Central Balticum Entrepreneurship Interaction

Analysis of Entrepreneurship Educators' Training Needs and Practices

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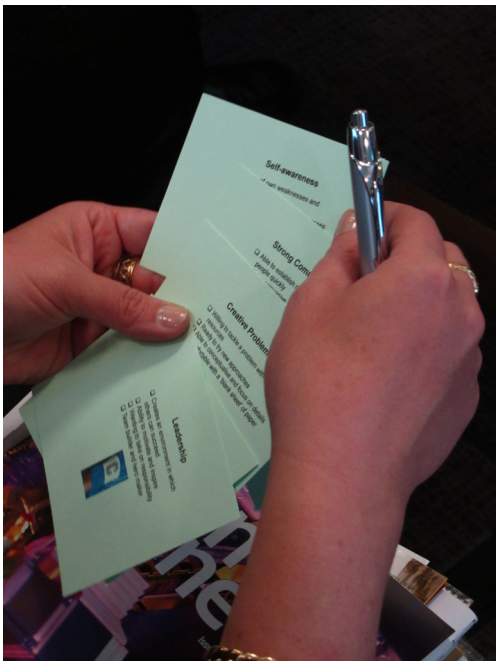

Aalto University | BUSINESS + ECONOMY | REPORT

Aalto University publication series
BUSINESS + **ECONOMY** 4/2013

Central Balticum Entrepreneurship Interaction (CB Entreint)

Analysis of Entrepreneurship Educators' Training Needs and Practices

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Aalto University
School of Business
Small Business Center

Aalto University publication series
BUSINESS + **ECONOMY** 4/2013

ISBN 978-952-60-5350-9
ISBN 978-952-60-5351-6 (pdf)
ISSN-L 1799-4810
ISSN 1799-4810 (printed)
ISSN 1799-4829 (pdf)

Images: Elisa Liekkilä (cover image)

Unigrafia Oy
Helsinki 2013

Finland

Publication orders (printed book):
natalia.narits@aalto.fi

441 697
Printed matter

Foreword

The role of education in promoting more entrepreneurial attitudes and behaviour is now widely recognised in the EU, but in the Central Baltic countries the theme is not enough utilised. Competences of educators in promoting entrepreneurship are different in the region. In addition totally new platforms for company-university interaction in promoting innovations and entrepreneurial behaviour are emerging. These new platforms are required to be applied quickly into universities and other higher education institutions (HEIs) in the Central Baltic region.

The Central Balticum Entrepreneurship Interaction (CB ENTREINT) project contributes to the Central Baltic regional development and competitiveness through the:

- analysis of the training needs for entrepreneurship teachers in the region and in different education levels when promoting entrepreneurship;
- analysis of the company-university latest and modern business platforms;
- cross-border network development between Central Baltic novel company-university platforms, HEIs and development organisations;
- development and piloting of the CB Professional Diploma Programme in Entrepreneurship Pedagogy.

This publication presents the results of a survey, which was implemented as part of the CB ENTREINT project addressing the above-mentioned issues. The project was financed by the Central Baltic Interreg IV A Program 2007-2013 (European Regional Development Fund) with national co-financing from the Regional Council of Southwest Finland. The lead partner of the project was Aalto University School of Business Small Business Center (Finland) and the project partners: Tallinn University of Technology (Estonia), University of Tartu (Estonia), Stockholm School of Economics in Riga (Latvia), Latvian Technological Center (Latvia). The purpose of the project was to contribute methodologically, via knowledge creation and transfer of latest innovative tools in entrepreneurship education to the Central Baltic regional development. Teachers and lecturers at all the educational levels will promote entrepreneurship more effectively and will interact more intensively with novel business platforms in the HEIs, entrepreneurship support organisations, and NGOs.

The project partner responsible for this study was *the University of Tartu, Centre for Entrepreneurship*, represented by Inna Kozlinska, Tõnis Mets, Liina Joller, Kalev Kaarna, Leeni Uba, Mervi Raudsaar, Triin Kask and Uuno Puus. The following individuals from the other partner organisations contributed to the study: Anne Gustafsson-Pesonen and Natalia Narits at *Aalto School of Business Small Business Center*; Urve Venesaar, Anett Linno, Alissa Vassilkova, Sirje Ustav, and Triin Ploompuu at *the Tallinn University of Technology*; Anders Paalzow, Arnis Sauka, and Ieva Goba at *the Stockholm School of Economics in Riga*; Ints Viksna at *the Latvian Technological Center*.

I thank the research team for its good work.

Helsinki, August 30, 2013
Pentti Mustalampi, Director
Aalto University School of Business Small Business Center

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1.0 Introduction

The general aim of the Central Balticum Entrepreneurship Interaction (CB ENTREINT) project is to promote entrepreneurial attitudes and behaviours in the Central Baltic (CB) area with a specific focus on improving teaching practices of entrepreneurship educators. The project comprises three major tasks: (1) to analyse problems and/or needs of entrepreneurship educators in the CB area, including the state of development of modern university-industry cooperation platforms, e.g., business garages, living labs, innovation factories, etc.; (2) to develop a cross-border cooperation network among higher education institutions, entrepreneurship support centres and organisations (business and technology parks, knowledge and technology transfer offices, business community associations, etc.) in the CB region; (3) based on the conducted analysis and the created network to devise and pilot a CB professional diploma programme (PDP) in entrepreneurship pedagogy.

This is the first CB ENTREINT report that presents results of a study carried out as part of the project to analyse current needs and problems the educators encounter in their practice of teaching entrepreneurship on different levels of the education system as well as the state of development of modern university-industry cooperation platforms for EE purposes in the CB area. The study was implemented in April-October 2012 and corresponds to the first project task. Implementation of the other tasks will be described and discussed in the second CB ENTREINT report.

The research process in this study consisted of the following steps: the literature review in entrepreneurship pedagogy, brainstorming sessions among the EE experts, semi-structured interviews with the educators in Estonia, Latvia and Finland, and analysis of the obtained qualitative data using the NVivo software. There are two major contributions the output of this research makes: a) empirical, whereas the results obtained shed light on how entrepreneurship is taught in the region and on the educators' consciousness as well as inform the training programme development for the educators; b) theoretical, since the study adapts, applies and complements the existing framework of teaching models brought into entrepreneurship education (EE) by Béchard & Grégoire (2005).

Main partners implementing the CB ENTREINT tasks are representatives of three CB countries: Aalto University School of Business Small Business Center (Finland, the lead partner), Tallinn University of Technology and University of Tartu (Estonia), Stockholm School of Economics in Riga and Latvian Technological Centre (Latvia). Other partners include: the Economic and Planning Center of the City of Helsinki, the Federation of Finnish Enterprises, the Tallinn City Government City Enterprise Board, Tartu City Government, Association of Latvian Technological Parks, Centres and Business Incubators. The project is financed by the Central Baltic Interreg IVA Programme 2007-2013 (the European Regional Development Fund). National co-financing is provided by the Regional Council of Southwest Finland.

1.1 Topicality

Within the European Framework for Key Competences for Lifelong Learning (EC, 2007; EU, 2006), entrepreneurship is defined as one of eight basic competences – together with mathematical, linguistic, digital, etc. – and the foundation for all developments required to contribute to social or commercial activity. Since 2000, along with adoption and implementation of a series of strategic documents by the European Commission (EC) – "The Charter for Small Enterprises", "Green Paper for Entrepreneurship Education in EU", "Oslo Agenda for Entrepreneurship Education in Europe", "Europe 2020", "Entrepreneurship 2020 Action Plan" – education has been accepted to be the priority pillar in promoting entrepreneurial attitudes and behaviours for making a societal change (EC, 2013; EC, 2010a; EC, 2006; EC, 2004; EC, 2000). They put a clear emphasis on developing entrepreneurial mindsets, involving students in enterprise projects, using more interactive methods that

develop problem-solving and creative skills, initiative, self-confidence; innovative pedagogies to build an entrepreneurial spirit (WEF, 2010).
However, the EC's (2008a, 2008b, 2009, 2010b) earlier research revealed that nowadays in Latvia and Estonia, as well as in the other new Member States of the EU, the overall situation in entrepreneurship education (EE) is rather weak: study programmes are deficient in interdisciplinary approach, interactive teaching methods that enable participants with entrepreneurial skills and even knowledge are used insufficiently, the level of cooperation between universities and businesses is low, etc. While the role of educators is critical, not even half of the staff teaching entrepreneurship in Europe has practical experience in business or entrepreneurship (Curavic, 2011; EC, 2008a; OECD, 2008).

On the other hand, Finland can be considered as a good-practice example in the Central Baltic (CB) region. Nearly 50% of population are trained in starting a business, 25% are involved in total entrepreneurial activity, and 55% are satisfied with the EE quality (EC, 2008a; EC, 2010). In 2009, the country approved the national "Guidelines for Entrepreneurship Education" (Ministry of Education, 2009:9). Studies (EC, 2008b, Leinonen et al., 2002) also refer to particular institutions as bright examples of novel EE, e.g. University of Jyväskylä and its "Tiimiakatemia" (Team Academy, 2012), which results in 37% of students starting up enterprises and 99% employed within six months upon graduation; Aalto University with a range of EE initiatives, such as Protomo, Aalto Design Factory, Venture Garage, and Small Business Centre, which also constantly transfers results of research into teaching practice, etc.

Increasing attention is now being paid to developing the competences of educators (particularly starting from 2011 with "The Budapest Agenda: Enabling Teachers for Entrepreneurship Education"), how to refocus their entrepreneurship teaching practices towards action-based, experiential learning methods, facilitation and new forms of assessment; to encourage cross-border collaboration among higher education institutions (HEIs), to grow an entrepreneurial educator with the help of specialised training programmes (EC, 2011; Heder et al., 2011). This enhancement of the educators' practices, in turn, is essential to facilitate transfer and development of entrepreneurial competences of students in order to attain better socio-economic outcomes, such as employability and corporate entrepreneurship along with venture creation, as well as a positive attitude towards entrepreneurship to recognise the opportunity of venture creation as a possible career choice (EC, 2012). Furthermore, competent entrepreneurship educators will help universities become more entrepreneurial and interact efficiently with the industry and government (ibid, 2012).

Considering the time that has passed since the previous studies were conducted and the growing importance of entrepreneurship, creativity and innovation education in Europe, we raised the following research questions prior to commencing the primary research:

- What are the current needs of entrepreneurship educators and the problems they encounter in everyday practices?
- How different or similar are these needs and practices in the researched countries? What recommendations does this imply?
- What is the state of development of the university-industry cooperation platforms for the purposes of teaching and learning entrepreneurship?
- What is the prevailing model of teaching entrepreneurship in the Central Baltic region at present?

The CB ENTREINT project is one among a series of projects dedicated to enhancing EE in the CB area on different levels of the education system: CREAENT (Creative Entrepreneurship Training Network), Enterprising SELF (Enterprising Education in Sweden, Estonia, Latvia and Finland), BEPART (Baltic Entrepreneurship Partners), etc., having a common priority to develop an economically competitive and innovative region, and at the same time supporting the EC's teachers education initiatives (the Oslo and Budapest Agendas).

1.2 Methodological Approach

The research process started with the overview of theory in entrepreneurship pedagogy entailing latest developments in the area of EE, different conceptual approaches to learning and teaching entrepreneurship: the works of Béchard & Grégoire (2005), Blenker et al. (2008), Kyrö (2008), Löbler (2006), Gibb (2005), etc. This overview allowed identification of the main dimensions of the educators' teaching practice and preliminary details comprising these dimensions for further exploitation in the primary research.

The Entreint project envisions addressing the educators' needs on different levels of education; thus, three main educational groups were selected: 1) university educators, 2) vocational/professional school educators[1], and 3) educators in the entrepreneurship support centres or institutions, e.g. business incubators, living labs (representing lifelong learning adult education). Most of the educators in the research sample, however, were representatives of higher education.

The ensuing series of brainstorming sessions in a group of experts from the Centre for Entrepreneurship at the University of Tartu were aimed at mapping provisional, or assumptive, needs of the educators in each educational group and according to the dimensions identified. The sessions resulted in the needs matrix showing problem fields in teaching entrepreneurship applicable to every partner country. This matrix was later added on or confirmed by the other partners.

Next, based on the literature review and the needs matrix, questions for semi-structured interviews were formulated ensuring focused, and at the same time, interactive two-way communication. The interview framework was built upon the following question blocks: methodology, assessment, curricula, social environment, physical environment, regulations, and financing, apart from the introductory and closing sections, and addressed theses specified in the matrix sectors. Using this framework, 34 interviews were conducted and a range of qualitative insights on the researched topic was gained.

The obtained information was processed further by means of the computer-assisted qualitative data analysis software NVivo in order to work out recommendations for the PDP, which targets advancing current EE practices and fulfilling the educators' needs.

The report comprises four body chapters, commencing with the theoretical basis of the study mainly concerned with teaching models in EE, which set the structure for the ensuing expert interviews. The next chapter provides details of the primary research process: data gathering, composition of interviews, profile of respondents, etc. This is followed by the chapter highlighting the main findings in line with the interview structure, and, finally, a discussion of the obtained results. The report ends with analytical conclusions and recommendations for the PDP development.

