UNIVERSITY INDUSTRY INNOVATION MAGAZINE

Embedding Entrepreneurship in Education

How is EntreComp Being Used in Higher Education? p. 4
University of Rotterdam: Where Ideas Turn into Artistic Productions p. 20
Entrepreneurship Teaching Toolkit developed by MCI p. 11
EMBEDDING ENTREPRENEURSHIP EDUCATION

for student entrepreneurship, and a collaborative start-up culture in Europe

PROJECT PARTNERS:
## Table Of Content

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>03</td>
<td>Foreword</td>
</tr>
<tr>
<td>04</td>
<td>The Commission's Approach</td>
</tr>
<tr>
<td>07</td>
<td>Quality Assuring Entrepreneurial Education</td>
</tr>
<tr>
<td>11</td>
<td>Erasmus+ Project in Focus</td>
</tr>
<tr>
<td>20</td>
<td>Ongoing Erasmus+ Projects</td>
</tr>
<tr>
<td>22</td>
<td>Institutional Experiences</td>
</tr>
<tr>
<td>30</td>
<td>Challenges and opportunities: A closer look at entrepreneurship education in Australian universities</td>
</tr>
<tr>
<td>34</td>
<td>JAMK raises the bar with its approach to entrepreneurship</td>
</tr>
<tr>
<td>38</td>
<td>Entrepreneurship education - it's all about the interplay</td>
</tr>
<tr>
<td>42</td>
<td>Embedding entrepreneurship at AUAS with our new 10K pre-incubation programme</td>
</tr>
<tr>
<td>45</td>
<td>Embedding entrepreneurship education at the Munich Business School</td>
</tr>
</tbody>
</table>

### Ongoing Erasmus+ Projects

- **20** University of Rotterdam: Where ideas turn into successful artistic production (WEXHE)
- **22** How do you assess creativity? (EntreAsses)
- **24** The academic entrepreneur or entrepreneurial academic? (ETEE)
- **28** Welcome to Tomorrow’s Land

### Institutional Experiences

- **30** Challenges and opportunities: A closer look at entrepreneurship education in Australian universities
- **34** JAMK raises the bar with its approach to entrepreneurship
- **38** Entrepreneurship education - it's all about the interplay
- **42** Embedding entrepreneurship at AUAS with our new 10K pre-incubation programme
- **45** Embedding entrepreneurship education at the Munich Business School
Join us in Sydney at the:

University-Industry Engagement Conference

11-13 February, 2019

UNIVERSITY-INDUSTRY ENGAGEMENT 02/2019
SYDNEY, AUSTRALIA
In this special issue we have taken up the challenge to focus on the concept of Entrepreneurship in Education. Why challenge? Over the past few decades the field has found itself a flourishing ground, and has achieved academic legitimacy and maturity expanding its practice across borders, and among learners of all ages and backgrounds. The concept has caused much enthusiasm in the higher education sector as well, being fully embraced as one of the major drivers of economic, social and individual growth. As we eagerly observe the breathtaking speed of developments in our member and non-member universities and in the broader higher education landscape, we realise that the interpretation of what entrepreneurship in education is and how it is facilitated varies greatly across institutions. What’s more, the definitions shift, making it hard to compare and contrast the practices in different regions, and interpret implications.

In the context of Europe the European Commission has been working towards creating a common understanding of the concepts and competences, as well as establishing solid quality standards. The EntreComp Framework launched by the Commission in 2016 is developed in reference to the guidelines of the Quality Assurance Agency for Higher Education (QAA) that drew from the input of over 70 UK universities. The framework has attracted considerable attention of the education providers, as well as the Erasmus projects on their development of approaches and tools in integrating entrepreneurship in the European universities. Thus we are thrilled to have the opportunity to highlight the work of some of the most prominent European initiatives in this issue, including EEE, WEXHE, EntreAssess, ETEE, and Tomorrow’s Land, some of which already generated outcomes within the suggested framework. Further, we are happy to bring into your attention the institutional journeys of JAMK University of Applied Sciences, Amsterdam University of Applied Sciences, and Munich Business School, as well as two Australian universities LaTrobe University and University of Adelaide, in integrating an entrepreneurial culture and curriculum within their institutions.

While our selection of articles reflect today’s diversity in the approaches taken and give credits to the efforts made, this special issue is prepared as a tribute to the Erasmus+ Strategic Partnership Project Embedding Entrepreneurship Education (EEE). During the past two years, the project consortium has developed a variety of tools and instruments that can be used to promote entrepreneurial thinking and action, establish regional stakeholder networks, and foster setting up state-of-the-art entrepreneurship education curriculum at the university level. We hope that with all featured initiatives, including the outcomes of the EEE project, we enable the replication of these good practices in other regions in Europe.

We welcome you again to this special issue and wish you a delightful reading.
How is the Entrecomp – The European Entrepreneurship Competence Framework – Being Used in Higher Education?

BY MARGHERITA BACIGALUPO & WILLIAM O’KEEFE
Entrepreneurship as a key competence is transversal to any aspect of life and entails a broader set of knowledges, skills and attitudes than those required to start up and run a company. The capacity to act upon ideas and opportunities and transform them into financial, cultural or social value for others is what make individuals and groups entrepreneurial in any endeavour in life, and this is the definition that the European Commission adopts in its Entrepreneurship Competence Framework (EntreComp). [1] Starting from such a broad definition, EntreComp unfolds the notion of value creation into three areas (Ideas & Opportunities, Resources and Into Action). Each area, in turn, identifies and describes fifteen competences, which are further elaborated into 60 thematic threads. Each thread in turn is articulated along eight levels of proficiency, from the most basic to advanced levels.

In total, EntreComp includes a total of 442 generic learning outcomes.

EntreComp is comprehensive and detailed and like a dictionary is meant to be consulted as a reference; it should not be considered a curriculum or programme, nor a standard.

EntreComp provides a definition and understanding of entrepreneurship competence within a lifelong learning perspective, that any player in the field of entrepreneurial learning, in formal education as much as those in non-formal and informal learning settings, can refer to. EntreComp was developed through desk research [2] and a 18-month-long consensus building process that has involved input from hundreds of people and eventual publication in June 2016.

Since its first citation in the New Skills Agenda For Europe, [3] EntreComp has become a reference de facto having been cited by the World Economic Forum in its Education Agenda [4], by the 2018 Recommendation on Key Competence for Lifelong Learning, and by a growing number of national policy documents such as the recent Entrepreneurship education syllabus for secondary school in Italy [5]. Further, the framework is widely used across domains, from formal education to lifelong learning and inclusion, as well as in employment and enterprise settings, as the more than 70 examples, tools and ideas featured in the 2018 user guide EntreComp Into Action: Get Inspired: Make it happen. [2] demonstrate.

The reason for its wide take up is threefold. First, the framework responds to a clear need. Entrepreneurship is acknowledged as key competence to face the challenges of today’s world, not only for workers who have to be able to proactively shape their careers but also for society as a whole which is exposed to an unprecedented pace of change, but its definition has always depended on the context of use giving rise to a plethora of partially overlapping partially competing concepts. Second, the framework is simple, modular, fine grained but flexible and adaptable to fit one’s need. It can be used to mobilise interest, to design practical entrepreneurial experiences, map a training offer, or to create a certification scheme. Finally, EntreComp represents European value added. Created by the European Commission Joint Research Centre in partnership with Directorate-General Employment Social affairs and Inclusion, EntreComp has both the scientific soundness and the policy endorsement to be a trusted reference document.

At higher education level, EntreComp has proven useful to revise the academic offer. Swansea University School of Management, for instance, as most business schools, had traditionally focused on the relevant theories of business planning, ideation and leadership. They found that their approach was limited in terms of the practical application of entrepreneurial skills, in turn leading to limited development of students’ and graduates’ entrepreneurial mindset. They thus decided to move in the direction of pedagogies focused on practical value creation. They used EntreComp to map their offer and found that around 75 per cent of their own intended learning outcomes were aligned with the ideation competences, though less so with the resource management and action competences. The identified gap became the focus of redevelopment to enable wider entrepreneurship competences to be recognised. EntreComp was used to balance the theoretical knowledge, academic rigour and practical experience within the learning outcomes of the entrepreneurship modules thereby embracing the three areas of competences that characterize the framework.

A similar exercise has been carried out at the Worcester Business School, University of Worcester, to identify focus competences so as to map the competences needed to start a business across the stages required to start and grow a business: discovery, modelling, start-up, existence, survival, success, adaption, and independence. This in turn led to the allocation of learning outcomes to training modules that build on one another, in a clear, consistent and easy-to-communicate way.

At the Kemmy Business School, University of Limerick, EntreComp has been used to stimulate learners’ reflection of their own progress in developing entrepreneurship competences within the Entrepreneurship Modules and Programmes, but also to allocate learning outcomes across the theoretical modules and the practical entrepreneurial experiences such as practical in-company projects, that student run over a 12-month period. This in turn raises awareness in the firms that provide the setting for student projects, about what is the added value of entrepreneurship as a transversal competence. Through this use of EntreComp, the University has enhanced its image and credibility within the local business expanding its relevance beyond its student population.

EntreComp has been been widely used to embed entrepreneurial learning across curricula and to reinforce entrepreneurial pathways open to any student and faculty. 

ENTRECOMP DEFINES AND DESCRIBES 15 ENTREPRENEURSHIP COMPETENCES, THAT ARE FURTHER ELABORATED INTO 60 THEMATIC THREADS. IN TOTAL, ENTRECOMP INCLUDES 442 GENERIC OUTCOME STATEMENTS.
The examples listed above, give an idea of how EntreComp can be adapted and used in the field of higher education as well as other area of education and training. From raising awareness across faculty, to mobilising interest around a consensual definition, from co-designing interventions, to fostering self-reflection in lecturers as well as in learners, EntreComp offers an accessible starting point when it comes to entrepreneurship education and can facilitate a common understanding of entrepreneurship. EntreComp lights the way for organisations, educators and learners to be empowered through the key competences that make an entrepreneurial mindset, ultimately creating value for others.

References


Margherita Bacigalupo is a research fellow at the Joint Research Centre of the European Commission. She is the lead author of the EntreComp: the Entrepreneurship Competence Framework published in 2016.

