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Entrepreneurship Education in Higher Education Institutions: Estonian Case

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Abstract

The European Union (EU) faces the daunting challenge of emerging from the crisis and putting economies back on a sustainable growth path – there is still need of innovative, well-educated, and entrepreneurial citizens who have the spirit and inquisitiveness to think in new ways, and the courage to meet and adapt to the challenges. Entrepreneurship education (EE) is much broader concept than entrepreneurship as a practice of trade; it includes the entrepreneurship key competence that refers to an individual's ability to turn ideas into action. Educational institutions stress the need to offer opportunities to increase entrepreneurial skills development (Bird, 2002). EE in European higher education institutions (HEI) is experiencing a growth; but there are still weaknesses (Varblane & Mets, 2010; Kyro & Carrier, 2005): for example, teaching of entrepreneurship for non-business industries is not sufficiently integrated in HEI's curricula; education provides little training in entrepreneurship. In the article authors map and analyse the situation of EE in Estonian HEIs. Authors use classification (as proposed in Twaalfhoven, Suen & Prats, 2001), which distinguished three types of approach to entrepreneurship programme development: a) the research-oriented model; b) the "consulting" model; c) the teaching/practice-oriented student development model. Authors use case-study approach and for data-collecting method interview is used. Findings: EE should be more experiential and interdisciplinary; entrepreneurship should be the third career choice for students and be part of curricula; the EE should be supported by ecosystem, teaching methods must change, etc. Also we have recommendations what are implemented in developing special program of EU structural foundations.

Keywords: entrepreneurship; Entrepreneurship education; Estonia; Higher education institutions;

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1. Introduction

Following the Europe 2020 strategic plan, the Lisbon agenda and the modernisation agenda of European universities, the European Union has recognized the importance of the role of HEIs (through education, research and innovation) in the transfer of knowledge to society and their vital contribution to Europe's economic competitiveness. (Davey, Baaken, Galan, Muros & Meerman, 2011) According to the Key Competence Framework, the entrepreneurship key competence refers to an individual's ability to turn ideas into action. It includes creativity, innovation and risk taking, as well as the ability to plan and manage projects to achieve objectives. Developing mind-sets, generic attributes and skills that are the foundations of entrepreneurship can be complemented by imparting more specific knowledge about business according to the level and type of education. The European Commission has long supported and helped further the cause of entrepreneurship education. Within the education and training agenda, the strategic framework for European cooperation, Education and Training 2020 has, as its fourth long-term strategic objective, to enhance creativity and innovation, including entrepreneurship, at all levels of education and training (Entrepreneurship education at school in Europe: National strategies, curricula and learning outcomes, 2012). The Commission is continuing its support through the Europe 2020 strategy where the need to embed creativity, innovation and entrepreneurship into education systems is highlighted in three flagship programmes: Youth on the Move, Agenda for New Skills and Jobs, and Innovation Union.

The concept "entrepreneurship education" has been understood more narrowly, aiming to give people the knowledge and skills needed to become self-employed and develop a new business for a long time. In general, entrepreneurship education is attainable for the students at public and private universities in Estonia, but the question is how it is taught and how effective is it for the students to enter the labor market after graduating the universities. The problem of students' low entrepreneurial attitude and mind-set and entrepreneurship education is subliminal in Estonia and special structural foundation programme is for developing entrepreneurial attitude and develop entrepreneurship education through all the education levels is in the preparation process.

2. Role of Higher Education in Entrepreneurship Education

The concept "enterprise education" incorporates a broader understanding of entrepreneurship, aiming to help people develop and adopt a more enterprising attitude, (that is, opportunity-oriented, proactive, flexible and open to change, uncertainty and risk) (Mahieu, 2006).

Entrepreneurship education can be said to include, but not exclusively so (Final report of the expert group entrepreneurship in higher education, especially within non-business studies, 2008): developing personal attributes and skills that form the basis of an entrepreneurial mind-set and behavior (creativity, sense of initiative, risk-taking, autonomy, self-confidence, leadership, team spirit, etc.) (Hytti & O'Gorman, 2004; Loudon & Smither, 1999; Lundstrom & Stevenson, 2001; Klapper, 2004); raising the awareness of students about self-employment and entrepreneurship as possible career options; working on concrete enterprise projects and activities; providing specific business skills and knowledge of how to start a company and run it successfully.