2.0 Theoretical Basis of the Study

A number of EE researchers and practitioners (for instance, Mets et al., 2013; Braun, 2011; Blenker et al., 2008; Heinonen, 2006; Löbler, 2006; Gustafsson-Pesonen & Kiuru, 2012) argued for the necessity to *employ experiential and process-based learning* in EE in order to increase educational output in terms of the number of new ventures, corporate entrepreneurs, and entrepreneurial individuals in society at large. However, up until now, especially in most of the HEIs in Eastern Europe, the emphasis has been put on education *about*

[1] The educators working at the upper-secondary and post-secondary vocational levels (e.g. in professional secondary schools and vocational colleges). In the research sample, 50% of these institutions combined functions of vocational education and professional higher education (the latter is also referred to as "the first stage of professional tertiary education" in some systems).

entrepreneurship, which employs a standard, lecture-seminar, type of teaching. According to the "Survey of Entrepreneurship in Higher Education" report (EC, 2008b), lecturing is among the three most widely used teaching methods across all the European HEIs, the other two being project work and case studies.

By far, teaching methods used in entrepreneurship programmes and courses in general characterise the educational approach employed. There are three basic approaches to EE, also referred to as teaching modes: education *about*, *through* and *for* entrepreneurship – the division widely admitted in the EE research (Gibb, 2005; Haase and Lautenschläger, 2011; Hytti et al., 2010; Hytti et al., 2004). Generally *about* is equated to a more notional, or formal, approach to teaching, while *through* and *for* – to the dynamic and holistic (Higgins and Elliott, 2010). These modes, in turn, are aligned with the general aims of enterprise learning: learning to understand entrepreneurship, to become entrepreneurial, and learning to become an entrepreneur (Bridge et al., 2010; Hannula and Pahari-Stylman, 2008; Hytti et al., 2004). As far as the latter two are concerned, the current pedagogic challenge is to shift towards an experiential learning approach as opposed to formative teaching.

The teaching modes and aims of enterprise learning closely match the supply, demand, and competence models of teaching entrepreneurship introduced by Béchard & Grégoire (2005). The teaching model is a broader framework, which suggests that not only the methods used to deliver the programmes and courses characterise the approach employed, but the whole system of dimensions, comprising: aims and results educators set and expect to achieve, content and context of learning, external factors, etc. The framework was adapted for this study and complemented with works of Blenker et al. (2008), Gibb (2005), Braun (2011), Müller & Diensberg (2011), and Löbler (2006), as a result of which six dimensions were identified for further empirical investigation – methodology, assessment, curricula, social and physical environment, regulations, and financing. Different characteristics of these dimensions along with its interaction determine, which model – supply, demand, competence or their hybrid – prevails. Table 1 illustrates these relations and serves as our working concept. Relying on this theoretical framework, the structure and content for the ensuing empirical study was worked out. How do different characteristics and interaction of the dimensions express the three models?

The supply model can be equated to the "about" teaching mode, or, in terms of Braun (2011), represents the "container knowledge" approach to EE. It suggests the study of entrepreneurship as an academic discipline and is entirely teaching-centred. The teaching process aims to explore the nature of entrepreneurship with students, provide them with best practice examples, and to develop their critical thinking based on theoretical understanding of the phenomenon. The methodical focus is in knowledge transmission and reproduction, which takes place in a standard classroom or lecture amphitheatre and homogenous group of students (e.g. all doing a bachelor degree in "International Business"). The methods applied are mainly lectures and seminars, where students solve exercises to use the knowledge in simple situations). The model features summative assessment – through exams and tests – comparing results with some standard benchmark. However, the system of measuring factual outcomes after graduation does not exist. Traditional universities employ this model very often. It also features no considerable financial or regulatory support from management or targeted EE policy. Employed educators do not necessarily possess experience in entrepreneurship.

In line with *the demand model*, students as prospective or acting founders/team members of a company within their biography and social setting are in the centre. Learning methods should be selected beforehand based on students' demands. One of the teaching objectives is to increase motivation in choosing entrepreneurship as a possible career path, to develop the sense of initiative and entrepreneurial attitude of students. It focuses more on behaviour, life plans, and value creation rather than businesses for profit. The demand model makes the learning experience meaningful by organising knowledge about theory and practice of entrepreneurship, letting the students understand, analyse and reflect. Methods applied within this model are meant to encourage exploration, discussion and experimentation: field trips, simulations, debates, elevator pitches,

Table 1. Dimensions of teaching and learning models in EE

Dimension/model	Supply (ABOUT)	Demand (THROUGH)	Competence (FOR)
Methodology	Knowledge transmission and reproduction.	Strengthening by imparting knowledge, emphasising exploration, discussion, experimentation.	Developing competences; drawing out wishes, abilities, dreams, goals, awareness; emphasising communication, discussion and production.
		Supporting achievement of self-congruent goals and/or self-development in a team and relation of external and internal environment. Creation of special learning environment. Learning-by-doing.	
	Lectures and seminars; reading print material, solving exercises, watching and listening audio-visuals, etc.	Lectures, seminars, field trips, simulations, animations, case studies, debates, essays, elevator pitches, etc. To be developed before instruction based on students' characteristics.	Problem-solving, real-life projects, business labs and competitions, pre-incubation, 24-h camps, virtual or real mini-companies, simulations, modelling, business portfolios, mentorship, etc.
Evaluation/ assessment	Exams, tests; summative. Outcomes measurement may not exist.	Formative and summative. Some form of outcomes measurement exists (e.g. feedback survey).	Results, profiles, performance in authentic situations. Self- and peer-assessment. Long-term tracking.
Environment: physical and social	Standard classrooms and lecture amphitheatres. Formality and standards.	Interactive and interdisciplinary classes/training sessions in standard or out-of-classroom settings, living labs, entrepreneurship camps, etc. Authenticity, ease of educator-student communication, tech-advancement.	
Curricula: teaching aims and outcomes, interdisciplinarity	To explore the nature of entrepreneurship, good practice examples. To remember and apply for simple problems. Homogenous groups of students. Theory into practice.	To understand and analyse. To give meaning, organise knowledge about theory and practice of entrepreneurship. To motivate students for it before/during instruction. To provide opportunities of practice, also in interdisciplinary teams.	To evaluate and create or reorganise existing knowledge for actions. Knowing, thinking, doing and participating – integrated into the experiential learning context. Intedisciplinarity is embedded. Practice into theory.
Regulations: EE policy, status	Entrepreneurship is an elective or free elective. No specialised training programmes for educators, experience is not a prerequisite.	Entrepreneurship can be compulsory, training of educators takes place occasionally; experience in the field is one of the recruitment criteria.	Entrepreneurship is integrated in the curriculum. Training programmes for teachers/trainers. Recruitment of entrepreneurial educators. Creation of EE infrastructure (incubators, science parks, etc.).
Financing: budget allocation, income generation	EE is not a priority in allocation of resources and is not considered as a means of income generation.	Internal support for EE development – systematic stimulation of entrepreneurial "life world", dedication of resources ensuring scalability and sustainability. Income generation through EE: knowledge and technology transfers, spin-offs and -outs, academic entrepreneurship.	

Source: adapted from Béchard & Grégoire (2005), complemented with Braun (2011), Müller & Diensberg (2011), Löbler (2006), Gibb (2005)

animations, etc. In comparison with the supply model, it is related to training and learning rather than teaching. Similar to the competence model (stepping ahead), provision of the interactive learning environment is at the core of the demand model. Assessment is not only summative, but also formative, and aims to help students realise their own strengths and weaknesses, and provide personalised solutions. Educators should have practical experience in entrepreneurship and its pedagogy to bring real-life examples into the classroom and share their expertise. Within this model, entrepreneurship is a compulsory subject in a curriculum and management dedicates resources for EE development systematically.

Finally, *the competence model* is concerned with developing entrepreneurial competences – attitude, knowledge and skills. If the demand model can be equated to education "through" entrepreneurship, the "for" mode comes into play here. Entrepreneurship is delivered through coaching and training, ensuring self-directed and experiential learning takes place with the aim to make the students apply their knowledge, which is given once needed, to change or create new knowledge. By creating an interactive and authentic learning environment the model foresees interdisciplinary team work and university-industry cooperation, including novel platforms, e.g. innovation factories, venture and living labs, science and technology parks, entrepreneurship support centres, etc. The widespread methods applied: real-life projects, 24-h entrepreneurship camps, (virtual) mini-companies, mentorship, etc. Unlike it is in the supply model ("right-wrong" judgments), the students are allowed to make mistakes and are encouraged to celebrate them as the reality is always uncertainty-led and the mistakes are to be learnt from.

Assessment is essentially performance-based, self- and peer-assessment is widely used, and the long-term tracking of the students' results is habitual. Along with the demand model, it is characterised by the ease of communication between the educators and students, internal managerial support for EE development and systematic stimulation of entrepreneurial "life world", but with a supplementary task to generate income through EE, e.g. holding shares in start-up companies, charging external companies for access to a pool of trained students, etc., as well as more technological advancement and bigger accent on out-of-classroom learning settings.

Having set the conceptual basis for the study, using previous research works by Braun (2011), Müller & Diensberg (2011), Löbler (2006), Béchard & Grégoire (2005), and Gibb (2005), the report proceeds with details of the primary research comprising the series of brainstorming sessions in the groups of EE experts and semi-structured interviews with the educators from Latvia, Finland and Estonia.

3.0 Primary Research

One of the CB ENTREINT project's intangible assets is the external network of educators teaching entrepreneurship or entrepreneurship-related disciplines in Latvia, Estonia and Finland, making it convenient to access experts in the field to gain qualitative and hands-on insights. For that reason interviews were chosen as the core research method. Prior to conducting the interviews, eight experts in the Centre for Entrepreneurship of the University of Tartu ran the brainstorming sessions with the aim to map provisional needs of the educators in each of the three educational groups: vocational, university and lifelong learning levels, using the built up framework, and to extend this ground for formulating the interview questions. Afterwards three experts in the Small Business Centre of the Aalto University held an extra brainstorming session and added in the needs of educators on the lifelong learning level. This chapter summarises the initial expert assumptions and expands on the details of the 34 interviews conducted with the entrepreneurship educators, such as: questions asked, data gathering and analysis, profile of respondents, etc.

3.1 "Brainstorm" Sessions: Provisional Matrix of Educators' Training Needs

Brainstorming is a widely applied creativity technique, usually for generating and collecting criticism-free ideas on a certain topic or problem in a group (Osborn, 1963). The group of participating experts had the pre-determined conceptual basis for the idea generation process (adapted from Béchard & Grégoire, 2005), as a result of which: a) an initial matrix of training needs was devised, showing current needs and/or problems of the educators across the three educational groups (vocational, higher, continuing education) and six dimensions (methodology, assessment, curricula, environment, regulations, financing) examined further; b) the key topics to be addressed in the interviews were agreed upon. The assumptive needs in the matrix appeared to be somewhat different in the universities and vocational schools as compared to the lifelong learning centres.

One of the common problems mentioned by the experts with regard to the "Methods" dimension in the first two groups is the insufficient experience of educators in the discipline they are teaching. The distinction is made between academic teaching of entrepreneurship and training with the use of a novel methodological toolbox. However very few academic educators are perceived to be knowledgeable in the latest methods in entrepreneurship pedagogy, they generally lack facilitating and moderating skills. While trainers are the minority, it is also hard to attract practitioners to teach; in addition, the practitioners are not prepared to deliver courses in entrepreneurship, in the view of the "brainstormers". As for the "Assessment" dimension, methods used are considered obsolete, on the one hand, and there is no united agreement about evaluation principles on the other. In the university settings, the practically non-existent entrepreneurship support centres for students upon completion of the entrepreneurship programme or module are mentioned as a problem. Underdeveloped cooperation with the industry is seen as another problem for the schools and universities. On the lifelong learning level, it is also hard to attract good mentors and trainers. Having considerable practical experience, they lack pedagogical skills, understanding of entrepreneurship pedagogy and methods, as well as the knowledge of entrepreneurship theories, in the experts' assumption.

In the "Curricula" dimension it is presumed that the educators of the first two groups do not sufficiently understand EE and its objectives, the process-based teaching, treating EE similarly to business education, and perceiving entrepreneurship from the angle of new venture creation. By far, only business-related faculties in the universities have entrepreneurship as part of the compulsory curricula, whilst the study programmes lack interdisciplinarity. In addition, the universities have a rigid curriculum structure, reluctant to fundamental pedagogical shifts. The educators on the lifelong learning level also look for interdisciplinary cooperation and seek team teaching. Lifelong (further) education, in view of the experts, lacks the entrepreneurship trainers' certification requirements and provision.

As perceived by the experts, the students' negative attitude expressed in carelessness, consumerism, and unwillingness to make the effort in applying working materials is one of the serious obstacles in creating a favourable learning and teaching environment, which is characterised as de-motivating. Students are afraid to be creative and to dream, which can be connected to the stigmatisation of mistakes (especially in the schools). The academic educators usually lack social skills and have limited vision in developing them, the experts assumed. On the tangible side, the density of physical spaces and large groups of students as well as limited technological capacities are apparently a problem hindering the teaching process. The educators on the lifelong learning level presumably faced with excess bureaucracy and hierarchy. They might also lack the courage to test and use new methods themselves. It can be the case that the educators are perceived as service providers, who can "copy-paste" relevant knowledge from brains to brains on this level.

Insufficient funding to support innovative teaching initiatives or novel cooperation platforms with industry, to expand physical space, purchase modern equipment – is at the forefront of the assumed needs in the "Financing" dimension. Teaching practitioners would require higher salaries both at the university and lifelong

learning levels, while in Finland free EE is a norm even on the latter level. The educators in the universities and schools presumably encounter regulatory difficulties, such as language barriers within legislation (possibility to study in the native language, hiring English speaking professors, etc.), higher education standards not supportive to a personalised approach; finally, poor commitment from management in the EE infrastructure development.