William O’Keefe is seconded national expert to the European Commission, at DG Employment Social Affairs and Inclusion, where he is in charge of the Entrepreneurship and Digital Competence Framework.
A small business owner and educator, I was rather taken by a question presented by Professor David Kirby some years back. To paraphrase, he simply asked, "If we had the opportunity to start over and reimagine education, what would it look like?" In recent years this question has fueled my imagination, so when I was invited to run the UK Higher Education Academy’s (Now AdvanceHE) Special Interest Group in Entrepreneurial Learning, rather than stick with the views of the group’s host business and finance departments within their member universities, I cast my eye further afield.

Here in the UK the quality of our Higher Education is the responsibility of the Quality Assurance Agency for Higher Education (QAA), and at that time they had over 30 'Benchmark Statement' for the different subjects that a University education might offer. So, for example, I asked myself which discipline might be best at learning and teaching that developed an ability to persuade an audience. Perhaps unsurprisingly theatre and drama came to the fore. So who would be best at learning and teaching that enhances decision-making within stressful situations? This time medical education provided some interesting insights. Working with incomplete evidence? Greek and the Classics. Creativity aimed at solving other people’s problems? The discipline of design had that well covered, and so the story went on.

What I ended up with was not a business course proposal at all, but a mish mash of many different disciplines within which there were areas of relevant focus and expertise, so together with colleagues from Enterprise Educators UK and the Higher Education Academy, we approached QAA with the idea of creating a signposting system to help educators who wished to become more entrepreneurial in their institutions. This signpost could illustrate where to look for relevant expertise and break out of the silo of business education.

This was 2011, and as a direct result, within a year we developed and produced what has become known as the world’s first national guidance to Universities on Enterprise and Entrepreneurship. Note the distinction here, seven years on we know how well received this split definition has become, simply because it helps an educator to work out what matters most to them, and what teaching techniques will be needed to make a reasonable evaluation of a learner’s progress.

To those who may be unfamiliar with the definitions we have been using in UK Universities for the past 5 years [1], here is an extract from the most recent guidance, which was published earlier this year following a
UK wide consultation of the impact and related practice development. This version has been strengthened in response to feedback from over 60 Universities.

**Enterprise**

Enterprise is defined here as the generation and application of ideas, which are set within practical situations during a project or undertaking. This is a generic concept that can be applied across all areas of education and professional life.

It combines creativity, originality, initiative, idea generation, design thinking, adaptability and reflexivity with problem identification, problem solving, innovation, expression, communication and practical action.

**Entrepreneurship**

Entrepreneurship Education is defined as the application of enterprise behaviours, attributes and competencies into the creation of cultural, social or economic value. This can, but does not exclusively, lead to venture creation.

Entrepreneurship applies to both individuals and groups (teams or organisations), and it refers to value creation in the private, public and third sectors, and in any hybrid combination of the three [1].

This ‘bigger picture’ approach has a clear advantage, as it enables all disciplines to start from positions of strength, and to then develop responses to areas in which they are less confident, and may therefore wish to draw upon the experience of other disciplines. It also provides the basis of a learning journey, as all too often the focus has been on the top end of the pyramid, where enthused students who already have ideas are the targets, and a narrower definition of entrepreneurship related only to business knowledge and practice leads the learning process. Here underlying competencies related to creativity, innovation, flexibility and adaptability are typically underplayed, as the learner’s ‘great idea for a business’ is the starting point for development.

So we asked, what of the other learners who are by far the majority, and what might education of this nature help them to achieve? The ‘Gateway Triangle developed in partnership with QUT’s Dr. Colin Jones addressed this, and by asking questions such as where is failure useful in a student’s learning, and where could it be catastrophic, new dimensions emerged.

There is often talk about the art and the science of education, and the definitions and triangle also help to position these. For example, creativity based courses such as those found in design ask for many solutions from their students. They do not simply expect the ‘right’ answer, but ask for the best-argued answer, and these should relate to a set of potential solutions that fit the circumstances. Neither do they expect the answer to be permanent, but adaptable when conditions change. This well-developed type of education requires pitching and debate, and is well suited to developing the kinds of flexible and adaptable thinkers that are being called for by the likes of the OECD and World Economic Forum. QAA takes these types of wider and underpinning approaches that have been gathered from the disciplines, and presents them as Enterprise Education.

The later stages take learning towards entrepreneurship, where mistakes are less desirable and many well-formed business practices can be used to explain well-understood processes. If laws and procedures are
well known, there will be more ‘correct’ answers to build into the learning approaches at this stage of development. Taken together, these are described as ‘Entrepreneurial’ and this is where QAA’s work has supported more broad European initiatives.

In 2015 three experts led by Ivana Komarkova undertook a review [2] on policies and approaches that enabled the development of entrepreneurial competencies for the European Commission’s Joint Research Center. Called ‘O’Vent’, it included in depth case studies [3] that met the criteria they were seeking. Learning settings, pedagogies and competency developments that were potentially transferable were reviewed and examined in detail. QAA’s work was selected and the example of University of Wales Trinity Saint David was used to illustrate the QAA approach. As it was one of the final 12 examples selected for in depth cases, the net result was that the emerging EntreComp model was mapped against QAA’s work as it developed.

EntreComp was published in 2016 and has been described as Europe’s ‘de facto’ guide for member states. A number of projects have emanated from it, and many were captured by Bantani Education’s Practice into Policy event (PiPEnt) in 2017. Led by the EU’s former policy lead for entrepreneurial education, Elin McCallum, it soon became clear just how many projects were engaging in related questions. The more recent ‘EntreComp into Action’ [4] picks up on many of these and other new initiatives.

So where am I going with this? Well consider this: if you were given the job of re-inventing education where would you start? Is education just about disciplinary recall of facts and knowledge, or could it be more about the mixing and matching of them in new creative ways? Would education start from the perspective of one discipline, or many disciplines?

In my view, entrepreneurial forms of education are for all learners, simply because in a world full of changes it is the best fit I know of. It therefore needs to grow out of the strengths we already have, or many wheels will be reinvented, and many educators become disenchanted. What is more, the University Interactions we need to see evolving are for all business types, and therein lays an other clear message.

Finally of course, who teaches the schoolteachers, the ones who wish to learn how to help their young people through entrepreneurial learning? Is that the role of University researchers and educators who see the bigger pictures described here?

When approving the entrepreneurship competence for all member states in May this year after unanimous agreement, the Council for Europe has this to say, and it will be the responsibility of those with experience to ensure that learner assessment and progression is managed in a quality enhanced way.

Member States should be emphasizing: ‘…essential interpersonal, communicative and cognitive skills such as: critical thinking, analytical skills, creativity, problem solving and resilience that facilitate young people’s transition to adulthood, active citizenship and working life.” [5]

References


©all rights on images used in this article belong to QAA

ANDY PENALUNA is the Director of the International Institute for Creative Entrepreneurial Development at University of Wales Trinity Saint David.
As in many other European regions also in Tyrol (Austria), the fostering of entrepreneurial skills and activities, especially among young people is seen as a way to drive economic growth. In order to support the success rate of start-ups education has become more prominent recently, particularly, but not exclusively, among higher education institutions. Yet, it seems that Europe still struggles to foster entrepreneurship in education and, to a certain degree, misses to unlock its students’ entrepreneurial spirit. It seems that even though entrepreneurial skills are considered important competences in today’s society, they are still not promoted enough, especially from an educational point of view.

In the context of the EU project ‘Embedding Entrepreneurship Education’, MCI Management Center Innsbruck (Austria) took the opportunity to contribute, together with its partners Univations (Germany), UIIN (Netherlands), University of Szeged (Hungary), Canice Consulting (Northern Ireland), and the associate partner the LaTrobe University (Australia), and made an attempt to develop innovative and interactive, practical-oriented teaching material for entrepreneurship education.

MCI developed an ‘Entrepreneurship Teaching Toolkit’ [1] with the aim to provide material for educators to train and educate individuals independently of their already existing skills and previous knowledge base in management, business or entrepreneurship. Thus, the Entrepreneurship Teaching Toolkit has been designed in such a form to serve educators from very different fields.

For this purpose two different aims are pursued with the Entrepreneurship Teaching Toolkit. First, individuals as instructors, lecturers, scholars etc. having different backgrounds should be able to use the Entrepreneurship Teaching Toolkit. For them it should be easy to integrate entrepreneurship modules in their existing educational courses and programs or to develop new courses and programs. Second and indirectly, students and individuals interested in entrepreneurship should be trained and educated to acquire solid entrepreneurial competences and/or to further improve them.

The structure of the Toolkit has been inspired by the EntreComp Framework [2], initiated and developed by the European Commission. The initiative seeks to

**By Desiree Wieser**

Fostering Entrepreneurship Education

The Entrepreneurship Teaching Toolkit

Developed by MCI Management Center Innsbruck
PRACTICAL ORIENTATION OF THE TOOLKIT IS REALIZED THROUGH A PROBLEM-BASED LEARNING APPROACH, INCLUDING LEARNING BY DOING, REAL-LIFE EXAMPLES, CASE STUDIES, ROLE-PLAYS, SIMULATIONS AND INTERACTION.

establish a shared understanding of the knowledge, skills and attitudes that characterize entrepreneurship. In turn, the EntreComp has been developed as a comprehensive, flexible and multi-purpose reference framework that sees and explains entrepreneurship as a key competence for lifelong learning. EntreComp focuses on the following three main entrepreneurship competence areas: Ideas & Opportunities, Resources, and into Action [5], whereby each area contains 5 further sub-competences [2,3].

It is an explicit aim of the EntreComp initiative that the framework can be refined and applied in more depth to address the particular needs of specific target groups. For this purpose, EntreComp has been developed as adaptable and flexible framework. Indeed, different institutions and organizations throughout Europe already applied EntreComp in practice to reach different goals, in particular in the ambit of education, informal learning, and employment, as summarized in the ‘EntreComp into Action’ [5]. The government of Luxembourg for example made use of EntreComp to support the development of Entrepreneurial Schools and entrepreneurial learning activities throughout the country. In Finland, the University of Turku has used EntreComp to create a common understanding of entrepreneurship across all faculties. Also a very interesting project is SFEDI Awards in the UK. This program supports the rehabilitation of prisoners and seeks to reduce reoffending rates with entrepreneurial education using EntreComp. Besides, also the Entrepreneurship Teaching Toolkit has been chosen to be part of the collection. It serves as an example on how to use EntreComp in the context of curriculum development, and describes how learning material can be developed and structured in line with EntreComp and with the goal to foster entrepreneurship education in higher education.

