation has been characterized as an important element, but also the usefulness of a product has been highlighted. Both of the interviewees mentioned that the team formation is essential but also the diversity of the people that constitute the team could provide benefits to a business. Last but not least, networking is also important as entrepreneurs can meet other partners or investors and work with them on relevant projects in future.

It is important to mention that these results cannot be generalised on a country level due to the small sample size that was used (19 academics and 2 interviewees).

Considering the results of this study, we believe that ENTRANCE project could assist non-business academics on their development of essential entrepreneurial competences but also to provide a guidance of how to use pedagogical approaches that reinforce entrepreneurship education in HEIs.

## References

Bosma, N., Hill, S., Ionescu-Somers, A., Kelley, D., Levie, J., & Tarnawa, A. (2020). Global Entrepreneurship Monitor. Global Entrepreneurship Research Association, London Business School.

McCallum E., Weicht R., McMullan L., Price A., EntreComp into Action: get inspired, make it happen (M. Bacigalupo & W. O'Keeffe Eds.), EUR 29105 EN, Publications Office of the European Union, Luxembourg, 2018. ISBN 978-92-79-79360- 8, doi:10.2760/574864, JRC109128



## Appendix

### Non-business academics questionnaire-Frequency tables

**Does your university collaborate with local firms (e.g., SMEs, large corporations, start-ups) for the promotion of entrepreneurship culture within the university?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	5	26,3	26,3	26,3
	Yes	14	73,7	73,7	100,0
	Total	19	100,0	100,0	

**Does your university provide to its academics/researchers the opportunity to receive research or innovation funding for the development and exploitation of a business idea?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	7	36,8	36,8	36,8
	Yes	12	63,2	63,2	100,0
	Total	19	100,0	100,0	

**Is there a relevant office or department within your university that supports academics or students in developing entrepreneurial activities?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	5	26,3	26,3	26,3
	Yes	14	73,7	73,7	100,0
	Total	19	100,0	100,0	

**Do you have any relevant experience in the development and the exploitation of a business idea?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	12	63,2	63,2	63,2
	Yes	7	36,8	36,8	100,0
	Total	19	100,0	100,0	

**I never thought to develop and exploit any business idea until now.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	5	26,3	26,3	26,3
	Disagree	7	36,8	36,8	63,2
	Neither agree or disagree	3	15,8	15,8	78,9
	Agree	2	10,5	10,5	89,5
	Strongly Agree	2	10,5	10,5	100,0
	Total	19	100,0	100,0	

**My university does not provide any incentives for academics to develop entrepreneurial activities.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	3	15,8	15,8	15,8
	Disagree	3	15,8	15,8	31,6
	Neither agree or disagree	6	31,6	31,6	63,2
	Agree	4	21,1	21,1	84,2
	Strongly Agree	3	15,8	15,8	100,0
	Total	19	100,0	100,0	

**There is no clear university policy regarding relationship with business.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	2	10,5	10,5	10,5
	Disagree	5	26,3	26,3	36,8
	Neither agree or disagree	5	26,3	26,3	63,2
	Agree	5	26,3	26,3	89,5
	Strongly Agree	2	10,5	10,5	100,0
	Total	19	100,0	100,0	

**My university does not have a relevant office/department that supports academics in developing entrepreneurial activities.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	6	31,6	31,6	31,6
	Disagree	6	31,6	31,6	63,2
	Neither agree or disagree	2	10,5	10,5	73,7
	Agree	2	10,5	10,5	84,2
	Strongly Agree	3	15,8	15,8	100,0
	Total	19	100,0	100,0	

**My research work is more theoretical, it is not so relevant with entrepreneurial activities.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	7	36,8	36,8	36,8
	Disagree	3	15,8	15,8	52,6
	Neither agree or disagree	2	10,5	10,5	63,2
	Agree	4	21,1	21,1	84,2
	Strongly Agree	3	15,8	15,8	100,0
	Total	19	100,0	100,0	

**My colleagues at university are not willing to start working on this new business idea together so I face difficulties in forming a successful team.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	2	10,5	10,5	10,5
	Disagree	4	21,1	21,1	31,6
	Neither agree or disagree	5	26,3	26,3	57,9
	Agree	4	21,1	21,1	78,9
	Strongly Agree	4	21,1	21,1	100,0
	Total	19	100,0	100,0	