More details on all the reported assumptions can be found in Annex I. Yet, the expert interviews that followed the brainstorming show whether these assumptions correspond to reality. The next subsection expands on the sample, profile of respondents and data gathering.

3.2 Semi-Structured Expert Interviews

Following the brainstorming sessions, interview questions were formulated addressing the key issues raised during the expert discussions (brainstorming) and reflected in the needs matrix. To allow more flexibility in a reciprocal communication with respondents, the interview questions were asked in a semi-structured way. Table 2 shows the dimensional topics addressed in the interviews, while Annex II provides the list of basic questions.

Table 2. Topics addressed in the interviews

Dimension		*Key topics addressed in the field research*
1	**Methodology**	Learning (teaching) methods Most effective teaching/training methods Interdisciplinarity Learning (teaching) outside classroom: living and venture labs, pre-incubators, science and business parks, innovation labs Joint projects with companies as part of learning (teaching)
2	**Curricula**	Main objectives of teaching entrepreneurship Expected learning outcomes EE curriculum renewal, structuring topics
3	**Evaluation**	Assessment methods EE outcomes measurement Student progress evaluation
4	**Environment**	Students' pro-activity Trainer (teacher)-Student barriers Management's attitude to EE
		Learning (teaching) materials Distance teaching technologies and software solutions Physical space and technological equipment
5	**Regulations**	EE in a country's education policy Status of entrepreneurship in curricula Institutionalisation of EE, support units
6	**Financing**	Financing of EE Changes in financing structure

In the course of the project, each partner was responsible for the selection of entrepreneurship educators, arranging and conducting the interviews. The interviews were conducted from May until October 2012. Before commencing the fieldwork, in the end of April 2012, the partners were provided with the interview implementation and data submission guidelines (Annex III) to ensure the unified data gathering process in three countries.

The minimum allowed number of interviews per educational group was set to six (two in each country), but in most cases the limit was exceeded and a total of 34 respondents contributed to the research, whereas some respondents represented two groups. Table 3 shows details of this distribution. As can be seen, the Estonian sample has a stronger focus on the higher education level, the Finnish – on the lifelong learning level, and the Latvian – both on higher education and lifelong learning.

The interviewees, who took part in the interviews, typically work in renowned institutions of the partner countries. For instance, in Latvia, the Riga International School of Economics and Business Administration, Stockholm School of Economics in Riga, University of Latvia; in Finland – Small Business Centre of Aalto University, Helsinki Business College; in Estonia – University of Tartu, Estonian Business School are among the contributing institutions. See Table 4.

Table 3. The sample size

Country	Educational group	Group fits	Total number of interviews
Finland	Vocational schools	2	7
	HEIs	2	
	LLL centre(s)	4	
Estonia	Vocational schools	2	11
	HEIs	9	
	LLL centre(s)	3	
Latvia	Vocational schools	3	16
	HEIs	7	
	LLL centre(s)	10	

Table 4. The institutions concerned

Country	Educational group	Institutions
Finland	Vocational education institutions:	South Savo Vocational College, Helsinki Business College.
	Universities:	Lahti University of Applied Sciences, Haaga Helia University of Applied Sciences (+University of Jyväskylä).
	LLL centre:	Aalto Small Business Centre.
Estonia	Vocational education institutions:	Võru Vocational Education Centre (+Antsla Gymnasium), Tartu Folk High School.
	Universities:	University of Tartu, Tallinn University of Technology, Tallinn University of Applied Sciences, Estonian Business School, Estonian Entrepreneurship University of Applied Sciences.
	LLL institutions:	Kehtna Economy and Technology School, Estonian Entrepreneurship University of Applied Sciences.
Latvia	Vocational education institutions:	Professional education school "Sigma", Riga Entrepreneurship College.
	Universities:	BA School of Business and Finance, Riga International School of Economics and Business Administration, Stockholm School of Economics in Riga, University of Latvia, Ventspils University College, Baltic International Academy, Riga Entrepreneurship College.
	LLL centres/institutions:	Kurzemes Business Incubator and Ventspils High Technology Park, Centre for Nascent Entrepreneurs, Business Incubator at the University of Latvia, Dobele Adult Education and Business Support Centre, SIA Poetika, SIA MBR, PITEC, SIA BUTS.

Demographic characteristics of the Finnish, Latvian and Estonian respondents are slightly different. The lower bounds of age range from 23 in Latvia to 35 in Finland, the upper are all between 54 and 57. The proportion of male and female respondents differs significantly in Finland, where 86% are female respondents, while in Estonia and Latvia it is somewhat more balanced (64% and 69%, respectively). Table 5 briefs on the profile of respondents.

Table 5. Profile of respondents

No.	Country	Age	Gender	Target group	Years in entrepreneurship	Years in teaching
1	Estonia	51-60	Male	Higher education	11-20	11-20
2		51-60	Male	Higher education	6-10	11-20
3		51-60	Male	Lifelong learning	1-5	11-20
4		41-50	Female	Higher education	1-5	1-5
5		31-40	Male	Higher education	1-5	6-10
6		31-40	Female	Vocational and lifelong	Related experience	1-5
7		31-40	Male	Higher education	1-5	1-5
8		31-40	Male	Higher education	11-20	1-5
9		21-30	Female	Higher education	6-10	1-5
10		31-40	Female	Vocational and higher	Related experience	11-20
11		41-50	Male	Higher and lifelong	1-5	6-10
12	Finland	41-50	Female	Higher education	11-20	6-10
13		41-50	Female	Lifelong learning	Related experience	11-20
14		51-60	Female	Lifelong learning	Related experience	21-30
15		51-60	Female	Higher education	21-30	11-20
16		31-40	Female	Lifelong learning	Related experience	1-5
17		51-60	Female	Vocational education	Some experience	6-10
18		51-60	Male	Vocational and lifelong	Related experience	6-10
19	Latvia	31-40	Male	Higher education	6-10	1-5
20		31-40	Female	Vocational and lifelong	Related experience	11-20
21		51-60	Female	Higher education	1-5	11-20
22		21-30	Male	Lifelong learning	Related experience	1-5
23		51-60	Female	Higher and lifelong	11-20	11-20
24		41-50	Female	Vocational and higher	Related experience	6-10
25		41-50	Female	Higher and lifelong	1-5	1-5
26		21-30	Male	Higher and lifelong	6-10	1-5
27		51-60	Female	Higher education	Related experience	21-30
28		31-40	Female	Vocational	Related experience	6-10
29		41-50	Male	Higher and lifelong	11-20	11-20
30		31-40	Female	Lifelong learning	Related experience	11-20
31		51-60	Male	Lifelong learning	Related experience	21-30
32		31-40	Female	Lifelong learning	Related experience	6-10
33		41-50	Female	Lifelong learning	Related experience	11-20
34		41-50	Female	Lifelong learning	1-5	11-20

Referring to years in entrepreneurship, over half of the interviewees can be classified as entrepreneurs or self-employed (for instance, business consultancy, marketer-freelancer, etc.), while the rest possess business-related experience, such as holding managerial positions in companies. The educators-entrepreneurs operate

in very different fields. For instance, the Latvian respondents are running (or used to run) their own enterprises, are (or were) self-employed in the following areas: fashion and design, theatre, real estate, business consultancy, insurance, finance, food retail and catering, development and manufacturing of electric products, building and construction, and marketing. The Estonian respondents mentioned: business, marketing and entrepreneurship consultancy, production of school notebooks, farming, IT and web applications, car parking, construction, education, training, and consultancy. As for the Finnish sample (though it is also the smallest), there are only 2 respondents who have direct experience in entrepreneurship, and they referred to transportation services and tourism.

The majority (70%) of the respondents have teaching experience that exceeds five years. However, in the Latvian and Estonian samples there are evidently more educators teaching business-related disciplines rather than entrepreneurship in comparison to the Finnish sample, where the respondents teach entrepreneurship specifically. There are few purely "entrepreneurship educators" in Latvia and Estonia in that respect. The younger respondents tend to specialise in teaching entrepreneurship as a discipline, while the rest have longer experience in teaching entrepreneurship- and business-related disciplines (marketing, finance, management, etc.). Among the younger respondents (aged 21-30 and 31-40), who are entrepreneurs, the number of years in entrepreneurship usually exceeds the number of years in teaching, while for the older respondents (aged 41-50 and 51-60) it is not always the case.

In the following section, the authors present the research findings and discuss the results obtained with the help of the NVivo software in the "Methodology", "Evaluation", "Curricula", "Environment", as well as "Regulations" and "Financing" dimensions.

4.0 Findings

This is a key section of the report devoted to the analysis and discussion of the obtained research results. Several differences are observed between Estonia and Latvia, on the one hand, and Finland, on the other, in all the dimensions; slight dissimilarities can also be noticed among the educational groups in some cases. Now, relying on the analytical framework and key topics highlighted in Table 2, we identify attributes through the NVivo coding process to present these similarities and differences.

4.1 How Do the Educators Define Entrepreneurship?

Prior to going into details of the core analysis, it is meaningful to accentuate, how understanding of entrepreneurship as such varies considerably among the respondents and countries. See Table 6. The respondents from Finland tend to define the concept more broadly, from the attitudinal and volitional perspectives. A business approach to entrepreneurship with a focus on profit maximisation is more common among the Latvian respondents. Entrepreneurship process-based definitions appear only in the Estonian sample, a purely opportunistic view – in the Latvian. Other definitions vary from sharing Schumpeter's views to selling smartly own competences.

These varying views on the notion of entrepreneurship may influence the educational approach employed, choice of teaching methods as well as the aims and outcomes the educators plan to achieve, i.e. the "Methodology" and "Curricula" dimensions. Personal understanding of the notion is also the basic information that suggests how the educators communicate its meaning to the students and what intellectual roots they rely on (economics, business administration or entrepreneurship as the pioneered field).

Table 6. Educators define entrepreneurship

No.	Definitions	Country	Educational group
1	"Making something out of nothing".	**EE**	higher
2	"Entrepreneurship is an activity that is directed towards satisfying needs of people in a new way, whereas the one, who satisfies the needs, takes business risks related to gathering and using the resources".		higher
3	"It is... taking responsibility for your family, your workers and your clients, who we offer our services to".		lifelong
4	"A process, where, as a result of adequate time and effort, values and personal satisfaction is established".		higher
5	"A set of skills and knowledge that makes ideas come true/happen through a natural cycle starting from opportunity recognition, idea to its execution..."		higher
6	"Creating something new under the constraint of limited resources".		higher
7	"Selling smartly your skills and competences (doing it by yourself)".		vocational
8	"Starting and operating a business on your own (a business approach)".		higher, vocational
1	"A way of thinking, a method and…it sort of means self-responsible action and leading oneself".	**FI**	lifelong
2	"It is an attitude, which is the starting point, the way of acting and thinking; business is a manifestation of entrepreneurship".		lifelong
3	"I feel that entrepreneurship is connected to life as a whole".		higher
4	"The broad definition is entrepreneurial active action that is my starting point; of course it is different if we are developing enterprises".		higher
5	"It all starts with your own self and your own will, the person's own motivation has to be true and the inner entrepreneurship has to exist at first".		vocational
1	"Entrepreneurship is business activity of an active person to satisfy his/her needs and needs of the society."	**LV**	vocational, lifelong
2	"Business activity aimed at making profit".		lifelong
3	"I agree with the definition of J. Schumpeter, because my experience is related to the innovative and creative enterprise..."		higher, lifelong
4	"A purposeful action or work of an individual or group of individuals to create something new that is necessary for a small, medium or large group(s) of society…"		lifelong
5	"Regular economic activity with an aim to get profit".		vocational, higher
6	"I can share an understanding that the key aim is maximum satisfaction of customer needs, which allows maximising profit".		vocational, higher
7	"It is how people identify and exploit opportunities. The main issue is why people identify or see and pursue certain opportunities; some people do, some do not, that is a question of difference between an entrepreneur and non-entrepreneur".		lifelong, higher

4.2 Results Across the Six Dimensions

The analysis starts with the "Methodology" dimension, where interdisciplinarity, effectiveness of various teaching/learning methods, the state of development of the university-industry cooperation platforms and other issues are addressed. Followed by "Curricula", "Assessment" and "Environment", most of the attributes identified through NVivo thematic coding in these dimensions highly depend on the educators themselves. Teaching and evaluation methods used and unused, objectives and outcomes they set to achieve, creation of authentic learning atmosphere, to name a few. Some topics are clearly influenced by external actors, for instance, HEIs initiatives in training educators, proactivity of students, attitude of management, teaching software and equipment; it is equally true for the "Regulations" and "Financing" dimensions. At the same time,

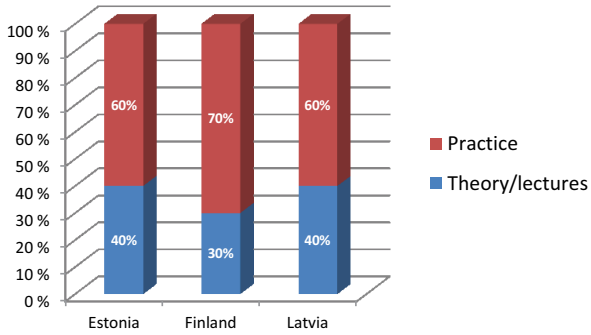
there are some transitional topics, such as university-industry cooperation, measurement of outcomes, interdisciplinary teaching, depending both on external and internal factors.