Developing the Entrepreneurship Teaching Toolkit MCI relied on the definition of Entrepreneurship based on the EntreComp Framework. According to this definition, Entrepreneurship is defined as a competence to act upon opportunities and ideas in order to create value for others [2,3]. Furthermore, the Entrepreneurship Teaching Toolkit has been structured according to the three main competence areas in the EntreComp Framework, namely ‘Ideas & Opportunities’, ‘Resources’, and ‘Into Action’. In turn, specific modules (tools) have been developed to foster those core competences and the respective sub-competences.

To fully exploit the rationales behind the EntreComp Framework, a modular approach for the Entrepreneurship Teaching Toolkit has been employed. The modular structure provides a flexible and forthcoming way to introduce entrepreneurship education along the outlined competences in the EntreComp. This renders the structure of the Toolkit even more adaptable and enables an institution-wide application throughout different faculties. The modular approach of the Entrepreneurship Teaching Toolkit offers a variety of possibilities to design curriculum and to improve entrepreneurial thinking through the combination of different modules and their implementation in many different, individual and eligible ways, allowing also for increased creativity in designing and transmitting knowledge, especially relevant for individuals (also instructors) with a non-business/management background. Hence, the Entrepreneurship Teaching Toolkit may inspire instructors, lecturers, scholars etc. to develop new courses, programs, etc. on one hand or enhance and extend existing courses and programs with specific tools and modules out of the toolkit.

For this purpose three different course recommendations have been developed that provide options on how to combine the single modules in order to establish:

- A basic entrepreneurship course (especially relevant for students with other backgrounds than business or management to get a solid overview and learn basics) with the goal to familiarise students with the topic of entrepreneurship.
- An advanced entrepreneurship course (relevant e.g. for innovative thinkers or founders in the early stage and others to improve, enhance and deepen entrepreneurial skills and knowledge) with the goal to foster and strengthen entrepreneurial skills and activities.
- A social entrepreneurship course (relevant for individuals interested in the social purpose of entrepreneurial activities and others) with the goal to encourage students to foster a social purpose with entrepreneurial activities and to cultivate entrepreneurial mindset among students.

As interactive learning material the Entrepreneurship Teaching Toolkit also focuses on practice. The practical orientation of the toolkit is realized through a problem-based learning approach, including learning by doing, real-life examples, case studies, role-plays, simulations and interaction. To foster university-business collaboration, especially the possibility to involve external actors, as regional entrepreneurs, start-ups and experts in the ambit of entrepreneurship, has been pursued. In this way entrepreneurship skills can be fostered through interactions with real entrepreneurs, laying at the same time the foundation for the establishment of fruitful links between academia and the business world.
Teaching Toolkit for Entrepreneurship Education

Developed by Bernd Ebersberger, Christine Pirhofer and Desiree Wieser

Freely available for download at eee-project.eu
Hence, we see the cooperation between the business sector and the academic sector as crucial, and we believe in bundling forces to render entrepreneurship education more effective in order to foster the development of a sustainable entrepreneurial ecosystem. Accordingly, every module designed for the toolkit includes suggestions how to efficiently involve external actors to enrich the entrepreneurship education experience. These suggestions include but are not limited to involving regional entrepreneurs, or experts etc. as discussants, mentors, jury, storytellers etc.

With the development of the Entrepreneurship Teaching Toolkit, a base for further initiatives in entrepreneurship education at MCI Management Center Innsbruck has been laid with the goal to foster the diffusion and development of entrepreneurship education also in future. Follow-up activities include the development of an MCI Open Badge in Entrepreneurship that will be launched in winter 2018/19. The Badge will substantially build on the outcomes and contents of the Entrepreneurship Teaching Toolkit, as well as on the EntreComp framework. Students will have the opportunity to acquire solid entrepreneurial skills in line with the competences drawn out in EntreComp (Ideas & Opportunities, Resources, Into Action) as they participate in the modules developed for the Entrepreneurship Teaching Toolkit.

References:

DESIREE WIESER is a Research & Teaching Assistant at MCI Management Center Innsbruck.
Recent approaches of entrepreneurial education (EE) suggest that entrepreneurial competences are not only key to enable individuals to launch start-up businesses but also to prepare them for mastering the challenging task of lifelong learning [1]. Although the acknowledgement of a wider scope of EE is not new [2], its position on the agenda of European and national policy-maker has been increasingly prioritised in the last years [3, 4, 5]. Following this understanding, the need to acquire entrepreneurial skills is not limited only to those that seek careers as entrepreneurs but rather extends to all learners and (future) employees [6]. Accordingly, educational institutions on all levels of education take on a crucial role for offering learning experiences that sustainably activate entrepreneurial skills development of learners beyond business motivated ventures. Among others, this is also why the European Commission declared (entrepreneurship) education to be one of the main pillars for catalysing entrepreneurship inside the European Union in the Entrepreneurship 2020 Action Plan [7].

Despite its prioritisation on the policy-making side, learners and practitioners on school-level as well as inside tertiary level education institution have not fully recognised the importance of EE yet. In fact, the Global Entrepreneurship Monitor (GEM) considers EE at school stage – globally as well as on European level – by far as the most underdeveloped element inside the entrepreneurship ecosystem [8].

The picture becomes even more drastic considering that also European best performers like the Netherlands and Estonia only receive mediocre scores (5.5 and 5.0) on the 9-point Likert scale (1=highly insufficient; 9=highly sufficient) the GEM applies for its expert based ratings [9].

A look at the GEM scores for post-school level entrepreneurship education framework conditions seemingly allows for a slightly more positive conclusion [9]. However, given that the GEM indicators are operationalized upon a rather business driven understanding of EE, their explanatory power appropriate proxy variables for
measuring EE prevalence of a wider scope in the ascribed educational levels are by definition limited [10]. In fact, indicators that capture a wider understanding of EE and allow for cross-country comparison have not been put to practice yet. This fuels the notion that framework conditions inside European higher education institutions (and below levels) for EE deliverance beyond business or alike studies might actually lie on a much lower level as captured by GEM measures. As a matter of fact, until 2008 the scope of such EE efforts inside higher education has been described as “worrisome” in a European wide study which estimated that less than only 50% of students in Europe had access to EE back then [11].

Consequently, from an aggregate-level perspective the provision of an adequate entrepreneurial knowledge base that allows a sustainable exploitation of adhered (lifelong) learning and skills potentials may actually be far from optimal. This somewhat jeopardizes aspirations for EE related achievements as pronounced in strategies as part of the European Entrepreneurship 2020 Action Plan [4].

Recent progress and current challenges

The availability of indicators capturing input and (e.g. offering access to EE relevant content inside educational curricula) and output (e.g. entrepreneurial proficiency levels) of EE on a cross-country as well as regular basis would certainly facilitate an adequate assessment of EE prevalence inside education institutions in Europe. The need for the latter has been repeatedly expressed and the range of available instruments to measure EE at national and European level has been thoroughly explored [12,13]. Notwithstanding, a sound methodology that reflects a broader approach to EE and allows for consistent EU-wide monitoring of EE activities has not been implemented yet. In the light of this, the development of the Entrepreneurship Competence Framework (EntreComp) can be considered as a milestone as it not only provides the basis for a coherent (and wider) understanding of EE but also suggests a comprehensive EE progression model that can serve as a holistic theoretical foundation that new indicator sets may be based on.

From a more practical perspective, a regular inter-temporal measurement of EE prevalence and performance would also facilitate the identification of good practices among European Union member states and provide an additional impetus to further stimulate exchange between policy-makers, educators, students, intermediaries and practitioners with regards to EE. However, the basis for this are well-functioning and scalable EE formats and instruments carried out by EE proficient staff. A first step to identify, share and exchange good
practice of the latter is provided by the EntreComp Into Action User Guide as well as by transnational collaborations as effected within the Embedding Entrepreneurship Education (EEE) consortium [14]. Despite the existence of a wide range of innovative initiatives and approaches, EE within higher education as well as at primary and secondary education level is still primarily carried out using a rather business centred approach. While this is due to a large variety of factors, one of the main reasons for this dominance is the still prevailing start-up or business focussed connotation of EE terminology itself. However, this “traditional” view is challenged by new frameworks as EntreComp which employs a wider understanding of EE. Albeit this opens up new possibilities to enhance EE efforts inside education, educators, students and pupils (especially in non-business-areas) are usually not aware of this “novel” understanding, and thus neither for its beneficial potentials when transferred into learning activities. However, only if they become adequately sensitized for the subject matter, they will acknowledge its relevance and pro-actively engage in EE activities inside their educational contexts. To do so, inter-disciplinary teaching and learning efforts bringing together EE proficient and EE unaware players inside education institutions need to be motivated, enhanced and supported.

From a methodological point of view, an increased integration of practical entrepreneurial experience across all educational fields also bears the potential to further spread EE inside education institutions. As a matter of fact, part of the entrepreneurial skills-set relies on tacit knowledge which is difficult to teach as it is rather gained by practical experience. However, the integration of entrepreneurial role models can bridge the gap between theory and practice and stimulate experience driven learning and teaching.

Although many barriers still need to be overcome to translate EE into a wider scope of educational areas and activities, much progress has been made in recent years. On the theoretical side, the development of EntreComp is a successful expression of this process. On the practical side, however, the acquisition of entrepreneurial skills is often still not an explicit part of competence catalogues and learning objectives within (non-business) education programmes. However, this is a necessary prerequisite to trigger the development of respective curricula which allow the implementation of learning and teaching activities and internalise the EE understanding underlying EntreComp. As such, EntreComp may well be regarded as an impetus to launch innovative initiatives that enable the latter and sustainably impact the entrepreneurship eco-system by strengthening two of its weakest pillars - entrepreneurship education at school level and at post-school level.
References:

©all rights on images used in this article belong to Univations. Photographer: Anna Bobko

FLORIAN BRATZKE is a Senior Project Manager at Univations - Institute of Technology and Knowledge Transfer at Martin-Luther University Halle-Wittenberg.