It can be said that there are no limits for entrepreneurial knowledge. By combining new tools, technologies, sources and opportunities entrepreneurs can constantly create new added value (Omerzel & Antoncic, 2008). Educational institutions stress the need to offer opportunities to increase entrepreneurial skills development (Bird, 2002). Different interpretations of entrepreneurship, enterprise, and an entrepreneur have far-reaching effects on the understanding of the objectives of entrepreneurship as field of study, the setting of specific course objectives, the choice of target audiences, the design of course content, the teaching methods applied, and ultimately on evaluating progress and on the design of impact assessment frameworks (Mwasalwiba, 2010). One aim of enterprise education is to increase employer, especially small-medium enterprise involvement in

schools, colleges and universities. Work placements, business start-up simulations, mock interviews, research and consultancy projects, careers talks (Flemming, 1996), business ideas generation (Solomon, Duffy & Tarabishy, 2002), mentoring, preparation of curricula vitae, business planning along with advice on presentations and job applications are areas in which employers can be involved. All of the aforementioned activities are examples as to how enterprise education can be embedded within different curriculum contexts (Jones & Iredale, 2010). In authors opinion the crucial importance has person entrepreneurial attitude and motivation, but as well from environmental side supportive system for beginners and start-ups with mentoring possibilities.

Scholars despite the objective of entrepreneurship education – when individuals who will be able to practicing entrepreneurship are taught, then the researchers can talk about learner centred, interdisciplinary, process-based, co-creation oriented, experiential and socially situated pedagogy (Ollila & Williams-Middleton, 2011; Gibb, 2011, 1987; Mwasalwiba, 2010; Kyro, 2008; Cotton, 1991). There is serious gap between preferred and applied pedagogy, and the main reason is that learner-oriented approach is much expensive and also need more qualified and their misalignment to the conventional educational systems and paradigms (Mwasalwiba, 2010; Ardalan, 2008).

There is increasing interest in attempting to teach not only about entrepreneurship, nor even for entrepreneurship, but also through entrepreneurship (Kirby, 2004; Hyrsky & Kyro, 2005; Hytti & O’Corman, 2004; Rae, 2004; Gibb, 1999), using new education programs to help students to obtain a range of both business understanding and transferable skills and competences (see Figure 1).

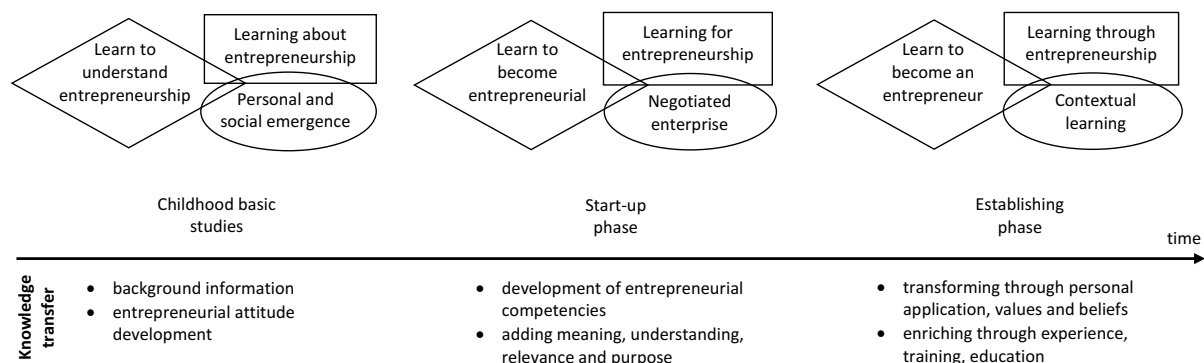


Figure 1. Entrepreneurial learning: conceptual model
(Kirby, 2004; Hyrsky & Kyro, 2005; Rae, 2004; Gibb, 1999; authors modification)

For entrepreneurship education, focussing on institutions of higher education offers the chance to develop knowledge intensive high-growth enterprises from all academic disciplines, not just technical ones. Higher education institutions should create an environment that fosters entrepreneurial mind-sets, skills and behaviours across their organizations. Universities can teach students how to start and grow enterprises in ways that benefit society. Technical universities in particular provide potential breeding grounds for high technology and high-growth companies or “gazelles.”