4.2.1 Methodology

In the existing variety of teaching methods in the sample studied, one can consider a good balance between theory and practice, formative and interactive approaches, as the best option. One of the earlier assumptions and previous research (EC, 2009; EC, 2008b) emphasised interactive teaching methods used insufficiently and lecturing as the most widely used teaching method. Figure 1 shows the proportion between theory and practice in teaching entrepreneurship based on the Estonian, Finnish and Latvian educators' responses to the question: "How many hours do you lecture and use other methods (in %)?"

Perception of practice in general and what is considered as learning-by-doing methods in particular differ among the educators, which range from solving in-class exercises (individually or in teams) to business games and company visits; hence, the scope and depth of using these methods. Awareness about methods unused in everyday practice differs either. Bearing in mind the differing perceptions of practice, it is informative to see Figure 2, where the teaching methods used by the educators in three countries are displayed. The figure shows those methods, which the educators mentioned themselves, and the number of educators using them.

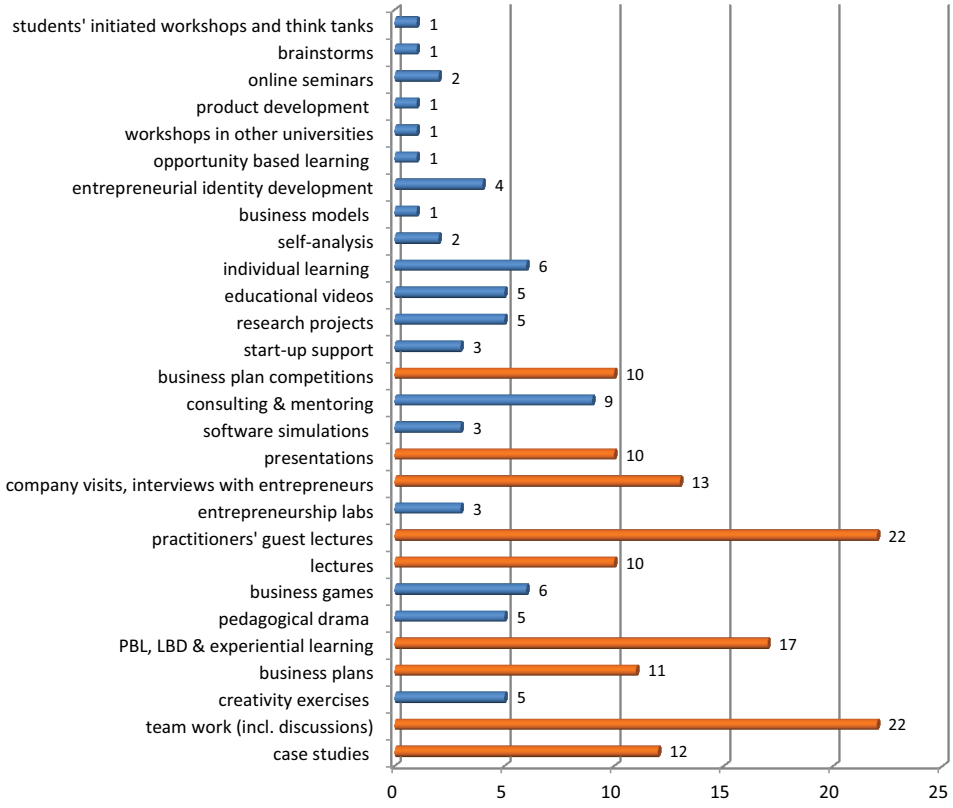
Figure 1. Proportion between theory and practice in teaching entrepreneurship



The most widely used methods referred to by over 10 respondents are: practitioners' guest lectures, company visits and interviews with entrepreneurs, case studies and business plans. In addition, there are two broader groups of methods pointed out during the interviews: teamwork and problem-based, experiential learning that overlap and comprise other methods displayed in the figure. For instance, some educators in Latvia interpret "problem-based learning" as an in-class task, where a team is given a case study or an industry problem to discuss and work together to solve it; the other educators in Estonia – as a real-life project, validation of customer hypotheses or internships/company placements. The methods carrying a higher degree of experimentalism, such as creativity exercises, pedagogical drama, business games, etc. are all referred to less frequently. The practitioners' guest lectures are very popular, while workshops by entrepreneurs are not.

A number of the experiential methods taking place outside classrooms, which are few, have the status of extra-curricular activities, e.g. business incubators, entrepreneurship labs, start-up. In Latvia, university incubators are becoming more common (in the last half-year new incubators opened in the state university and in one of the leading business schools), while in Estonia start-up competitions, like "Brainstorm" and "Garage48", are very popular.

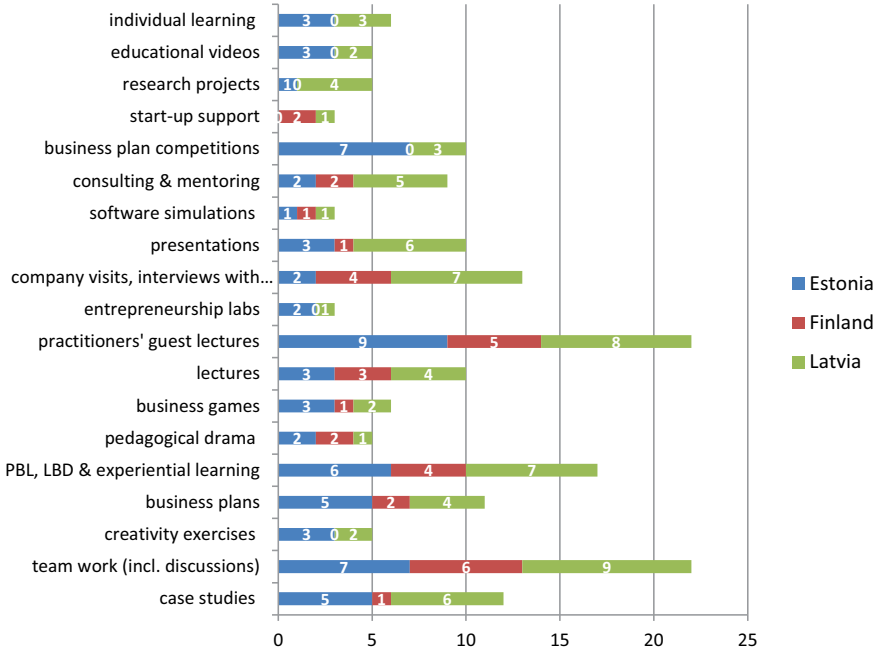
Figure 2. Teaching methods used by entrepreneurship educators in Estonia, Finland and Latvia



Venture or innovation labs, visits to science and business parks are not mentioned at the higher education or vocational levels. This statement is equally true for all three countries, although a comparatively small number of the respondents from Finland and focus on experts from the lifelong learning level impose known limitations, hence, disallow concluding the unmentioned methods are not in use. However, it does indicate that the novel EE platforms are not the common means of educating future (potential) entrepreneurs. All the respondents were asked what kind of outside classroom activities they and their students have taken part in recently. The topic was also touched upon in the university-industry cooperation question, which is addressed in the end of this sub-section.

In each country sample, there are a number of methods unspecified by any of the educators from the other two countries: *business models and self-analysis* – referred to by the Estonian educators only; *workshops in other universities, opportunity-based learning, entrepreneurial identity development* – by the Finnish; *brainstorms, product development, online seminars, students' initiated workshops and seminars* – by the Latvian educators. Most of these methods are used at the higher education level, which is demonstrated in Figure 3 that also illustrates the breakdown of answers by the educational groups.

Figure 2. continued



Recollecting the prevailing number of group fits for the higher education and lifelong learning levels (Table 3), these groups dominate accordingly in the answers below. At the same time, the assortment of methods used on the vocational level is scarcer, which might be implicitly connected to the lack of financing as discussed further in the subsection 4.1.5.

Interdisciplinary teamwork is not a usual practice in any of the partner countries. It is lacking in Latvia, especially at the higher education and vocational levels, since additional financing and re-planning of the curriculum are required for that. The university incubators and entrepreneurship labs highly support interdisciplinarity, yet it is not always possible to ensure. In Estonia and Latvia, interdisciplinary teams are formed during extra-curricular activities. Within formal programmes of the universities and lifelong learning centres students of only one specialty work in groups, it is not considered possible otherwise, but planned to be integrated at some point in the future (through electives). One of the Estonian respondents noticed that an interdisciplinary form of learning does not always work, especially at the Master level and during distance courses. In Finland, interdisciplinary work is not usual either, although it is favoured in vocational schools; for motivated students willing to start a new enterprise extra-curricular support is available at both vocational and higher education levels, it is also practiced during entrepreneurship projects.

A significant, yet unfulfilled, constituent of the educators' practice is the set of methods they are familiar with or aware of, but do not use. The sets of unused methods in the three countries are slightly different as displayed in Figure 4. Firstly, some of the methods that are admitted to be used appear in the lists of unused too: pedagogical drama mentioned by educators in the Finnish lifelong learning centre, problem-based learning – by a vocational school educator; in the Latvian sample, these are local case studies and company visits mentioned by two educators at the lifelong and higher education levels, and other methods (roundtable

mentoring Vs mentoring, online methods Vs online seminars); company visits, consulting and mentoring, case studies and practitioners' guest lectures – at the higher education level in the Estonian sample.

Figure 3. Teaching methods used - by target groups

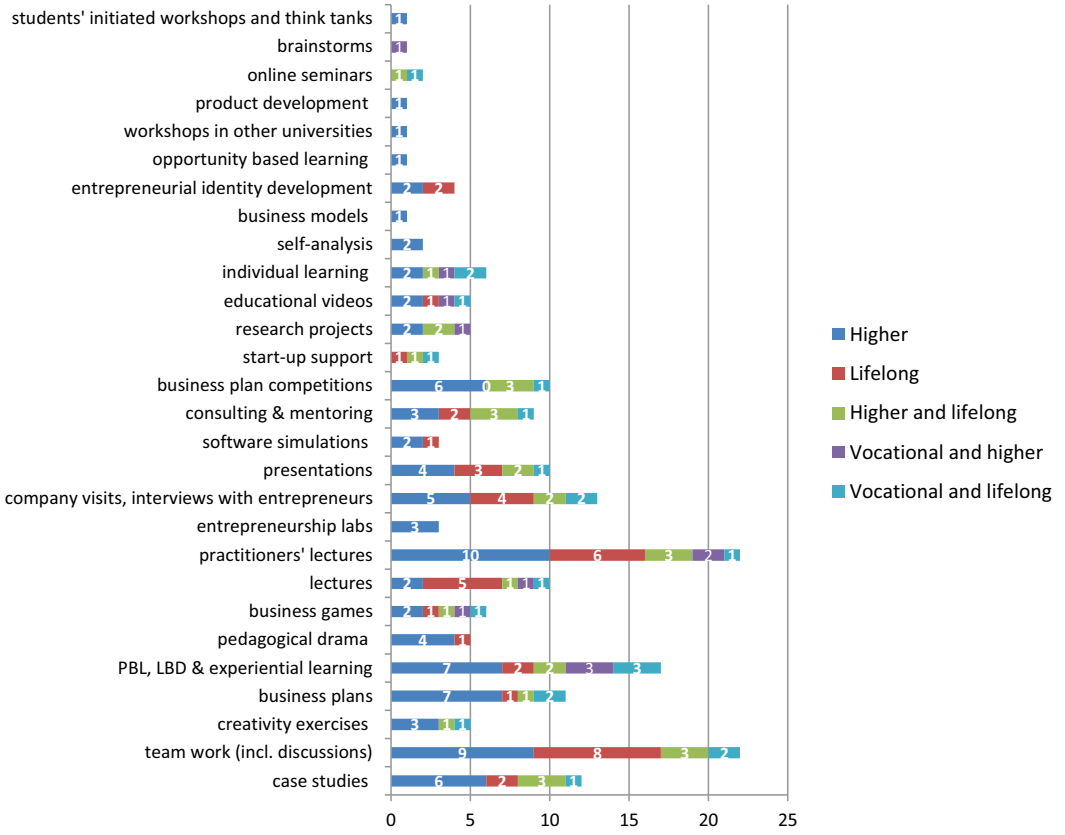
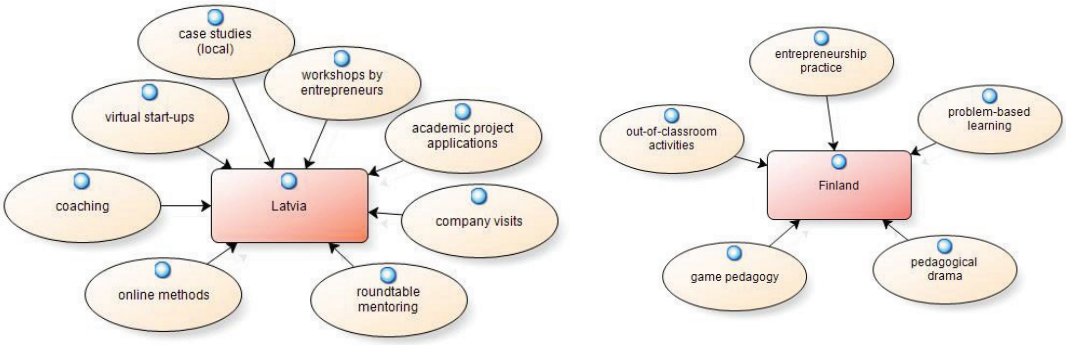
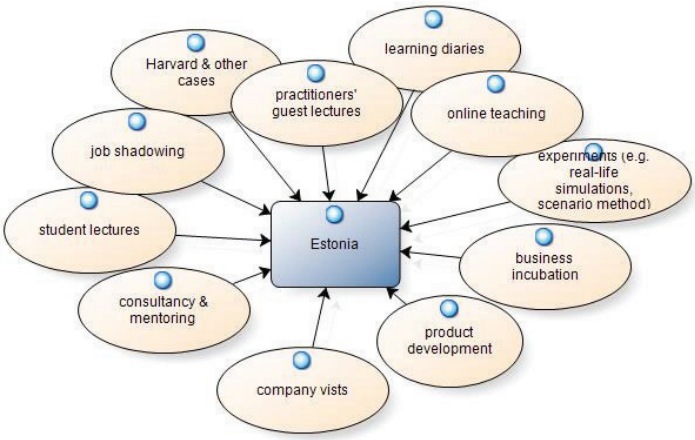


Figure 4. Teaching methods some educators do not use, but are familiar with; by country





The repetition of the used and unused methods may signify that even at the same level in one country the use of methods does differ among the educators. Similarly, some of the unused methods seem indicative: virtual start-ups, practical application of academic projects, coaching and workshops (not lectures) by entrepreneurs – among the Latvian respondents; learning diaries, student lectures, product development, experiments and others – among the Estonian; practice of entrepreneurship in out-of-classroom settings – among the Finnish respondents.