SZABOLCS PRÓNAY is an Assistant Professor at the University of Szeged in the Faculty of Economics and Business Administration.
Erasmus University of Rotterdam

Where Ideas Turn into Successful Artistic Productions

How to turn abstract ideas into an executable plan? How to fit academic learning into the intensive dynamics of creative industries? These questions are frequently asked by young cultural entrepreneurs, who find themselves in the world of arts without real life experience. The seminar Applied Cultural Entrepreneurship, offered as a part of the master programme in Cultural Economics and Entrepreneurship at the Erasmus University of Rotterdam (EUR), aims to equip students who might experience similar challenges in their future practice. It encourages them to recognize their entrepreneurial potential, apply their prior theoretical knowledge in practice, and learn from the real-life experiences.

What does the seminar entail?
During the seminar Cultural Entrepreneurship participants have the opportunity to work with their counterparts from two Universities of Applied Sciences based in the region: the Willem de Kooning Academy (WdKa) specialized in teaching media, art, design and leisure and Codarts Rotterdam which focuses on training dancers, musicians and circus performers to become dedicated and inspiring artists, leaders and facilitators in an international context. The partnering institutions can also vary depending on the initiatives of the students.

Although the theme of the seminar revolves around entrepreneurship, students do not start their own businesses as an outcome of this course. Instead, the seminar encourages students to take responsibility for designing, launching and running an actual production or an artistic event. Students are active in all steps of producing: performing as economists, planners, managers, marketers, accountants, consultants, fundraisers, etc. Since the seminar is a part of the master programme Cultural Economics and Entrepreneurship, students will have to...
incorporate entrepreneurial theories within their project and critically reflect on these theories within an evaluation report.

What does the seminar bring to the community?
The seminar distinguishes itself with its contribution to the cultural life of the region. During the seminar, students might work on socially relevant events, projects or even write consultancy reports for local cultural organizations such as the Rotterdam Philharmonic Orchestra or the Mauritshuis Museum. Groups of students pitch their project plans to lecturers who will act as ‘a board of trustees’. If ‘the board’ approves the plan, each group will receive €150,- to realize their project.

To illustrate, in 2017 three groups engaged in different types of activities. One group organized an event called ‘Club Culture’ with electronic music performances, an exhibition, visual arts and films. Another group delivered ‘Project Primavera’ in collaboration with students of Codarts and WdKa. During the event, the student-artists performed micro-performances and dynamic art pieces. The third group wrote a consultancy report for the Rotterdam Philharmonic Orchestra on how they could adjust their programmes and strategies in order to meet the quality expectations of all stakeholders. This report proved to be so successful that the orchestra employed the group for another round of consultations, while one of the group members received a permanent job offer. In 2018 the EUR students will get to work with the Mauritshuis Museum, the Dutch Culture Centre for International Cooperation and the Department of Culture of the Swedish Halland County.

What is the added value of the seminar for the students?
The seminar’s ‘ultimate goal’ is to boost the students’ career prospects though the development of professional competences and skills needed for undertaking entrepreneurship activities in the cultural field. Participating students report to have improved their ability for creative and analytical thinking, leadership skills, project-based working, oral and written communication skills, networking, planning and teamwork and initiative to undertake new and complex activities. Moreover, the seminar allows the students to connect their theoretical academic background with the practice.

This article is based on a case study originally written by Anna Silvius (University of Groningen), developed as part of the Erasmus + Knowledge Alliance Project “Integrating Entrepreneurship and Work Experience into Higher Education” (WEX-HE). This and other 80+ case studies from across Europe will be made available in the project website by the end of the year 2018.

For more information on the project, please visit www.wexhe.eu.

©all rights on images used in this article belong to University of Rotterdam
How do you assess creativity?

EntreAssess helps educators with the challenge of assessing entrepreneurial competences

W e live in changing times, supporting learning to develop the skills for jobs that do not exist yet. Entrepreneurial competencies such as self-awareness, spotting opportunities, creativity or working with others become more important when automation and artificial intelligence are changing the way we live and work. As educators, we know that assessment is changing too and the question just how to assess creativity and vision becomes more prevalent. In every staffroom across every European place of learning, these questions are emerging. As the EntreAssess consortium, we have been listening to teachers and gathering answers to these questions. We are a group of educators and practitioners in entrepreneurship education who are keen to meet the challenges. Over the course of our two-year EU funded Practical Entrepreneurial Assessment Tool for Europe project, we have listened to and engaged with teachers from across Europe to find answers. Along the way, we found many inspirational practices that we captured in a progression model of assessment of entrepreneurial and innovative skills for educators.

The progression model and resources we gathered culminated in our EntreAssess vision. We work towards a world in which assessment informs what a learner should be learning next; a world where assessment focuses on progression and steers the learning forward; a world where assessment is designed to have value for the learner. We envision a world where educators use those sophisticated assessment methods and tools that help them manage their learners' often complex entrepreneurial learning journey.

About the EntreAssess vision

Our website captures the outputs of two years of work and is the starting point for educators on their journey. The website sets out steps combining a variety of resources to help educators with the challenge of assessing entrepreneurial competences.

1. Self-assessment to understand assessment readiness

The first step is for the educators to understand their own assessment readiness. We have developed a self-assessment tool to help educators map themselves against six dimensions of assessment of entrepreneurial learning along our progression levels. The six dimensions - the what, how, when, where, who, and why of entrepreneurial competence assessing – are what teachers ask about entrepreneurial learning. For example, they want to understand why assessment of entrepreneurial skills is important, how to assess these skills, and what tools to use in which situation.

2. Progression model

Once educators understand their assessment readiness, they are ready to take the next step! We know educators ask questions such as “How do I know if my assessment is fair to my students? How do I know if my assessment is really mapping my students’ progress?” and the progression model that we developed aims to address those. It captures the six dimensions across several progression levels, including initiating, developing and performing, and thus shows the journey forward.

For each level and dimension, we have collected a set of assessment methods that the educator can pick from to get started with. We have also made it easy for them to find tools that use these methods. For example, at initiat-
ing level, assessment is often used to simply get through the curriculum, but at developing level, assessment is more focused on improving student learning. Finally, at a performing level, evidence is analysed to fine-tune teaching and assessment practices in a way to help both the learner and the teacher to recognise where the learner is in their learning, where they need to go and how best to get there.

Additionally, as we found many inspirational practices through our collaborations with educators, we also mapped these to the progression model. These practices tell the stories of how educators from across the globe and across education levels and environments use the different methods and tools in their classroom. They thus open up the door to take a peek into the teaching practices in other countries to hopefully inspire those who visit our website to try a new method or tool and take the next step in their own assessment progression.

The progression model can be used by educators individually as well as groups of educators or across a whole school. Through this work as a foundation to make a change in education we of course want to see the shift towards a holistic uptake of progressive assessment approaches across institutions - and more. We encourage educators to use the model to support their school leadership to develop. For example, we would hope for educators to lead discussions with their fellow teachers on the theme of assessment of entrepreneurial skills, or would love for them to kickstart a whole new way of thinking about assessment across their school that results in a structured approach to making assessment really work for them and their learners.

3. EntreAssess inspiration

Our “EntreAssess inspiration” is the library of assessment methods and tools that any educator can browse through. To date, we collated 17 methods that we think are useful for educators. For example, at a basic level educators are all used to using summative assessment to help them get through the curriculum and to give their students a mark or grade. On a more advanced level, they may use formative assessment to develop and inform their students’ learning. Where we want to get to is a sophisticated level of assessment like ipsative assessment; something that really inspires learners to reach their personal best.

Choosing one or two of these methods that suit the educator is a great way to get engaged.

4. Vision

Now that educators are well and truly on their journey continuing to be empowered to use more and more sophisticated assessment methods and tools that allow them to capture the nuances of their learners’ entrepreneurial learning journey, we are nearer the change that we envision! We imagine an entire school where innovative assessment is used in all classrooms across all subjects, we imagine an entire school where teachers and students support each other through assessment, and we imagine a future where an entire school and its community come together to make assessment relevant and real, to reflect the changing world around us.

How to get started

‘Everything starts on our website! There educators find the self-assessment tool, progression model, library of entrepreneurship assessment methods, tools and examples, and the journey and vision that we pursue and want to take them along with. We are also interested in hearing from educators and invite everyone to share their journey with us at @PEAT_EU on Twitter.'
Popular stereotypes have given us entrepreneurs in all forms; the all mighty globe-straddling business tycoon, the lonely teenage tech genius in his bedroom, or the hype driven throng of artisan coffee fuelled graduates all drinking the kool-aid. The gaps between these extremes are where the vast majority exist, and where the vast majority of the value exists. These are small teams of people with a shared vision, an idea for which they have some proof of concept, and a significant need for support if they are to succeed. It is these people for whom a University offers a sanctuary and a home whilst they grow, and a generous community with facilities, guidance and knowledge to be drawn upon. How a University does this has taken a leap in the right direction, and after a pause, is perhaps ready to take another.

Open arms, closed minds
In recent times a concerted strategic emphasis has been given to enterprise and entrepreneurship at countless Universities all over the world. Investment has driven the creation of new buildings, facilities, student programmes, and the promotion of enterprise to a common factor in decision making. This has made a big difference; brought people together, laid foundations for real collaboration, and provided infrastructure for great things to happen. It has not however, in most cases, provided the impetus and incentive for a pan-organisational change in mindset. Herein lies the opportunity for another almighty stride, but adapting core approach and behaviour, even just a little, is a tough and ill-trodden path.

Entrepreneurship is no longer the reserve of the entrepreneur
Our understanding and subsequent application of entrepreneurship has evolved in the last decade or two to become far more inclusive and aspirational. There are more white knights held aloft as inspirational examples,
but there are also far more people engaged in the lower-profile middle ground. This demonstrates the broader appeal for entrepreneurship, how it can transform employees of all organisations, positively influence the environment and atmosphere of even the most traditional trades and professional services, and therefore why it has climbed dramatically in importance and popularity with students striving to differentiate themselves. Entrepreneurs exist in a very different world, and journey on very different roads to large institution led academia but their sphere of interaction has always been a vital one, and it is growing. Where friction exists, deeper collaboration and a shift in mindset have the potential to provide genuine progress.