Entrepreneurial universities enhance regional development and international competitiveness and their role is especially important in structurally weak and peripheral regions where universities tend to have a monopoly over the production of intellectual capital. (Baptista, Lima & Mendoca, 2011) HEIs can foster greater entrepreneurship through EE; knowledge transfer; academic spin-offs; spin-ins; the commercialisation of R&D; campus incubators; and/or indirectly through networking and training.

They are regarded as seedbeds of innovation fostering new knowledge and ideas which could be translated into commercial entities and exploiting the intellectual assets and enhancing economic growth (Fenton & Barry, 2014).

3. Entrepreneurship Education Teaching in Estonian Universities

Education plays an important role in the process of building entrepreneurial capacity. (Hannon, 2006) The rationale behind the push to widen the knowledge of entrepreneurial and enterprise development is to build up confidence to develop the required managerial skills that will provide them the capacity to function effectively in the fast changing, competitive and entrepreneurial economy and labour markets of the 21st century (without necessarily starting up a business). (Ahmad, 2013)

In the present research, in the first the researchers provided a comprehensive literature review of research in entrepreneurship education and HEI. In the second, the researchers analysed Estonians public universities and their faculties' homepages to analyse full-time programmes, which are teaching entrepreneurship. In the third, a qualitative approach was used to gather and analyse the required data. The experts were chosen from all universities and the experts were responsible for entrepreneurship education in their organizations. All experts were either member of academic units or universities boards. A series of semi-structured interviews were conducted for data collection. Eight experts were chosen and interviewed in 2014 in one to two sessions. Coding methods were used to identify the dimensions and their elements and variables. The gathered data and analyzed conceptualization was circulated through the interviewed experts, and the face/expert validity of the conceptualization was confirmed. Additional information about and from the universities was collected from their web-pages, searching in web, and other documented materials.

As a methodological basis, the current study used classification (as proposed in Twaalfhoven, Suen, & Prats, 2001), which distinguished three types of approach to entrepreneurship programme development: a) the research-oriented model, with the focus on academic research, the creation of new ideas about entrepreneurship practices, and the development of new pedagogical tools; b) the "consulting" model, with the focus on establishing relationships with the local business community, whereby faculty, and often students too, provide services in consulting, giving practical courses such as writing a business plan and managing a business; c) the teaching/practice-oriented student development model, with a wide range of courses for students, business plan competitions, internships, and strong connections with active business-people to encourage students to establish start-up firms.

According to authors data the situation in Estonian public universities in 2013/2014 academic year was following (see Table 1). In this research we also observe two private HEIs: Estonian Business School and Estonian Entrepreneurship University of Applied Sciences and in both curricula entrepreneurship education is compulsory.

Table 1. EE at public universities in Estonia

HEI	Total number of students	Including			
		Business students	Non-business students		
			Participated in entrepreneurship education		
No	No	No	Percent		
Estonian Academy of Arts	1129		1129	59	5.2
Estonian University of Life Sciences	4278	768	3510	70	2.0
Estonian Academy of Music and Theatre	699	33			
Tallinn University of Technology	12903	3827	9076	1000	11.0

Tallinn University	9971	1394	8577	75	0.9
University of Tartu	15,785	1375	14,410	787	5.5
Total of universities	44,765	7397	36,702	1991	5.4

As it can be observed from Table 1, entrepreneurship education has been made available for students at all HEIs. There is going on effective collaboration between different universities: for example, Estonian Business School offers entrepreneurship education for Estonian Academy of Arts and Estonian Academy of Music and Theatre, and they offer for exchange courses of design and product development. This collaboration is one of the best practices for obtaining inter-disciplinarity in entrepreneurship education. Experts suggest that it will be useful to develop entrepreneurs' career choice for students as also European Commission has suggested (2008). At the moment, choice to choose between scientists and specialists is there and these choices are based on models in curricula. One of the tasks will be to develop model of entrepreneurship (integrated in all levels of higher education), what guarantees the choice of entrepreneurship for students and also quality of content.