Another theme is what methods the educators consider the most effective for students and for their own learning. Table 7 provides details of the NVivo thematic coding with this regard. Learning-by-doing and problem-based learning still hit the record as the most effective type of learning for students. The second popular answer can be attributed to team and individual learning. Only a few educators pointed to a combination of different methods, which sum up into the most effective approach, when teaching students (see "a combination of lectures, problem-solving, group work and creative exercises"). Among the most effective methods for self-learning, the educators consider being practitioners, solving practical exercises, the same methods they use with students, and learning from students, among others. Cooperation with companies has gained increasing attention in recent years as a prerequisite for industry-based, real-life projects, internships and work placements was mentioned as effective for the educators, but did not even enter the list of effective methods for students.

The topic of university-industry cooperation was addressed during the interviews directly ("Do you cooperate with companies to improve your teaching practice?") and indirectly ("What kind of outside classroom activities have you and your students been involved in recently?"). Contrary to the initial expectations, the received answers were quite positive, however 30% of the Estonian and Latvian interviewees do not engage in the university-industry cooperation at all as opposed to the respective 50% and 43%, who do engage, with an active layer of 20% and 14%. Finland remains at the forefront, featuring no negative answers about this topic (Figure 5). Most of the Finnish interviewees believe that cooperation with industry has been strengthened, likewise – networking among practitioners. Apart from company visits, internships and work placements still remain the most common form of cooperation with companies in the researched countries, which is rather formal, especially at the vocational level. Innovation teams and joint real-life projects with companies are very rare in Latvia and Estonia. One exemplary Estonian HEI cooperates with companies in developing curricula. Yet, these findings are informed solely by the educators, not the industry representatives.

Table 7. Methods effective for students and educators

Dimension/Key topics		Attributes identified through NVivo thematic coding	Country	Educators
Methods	Effective for students	learning-by-doing: - setting up own companies - developing business models and plans - independent practical work - product development	3 EE 2 FI 2 LV	7
		learning from each other	1 FI	1
		team and individual learning: - presentations - discussions	1 EE 1 FI 5 LV	7
		problem-based learning: - analysis of real-life situations - assessment of business ideas - case studies - consulting, mentoring	4 EE 1 FI 5 LV	10
		a combination of lectures, problem-solving, group work and creative exercises	2 EE 1 LV	3
		theory followed by practice	1 EE, 1 LV	2
		constant feedback	1 EE	1
		active interaction	1 EE	1
		elevator pitches	1 LV	1
		role plays, games	3 LV	3
		experience exchange, company visits	1 LV	1
	Effective for educators' own learning	learning from students	1 EE, 1 FI	2
		group work	2 FI	2
		same methods as used with students	1 FI, 2 LV	3
		experimenting with different methods	1 EE	1
		learning from mistakes of entrepreneurs	1 EE	1
		e-learning in groups	1 EE	1
		creative assignments	1 EE, 1 LV	2
		reading books	1 EE	1
		being a practitioner	2 EE, 3 LV	5
		experience exchange with colleagues and other professionals	1 EE 1 LV	2
		practical exercises	2 EE, 1 LV	3
		outside classroom activities together with students	1 EE	1
		training in entrepreneurship	1 LV	1
		scientific conferences, publishing, projects	2 LV	2
		cooperation with businesses	2 LV	2
		acquisition of new methods	1 LV	1

Throughout a professional career path entrepreneurship educators develop and advance their practices in two ways: self-development driven by their own responsibility and initiative, and exposure to institutional drivers coming from universities, schools and centres the educators work for. According to the Latvian and Estonian educators, their institutions sometimes offer general pedagogy-related courses and trainings, though with no connection to entrepreneurship. In rare cases, EE trainings are available at the higher education and lifelong learning levels, but for selected educators only. In Finland, some lifelong learning centres have developed their own EE methodology for training the educators. Coaching of the educators by practitioners also takes place at

the higher education level, where EE trainings for the educators tend to be encouraged. At the same time, not all the educators can avail of the existing options. The real support that teaching staff needs for their work still remains weak in Finland; on the other hand, there are educators, who think that EE is too complicated and time-consuming. Table 8 exhibits more details of this appraisal, and also shows what self-development initiatives among the educators prevail in Estonia and Latvia.

Figure 5. Cooperation with companies

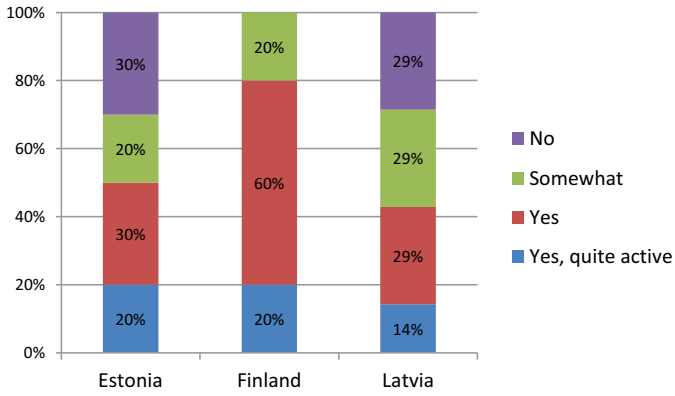


Table 8. Own and institutional initiatives for further development

Dimension/Key topics		Attributes identified through NVivo thematic coding	Country	Educators
Methods	Self-development	teacher trainings	FI	2
		experience exchange with colleagues		1
		application of EE models, experiments		2
		experiments with new methods	EE	2
		being open to new ideas		1
		taking part in conferences		2
		inviting experts		1
		reading		4
		benchmarking against colleagues		2
		keeping oneself up-to-date		1
		teacher trainings		3
		collecting new case studies		1
		by accident, trial & error		1
		by being a practitioner		3
		teachers' trainings	LV	6
		entrepreneurial experience, practicing		3
		reading		5
		considering feedback from students		1
		keeping oneself up-to-date, observing		3
		discussions with experts		1
		conferences		2
		cooperating with practitioners		3
		considering students' feedback		1

	(H)EI initiatives for training educators	generally positive, supportive	FI	1
		purposefully developed novel EE methodology		1
		generally not much is offered for educators		1
		coaching through pre-incubator activity		1
		projects, courses; enables participation		2
		some general courses offered occasionally	EE	4
		outsourced courses, offers a possibility		3
		Primus programme		2
		EE trainings courses, but not eligible for all educators		1
		too much lecture-based courses		1
		general courses for educators	LV	4
		special educational programmes are not organised		8
		no time to participate		1
		not often due to limited budget		1

Reading remains one of the most popular self-development options in Estonia and Latvia, although it was not stated as often, when referring to the methods' effectiveness for the educators. Followed by practice-based initiatives (cooperation, discussions with practitioners, being a practitioner, entrepreneurial experience, collecting practical cases), reading is named more often than teacher trainings in Estonia, but less often in Latvia. Experiments with new methods and the application of novel EE models are mentioned by the Finnish and Estonian educators.

As noted previously, development of their own teaching options, choice of methods as well as setting aims and outcomes, which are discussed in the next subsection, are highly dependent on the educators themselves, and, in turn, connected to how competent they are in both entrepreneurship and general pedagogy.

Main points from the "Methods" subsection:

- There is a tendency to rely on experiential teaching/learning methods, but understanding and depth of using these methods varies across the researched countries. These methods are also considered as the most effective for students' learning.
- Interdisciplinary teamwork is not a regular practice in any of the countries and also takes place more often as an extra-curricular activity within entrepreneurship labs or university business incubators.
- 30% of the Estonian and Latvian respondents do not engage in university-industry cooperation, but the most common forms are internships and work placements. Finland remains at the forefront of the cooperation development.
- Specialised EE trainings for educators are rather rare, especially in Latvia and Estonia. The educators develop themselves through reading, their own practical experience and by attending general pedagogy-based courses.

4.2.2 Curricula

This subsection is devoted to the "Curricula" dimension, which does not only mean "a study programme", but also entails setting educational objectives and statements of the desired outcomes of learning. Thus, it refers to an educational interaction of students with instructional content, materials, resources and processes for evaluating the attainment of educational objectives by the educators. Other key themes in this dimension included individual principles or practices of structuring topics in study programmes, participation in the programmes' renewal, and the number of credit points their courses are worth.

Table 9. “How do you structure topics you teach within the entrepreneurship course?”

Dimension/Key topics		Attributes identified through NVivo thematic coding	Country	Educators
Curricula	Structuring topics	around practical inputs	2 EE, 1 FI, 1 LV	4
		by elaborating role models	1 EE	1
		deductively	1 EE, 1 FI, 1 LV	3
		according to the entrepreneurship process logics	3 EE, 1 LV	4
		in line with the business plan logics	1 EE, 1 FI, 1 LV	3
		based on Blank’s approach	2 EE	2
		depends on hours	1 FI	1
		lecture-discussion-theory	1 LV	1
		theory-practice	1 LV	1
		standard, classical textbook approach	2 LV	2
		by making students understand their own compatibility with entrepreneurship	1 FI, 1 LV	2
		tailored to a specific group	1 LV	1
		topics provided by the State Employment Agency	2 LV	2

When structuring topics in the study courses they teach, the educators rely on very different principles. The entrepreneurship process approach (Baron & Shane, 2008) and lean start-ups of Steve Blank are admitted by a number of educators in the Estonian universities as a guide to planning the courses. Others are guided by practical inputs, i.e. students’ needs and the dynamics of learning processes. All the educators, however, do start their courses with certain theoretical foundations, not practical exercises. For the lifelong learning centres in Latvia, the State Employment Agency often provides a ready list of topics. At the higher education level textbooks are used as a guide quite often. Table 9 shows the most common responses identified.

The majority of the interviewed educators take part in the study curriculum renewal, except one university educator in Estonia, two educators in Latvia at the lifelong learning and, partly, HE level; two educators in Finland at the vocational and lifelong learning levels. The respondents from Estonia and Latvia teach entrepreneurship or related modules worth 2-12 ECTS, from Finland – 2 ECTS that is the usual length of one educational course.

In this dimension it is indicative to compare two different sets of answers the educators gave, when asked the following questions: “What are the main objectives of your teaching practice?” and “What are the main expected outcomes of your teaching practice?” Firstly, there is a clear focus in the responses by the Finnish educators on the entrepreneurial attitude and development of enterprising individuals, which is in line with the way the group defines entrepreneurship. None of the representatives of this group regard new enterprises as the ultimate outcome of their teaching in comparison to the Latvian and Estonian samples. This outcome is one of the most expected among the respondents from Latvia.