Purpose Leading the way

That all Universities differ in what they offer and produce is a positive attribute of a diverse system. Their strategy and approach to entrepreneurship is no different. The place to begin is with purpose – why entrepreneurship and to what effect. This has often been ignored in place of activity and physical results which is a mistake. The purpose of embracing entrepreneurship can vary significantly, as can starting points, the structure of the community, research outputs and priorities, as can demand from staff, students and academics.

With relatively humble aspirations, one might aim to produce graduates with a more rounded set of enterprise skills who can perform better in the job market. For those with greater foresight, ambition and support, we can initiate a slow pivot within academia towards enterprise and engaging the wider community - and provide the ongoing drive to see an entrepreneurial mindset emerge throughout all layers and activities within a University. It is this goal that will produce the most exceptional results for research, students, partnerships and growth - but the commitment required needs to be sustained and championed. By defining the purpose in clear developmental steps, results can be demonstrated, achieved, built upon and learnt from. Though entrepreneurs have often been assumed to take risks and gambles, they only ever do so with actionable planning, rapid feedback and in pursuit of clear results. Universities could learn a great deal from adopting some elements of this approach.

Enterprise Engine

It is where the two worlds first overlap that we can begin, and that is with people. There are examples of best practice displayed by Universities around the world, but they all share one common feature, which is having people work together (who do not normally) on valuable work. This includes generating cross faculty teams to collaborate with industry, embedding research into product development with start-ups, releasing staff time to explore the application of their work in a commercial environment, trusting students to thrive but providing them with a sandbox to learn in, and giving staff first hand experience of the world of enterprise and entrepreneurship. There will always be resistance and those brittle to change, but they shall be matched and shadowed by the innovators and adopters who generate new forms and scales of value.

As an atmosphere develops where people take on responsibility and use initiative to enhance their work through entrepreneurship, there becomes a demand and desire for partnerships to evolve informally and organically. These lines of activity that open up a University are dramatic in their impact. Though not all will flourish, the message to the outside world is a welcoming one. An entrepreneurial mindset does mean everyone in the organisation looking out and drawing others in, students building mentoring relationships, staff offering facilities to local companies and using their support.
There are examples of best practice displayed by universities around the world, but they all share one common feature - having people work together (who do not normally) on valuable work.

In return, post graduates demonstrating the value of their work in the real world, and senior leaders embracing strategic partnerships that firmly position the University in a central role for growth.

The diversity within a University should be promoted and its use facilitated. Where an engineering challenge presents itself, invite the designers to provide their perspective. If working in hostile biological environments, collaborate with product designers and materials experts. These are the opportunities that define a student’s career, unlock a researcher’s future, and carve new avenues that spike interest and investment.

When the opportunity presents itself, providing a physical space and a visible manifestation of an entrepreneurial University is a magnificent achievement. Ensure only that it is designed in all manners with its purpose in mind, a forum between worlds, a new form and a new structure, and a space that can adapt. The physical presence can be matched in significance by the culture, atmosphere and soft presence of an entrepreneurial mindset existing across and within all parts of the University. In isolation a physical space can have limited scope. We return to our starting point with the value of the people involved being a tremendous indicator of the progress in broad behavioural change. Discover and recruit champions, empower ambassadors and establish new frameworks that bind these individuals from all walks of University life. This can be simple working groups, a high profile challenge as part of the entrepreneurial programme design, or a more formal role that provides a point of contact accessible to all.

An Enterprise Engine can power change from any starting point, but relies on direction from senior leadership and a strategy prepared to evolve over time. Entrepreneurship and enterprise have demonstrated their demand, their potential, and their impact. Behaviour is now ready to follow.

Entrepreneurship Training for Enterprise Educators (ETEE) – case in point

In enterprise departments at Universities there are teams of people tasked with the development and delivery of the enterprise and entrepreneurship strategy. The wealth of experience, capability and drive is often very impressive. It is however rarely built from entrepreneurial experience, and this is a simple example of how a mindset shift can be given a jump start. ETEE is a punchy programme being built to offer enterprise educators first hand experience of the entrepreneurial journey and the world it inhabits. If you are asking researchers to pitch to start-ups, is it not reasonable for you to have been in their shoes? Asking people to change their mindset is asking them to leave the comfort and confidence of the known, and venture into the unknown, the challenging, and the new. ETEE will give staff in enterprise departments, and anyone else engaged, a short course in practical entrepreneurship – no curriculums, no structured processes for approval, and certainly no judgments. As we ask people to change, ETEE is a tool to show them why and how, after which the two worlds might move ever closer.

Stronger Together

Akin to Capulets and Montagues, the sides of academia and entrepreneurship have not always been great lovers, but they have always been near to each other and this proximity has given rise to a new generation where the stars are crossed no more. As an international community strengthens around entrepreneurship, start-ups and technological innovation and development, Universities have a leading role and the capacity to greatly influence direction. Ever better understanding, ever greater exploration, and ever open arms can give entrepreneurship in and with education its final step up, but it must be a step taken together, with the right mindset and motivation. ■

This article was written in the framework of ETEE project.

WILL EVANS is the Managing Director of Amery Brothers, an organisation involved in the development of an effective entrepreneurial ecosystem within and around Universities across Europe.
Welcome to Tomorrow’s Land

TOMORROW’S LAND IS NOT JUST A PLACE YOU CAN VISIT, IT’S A PLACE WHERE YOU CAN EXPLORE AND CREATE INITIATIVES FOR BOTH PEOPLE AND PLANET TO FLOURISH

The effects of globalisation, rapid technological development and financial crisis have generated an intense debate about issues that societies are forced to face in our modern world. Long-standing problems such as unemployment, increasing inequalities within societies and climate change, among others, remain challenges for governments and communities across the world. Solving these issues is a challenge for the next generation of social innovators who won’t be relying on traditional forms of charity and government-run projects to do so, but rather on their own social innovations and ventures creating social value for society as a whole.

Central to this prevailing discourse is the growing concern that this generation of pioneers are not always able to deal with the rapidly changing context and are not appropriately equipped to cope with the old and new problems that societies face today. Notwithstanding the growing importance of social entrepreneurs in our modern world, we believe that never, more than today, has the need for social innovation and social innovators been so imperative.

Tomorrow’s Land is a collaborative effort to contribute to this need. The partners in the Tomorrow’s Land project, co-funded by the Erasmus+ Programme of the European Union, joined together to create a way to support the next generation of social innovators to be fully capable of influencing and contributing to the development of a better, more inclusive and innovative society.

Six European partner organisations including Regenerus (UK), Münster University of Applied Sciences (Germany), Advancis (Portugal), Bespoke (Denmark), POLITomorrow’s Land will produce four Intellectual Outputs:

- **Strategic Foresight** – a creative research report compiled of the Map of Tomorrow’s Land and the Learning Framework
- **Learning Academy** – an online learning platform and MOOC
- **Champions of Change** – a facilitator training course
- **Social Innovation Bootcamp** – an international blended learning activity.

Since December 2016 project partners have undertaken creative research and developed a learning framework for social innovators. This framework underpins on-going activities to develop an online learning platform and facilitator training programme. The project partners have adapted EntreComp to create value to their own learning framework for social innovators. The first draft of the social innovator’s learning framework is available in the Strategic Foresight report that can be downloaded here: http://www.tomorrowsland.eu/formulaacuterio-report.html. The Tomorrow’s Land learning framework is an open resource that can be used to inform the development of entrepreneurship competences particularly for social innovators.

Next steps

The Tomorrow’s Land social innovation framework and learning programme is being piloted during 2018. Partners will test resources, facilitate workshops and share findings with stakeholders across the EU. Overall, the project plans to build competences that will help stimulate new social
innovations through Europe-wide collaborations, and to contribute to other emerging social innovation and competency frameworks. Currently everyone has just to join the project online for a Massive Open Online Course (MOOC) and become a pioneer of Tomorrow’s Land. The pilot edition of the Tomorrow’s Land MOOC is now open for registration. Tomorrow’s Land MOOC aims to ignite creative thinking to help the next generation open up their mind to new possibilities, to design and shape social innovations to make the world a better place. In Tomorrow’s Land we are shifting the mindset, becoming a new kind of observer and creator, who looks for opportunities to solve some of the social challenges we face and collaborates to create a brighter future. The MOOC combines theory, inspiration, practice, self-reflection and discussion and is designed as a journey to the future. The Tomorrow’s Land learning journey consists of seven learning paths:

Module 1 | Welcome to Tomorrow’s Land
Module 2 | The Explorer Guide Intro
Module 3 | Creative Thinker Path
Module 4 | Implementer Path
Module 5 | Connector Path
Module 6 | Catalyst for Change Path
Module 7 | Techie Path

In June 2018 the project consortium is running a social innovation Bootcamp in Matosinhos, Portugal. This one-week event aims at challenging international participants with a task to co-design effective solutions for local communities and organisations from Porto and Matosinhos. After completing the Tomorrow’s Land MOOC, a group of young aspiring current and future social innovators will gather together to actively immerse themselves into social innovation and Portuguese entrepreneurial environment.

The project will be closed by an international Tomorrow’s Land Forum taking place on the 22nd of November 2018 in Liverpool, UK. This event aims at facilitating the discussion around the topics of social innovation and entrepreneurship. The Forum will challenge our thinking on how we can support and equip young people who will co-design the better tomorrow and solve the current and future challenges.

Since 2016, Tomorrow’s Land Project Partners have undertaken creative research and developed a learning framework for social innovators.

BALZAN ORAZBAYEVA is a Research Associate at Science-to-Business Marketing Research Centre, Münster University of Applied Sciences (MUAS).
But the true picture is more complex.

Entrepreneurship education: A story of uneven support

Entrepreneurship education in Australia tends to be concentrated within business schools, rather than spread more evenly throughout the university. And, as the 2014 review of entrepreneurship education in Australia noted above found, the programs tend to be peripheral and focused more on teaching and pushing out publication, rather than engaging with industry or fostering entrepreneurial enterprises.

From an applied point of view, it is even questionable whether business schools are the natural home of entrepreneurship. While business skills are undoubtedly helpful in bringing an idea to market, the initial idea could come from any discipline.

Attempts to extend entrepreneurship education beyond the confines of the business school meet with mixed results. While entrepreneurship education often enjoys high levels of support from senior academic leaders and from state and Federal legislators and policy makers, the level of support it enjoys among teaching staff is highly uneven.