**There are many legal complications between the university and the academics when they start a spin-off and I do not want to get into arguments with my superiors.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	1	5,3	5,3	5,3
	Disagree	1	5,3	5,3	10,5
	Neither agree or disagree	5	26,3	26,3	36,8
	Agree	5	26,3	26,3	63,2
	Strongly Agree	7	36,8	36,8	100,0
	Total	19	100,0	100,0	

**I am not aware of the Intellectual Property Rights associated with my invention or the procedure that I should follow to protect them.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	5	26,3	26,3	26,3
	Disagree	2	10,5	10,5	36,8
	Neither agree or disagree	5	26,3	26,3	63,2
	Agree	3	15,8	15,8	78,9
	Strongly Agree	4	21,1	21,1	100,0
	Total	19	100,0	100,0	

**I work so many hours to conduct other academic tasks that I don't have time to embark in such exploitation/entrepreneurial activities.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	3	15,8	15,8	15,8
	Neither agree or disagree	2	10,5	10,5	26,3
	Agree	6	31,6	31,6	57,9
	Strongly Agree	8	42,1	42,1	100,0
	Total	19	100,0	100,0	

**I do not hold a previous experience of how to start in exploiting my research findings or embarking on entrepreneurial activities (e.g., development of a business plan).**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	2	10,5	10,5	10,5
	Disagree	3	15,8	15,8	26,3
	Neither agree or disagree	3	15,8	15,8	42,1
	Agree	6	31,6	31,6	73,7
	Strongly Agree	5	26,3	26,3	100,0
	Total	19	100,0	100,0	

**I am not sure how to identify a business opportunity considering the needs of a particular target group and the characteristics of my business idea.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	2	10,5	10,5	10,5
	Disagree	6	31,6	31,6	42,1
	Neither agree or disagree	3	15,8	15,8	57,9
	Agree	4	21,1	21,1	78,9
	Strongly Agree	4	21,1	21,1	100,0
	Total	19	100,0	100,0	

**I am afraid that I won't be successful in my entrepreneurial efforts since I was not trained in this area before thus I avoid starting altogether.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	1	5,3	5,3	5,3
	Disagree	5	26,3	26,3	31,6
	Neither agree or disagree	3	15,8	15,8	47,4
	Agree	7	36,8	36,8	84,2
	Strongly Agree	3	15,8	15,8	100,0
	Total	19	100,0	100,0	

**I am afraid that my potential business idea will not be attractive in the market.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	3	15,8	15,8	15,8
	Disagree	5	26,3	26,3	42,1
	Neither agree or disagree	2	10,5	10,5	52,6
	Agree	7	36,8	36,8	89,5
	Strongly Agree	2	10,5	10,5	100,0
	Total	19	100,0	100,0	

**The legal framework in my country does not support academics when they start entrepreneurial activities within Universities.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	5,3	5,3	5,3
	Neither agree or disagree	8	42,1	42,1	47,4
	Agree	6	31,6	31,6	78,9
	Strongly Agree	4	21,1	21,1	100,0
	Total	19	100,0	100,0	

**The current situation of the COVID-19 pandemic.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	4	21,1	21,1	21,1
	Neither agree or disagree	9	47,4	47,4	68,4
	Agree	4	21,1	21,1	89,5
	Strongly Agree	2	10,5	10,5	100,0
	Total	19	100,0	100,0	

**Other (please write your own reasons)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	15	78,9	78,9	78,9
Easier procedures to create a company and understanding its obligations	1	5,3	5,3	84,2
In my university and in Cyprus there is no clear policy that support the spin-off . I have ideas and I would like to get involve but I am afraid I will not have the support from my University	1	5,3	5,3	89,5
My area of research does not concerne entrepreneurial activities	1	5,3	5,3	94,7
The previous question has a problem "The current situation of the COVID-19 pandemic."	1	5,3	5,3	100,0
Total	19	100,0	100,0	

**I can recognize community's and surroundings' needs for the development of my idea/activity.**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	2	10,5	10,5	10,5
Neither agree or disagree	6	31,6	31,6	42,1
Agree	6	31,6	31,6	73,7
Strongly Agree	5	26,3	26,3	100,0
Total	19	100,0	100,0	



**I can identify innovative characteristics of my idea/activity.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	5,3	5,3	5,3
	Neither agree or disagree	4	21,1	21,1	26,3
	Agree	9	47,4	47,4	73,7
	Strongly Agree	5	26,3	26,3	100,0
	Total	19	100,0	100,0	

