



Supporting the Entrepreneurial Potential of Higher Education

*Final Report
Executive Summary*

Supporting the Entrepreneurial Potential of Higher Education

Final Report Executive Summary

Version 1.1

June 2015

Authors:

Dr. Stefan Lilischkis (empirica, co-ordinator)

Prof. Dr. Christine Volkmann, Dr. Marc Gruenhagen, M.Sc. Kathrin Bischoff
(Bergische Universität Wuppertal, UNESCO-Chair of Entrepreneurship and
Intercultural Management)

Prof. Dr. Brigitte Halbfas (University of Kassel)

Executive summary

Key findings in a nutshell

European universities perform a wealth of approaches to entrepreneurship education (EE). However, impediments to develop EE further remain. The study found six principal challenges and possible solutions:

Challenge 1: **Overcoming reservations** against EE on the part of university managers, educators and students. One solution may be to see EE not only as teaching to start a new business but also, more broadly, creatively making an idea happen.

Challenge 2: **Assuring sustainable finance** for EE as a relatively young and personnel-intensive discipline. One solution may be to offer EE also as paid education to professionals.

Challenge 3: **Assuring curricular EE quality** when experience is small, new methods arise, and when leading educators leave. Local offers for “educating the educators” as well as national and international EE educator networks may help. If legal framework conditions for EE are

unfavourable, e.g. related to involving practitioners in teaching and to allowing students to engage in commercial activities, universities may lobby for their modification.

Challenge 4: **Assuring quality of extra-curricular EE** activities involves maintaining their flexibility while improving their institutionalisation. Certification bodies for their evaluation and legitimisation could be further developed.

Challenge 5: Universities’ networks with external stakeholders often lack scope and strength. Universities should **strengthen networks** e.g. with alumni who can be easily accessible and trustful guest speakers, mentors and funders.

Challenge 6: **Measuring outcomes and impact** of EE in the light of high expectations towards EE. Such measures should be long-term, not only focused on start-ups, and assess students’ entrepreneurial mindsets, skills and behaviour before and after courses.

Study background and objectives

This document is the final report of the study “supporting the entrepreneurial potential of higher education” (sepHE, <http://www.sepHE.eu>). The report presents the study’s approach and findings and it points out challenges, possible solutions and policy implications for further action. The overall objective of the study is gaining insights about the factors that may further enable the entrepreneurial potential in higher education in Europe. Towards this end, the study collected and analysed 20 case studies about innovative entrepreneurship education (EE) practices at European universities. The background of the study is the European Commission’s strong belief that higher education in general and entrepreneurship education in particular play a crucial role in creating jobs, economic growth and wealth in Europe.

Methods applied in this study

Analytical framework

The study focuses on three principal issues of entrepreneurship education: curricular offers, extra-curricular activities, and institutional aspects. Hence, the study’s analytical framework focuses on EE design, the way it is delivered by educators to target groups, EE setting and management as well as organisational set-up and change, legal frameworks, and mindsets. The framework also addresses the influence of the socio-cultural, economic and political context and the impact of EE on the society and economy.

Case studies

The study team and the European Commission, supported by a peer group, selected 20 universities for case studies which constitute the key part of the study. The cases were selected according to six criteria: The cases represent (1) new models in entrepreneurship education while having sufficient experience with them, (2) different aspects of entrepreneurship education in curricular offers, extra-curricular activities, institutional aspects and outreach to external stakeholders, (3) different types of universities, and (4) many different European countries. Furthermore, (5) most of them are not yet widely known, and (6) offer examples that may relatively easily be transferred to other universities. The selected cases stem from 19 different EU Member States.

Drivers and impediments of entrepreneurship education

Establishing EE does not go without saying – there are impediments to be overcome on the part of a university's management, staff and students. There may be reservations against entrepreneurship as being profit-oriented and biased, thus conflicting with the neutrality and independence of science. Different cultures in academic disciplines prevail – the values, habits, and beliefs of representatives from economics and business studies tend to be different from other disciplines. This may cause reservations against entrepreneurship among all groups involved: university managers, educators and students as well as external stakeholders. Moreover, students may not be interested in entrepreneurship because they prefer becoming employees, not self-employed, after graduation.

Findings about curricular entrepreneurship education offers

The majority of the sepHE case studies focus on curricular offers. In the cases explored, there is a plurality of curricular EE offers, comprising programmes, courses, modules, lectures, tutorials, and also internships. Investigated aspects encompass target groups, design, setting and management of EE.

In terms of target groups, a focus is set in most case studies on offers targeted at university students as opposed to offers for non-student target groups, such as staff members, alumni, researchers and start-ups.