Challenges & Opportunities

A closer look at entrepreneurship education in Australian universities

While the expansion in entrepreneurship education in Australian universities is impressive when assessed in terms of number of programs and curriculum offerings, a closer look reveals a more complex picture with a range of challenges.

The first postgraduate course focusing on entrepreneurship in Australian universities was introduced in the 1990s and the numbers have grown steadily since. A 2014 review of entrepreneurship education in Australia, for example, reported that over 95 per cent of Australian universities teach entrepreneurship at undergraduate level and 90 per cent at postgraduate level.

Support for entrepreneurship education extends beyond the formal curriculum. For example, peak lobby group Universities Australia has identified more than 100 programs supporting start-ups at the 38 public universities it represents.

In addition to formal curriculum, these initiatives include masterclasses, support for initiatives such as maker-spaces, accelerators and incubators. Many are open to staff, students and alumni, and some offer the backing of seed capital.

Judged in terms of activity and official support, entrepreneurship education would appear to be doing well.

But the true picture is more complex.
For example, in 2012 La Trobe University in Melbourne implemented a strategy to make entrepreneurial education — referred to “Innovation and Entrepreneurship” — an integral part of every undergraduate degree.

Each degree would be required to have at least one compulsory subject containing learning and assessment activities about innovation and entrepreneurship. This included one major assessment task on entrepreneurship worth at least 25 per cent of the final grade for the subject. If such a subject could not be fit into content of the degree, students need to be able to take electives to cover the same content — potentially from another part of the university.

In practice, ensuring that all students have access to such content within their degree proved challenging. Degrees accredited by professional bodies, for example, found it difficult to accommodate this requirement, particularly the 25 per cent minimum. While the university valued entrepreneurship education, it was not necessarily a priority for accrediting bodies already struggling with crowded curriculums.

Support for the integration of such content also varies across disciplines. As the subject co-ordinator of a public relations subject put it, “If we don’t embed innovation and entrepreneurship, what have we taught them? I don’t think there is a choice. The question is: how quickly can we get it into the curriculum”.

Other teaching staff perceived the decision to integrate innovation and entrepreneurship as imposed in a top-down manner. Asked why she embedded innovation and entrepreneurship in her subject, one academic in the humanities and social sciences said simply “we were told to”.

**Entrepreneurship and higher education: a tale of two cultures?**

It is noteworthy that many of the more ambitious efforts to encourage entrepreneurship, such as incubators and accelerators, are often established separately — both organisationally, and, in some cases geographically — from their host university.

The University of Wollongong’s iAccelerate program’s offices, for example, are separate from the main campus. iAccelerate even maintains a separate website.
While such decisions are made for sound reasons, such as creating purpose-built facilities for events and activities that are more appropriate and accessible to businesses and community stakeholders — as is the case for iAccelerate — it can also serve to reinforce differences between the culture of academia and that of entrepreneurship. This is perhaps best illustrated by the different incentives for academics as compared to entrepreneurs. Career progression in Australian academia remains strongly linked to attracting research income and publishing in peer-reviewed journals. While commercialising research and patenting intellectual property are strongly encouraged and supported by both institutions and policy makers, this is a less developed path to career progression. Meanwhile, starting new ventures and engaging with industry, while growing, are uncertain paths to career progression.

The cultural differences also extend to the types of teaching and learning encouraged in more innovative hatchery-style and accelerator-type programs. Mentors and facilitators in such programs are often guided by student interest. Even when facilitators introduce topics, it is the students who shape the learning environment and the curriculum through their own specific requirements, interests and perspectives.

In this way the student and the educator negotiate the content and each student strives to achieve their unique determined outcomes. Participants in entrepreneurship education need to be able to handle uncertainty and ambiguity and overcome adverse circumstances.

Such modes of instruction are outside of many academics’ teaching experience. The typical teaching pattern is one where students work through a set curriculum in a prescribed and pedagogical manner in a more formal entrepreneurship course such as in a Business School. These course types emphasise formal planning and skill building. They are often regulated and structured in what they teach by accreditation bodies and government regulations, such as the Australian Qualification Framework (AQF).

To overcome these challenges, a considerable amount of time, energy and money is devoted by Australian universities. These include awareness programs such as boot camps and week-end workshops and pitch competitions to start-ups, accelerators and incubators.

And these efforts are leading to real collaborations between students, staff, alumni and entrepreneurs. For example, the 2017 launch of the SPARK Deakin Accelerator, an initiative of Deakin University in Victoria, saw 100 mentors, staff and members of the start-up community come together to pitch ideas and seek funding.

While the program does not have connections to the formal curriculum, it has established a solid series of entrepreneurship and networking events, right through to workshops for students to gain hands-on experience in start-up skills. The program offers $10,000 AUD in Deakin funding for start-ups along with space and mentoring opportunities for successful start-up ideas.

Entrepreneurship education in universities is also being assisted by government funding initiatives. Recently the Victorian government launched a $60 million start-up initiative LaunchVic.

One of the 18 projects that shared in the first round of funding included La Trobe University, in a partnership with Deakin University and Federation University. This will focus on developing regional start-ups by providing funding, mentoring, and access to university experts working in the areas of sport, engineering, law, business, marketing and media.

While these will not solve institutional constraints, entrenched attitudes and ingrained cultural barriers, they do nevertheless offer a start in advancing entrepreneurship education within higher education. The success of such initiatives will be when they offer measurable progress in enhancing employability and proven models for growing the next generation of entrepreneurs.
JAMK Raises the Bar with its Approach to Entrepreneurial Education and Culture
AMK University of Applied Sciences (JAMK) aims to prove itself as the best university of applied sciences in Finland, with a strong record of accomplishment in quality of education, internationalization and promotion of entrepreneurship. JAMK wants to keep its position as an internationally oriented forerunner in education and a strong player in practically oriented research, development and innovation activities.

How does JAMK embed entrepreneurship education into its degree programs?

JAMK is a marketplace for innovation and entrepreneurship, where it offers services, courses and expertise for its students and partners. At JAMK, learning happens by doing. The university tries to encourage students and personnel to think and act differently. All who take part in the operations are able to question things and create something new. The purpose is not only to increase entrepreneurship, but also to provide entrepreneurial and creative abilities inside the university. JAMK offers students two different paths to become entrepreneurs:

1) JAMK Generator is a specialist team inside JAMK, which offers mandatory entrepreneurship and innovation courses and services. It also provides possibilities for students to innovate, get inspired, develop business ideas or found a company as part of their studies. Entrepreneurship course is one of its products. After JAMK made this course mandatory for all its students in 2013, students have established over 100 new companies with the help of JAMK Generator until spring 2017. In 2017-
2018, students have established 30 new companies and progress is still going on. Interest of students for entrepreneurship seems to be increasing continuously.

2) Tiimiakatemia (Team Academy) is the entrepreneurship center of excellence over 20 years at JAMK, which allows students to do all the same activities as JAMK Generator. The biggest difference is that Tiimiakatemia has an entrepreneurship degree program, where its students establish their own companies with their own team members. Running their own business is one part of their studies.

JAMK has built up network of coaches, entrepreneurship coordinators and tutor teachers, available for students who try to find business idea or who already have it and want to create a business concept (Figure 2). Tutor teachers and entrepreneurship coordinators of JAMK faculties ensure that most of the entrepreneur sections are implemented in every degree program. Student groups are using their own experiences, observations and knowledge to find out product and business ideas. Later they develop those ideas to products and business concepts. The students examine the business potential of their ideas and share the ideas with their group. After that, they present their ideas for a larger audience including students, staff members and representatives of work-life. At the same time, in the entrepreneurship course in different study programs, coaches are giving acquire basic information on entrepreneurship and profitable business in functional ways to students. Students test their capacity for entrepreneurship and expend their understanding of their field with cases from corporate life.

JAMK has also built up the platform, jamkgenerator (see https://www.jamk.fi/fi/Tutkimus-ja-kehitys/JAMK-Generator/Generator/) where students can get new skills, are encouraged to look around, find the new challenges and opportunities, and use them. JAMK wants push students to be creative and innovative. This is one way to help students to take a charge of their own life. The platform gives students opportunity to get into a situation where they have to act and behave like entrepreneurs. As a result, students have competences how to run their own business. Nowadays the mega trend in companies in Finland is to support behavior like internal entrepreneurship, so lessons learnt do not be wasted even students would not become entrepreneurs.

When a student has a business idea, he/she discusses with the entrepreneurship coordinator, who accepts student’s enrollment to Pre-Incubator course. This practical course consists of lectures on competence areas required by business activities, entrepreneur stories, weekly assignments and development of a shared business idea.
in cross-disciplinary teams. The course concludes with a business idea competition judged by a specialist panel and the students. Course includes ten face-to-face sessions following the same pattern: discussions of weekly assignments, specific topics' lectures and instructions for next assignments.

After start up, JAMK provides students Incubator Service course. In the beginning of the course JAMK and a new company, write in a consultancy agreement. This course is provided by JAMK’s specialist and it is tailored for the needs of a company and it lasts one year.

Innovation Week at JAMK

In autumn 2013, the first Innovation Week was arranged at JAMK (Figure 3). During this kick-off week, 600 students were involved in solving the development challenges set by the company clients. The key challenges varied from the development of a well-being service concept to the recognition and achievement of hidden customer potential. During one week, students have about 3,000 phone calls and face-to-face discussions with customers and target groups in Jyväskylä. They also created ideas and concepts for solutions to assignments and perform quick tests of their solutions on-site with the customers. As the results of this first Innovation Week nine clients got workload of 600 students and 30 coaches, who together created 60 000 ideas for the needs of clients.

One goal of Innovation Week is to provide all JAMK students a Design Thinking-type problem-solving method (Figure 1). The method is also used and taught at the world’s leading business schools as an operating model for diversified, multi-disciplinary development groups. JAMK is the first educational institute in Europe to teach the method to all students through practical experience.

Since its kick-off, all JAMK students have taken part in this course, which is mandatory for them. Total number of students, who has already passed this course, is 6500. Students have so far had 90 assignments from company clients and JAMK students have generated 650 000 ideas and concepts for the needs of clients. Nowadays both face-to-face and virtual innovation weeks are arranged twice per year. Beside this student course, JAMK Generator is running this service for companies and JAMK own developing tasks.