**I can choose the right resources for the implementation of my idea.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	2	10,5	10,5	10,5
	Disagree	1	5,3	5,3	15,8
	Neither agree or disagree	7	36,8	36,8	52,6
	Agree	6	31,6	31,6	84,2
	Strongly Agree	3	15,8	15,8	100,0
	Total	19	100,0	100,0	

**I can identify my strengths and weaknesses and those of my team.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	1	5,3	5,3	5,3
	Disagree	1	5,3	5,3	10,5
	Neither agree or disagree	6	31,6	31,6	42,1
	Agree	7	36,8	36,8	78,9
	Strongly Agree	4	21,1	21,1	100,0
	Total	19	100,0	100,0	

**I can keep my team motivated to what they want to achieve.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	5,3	5,3	5,3
	Neither agree or disagree	8	42,1	42,1	47,4
	Agree	5	26,3	26,3	73,7
	Strongly Agree	5	26,3	26,3	100,0
	Total	19	100,0	100,0	

**I can look for external help if need be, for the development and implementation of my activity/idea (e.g., social enterprise advisors).**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	1	5,3	5,3	5,3
	Disagree	2	10,5	10,5	15,8
	Neither agree or disagree	6	31,6	31,6	47,4
	Agree	6	31,6	31,6	78,9
	Strongly Agree	4	21,1	21,1	100,0
	Total	19	100,0	100,0	

**I can draw up the budget of my activity/idea.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	2	10,5	10,5	10,5
	Disagree	2	10,5	10,5	21,1
	Neither agree or disagree	5	26,3	26,3	47,4
	Agree	7	36,8	36,8	84,2
	Strongly Agree	3	15,8	15,8	100,0
	Total	19	100,0	100,0	

**I can use social media appropriately based on my audience and the purpose of my activity/idea.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	3	15,8	15,8	15,8
	Disagree	3	15,8	15,8	31,6
	Neither agree or disagree	8	42,1	42,1	73,7
	Agree	3	15,8	15,8	89,5
	Strongly Agree	2	10,5	10,5	100,0
	Total	19	100,0	100,0	

**I can develop an action plan which includes the basic steps to achieve the goals of my activity/idea (e.g., set milestones).**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	2	10,5	10,5	10,5
	Disagree	1	5,3	5,3	15,8
	Neither agree or disagree	5	26,3	26,3	42,1
	Agree	8	42,1	42,1	84,2
	Strongly Agree	3	15,8	15,8	100,0
	Total	19	100,0	100,0	

**I can recognize in advance possible risks related to my activity/idea.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	2	10,5	10,5	10,5
	Disagree	4	21,1	21,1	31,6
	Neither agree or disagree	4	21,1	21,1	52,6
	Agree	6	31,6	31,6	84,2
	Strongly Agree	3	15,8	15,8	100,0
	Total	19	100,0	100,0	

**I can develop a business plan describing how to achieve the goals of my activity/idea.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	2	10,5	10,5	10,5
	Disagree	8	42,1	42,1	52,6
	Neither agree or disagree	3	15,8	15,8	68,4
	Agree	5	26,3	26,3	94,7
	Strongly Agree	1	5,3	5,3	100,0
	Total	19	100,0	100,0	

**One of the goals of the university is to stimulate and support the development of entrepreneurial mindsets and skills.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	1	5,3	5,3	5,3
	Disagree	4	21,1	21,1	26,3
	Neither agree or disagree	3	15,8	15,8	42,1
	Agree	6	31,6	31,6	73,7
	Strongly Agree	5	26,3	26,3	100,0
	Total	19	100,0	100,0	

**Academics and staff follow an entrepreneurial teaching approach across all the departments, promoting diversity and innovation in teaching and learning.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stronly Disagree	6	31,6	31,6	31,6
	Disagree	3	15,8	15,8	47,4
	Neither agree or disagree	4	21,1	21,1	68,4
	Agree	4	21,1	21,1	89,5
	Strongly Agree	2	10,5	10,5	100,0
	Total	19	100,0	100,0	

**Ask students to decide their own problem-solving procedures.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	5,3	5,3	5,3
	Neither agree or disagree	1	5,3	5,3	10,5
	Agree	9	47,4	47,4	57,9
	Strongly Agree	8	42,1	42,1	100,0
	Total	19	100,0	100,0	