As can be seen in Table 10, certain discrepancies between the aims and outcomes the educators set and plan to attain can be noticed. For example, an educator sets the aim “to make students understand what entrepreneurship is and takes” and expects “business planning skills, boosted existing or emerging enterprising activities” as the outcomes; “to develop the ability to apply skills and knowledge” vs. “economic mindset”; “to develop skills, knowledge and competences” vs. “a qualification thesis or exam”. Considerable attention is given to raising awareness about entrepreneurship and helping students to understand whether this career path suits them among the Latvian and Estonian respondents. Developing enterprising individuals is also often

Table 10. Teaching objectives set and outcomes expected by the educators

Attributes identified through NVivo thematic coding: objectives vs. outcomes				
	Main objectives of teaching	n	**Expected outcomes**	n
Finland	To educate entrepreneurial personalities	1	Developed entrepreneurial attitude and readiness	1
	To make students understand what entrepreneurship is and what it takes	1	Business planning skills, boosted existing or emerging enterprising activities	1
	To train experts in sales, services and entrepreneurship	1	Positive attitude towards entrepreneurship	1
	To increase general enterprising activities	1	Self-knowledge and self-esteem	1
	To develop the inner entrepreneur in everyone and to train motivated people further	2	Employability, and, possibly, entrepreneurship	1
Estonia	To provide with necessary knowledge about entrepreneurship	6	More reasonable and conscious behaviour/career choice; assessment of one's suitability for e-ship	1
	To help students make a well-grounded career choice	1	The awareness of e-ship related possibilities and risks; realisation if they want to be entrepreneurs	1
	To provide students with knowledge, concrete techniques or tools	4	Concrete practical techniques how to do things; re-assess present convictions and experiences.	1
	To form entrepreneurial skills, knowledge and attitudes for any employment or self-employment activity	2	Enterprising spirit and a set of outcomes outlined by the EC (e-ship processing and planning, creating and analysing business ideas, etc.)	3
	According to the state standard, but with more emphasis on creativity, sociability, etc.	1	Shaping entrepreneurial attitude and the set of EC's outlined outcomes	1
	To make students understand fundamentals and how to write a business plan	2	To understand and be interested by the subject; to put knowledge into practice, to improve skills	2
	To teach how to approach problems more logically and give certain tools	1	To improve skills, to launch good companies, but the latter is a side effect of the university teaching	1
	The ultimate objective would be to increase the number of start-ups	1	Outcomes are the same as objectives, fulfilled objectives	2
	To create entrepreneurial mindset	1	Increase of the number of students, who would like to become entrepreneurs	1
	To develop the ability to apply skills and knowledge		Economic mindset	1
Latvia	To promote development of business environment, increase the number of entrepreneurs	1	New companies, projects, improved efficiency of existing companies, entrepreneurial skills	4
	To improve results of existing entrepreneurs	2	Improved efficiency and competitiveness of existing companies	3
	To develop entrepreneurial spirit, to give necessary knowledge and skills to establish and run a business successfully	1	Understanding the business as a system and develop entrepreneurial attitude	1
	To give students necessary knowledge, develop skills and abilities (competences)	6	Entrepreneurial knowledge and skills, rational problem-solving, new entrepreneurs	2
	Implementation of business ideas	1	Understanding of real e-ship, analysis of the business ideas and new start-ups	1
	To develop skills, knowledge and competences	1	A qualification thesis or exam	1
	To clarify what e-ship is, to help understand whether it is for them, to teach settings and achieving aims	1	Enterprising students and their abilities; managers, self-employed or good teachers	1
	To increase motivation to become entrepreneurs with the analysis of advantages and risks	1	Same as objectives, increased motivation, knowledge and skills	1
	To raise awareness about entrepreneurship	2	To make students understand whether entrepreneurship suits them and what they want	2

the expected outcome, which is not always evident directly from the objectives set. The emphasis on the development of a positive attitude and enterprising personalities as the expected outcomes is clearly manifested in the Finnish sample.

Nevertheless, knowledge about formulating the aims and results of teaching remains a more pedagogical issue rather than entrepreneurial. Eventually it might not affect the teaching quality considerably, yet should be taken into account during the training programme development. In the best case scenario practitioners should be equipped with entrepreneurship pedagogy, and the educators should develop their own enterprising competences.

Main points from the "Curricula" subsection:

- Entrepreneurship process, business plan logics and practical inputs, such as students' needs and group dynamics, play an important role in structuring topics for study courses by the educators.
- Most of the educators take part in the entrepreneurship curriculum renewal.
- In some cases the aims educators set for teaching and the outcomes they plan or want to attain do not match.

4.2.3 Evaluation

The "Evaluation" dimension covers four topics: used and unused assessment methods, consideration of the students' feedback, the EE outcomes measurement system and the educators' view on the students' progress.

From the first look, there is nothing exciting in grading students, which is a formal requirement in the vocational and higher education institutions. However, assessment methods can serve as educational methods, and at the same time help an educator to deal with big groups of students. Examples of these methods are: team evaluation, including fishbowls and other group discussions that require decent preparation, peer- and self-evaluation. Most of the interviewed educators attempt to use them together with the standard and formal methods of assessment. Figure 6 pictures the range of methods used. Self- and team evaluations are mentioned by all the Finnish educators and quite often by the Estonian and Latvian educators. Among the unused methods, which are shown in Figure 7: learning diaries, self- and external examination, multi-rater and individual feedback.

While the students' grading and assessment methods are practiced in variety, longitudinal measurement of EE outcomes is rare (Latvia – on higher education and lifelong learning levels, Finland – on vocational and higher education levels) or non-existent (Estonia). In Latvia and Finland, the outcomes are also measured by the number of established enterprises in the same educational groups. As for the Estonian educators, they use short-term feedback or, along with some Latvian educators, admit that no continuous measurement system exists. See Table 11 for more details.

Feedback from students is taken into account by all the educators, whether during or at the end of a study course. The Finnish respondents sometimes connect the feedback gathering with self-evaluation or reflections. The Latvian respondents use online or paper questionnaire, the Moodle environment to collect feedback, which is in most cases anonymous; still, there is always someone, who is not satisfied. The Estonian respondents gather feedback, using reflections, memos, group work and interviews, directly asking students what changes they would be willing to see; it is taken into account, if constructive and considered valuable.

Figure 6. Assessment methods used by the educators

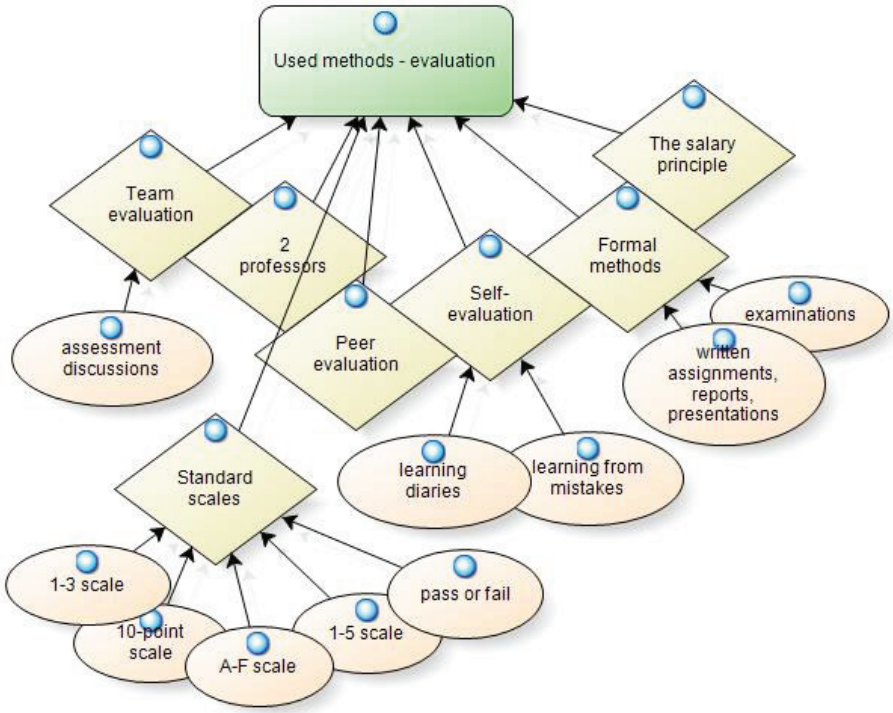


Figure 7. Unused assessment methods

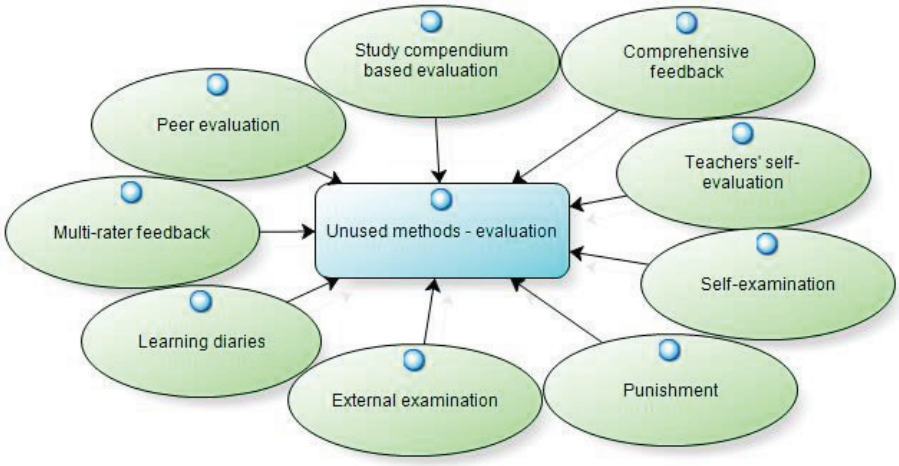


Table 11. “Do you measure the EE outcomes in the short- or long-term?”

Dimension/Key topics		Attributes identified through NVivo thematic coding	Country	Educators
Evaluation	EE outcomes measurement	*Confirmation:*		
		Alumni surveys	1 EE	1
		Longitudinal follow-up	4 FI, 4 LV	8
		Business growth	1 FI, 2 LV	3
		Number of enterprises founded	2 FI, 2 LV	4
		Negation:		
		No continuous system	7 EE, 3 LV	10
		Only short-term feedback	4 EE, 1 FI, 3 LV	8
		On personal level only	1 LV	1

Table 12. View on students’ progress vs. achievement of expected outcomes

Attributes identified through NVivo thematic coding				
Country/topic	View on progress		Achievement of outcomes	
Finland	growing motivation and changing attitudes to business	1	a quality prize for teaching	2
	realisation that entrepreneurship is related to regular life	1	outcomes are achieved very well	2
	problems with project work	1	employability among graduates is very high	1
	results have to be demanded in most cases	1	results could be better, if more methods were available	1
Estonia	varies as usual depending on students	4	generally well	6
	very positive	2	hard to interpret	1
	knowledge developed considerably	1	not enough integration of business skills into specialty subjects	1
	difficult to compare, results are measured by final homework	1	no new companies, but career progress	3
	grades do not express reality, students like more interactive learning activities	1	-	-
	students seem happy and successful	1	-	-
Latvia	positive	4	objectives sometimes seem difficult to achieve	1
	indispensable practical knowledge acquired	2	achieved well, if students are motivated	3
	need more practical experience	1	if no previous exposure to entrepreneurship, results are difficult to achieve	1
	progress is evident, but it’s decreasing among newcomers	2	not achieved well due to decreasing quality of applicants	1
	students have become more active	1	well – in terms of grades, more new companies were expected	1
	varies a lot	1	more depends on students, not educators	2

The interview structure allowed asking similar questions in different ways to make direct comparisons during further analysis (e.g. aims vs. outcomes, university-industry cooperation vs. outside classroom activities). In the “Evaluation” dimension this comparison concerns the educators’ views on the students’ progress and on the

achievement of the expected outcomes – as Table 12 exhibits. It can be concluded that these two views in general do match, but there are some details that spark comments. Firstly, in the Latvian sample positive views on the students' progress meet a number of conditions to achieve the outcomes, such as motivation of students and other factors that depend on the students, not educators. Secondly, in the Estonian sample, the view on progress is more moderate, but the achievement of outcomes assessed positively (generally well, career progress). Finally, career progress and high employability of the students are mentioned as the achieved outcomes contrary to the establishment of new companies.

Main points from the "Evaluation" subsection:

- The educators use a range of assessment and grading methods that help them and the students in the study process.
- The clear and united system of measuring the EE outcomes does not exist.
- The educators' view on the students' progress and achievement of the desired outcomes is generally positive.

If the dimensional topics discussed previously can be influenced by the educators to a greater extent, environmental and regulation issues are largely attributed to external influencers. The two following subsections elaborate on the social and physical environment, regulations and financing that also impact on the educators' practice.

4.2.4 Environment

The teaching environment addressed in the research comprises two parts: social and physical. The first part entails students' proactivity, barriers that might arise between educators and students, as well as management's attitude to EE development. Here the respondents also commented on the use of humour or fun in teaching, and how they attempt to create an authentic learning atmosphere based on their own real-life experiences. The second part entails satisfaction with the physical space and equipment the educators have at their disposal, distance teaching and the software they used, and development of study materials.

Having previously commented about motivation and other factors attributable to students, over 50% of the educators find their students proactive, the other half has diverse opinions from the fact that the students are very different and proactivity, thus, varies a lot, to the stance that it is the task of an educator to involve every student into active work.

Simultaneously, the lack of motivation among the students and resistance to learning is a significant barrier, followed by the lack of time to commit to studies properly. One more aspect unsettling the study process is the differing level of preparation of the students (pointed out by the Latvian and Estonian educators). Quite a few educators do not see any significant barriers, as can be seen in Table 9. A large number of respondents perceive the attitude of the management of their schools, universities or centres to EE and its development initiatives as generally positive with a frequent remark by the educators from Latvia and Estonia that in cases, when concrete decisions are required, the management is more distant. No pure negative extreme is noticed, but sometimes the attitude can be described as "uninvolved", or indifferent.

In terms of the physical space for teaching, it is quite standard – classroom settings, which cannot always be rearranged for group works, and if it can, the rearrangement is time-consuming. That is why a half of the respondents are either somewhat satisfied or unsatisfied with the study rooms and equipment provided.

Distance teaching (video lectures or online teaching) is practiced rarely, especially in Latvia and Estonia. Information platforms are mostly used for data storage and contacts with students, e.g. Moodle and Dropbox, Optima. The Estonian business planning software iPlanner is quite popular in the country; however, no other

learning software is mentioned as used. Technology equipment is kept to a necessary minimum, also due to the fact that more modern devices, e.g. smart boards, iPads, in some cases even static projectors, require extra financial investments.