EU granted HEIBus project

In the beginning of year 2017 started EU granted Erasmus+ Knowledge Alliance 2 project Smart HEI-Business collaboration for skills and competitiveness (HEIBus). JAMK School of Technology is the main partner and coordinator of this three-year project. One work package of HEIBus is Multidisciplinary Student-level Real-life Problem Solving (RLPS). In RLPS implementations, students from three different countries and universities form three international and multidisciplinary groups, which solve the same real-life problem given by a company. In the beginning of every implementation, two student groups have one face-to-face intensive week in the country and city, where the company locates and one student group takes virtually part in it. During the intensive week, there are tailored lectures and during the whole implementation, there are supervision by professors/teachers from three universities and company representatives for all student groups.

After the intensive week, all students work at their own universities and meet regularly and virtually other members of their group and supervisors. In the end of the implementation the company representatives choose the winning group and professors/teachers give the grades. The objectives of RLPS implementations for students are that they become more international and learn to work together with students from different study areas and countries, but in the same time that they learn the basics of entrepreneurship.

Entrepreneurship, new enterprises and workplaces. What will happen next?

In Jyväskylä, there are two universities and several vocational schools, with altogether around 42000 students. In the beginning of year 2018 JAMK University of Applied Sciences, the University of Jyväskylä, Jyväskylä Educational Consortium GRADIA and City of Jyväskylä built up a coalition, the purpose of which is to serve the society, to support its wellbeing and to expand entrepreneurship and innovation education to all these institutions. This co-operation will lead entrepreneurship education to the new level. It will provide possibilities for all students in Jyväskylä to participate in special courses, to develop own business ideas and to aquire task from business clients.

Finland needs creative and courageous young people and it is via entrepreneurship we offer possibilities and freedom to them. This is an important part of the Finnish image of an affluent society.

Since Innovation Week Kick-off, 6500 students have passed the course, submitted 90 assignments, generated 650 000 ideas targeting the needs of business clients.
The world is changing and, with it, the world of work and the skills required for future career success. Entrepreneurial thinking and action emerge high on the list of skills critical, alongside interpersonal, creative and problem-solving skills (see Australia 2030 Plan) [1]. This understanding has led to a significant increase in relevant education offerings, ranging from brief entrepreneurship workshops and seminars, start-up weekends, massive open online courses (MOOCs), and mentor programs to formal university degree options.

For universities, embedding entrepreneurial thinking within their education programs is only one part of their engagement with entrepreneurship. Increasing environmental pressures motivate universities to be more pertinent, have greater impact, and better engage with industry/communities. Indeed, at a strategic level, environmental change is driving universities towards enhancing their social, economic, intellectual, and cultural value to the communities in which they operate, while looking to grow or maintain student load, encourage world-leading research, attract increased research funding and do so in an increasingly global manner. Hence, universities place great emphasis on identifying, evaluating and seizing opportunities, utilising their resources in new combinations to respond to these opportunities, as well as becoming more open to uncertainty and risk. Hence, universities themselves have to be more entrepreneurial.

Yet, most universities that engage in entrepreneur-
Entrepreneurship education—It’s all about the interplay and/or commercialisation activities, including education, unwittingly or unwittingly develop silos in the university whereby the academic-related entrepreneurship teaching and research components do not communicate well with the non-academic commercialisation, business incubation, and/or entrepreneurial engagement components. As a result, the full potential of entrepreneurship education and achievement is unrealised within the university and communities miss out on the entrepreneurial potential value that could have been created. Reduced student and/or staff commercialisation activities and reduced university community engagement and impact are the consequences.

The University of Adelaide has thus taken a different approach. It adopts a holistic 3-dimensional approach to entrepreneurship that integrates the two-dimensional academic and incubation components with a third global network dimension. The ThincLab comprises three dimensions:

1. **Academic engagement**, comprising education alongside research in and about entrepreneurship and innovation. The University of Adelaide offers a portfolio of learning options. In addition to undergraduate and postgraduate programs and courses, all of which fuse students from across the university’s wide-ranging degree programs, the university offers MOOCS, workshops, and non-award courses. What characterises these options is that the education does not stand alone but that they are built and maintained through a strong research-teaching nexus. Ensuring that leading research informs education and vice versa is critical to maintaining best practice education over time.

2. **Incubation engagement**, which happens through creating meeting places for those inside and outside the University who are interested in entrepreneurship, innovation, and commercialisation specifically, and productivity and job creation more generally. It is where creativity, innovation, and design thinking is encouraged; and where ideas and venture growth is accelerated.

3. **Global Network engagement**, an internationally connected network of ThincLab hubs, providing portals into the University creating pathways among Asia, Australia and Europe to help commercialise student, staff, and alumni research in global markets and attract international students and staff to the University. It facilitates collaborating with international partners.

A SUCCESS STORY ON THE INTERFACE OF EDUCATION/RESEARCH, INCUBATION AND GLOBAL IS THE AUSTRALIAN "ECHALLENGE", ONE OF THE LONGEST-RUNNING AUSTRALIAN ENTREPRENEURIAL CHALLENGE PROGRAMS. WITH OVER 6,000 ALUMNI, THE ECHALLENGE HAS ENABLED CLOSE TO 1,000 START-UPS TO DATE.
organisations to attract research linkage funding, sponsorships, and scholarships.

Aligned with the quote “The great aim of education is not knowledge, but action” (Herbert Spencer), educational offerings are built so that students wishing to start or develop their own ventures not only learn about entrepreneurship but also practice it within the University’s ThincLab incubators and their extensive networks. By occupying space in a ThincLab, domestically or overseas, any learner interested in developing their businesses while studying can do so in a supported manner, so that they graduate not only with a degree but also with functioning businesses. Even for those students not ready to start their own venture, the global network of ThincLab hubs offers an international experiential platform. It is here that they can gain entrepreneurial work and cultural experiences in global markets, in a supportive environment.

A success story on the interface of education/research, incubation and global is the Australian eChallenge, one of the longest-running Australian entrepreneurial challenge programs. With over 6,000 alumni, the eChallenge has enabled close to 1,000 start-ups to date. As part of a three-month experiential pre-incubation program, participants

(i) develop and refine their concept ideas in response to identified opportunities through an integrated program of facilitated educational workshops and industry mentoring

(ii) develop actionable commercialisation strategies that form the basis of executable plans for creating new innovative ventures, and

(iii) submit their innovations and associated strategies to an intense competitive evaluative process involving presentations to a panel of experienced industry assessors.

In addition to local customisations of the program to meet industry demand, the eChallenge has also grown internationally. It is licenced to select universities and or partners with suitable organisations in other countries. The extensive online learning opportunities developed for this program, involving quality teaching materials and online discussion forums, allow for a blended learning, flipped classroom approach. This means that the eChallenge can be delivered anywhere in the world with minimal effort, based on a proven pedagogically sound participant-focused learning model.

The eChallenge and ThincLabs work hand-in-hand to assist students and other entrepreneurs adopt a global perspective and identify, assess, and develop opportunities where new ventures are created with training and mentoring support. In this regard, eChallenge participants and students studying entrepreneurship at the University of Adelaide in Australia have established businesses in ThincLab Chalons (TLC) (the University’s French business incubator) just outside of Paris. The concierge service provided by TLC facilitates a smooth transitioning of overseas ventures establishing in France using TLC as a Launchpad into Europe. In addition, participants of the eChallenge program delivered in France with a number of key institutional partners have the opportunity to establish their businesses in ThincLab Adelaide (South Australia) and ThincLab Singapore. Breaking down the entrepreneurship silos and capitalising on the various ThincLab and eChallenge dimensions results in a collage of successful cross-border new ventures being created and developed.

Where you can demonstrate to students the relevance of their learning, they will be more motivated to do so. Incorporating teaching and learning with research and incubation, and offering this on a global scale is rewarding for students.

Thus, in this regard, ThincLab is more than four walls with hot desks, co-shared working spaces, and offices for budding entrepreneurs. ThincLab is about developing relationships. It provides an innovative and unique platform to engage with communities through creating value and impact locally, regionally, and internationally. It does this through providing a portal into the University for communities, as well as being a focal point in the University community for students, staff, and alumni, in the areas of entrepreneurship, innovation, and commercialisation. It is not the only way to engage but it provides a unique approach to engagement through entrepreneurship: As a basis for facilitating local, regional, and international academic and business incubation exchanges it leads to:

- cross-border and cross-cultural economic, social, cultural, and/or intellectual value being created and export sales being generated
- improved understandings of the dynamics of entrepreneurship in a global context by students and entrepreneurs within the university’s entrepreneurship system resulting in more productive and/or employable University graduates as well as more successful entrepreneurial ventures underpinned by enhanced job creation and productivity improvements, and
- the opportunity to observe and better understand the factors associated with more sustainable entrepreneurial ventures and vibrant communities thereby contributing toward theory building and enhanced entrepreneurial practice and policy-making.

References


NOEL LINDSAY is the Pro Vice Chancellor of Entrepreneurship at The University of Adelaide.

CAROLIN PLEWA is the Deputy Director of Entrepreneurship, Commercialisation and Innovation Centre at The University of Adelaide.
The Amsterdam University of Applied Sciences (AUAS) wants to further expand its reputation as the place where students can develop relevant skills, expertise and networks to either become professional entrepreneurs who build and grow innovative and sustainable businesses or entrepreneurial professionals who can navigate and be employable in the rapidly changing labor market.

Over the past 15 years, entrepreneurship education has been key to achieving this ambition; offering multiple minors, tracks and masters in entrepreneurship, more than thousand students are introduced to entrepreneurship annually, and a number of successful firms have emerged from this. Recently the AUAS introduced a more comprehensive program to stimulate and support the entrepreneurial mentality among students and staff including a research program, special arrangements for student-entrepreneurs, and various extra-curricular programs to inspire, foster ideation and support impact creation. The flagship of this program is the AUAS’ 10K pre-incubator program.

10K bridging the education - innovation gap
The 10K pre-incubator program is created to build the bridge between the safe classroom and the highly competitive entrepreneurial ecosystem and it seeks to help innovative student-ventures to become startup ready and create impact.