All experts pointed out the issues of teaching methods used in EE and the changed learning paradigm. Lectors of entrepreneurship education should more use interactive and action learning methods in teaching process. All experts agreed that the practical learning of entrepreneurship through entrepreneurship (see Figure 1; Kirby, 2004; Hyrsky & Kyro, 2005; Hytti & O'Corman, 2004; Rae, 2004; Gibb, 1999) is more effective and helps achieve the learning outcomes including development of entrepreneurial attitude. Another problem in teaching is how to organism entrepreneurship courses in inter-disciplinarity bases. It requires collaboration between faculties in universities, but also collaboration between HEIs. Sometimes, it is quite hard to organize such kind of collaboration because of different logic in curricula and also different understandings of entrepreneurship (see also Mwasalwiba, 2010).

Experts emphasise that the entrepreneurial culture in universities must change, and teaching methods used in specialty coursed should support development of students' entrepreneurship key competence (see also Final Report of the Expert Group Entrepreneurship in Higher Education, especially within non-business studies, 2008; Hytti & O'Gorman, 2004; Klapper, 2004; Lundstrom & Stevenson, 2001; Loudon & Smither, 1999). This leads to the next problems (also pointed by Mwasalwiba, 2010 and Ardalan, 2008): competent teaching stuff and learner-oriented approach is more expensive. All the experts pointed out, that competence of lectors must be proved and special training courses developed. In this theme, involvement of international experience and competence is crucial.

One big block of themes from interviews was connected with EE support networks in HEIs, such as pre-incubation service, possibility to get mentoring, pitching competitions, informal trainings and seed capital for students' start-ups. Experts suggested establishing unified ecosystem for all Estonian HEIs and vocational schools. This ecosystem will have two bases: one for Sothern-Estonia, based on University of Tartu and the other for Northern-Estonia based on Tallinn universities. This ecosystem involves mentoring and coaching, but also prototyping network and investor's network. There is need to develop competition system what covers all Estonia and embrace vocational schools, schools of applied sciences and universities.

Questions were discrepancy of experts' opinions concern students' legal entity for start-up – is there a need for special entity or existing situation will be managed. The differences arise from different aims of entrepreneurship education. HEIs were the aim was to give entrepreneurship experience to students in hope to support spin-off, there was understanding that we can do it "real" and we don't need artefact situation, but where the main attention was on developing entrepreneurial mind-set, the need was mentioned.

Summa summarum, can be generalized that some universities have research-oriented model to entrepreneurship programmes – they have competent researchers who give strong science base to

the programs. Maybe there should be more inter-diciplinarity among researchers, because there is weak cooperation between entrepreneurship centered researchers and educational scientists. The “consulting” model is implemented by colleges, where the importance to cooperate with local community and entrepreneurs to develop the whole region is more crucial than in bigger towns where universities are situated. And the third model, the teaching/practice-oriented student development model was mainly used by universities trying to develop EE with ecosystem.

4. Conclusions

Entrepreneurship development is a key factor for an economic and social development of a country. Every state is interested in strong and developed economy and civic society. A strong economy is based on well-developed entrepreneurship. As Pramann Salu (2005) stated – country and its economy are as successful, as developed is its entrepreneurship.

Entrepreneurship has never been more important than it is today in this time of recovering from economic crisis. The economy is growing, but the growth should continue. Innovation and entrepreneurship a helping to solve the global challenges of the 21st century, building sustainable development, creating jobs and developing human welfare. When the researchers speak about entrepreneurship in this article, it is meant in the broadest terms and in all forms that entrepreneurial people in large companies and in SMEs, in the public sector, in HEIs, in third sector and, who launch and grow new companies. Now more than ever, innovation is needed in all sectors: new solutions, creative approaches, and new ways of operating and co-operation. These are in uncharted territory and need people in all sectors and at all ages who can “think out of the box” (see also Mahieu, 2006) to identify and pursue opportunities in news.

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