When looking at the design, objectives of entrepreneurship education are usually a combination of the development of theoretical knowledge and practical skills for entrepreneurial thinking and acting. The format and content can be distinguished accordingly based on theoretical entrepreneurship knowledge and its practical application through business plans or business model canvases. Employed teaching methods include traditional or guest lectures, case studies, simulations, mentoring, business cooperation and placements as well as flipped-classroom concepts and team teaching. The majority of the examined cases at present focus on traditional media as opposed to online media. Evaluation methods range from formal methods, such as exams, presentations, participation grades, written business plans or self-reflective journals, to informal evaluation through feedback by internal and external instructors or peers.

Regarding the instructors, a large extent of all EE activities is taught by internal university staff, such as professors, teaching fellows or assistants, PhD students and administrative staff. Next to university-related instructors, external instructors from academia or practice are involved in EE. One particular group of importance are entrepreneurs who engage in EE activities as real entrepreneurs and/or entrepreneurs in residence. Finally, mentors are regularly employed in the context of curricular EE primarily to provide support and advice to student start-up projects.

Concerning the setting, most curricular EE activities take place on campus and the timing varies from short-term, one-time offers to regular, long-term offers.

The findings on the management of curricular EE reveal different approaches to staff development, such as internal and external training, coaching and consulting services or workshops next to mentoring, peer-evaluation and team teaching approaches. Student support is mostly provided by external stakeholders in cooperation with university staff. Internal and external entrepreneurship networks can be managed by distinct formal and informal approaches. Similarly, curricular education can be formally integrated or courses can be executed autonomously with little integration and a limited focus on continued education. Lastly, course evaluation can be conducted through standardized evaluation tools, evaluation committees, pilot programmes, focus groups and feedback meetings.

Findings about extra-curricular EE activities

Corresponding with the open, non-regulated nature of extra-curricular education at HEIs, the university cases feature a **wide range of activities for different target groups** outside the curriculum. This flexibility is used by education institutions just establishing EE to jump start, showcase, and build entrepreneurship in particular through extra-curricular offers.

The case universities often **leverage their own EE through activities conceptualised by third parties** (e.g. Junior Achievement, Start-up Weekend, or others). This enables using

teaching resources effectively by employing established formats and concentrating on student coaching in these activities.

Typical **impediments** of non-institutionalised extra-curricular EE in the cases are a dependence on individual teaching staff to set up and run activities, a lack of evaluation and quality support as regards the educational design of activities and the (external) instructors involved in them, and insufficient incentives for both students (who do not gain credits in extra-curricular EE) and teaching staff (facing opportunity costs of teaching and a low academic acceptance of extra-curricular formats). Some universities therefore consider curricular re-integration.

Findings about institutional aspects of entrepreneurship education

The study dealt with three institutional aspects of EE: organisational set-up and change (section 3.4.1), regulations (section 3.4.2), and mindsets (section 3.4.3). As regards **organisational set-up**, EE was found to be centralised in the majority of cases. Related entities may be entrepreneurship centres (inside or outside faculties), research institutes or professorial chairs. However, only a few case universities have top management positions directly related to entrepreneurship.

The case studies revealed insights about **regulations**, i.e. laws and statutes related to EE. At some universities, specific legal provisions were found to inhibit EE. For example, laws may inhibit the involvement of entrepreneurs in teaching or students' engagement in commercial activities. As regards statutes, in most cases EE plays an important or at least some role in the university's strategy. Furthermore, educators' incentives to become involved in EE are normally immaterial, not material. Materially, EE offers are mostly within the curricular duties of the respective educators. Immaterial incentives may include participation in special training and international networking with other EE educators.

Many case universities seek changing **mindsets** at the university towards becoming more entrepreneurial – among students as well as deans and high-level managers.

Outreach to external stakeholders in entrepreneurship education

Involving external stakeholders into EE was found to be important for bringing in practical experience, which is in turn important for enhancing students' entrepreneurial thinking and behaviour. The case universities were found to co-operate with a **broad range of external stakeholders** from local, national and international level in their EE activities. These stakeholders include, above all, enterprises, finance providers, support services as well as incubators, accelerators, and technology parks. Further stakeholders include other universities, student organisations and alumni.

The **type of involvement** varies. It ranges from lecturing and mentoring as well as funding, investment and sponsoring, to the provision and organisation of events, competitions, training sessions or workshops. **International relationships** play an important role in several case studies, in particular with regard to international university partnerships, for instance through the joint organisation of EE events, training or conferences.