Table 9. Social and physical environment

Dimension/Key topics		Attributes identified through NVivo thematic coding	Country	Educators
Social	Students' pro-activity	Generally proactive	5 EE, 2 FI, 7 LV	14
		More or less proactive	3 EE, 1 LV	4
		Not enough	1 EE, 2 LV	3
		It varies a lot	3 EE, 4 FI, 2 LV	9
		It is up to a trainer to involve everyone	1 EE, 2 FI, 1 LV	4
	Teacher-student barriers	No significant obstacles	5 EE, 2 LV	7
		Lack of time among students	3 EE, 1 FI, 1 LV	5
		Differing level of preparation	2 EE, 2 LV	4
		Write-wrong perception	1 EE	1
		Students do not like to feel out of their comfort zone	1 FI	1
		Low motivation level, resistance to learn	2 FI, 3 LV	5
		Quick returns demanded	2 LV	2
		Students are used to relying on others	1 LV	1
	Management's attitude to EE	Generally supportive and positive	5 EE, 5 FI, 15 LV	20
		Positive, but distant, when decisions are required	3 EE, 1 FI, 2 LV	6
		Supportive, if a higher level order comes	1 EE	1
		Not involved much	2 EE, 1 LV	3
Physical	Satisfaction with physical space and equipment	Positive	5 EE, 1 FI, 10 LV	16
		Somewhat	3 EE, 4 FI, 2 LV	9
		Neutral	1 EE	1
		Negative	2 EE, 2 FI, 4 LV	8
	Distance teaching, software	Used, but not so extensively, mostly for information storage and e-contacts with students	5 EE, 5 FI, 6 LV	16
		Not used	4 EE, 4 LV	8
		Video lectures, conferences and distance tests	1 EE, 1 LV	2
		Online courses	2 FI	2
		Used enough	1 LV	1
	Development of materials	Create and update all the study materials myself	7 EE, 2 FI, 11 LV	20
		Encourage students to look for new materials	1 LV	1
		Use own and the ones provided by my institution	2 EE, 2 FI, 3 LV	7
		External sources and my own input	3 FI, 1 LV	4

60% of the respondents create and update study materials used in the teaching process themselves, others combine their own and external resources, e.g. provided by institutions or taken from the Internet.

Main points from the "Environment" subsection:

- Over 50% of the educators find their students proactive.
- The most significant barriers in attitudes of the Latvian and Finnish educators with students are the lack of motivation and resistance to learn, as well as the lack of time among the students in all three

countries. In addition, the varying levels of preparation was pointed out by the Latvian and Estonian educators.

- Half of the interviewees are not satisfied or unsatisfied with the study rooms and equipment provided.
- Distance teaching is practiced rarely, specialised learning software (e.g. for business planning, modelling or simulation) is not a common tool in teaching.

4.2.5 Regulations and Financing

Such external factors as official regulations, including the status of EE in a country's policy and curricula of education institutions, as well as financing structure are also influencing the development phase and teaching of entrepreneurship in the researched countries. In Finland, EE has been supported for many years already, including the accepted national Guidelines for EE (2009). In Estonia, recognition of the significance of EE is evident both in legislation and rhetoric, but less in financing. Finally, in Latvia, no legislative initiatives or explicit state support exists. The most recent private trend, however, is the establishment of entrepreneurship support structures such as business incubators in business schools and universities. Table 10 summarises details of the NVivo coding for this and other topics with the "Regulations" dimension.

Table 10. Regulations

Dimension/Key topics	Attributes identified through NVivo thematic coding	Country	Educators
EE in a country's education policy	Not supported enough	9 EE	1
	Supported legally and verbally		1
	Decreased for vocational schools		1
	Moderate role		1
	Unregulated, but supported		1
	Important and generally supported		5
	Supported and developed for a long time	5 FI	2
	A lot is at the level of speech and papers		1
	National guidelines for EE exist, but its recognition is not controlled enough Supported on the state level, but not all schools accepted		2
	Does not exist, only private initiatives	5 LV	2
	Not enough attention and support		2
	Declared, but non-existent		1
Status in curricula	Compulsory	5 EE, 1 FI, 5 LV	11
	Elective	3 EE, 3 FI, 6 LV	12
	Both elective and compulsory	2 EE, 2 FI, 2 LV	6
Support structures	Corresponding Chair, Centre for Entrepreneurship, Idea Lab, Garage48, Entrepreneurship Support Centre, Business Incubator	7 EE, 2 LV	9
	Entrepreneurship advisory for spin-offs	1 EE	1
	Separate structural unit	1 EE, 2 LV	3
	Experienced entrepreneurs	2 LV	2
	Faculty	3 LV	3
	EE infrastructure: Protomo, Design Factory, Start-Up Sauna, YES network, Team Academy, etc.	3 FI	3

An overview of the respondents' answers about existing support structures for entrepreneurship in their institutions has shown that a number of centres, corresponding chair and other entrepreneurial initiatives do exist in Estonia (e.g. Idea Lab, Garage48) and Latvia (e.g. Entrepreneurship Support Centre, Centre for Sustainable Development, TechHub). EE infrastructures have been developed in Finland (e.g. in Aalto University, University of Jyvaskyla) and are open for different ages and target audiences.

Entrepreneurship appeared to be a compulsory course in many universities of the region with an exception pertaining to some traditional universities in Estonia. In Finland, entrepreneurship pedagogy development is set as an educational priority at all levels, but the discipline is not always compulsory. In the lifelong learning centres entrepreneurship is an elective or free elective, what is explicable by the fact that adults are free to choose the courses they want and are motivated by. In other cases entrepreneurship has a dual status in the curricula (see Table 10).

When answering the questions about the financing of EE ("How is EE financed in your institution?", "Do you see a need for changing the way EE is financed?"), the educators from both Latvia and Estonia were quite reserved in expressing the view that it is not financed enough, taking into account that state financing was not mentioned by the Estonian educators[2], and only three institutions in Latvia receive some funds from the government. Even these state-financed institutions do not get financing specifically targeted to EE, thus being financed from tuition fees. Other private institutions in Latvia and Estonia fully depend on the number of students and European projects to finance EE. In Finland, the financing structure is divided among the state, projects and an institution's own share in most cases. Table 11 shows the distribution and number of educators corresponding to the coded answers.

Table 11. Financing

NVivo coding	Country	Educators
Sufficiently financed	1 EE	1
Insufficiently financed	4 EE, 1 LV	5
Depends on income from students	2 EE, 1 FI, 3 LV	6
State, project and own share	5 FI, 1 LV	6
Depends on students and EU projects	1 LV	1
Project-based	2 LV	2
Depends on contact hours	1 LV	1
Self- and project-funded	3 LV	3
State, students and alumni	1 LV	1
State Employment Agency	1 LV	1

Main points from the "Regulations and financing" subsection:

- In Latvia, as opposed to Estonia and Finland, no legislative initiatives or explicit state support to EE exists. Subsequently, the greater number of entrepreneurship support structures is present in the Finnish and Estonian education institutions.
- Financing of EE in the private institutions of Latvia and Estonia fully depends on the number of students and European projects. The financing in those institutions that are partly funded by the state is not targeted to EE specifically.
- Entrepreneurship is a compulsory course in many universities of the Central Baltic region.

[2] This might change in the near future due to local education system reform making state and municipal basic, vocational and higher education free for everyone, as well as increasing attention given to EE by the government in Estonia.

The “Financing” dimension closed the formal part of the interview, which was followed by the final block of questions collecting informal insights on teaching entrepreneurship.

4.3 Ideal Approach to EE, Best Practices in the Region

This subsection sheds light on the informal and concluding part of the interview, during which the educators shared their vision of the ideal approach to EE as well as the best EE and entrepreneurship practices in the region they know.

The collective ideal view combines several angles of teaching aims and outcomes (motivation, attitude, knowledge, skills development), methodological approaches (academic and practical), which includes cooperation with practitioners and companies, establishment of student enterprises, integration of entrepreneurship into other disciplines, teaching at the lower levels of the education system. Here is a snapshot of the educators’ view on the ideal approach to teaching entrepreneurship:

- *Practically oriented, involving entrepreneurs*
- *Starting from early age, kindergartens and secondary schools*
- *Growing confidence of people and reminding them how to dream*
- *Growing different types of entrepreneurs*
- *Practitioners should teach*
- *Short, maximum one year long course, following which students have to set up their own companies*
- *Module- and process-based from basics to starting a company*
- *Combining academic and practical parts*
- *Developing entrepreneurial attitude at first*
- *Developing a broad understanding of entrepreneurship*
- *Keep developing existing components of teaching, study materials and cooperation with companies*
- *To develop entrepreneurial abilities in all subjects, not only entrepreneurship - depends on lecturers*
- *Based on connections with companies and industry*
- *Developing motivation, knowledge and skills of students.*

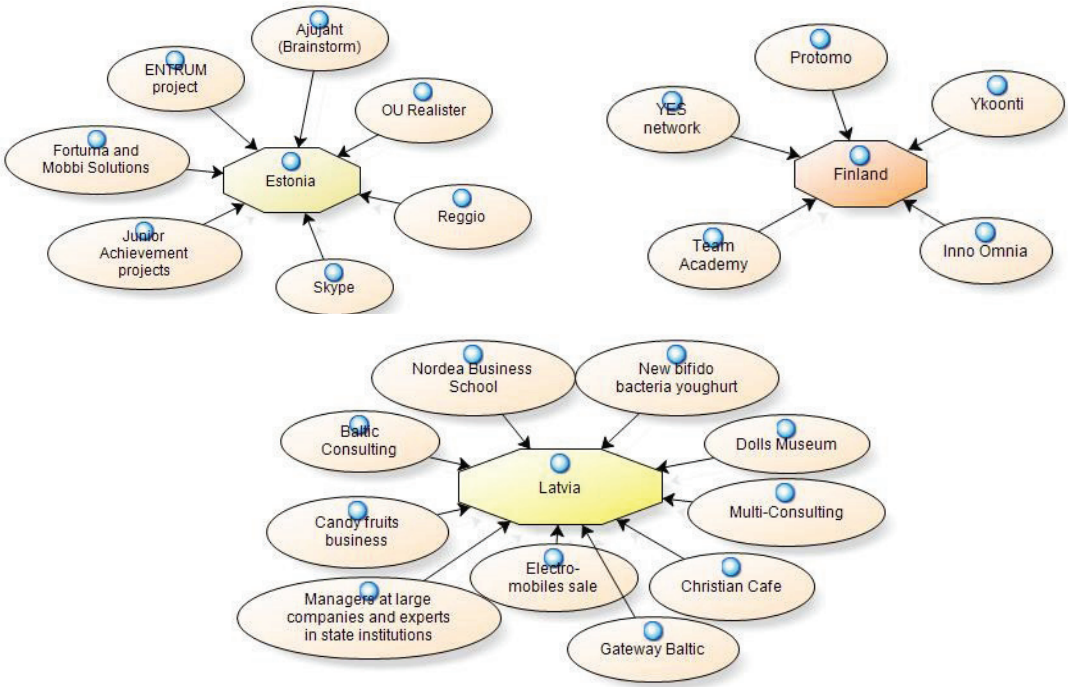
In addition to this view, some respondents expressed their practical wishes and expectations from future trainings of educators. Table 12 shows the wish list by country.

The topic of EE best practices was perceived very differently by the respondents. The educators from Finland recollected the most successful EE initiatives, such as Protomo, Team Academy, YKoonti project, etc., while the educators from Latvia and Estonia tended to list entrepreneurial initiatives or enterprises established as a result of EE in their institutions or famous well-established companies in their countries, such as Mobbi Solutions, Realister, Reggio in Estonia, and Gateway Baltic, Dolls Museum, Multi-Consulting, Christian Café in Latvia. Two university educators from Estonia and Latvia, however, could not mention any particular examples. Figure 8 illustrates these responses.

Table 12. Practicalities awaited by the educators from the training programme

Latvia	1	To learn about best practice examples from other countries.
	2	To balance theory, practice and entertainment.
	3	To have it in a form of in-class assignments, a short and intensive course, multi-disciplinary teamwork based, modelling the real-life work in a team.
	4	Highly professional use of a particular EE method to acquire.
	5	A set of methods or approaches, which are presented as a research demonstrating effectiveness of every method, what students gained from it (where aims are aligned with results…).
	6	The newest software solutions (also for business planning, e.g. ASSYSTEM.com).
Estonia	1	To integrate new information received during the class, it has to be a series of projects/assignments in an entrepreneurial process framework.
	2	It has to require no further commitment or home tasks (due to time constraints).
	3	To learn more about automated & other feedback methods.
	4	By the end of the programme, to work out a ready solution how to change a particular course (starting from PowerPoint slides and on all stages of the teaching process): "Course content –> benefits –> measurements/feedback: concrete plan."
	5	To get fresh & bright local entrepreneurship cases.
	6	"To learn how to learn" from guest lecturers.
	7	An opportunity to enlarge a personal network (incl. industrial).
Finland	1	Working-life context should be taken into account more tightly.
	2	To go more outside of the classroom and learn elsewhere, especially with entrepreneurs.
	3	To establish closer cooperation with enterprises to develop new training programs.
	4	Simulation games would be nice to try.
	5	It should be interactive.

Figure 8. EE best practices in Estonia, Finland and Latvia



The following section compares the initial assumptions that were formulated by the groups of experts during the brainstorming sessions prior to commencing the empirical data gathering, discusses the findings and its implications.

5.0 Discussion: "Brainstorm" vs. Interview Results, Implications

Having overviewed the main findings in each dimension, we can recollect the initial research questions and the matrix of the entrepreneurship educators' assumptive needs in order to confirm or reject the starting premises as well as to discuss the obtained results.