Our target groups include teams of students and/or alumni who have already partaken in one of the entrepreneurship minors or tracks but who realize that their initial idea requires further development before it can be taken to the market. We also welcome teams who participated in minors or internships that focused on the development of novel concepts or innovations, ranging from health technology to applied child psychology without actually learning how to develop and benefit from entrepreneurial skills.

10K ideas ideally originate from educational or research projects where participants already have been involved in for a while, as this give the teams a head-start in terms of knowledge and expertise. 10K ideas are furthermore based on recent (technological) innovations and tap in to unmet market demands and/or seek to solve a societal challenge. We believe that these form the most fruitful basis for a scalable business. While 10K does not focus on social ventures per se, we are especially interested in those ideas that can make a real impact while...
being based on sustainable revenue models. While being knowledge-based and possibly requiring some R&D, the opportunities developed by 10K participants are expected to have a limited time-to-market and relatively modest (seed) capital requirements. 10K participants typically have a bachelor education (or master at best), limited to no industry experience and hardly any access to advanced lab equipment or R&D facilities. Consequently, if technology based at all, the opportunities pursued by 10K participants are likely to be applications derived from platform or enabling technologies, whether it is virtual reality or 3D printing, with a high technology readiness level where working prototypes can be demonstrated.

How is the program structured?

Every semester we select a maximum of 12 teams (students and alumni) who have an innovative and scalable business idea that they want to bring to the market. The teams can apply directly but we also use our internal network of educators, researchers, and business developers to spot and scout potentially interesting teams for us.

These teams enroll in a 6-month program that starts with an introduction week. We kick-start with the 24 steps of Disciplined Entrepreneurship [1], build trust among the new group, establish a work ethos and focus on developing skills including networking, visual thinking and how to benefit from the design method toolkit.

This week is followed by a period of self-activation, bi-weekly sessions of individual coaching and group intervision, joint dinners and masterclasses. The aim is to share knowledge of field experts and help participants gain insights, knowledge and skills they are likely to need at some point during the next three years. Subjects include: fundamental finance, PR & free publicity, going abroad, legal fundamentals and work-life balance. The program ends with a Dragon’s Den event where the teams have to prove to be start-up ready to a panel of industry experts and experienced entrepreneurs.

In the following semester, 10K alumni are invited to the bi-weekly interaction sessions and master classes on a voluntary basis to expand their network and expertise.

The program itself is based on four building blocks. The Disciplined Entrepreneurship method forms the heart of our program. The validated method integrates various well-known start-up methods like lean start-up and business model canvas into an abundance of high-quality (teaching) materials that we both use in our coaching sessions and stimulate self-activa-
“STARTUP READY” MEANS [THE PARTICIPANTS] HAVE A SUBSTANTIATED ANSWERS TO “WHY ARE YOU IN BUSINESS?”, “WHO IS YOUR CUSTOMER?”, “HOW DO YOU PRODUCE YOUR PRODUCT?”

Combination of critical thinking and the best available evidence, whether it is about customer decision making or funding opportunities. Hence, we train our participants in methods of Evidence based management and decision making and give them the tools to make these kind of decisions.

- To succeed in entrepreneurship it is important to have a team that knows their own strengths and weaknesses and to do this, both as a team as on an individual level it is important to identify which competencies are well developed and which need to be worked on. To that end, we use the validated EntreComp: Entrepreneurship Competence Framework [2] to monitor ideation and opportunity recognition, ability to mobilize resources and translate ideas into action.

- We use the UN’s Sustainable development goals to inspire teams to think about how the opportunities they pursue can contribute to creating a real impact in the world. Also, we translated a model developed by United Nations Institute for Training and Research (UNITAR) [3] into a tool that allows teams to analyse their business model and organization in terms of sustainability.

Are you ‘Startup Ready’?

Being Startup Ready doesn’t mean that the teams will directly earn money, have employees or even have their own company. Rather it means that they are ready to compete – for a spot in an accelerator, for funding, for attention, for customers – within the startup ecosystem. Just like after finishing an education with bachelor degree qualifications, people need to build skills to be competitive in the labor market and compete for a job with other applicants.

During the program participants learn that launching an independent company is not always necessary but that in some cases, they can actually create a bigger impact when becoming a part of an established firm or merging with another startup. Enrollment in an accelerator or startup in residence program could also be a sensible next step, just as selling the idea to someone else and moving on to new endeavors. Regardless of the organization form they choose, as entrepreneur they will be able to convince many people that their idea and their team are startup ready.

Startup ready, here, means they have a substantiated answer to questions pertaining to their business model, such as “Why are you in business?”, “Who is your customer?”, “How do you produce your product?” Their personal development and how they are able to bridge the gap between being a student and being a professional entrepreneur is also important. Can they attest to what drives them and their team, their ability to build network relationships, and to deal with complex information? Additionally, we challenge our participants on their ability to build sustainable ventures and create impact beyond the financial domain. Finally, we expect them to have a corroborated story on how their venture can contribute to a better world.

Promising outcomes

Currently we benefit from the lessons learned during the pilot edition. The second edition has started with six innovative ideas to be developed into startup-ready ventures. The first generation participants have, in the meantime, proven to be startup ready. One team has secured a soft loan for almost 250k, in order to take their prototype to market. Another team secured a grant for a technical feasibility study and a third team entered the Startup-n-residence program of the municipality of Amsterdam. Finally, one participant quit her job to fully focus on her enterprise and another got a job within the university to further develop his business idea.

It is a promising start for 10K on which; we are eager to build to help students develop their entrepreneurial spirit and underline the entrepreneurial reputation of the AUAS.

References:

* The name 10K is not about money though it is about investing. It refers to Gladwell, M. 2008. Outliers: The story of success: Hachette UK. “10,000-Hour Rule” that states that 10,000 hours of “deliberate practice” are needed to become world-class, at anything.

INGRID WAKKEE is the Professor of Entrepreneurship at Amsterdam University of Applied Sciences.

BART VAN GREVENHOF is the Program Manager at the entrepreneurship program of the Amsterdam University of Applied Sciences. In this capacity he is responsible for the 10K Pre-incubation program.
Embedding Entrepreneurship Education at the Munich Business School

Background to the Munich Business School

The Munich Business School is a private international business school and confers degrees exclusively in business administration including one undergraduate Bachelor program, 4 graduate Programs (Masters and MBA) and a DBA in cooperation with Sheffield Hallam University. With a student population of nearly 700 and has been rated the best private business school in Germany for business administration.

For over 20 years and well before the majority of universities in Germany, the Munich Business School has run courses on entrepreneurship and new venture creation. During that period, the business school alumni have been responsible for the creation of a number of startups including Eccocar, Mylittlejob, GYMDER and Yavalu.

“THE ENTREPRENEURIAL MYSTIQUE? IT’S NOT MAGIC, IT’S NOT MYSTERIOUS, AND IT HAS NOTHING TO DO WITH THE GENES. IT’S A DISCIPLINE. AND LIKE DISCIPLINE, IT CAN BE LEARNED.”

PETER DRUCKER

BY TODD DAVEY, BARBARA SCHECK & ALEXANDER HAHN
Building entrepreneurship as a major focus of the Munich Business School

Building on a rich history of entrepreneurship, MBS decided to further institutionalize its activities in the field. This decision was triggered by entrepreneurship and start-ups being increasingly prominent in students’ life – as product or service providers but also as potential employers and as a career option for interested founders.

The overall objective at MBS was to develop competencies and capacity amongst the students as future start-up founders but also for entrepreneurial approaches in corporate environments allowing them to identify, create and act upon opportunities in order to create value.

MBS appointed a Professor of Entrepreneurship in 2017 with a social entrepreneurship background, which was followed by a Professor of Digital Marketing and Communication (with personal start-up experience) in 2018 and supported by a further Professor with an entrepreneurship education background. This was further reinforced by the establishment of an entrepreneurship and innovation research group.

In terms of curricula, for many years, a course on entrepreneurship business plans had been a central building block of the school’s Bachelor program within the Bachelor of International Business. Additionally, within the Master of International Business as well as the Bachelor of International Business there are courses focused on innovation management, in which students work with design thinking to develop new concepts, create prototypes and test them, core concepts in developing new business ideas.

For such a small university, this is a significant investment in the topic.

Is a business plan course still necessary?

The Entrepreneurship Business Plan course with the Bachelor of International Business is the first time that bachelor students experience entrepreneurship during their studies. The course objective thus is mainly to motivate students in the topic of entrepreneurship, get first insights and make first practical steps. It consists of introduction to entrepreneurship as well as of an introduction to business planning. This part comprised information on the structure of a business plan, elaborating on specific topics along the way, such as marketing, financing, etc.

The reasoning behind this course was the – still prevailing – importance of business plans for entrepreneurs in the German start-up system, for example when acquiring public grants, to participate at entrepreneurship competitions or for investor presentations. However, in relation to competitions and investors, this type of preparation and showcasing has changed towards pitch decks and business cases (2-3 page concept summaries). This is because a business plan is a rather static document not able to depict the fast-changing life, culture and environment of start-ups. The notion that it is out of date by the time it is written is the prevailing sentiment.

Nevertheless, a business plan requires the authors to think through their business idea with a certain rigor covering all aspects relevant to the product, client, marketing and implementation. The challenge thus consisted in combining these two developments into a meaningful offer for the Bachelor students.

Creating a focus for entrepreneurship activity at MBS

The responsible educators at MBS decided to incrementally transform the course from a pure business planning perspective including additionally a prototyping and testing exercise, in which students can test their problem-solution fit using some of the many online tools now available to support idea testing. Moreover, presentations from entrepreneurs have also been introduced to give students a better feel for entrepreneurship.

Furthermore, in order to close the program with a highlight, something for the teams to look forward to
TODD DAVEY is the Professor of Practice at the Munich Business School.

BARBARA SCHECK is the Professor of Entrepreneurship at the Munich Business School.

ALEXANDER HAHN is the Professor of Digital Marketing and Communication at the Munich Business School.
WE THANK OUR ORGANISATIONAL MEMBERS
WE THANK OUR ORGANISATIONAL MEMBERS

JOIN OUR COMMUNITY OF UNIVERSITY-INDUSTRY INTERACTION PROFESSIONALS

WWW.UIIN.ORG