Measuring the impacts of entrepreneurship education

Many case universities were found to not pay particularly strong attention to measuring the impact of entrepreneurship education. Some do not measure the impacts at all. Most widespread was keeping track of start-ups by students and graduates, which is however difficult to achieve comprehensively. Another fairly widespread method is evaluating the impact of entrepreneurship courses by measuring students' entrepreneurial awareness, skills and behaviour at the beginning and at the end of the course. Some universities conduct surveys of their students and alumni including entrepreneurship issues. Only a few universities were found to participate in international surveys related to entrepreneurship education.

Conclusions: challenges, possible solutions, and policy implications

The findings lead to six principal conclusions for further developing entrepreneurship education in Europe. They deal with challenges, solutions and policy implications, derived from the 20 case studies and validated with independent experts. The conclusions may help European universities

to establish or improve EE, they may give stakeholders ideas how to support EE, and they may show policy makers how to promote EE.

Challenge 1: Overcoming reservations against entrepreneurship education

In order to overcome prevailing reservations about EE on the part of university managers, educators and students, universities may sophisticate their EE design and management, also through learning from other universities. They may institutionalise EE through including it in the university's strategy and in EE-related units and management positions. They may establish EE ambassadors in the university's faculties and promote entrepreneurship showcases. In order to reach all students, they could teach not only "entrepreneurship" as starting a new business, but also "enterprising", i.e. having an idea and making it happen. Entrepreneurship (or "enterprising") could also be taught by educators whose primary expertise is not entrepreneurship. Policy makers on all geographical levels can help spread knowledge about EE approaches and design through conferences, workshops and publications.

Challenge 2: Assuring sustainable finance for entrepreneurship education

EE is relatively personnel-intensive, a relatively young discipline, and it may be based on funding from fixed-term public programmes. These are specific challenges for sustaining finance for EE offers. Possible solutions include that EE becomes part of the university's general efforts to sustain public funding – baseline and project funding – through competent governance. More specifically, universities can seek funding for EE through paid education for SME CEOs and large business managers. Education policy makers could develop support programmes for EE and provide special funds to universities which show clear and strong efforts to develop EE, e.g. for establishing entrepreneurship centres.

Challenge 3: Assuring quality of entrepreneurship teaching

Universities may face challenges of developing EE teaching when EE has been introduced recently. They may also seek to improve EE teaching in the light of new insights about how EE could and should be designed or when facing changing demand from student; and they may need to sustain high quality of EE teaching when EE educators leave the university. Possible solutions are related to teaching EE educators: Universities can offer on-site instructions for individuals or groups of educators, and they can connect with national as well as international networks of EE educators and their training offers. National policy makers can support the establishment or development of national EE networks through encouragement, bringing relevant actors together or initial funding. They can also establish national or international accreditation schemes for EE.

In some countries and universities, students may not be allowed to engage in commercial activities, and regulations may impede involvement of entrepreneurs into teaching. National or regional education policy makers may revisit and possibly revise existing regulations that impede EE in an unjustified manner.

Challenge 4: Assuring quality of extra-curricular entrepreneurship education

Extra-curricular EE allows universities to offer a great variety of entrepreneurship activities and create new ones without going through curricular accreditation. However, this lack of organisational anchoring also brings about impediments such as insufficient incentives for student participation and staff commitment, dependence on individual teaching staff (and their networks to external instructors and sponsors), as well as quality risks due to a lack of evaluation procedures. Solutions may include bundling extra-curricular activities and integrating selected extra-curricular activities into curricula. Education policy makers may support European platforms and the further development of certification bodies to improve the quality, evaluation, and visibility of extra-curricular entrepreneurship activities.

Challenge 5: Assuring strong networks with external stakeholders

While involving external stakeholders was found to be important for making EE practice-oriented, the case studies found that networks with external stakeholders often lack scope and strength. Universities may need to strengthen such networks and establish related databases and management structures. This applies in particular to alumni who may be relatively easily accessible and trustful guest speakers, mentors, and funders. It may also apply to start-up services, technology parks, enterprises, and other universities. Policy makers could promote

databases for connecting with enterprises such as the European Enterprise Network and initiatives like the University-Business Forum and HEInnovate which facilitate collaboration.

Challenge 6: Measuring outcomes and impact of entrepreneurship education

There are often high expectations about positive impacts of EE on students' skills, behaviour, and on the regional economy. However, it is difficult to measure such impact. At the case universities, EE-specific evaluation instruments are only very rarely institutionalised and truly employed on a long-term basis. A typical problem may be the perception of university actors that continuous measurement and analysis of EE impacts is resource-consuming. A possible route for improvement is the establishment of joint samples and an EU-level set of evaluation tools to foster cross-university and EU-wide co-operation to make impact measurement easier and more valuable for individual universities and their entrepreneurship instructors and researchers.