**Encourage academics and students' collaboration for common assignment.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	5,3	5,3	5,3
	Neither agree or disagree	2	10,5	10,5	15,8
	Agree	7	36,8	36,8	52,6
	Strongly Agree	9	47,4	47,4	100,0
	Total	19	100,0	100,0	

**Ask students to work and examine case studies.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neither agree or disagree	4	21,1	21,1	21,1
	Agree	7	36,8	36,8	57,9
	Strongly Agree	8	42,1	42,1	100,0
	Total	19	100,0	100,0	

**Engage students in real-world projects (e.g., problem-based learning).**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neither agree or disagree	1	5,3	5,3	5,3
	Agree	4	21,1	21,1	26,3
	Strongly Agree	14	73,7	73,7	100,0
	Total	19	100,0	100,0	

**Use experiential learning approach (e.g., organize students' visits in local firms as an objective of your class, pop-up shops).**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	3	15,8	15,8	15,8
	Neither agree or disagree	2	10,5	10,5	26,3
	Agree	4	21,1	21,1	47,4
	Strongly Agree	10	52,6	52,6	100,0
	Total	19	100,0	100,0	

### What is your gender?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	5	26,3	26,3	26,3
	Male	14	73,7	73,7	100,0
	Total	19	100,0	100,0	

### How old are you?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	26-30	1	5,3	5,3	5,3
	31-40	8	42,1	42,1	47,4
	41-50	5	26,3	26,3	73,7
	51-60	2	10,5	10,5	84,2
	61 or older	3	15,8	15,8	100,0
	Total	19	100,0	100,0	

### By the end of this academic year, how many years will you have been teaching altogether?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5 years	2	10,5	10,5	10,5
	11-20 years	8	42,1	42,1	52,6
	21-30 years	3	15,8	15,8	68,4
	31 or more years	2	10,5	10,5	78,9
	6-10 years	4	21,1	21,1	100,0
	Total	19	100,0	100,0	

### In which country are you located?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Cyprus	19	100,0	100,0	100,0

### In which institution/university are you employed?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid CUT	1	5,3	5,3	5,3
Cyprus University of Technology	1	5,3	5,3	10,5
European University Cyprus	2	10,5	10,5	21,1
Institute of Neurology and Genetics	1	5,3	5,3	26,3
Intercollege and University of Nicosia	1	5,3	5,3	31,6
Prefer to not say	1	5,3	5,3	36,8
TEPAK	1	5,3	5,3	42,1
UCY	2	10,5	10,5	52,6
UCY and then UNIC	1	5,3	5,3	57,9
University of Cyprus	6	31,6	31,6	89,5
University of Cyprus & Cyprus University of Technology	1	5,3	5,3	94,7
University of Nicosia	1	5,3	5,3	100,0
Total	19	100,0	100,0	



### What is your area of specialization?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Arts and Humanities	3	15,8	15,8	15,8
	Clinical and Health	1	5,3	5,3	21,1
	Computer Science	1	5,3	5,3	26,3
	Culinary and Hospitality	1	5,3	5,3	31,6
	Design & Technology	1	5,3	5,3	36,8
	Education	4	21,1	21,1	57,9
	Engineering	2	10,5	10,5	68,4
	ICT	1	5,3	5,3	73,7
	Life sciences	2	10,5	10,5	84,2
	Physical sciences	1	5,3	5,3	89,5
	Prefer not to say	1	5,3	5,3	94,7
	Software developer	1	5,3	5,3	100,0
	Total	19	100,0	100,0	

### Which is the exact position you hold in the organization/university?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Assistant Professor	2	10,5	10,5	10,5
	Associate Professor	6	31,6	31,6	42,1
	Lecturer	2	10,5	10,5	52,6
	Professor	5	26,3	26,3	78,9
	Researcher	2	10,5	10,5	89,5
	Researcher and Lecturer	1	5,3	5,3	94,7
	Senior Lecturer	1	5,3	5,3	100,0
	Total	19	100,0	100,0	

**Would you like to participate in the free online training of entrepreneurship addressed to non-business academics during 2021-2022 offered by the “ENTRANCE” EU-funded project? (For more information, please visit <https://entranceproject.eu/>)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	4	21,1	21,1	21,1
	Not sure	5	26,3	26,3	47,4
	Yes	10	52,6	52,6	100,0
	Total	19	100,0	100,0	