First of all, contrary to the initial assumption that the educators do not have sufficient experience in entrepreneurship, most of the interviewed educators in Estonia have experience in entrepreneurship ranging from 2 to 20 years. In Latvia, 7 out of 16 respondents have been entrepreneurs, and in Finland, 2 out of 7 educators possess entrepreneurship experience (the rest – business-/industry-related experience). The Finnish respondents tend to belong to the older age groups. It can also be observed that the number of years in entrepreneurship has an inclination to be bigger than the number of years in teaching among the younger Estonian and Latvian respondents. To make background comparisons, there are a handful of educators specialising in entrepreneurship in Latvia and Estonia, while the rest are in business/enterprise management; in Finland, entrepreneurship is more established as an educational discipline.

The demographic data confirms that "pure" practitioners are a minority, but the analysis does not show that they are unprepared to teach entrepreneurship. Regarding the Finnish sample and its focus on the lifelong learning level, this finding also clashes with the starting thesis that the educators have a strong experience in substance, but lack pedagogical skills. When overviewing the results of the "Curricula" dimension, it seems to be the reverse, though the educators' knowledge of entrepreneurship theory was not addressed during the interviews.

Experiential teaching/learning methods are often used, while the understanding and depth of using these methods varies across the researched countries. For instance, some of the respondents from Latvia interpreted standard in-class exercises as learning-by-doing or problem-based learning. This finding partly supports the initial assumption that university and (especially) vocational level educators are lacking knowledge about the variety of existing EE methods, and, apparently, also the scope and meaning of the experiential methods. Otherwise, Figure 2 shows that the countries do not differ much in terms of the use of methods. The overall approach of the educators tends to be more practice- rather than theory-based, however, the teaching methods with a higher degree of experimentalism (e.g. pedagogical drama, creativity exercises, and business games) are relatively rare. While involvement of practitioners increases workload, guest lectures are one of the most widespread methods in the Central Baltic countries.

The practice-oriented approach along with the findings from the "Social environment" dimension allows the rejection of the assumption about the "totalitarian" role of vocational teachers and the basic perception of "teacher – active, student – passive"; the vocational level teachers are open and realise the need of further education in entrepreneurship pedagogy. The analysis of methods employed does not indicate the old-fashioned learning orientation in the Finnish sample either.

Underdeveloped university-industry cooperation for educational purposes was one of the basic assumptions in the "Methodology" dimension. This assumption can be confirmed only to a certain extent, since 50% and 43% of the Estonian and Latvian interviewees in our sample do engage in this cooperation. The most common forms, however, are internships and work placements, while industry or real-life projects with companies are rare. Innovation teams are not mentioned as such. In spite of the fact that some interviewees simultaneously

represent the industry, i.e. run their own companies, are self-employed consultants, we are not fully informed about the industry's opinion about cooperation with universities; hence, in future research, it is reasonable to examine whether the views of the industry and university representatives on mutual cooperation match.

Evaluation methods employed are not as obsolete as expected – they range from standard to team evaluations, learning diaries and self-analysis. Around 30% of the respondents continue using only the formal assessment methods (they mostly belong to the vocational level teachers). However, the system of measuring the EE outcomes is absent – only a few business schools track their alumni in the long-term; the other HEIs also gather after-course student feedback.

As we found out, the definitions of entrepreneurship differ in Latvia, Estonia, and Finland, where a commercial focus prevails in the Latvian sample, attitudinal and volitional – in the Finnish sample, while the Estonian sample can be characterised by the mix of process perspective, opportunity recognition and business focus. These tendencies are somewhat reflected in the teaching aims and outcomes. For the Finnish educators, attitudinal perspective finds reflection also in the teaching methods employed in this sample uniquely (entrepreneurial identity development).

The entrepreneurship educators in Latvia tend to perceive EE similarly to business education, which is in line with one of the assumptions in the "Curricula" dimension. New companies are one of the most expected outcomes in this group, being in line with the business focus of the definitions of entrepreneurship. A number of educators also seek enterprising individuals as an outcome. The new venture creation can be rationally considered as the long-term outcome, since it has been found out that most of the entrepreneurs start-up in their thirties (Teigland et al., 2011); at the same time, the affective and volitional outcomes, including a positive attitude towards entrepreneurship, entrepreneurial intentions and motivation can be treated as the short-term outcomes. Yet, a viable approach is required to measure them, but is not established.

If to consider also some discrepancies between the aims and outcomes sought, this may indicate the need of further education in entrepreneurship pedagogy and intellectual roots of entrepreneurship. The conclusion applies not only to practitioners (which are the minority), but to the educators with extensive teaching experience exceeding their experience in entrepreneurship. Hence, the finding supports the assumed insufficient understanding of EE and its objectives in the "Curricula" dimension.

Contrary to the expected, entrepreneurship is integrated across curricula in many Central Baltic Universities (as specified in the "Regulations" dimension). Other assumptions concerning the lack of interdisciplinarity are admitted to be correct. A similar conclusion can be made about the absence of the EE trainer certificate or diploma programmes, since the educators attended general pedagogy courses, but not specialised in EE. It is equally true that team teaching is not practiced among the educators, representatives of different disciplines.

In a row of the confirmed assumptions in the "Environment" dimension are the following: attitude of students unfavourable to the learning process, density or inconvenience of physical space for teaching, limited use of distant teaching and technological capacities. Language barriers or absence of teaching materials in the native language, and a number of other issues were not raised by the educators. At the same time, over 50% of the educators find their students proactive and creative enough, which rejects the assumption the students are afraid to dream and be creative.

Most of the needs identified in the previous dimensions can be explicable with insufficient financing targeted to EE specifically. This is particularly relevant to Latvia, where no direct legislative or only occasional financial support of EE exists, whereas the latter conclusion largely refers to universities and vocational schools (some financial input is provided for business incubators). Indeed, virtual space and business modelling/simulation/planning software require extra financing. It is equally true for innovative university-

industry platforms and using personalised curricula. If business incubators, entrepreneurship labs are gradually becoming a wider practice, then knowledge and technology transfer offices as part of universities is a truly rare occasion, especially in the Baltic countries. Partly supporting the initial assumption, management of education institutions generally favours the new EE initiatives, but is uninvolved or reluctant to act, when it is expected and required.

Table 13. The prevailing teaching model in the Central Baltic region

Dimension/Model	Supply	Supply-Demand	Demand	Demand-Competence
Methodology	-	-	EE, LV, FI	(EE, LV, FI)
Curricula	-	-	EE, LV, FI	-
Evaluation	-	-	EE, LV, FI	(EE, LV FI)
Environment	-	EE, LV	FI	-
Regulations	LV	-	EE	FI
Financing	LV, EE	-	-	FI

Table 14. Common and specific problems and needs of the educators summarised

	Common needs/problems	Specific needs/problems
Methods	•Understanding and depth of using experiential methods varies a lot. •No or few activities outside classroom. •Lack of team teaching. •Improvement of cooperation between universities and different faculties (economists, engineers, designers, etc.) is needed. •No virtual or real platforms established for this cooperation.	•Virtual start-ups, practical application of academic projects, coaching and workshops by practitioners – of the Latvian educators. •Learning diaries, student lectures, product development – of the Estonian educators. •30% of the Estonian and Latvian respondents do not engage into the university-industry cooperation. •Specialised EE trainings for educators are rather rare in these countries.
Evaluation	•The clear and united system of measuring the EE outcomes does not exist. •Acquisition of learning diary, self-examination, comprehensive and automated feedback methods.	•In the Latvian sample, attainment of aims is hindered by low motivation and other student-dependent factors (environment).
Curricula	•Entrepreneurship pedagogy: alignment of objectives, methods, outcomes, measurements.	•In some cases, aims the Latvian and Estonian educators set for teaching and outcomes they plan or want to attain do not match. •Business focus of EE in Latvia.
Environment	•The lack of time among the students is the common obstacle in the teaching process. •A half of the respondents are not satisfied or unsatisfied with study rooms and equipment provided as not appropriate for a group work. •Specialised learning software (e.g. for business planning, modelling or simulation) is not a common tool in teaching.	•The differing level of the students' preparation is a factor hindering the teaching process in Latvia and Estonia. •The lack of motivation and resistance to learn are the most significant barriers in attitudes of the Latvian and Finnish educators with their students.
Regulations & Financing	•Some educators or managers in HE are not ready for methodological and conceptual changes, though generally supportive. •In Latvia and Estonia, EE financing structure is largely dependent on the number of students and European projects.	•There is no legislative support at the government level targeted to EE in Latvia. Insufficient financing of the EE infrastructure development in universities and vocational schools.

In light of the current discussion, a systemic view over the analysed dimensions makes it logical to enquire into what the prevailing model of teaching entrepreneurship in the Central Baltic region is. Having considered the prescriptive theoretical Table 1 that served as our working concept, it can be concluded that the demand model is dominant in this region, but certain shifts are evident with respect to externally influenced dimensions. For instance, we see a tendency to shift towards the demand-competence model in Finland, owing to the " Regulations" and "Financing" dimensions, while they do not do a good job for Latvia in that respect. There are positive signs of transiting towards the demand-competence model also in the use of teaching and evaluation methods in all the researched countries. When drawing this conclusion, we bear in mind the nature of research that brought a number of qualitative insights as indications that particular practices are present in the countries. Table 13 maps the obtained results.

Summing up the analysis and discussion, Table 14 shows common and specific needs of the entrepreneurship educators across the specified dimensions, which are indicative for the training programme development targeted to the regional educators.

The last section concludes the report and provides the respective recommendations.

6.0 Conclusions and Recommendations for the Training Programme Development

Throughout the analysis, we can see that the practices of the entrepreneurship educators, who contributed to this study, feature some internal or external differences. However, the generic philosophical basis for teaching entrepreneurship is the same for Estonia, Finland and Latvia. Therefore, the prospective training programme should not only take into account specific country differences, but also ensure cross-border exchange of trainers of trainers and educators, who take part in the training.

The main recommendations for the programme development are presented in a set of statements and contain both the analytical insights and practicalities awaited by the educators themselves. Following the identification of the country-specific needs in the previous section, this set addresses common needs and expressed wishes, and leaves the rest to professionals working on the programme content in the target countries.

When formulating the suggestions, it is necessary to take into consideration that our target educator is experienced in teaching entrepreneurship and business-related disciplines, has experience in entrepreneurship or business management, has their own toolbox of methods, but is willing to enrich it with more experiential methods. Simultaneously, she/he does not have substantial knowledge in entrepreneurship pedagogy even entrepreneurship; the latter is particularly true for the educators teaching marketing, accounting, strategic management and other business-related disciplines.

First of all, the programme should contain the module on entrepreneurship pedagogy that would teach how to set and align objectives, methods, outcomes, and its' measurements. However, it is clear that an appropriate measurement system is a challenge, since there is no united conclusion with this regard. Secondly, it should address entrepreneurship history, evolving views on what entrepreneurship is and how it affects education/teaching. Thirdly, a practical theory of entrepreneurship, which entails the process perspective, opportunity recognition, innovation and creativity, product development.

Fourthly, the training programme for the educators should provide them with different approaches to teaching entrepreneurship, so that they could integrate and transfer their own experiences in a novel way. Hence, the new methodological toolbox should be articulated. The current study indicates there is a growing demand for the teaching methods with a higher degree of experimentalism, e.g. workshops by

practitioners/entrepreneurs, pedagogical drama, creativity exercises, business games that can be implemented inside a standard classroom, and real-life projects with companies, innovation teams, work-based projects, student companies – outside the classroom.

The reverse perspective on the methods used, i.e. the methods the educators are aware of, but do not use, showed that they are not fully conscious of the methods they might benefit from: for example, business modelling, is used by only one educator from Estonia, but was not mentioned by any of the educators, when answering the reverse question. While case studies are a popular teaching method as such, the common problem is the lack of local cases that address specific problems of the region or country. For that reason some of the educators refrain from using this method, considering Harvard cases too bulky and complicated. Another example is product development, which is no less important for the entrepreneurship process, but is mentioned as unused by one Estonian educator only, while it is being used by only one Latvian educator in our sample.

External classroom methods subsequently require development of the novel university-industry cooperation initiatives and platforms. The ideal variant is to assist the educators with expanding their own industry networks within the training programme. Fifthly, interdisciplinary studies and teamwork should be a part of the training for the educators, so that they could gain experience in forming and moderating these teams.

Finally, going beyond the scope of the training programme, “hard” solutions for study rooms, and, possibly, software solutions for business planning, modelling or simulations should be provided. On the administrative level it might be worth considering including the entrepreneurship support activities, such as business incubators and labs into the standard curriculum or to allow students gaining credit points for taking part in these initiatives. Finally, it is of utmost importance to raise the attention of the government to the EE development in one of the researched countries – Latvia, since it is lagging behind its northern neighbours in this respect.

Taking into account the wish list from the educators, the programme should balance theory, practice and entertainment. It has to be short, intensive and interactive, teamwork and real-life based and involve the participation of entrepreneurs. As a result, the trainees should already work out solutions how to improve their own entrepreneurship course or programme.

Evidently, these recommendations are voluminous and still quite general. However, one can apply some of them in a short training programme or a series of the discussed topics in a longer programme. At the same time, it would be valuable to combine the educators’ wish list with the issues underpinned by the study, since the educators do not always know what teaching needs they truly have.

The conducted research has several limitations. Firstly, the data gathering was implemented by several researchers; therefore, the questions actually asked and other details of the final transcripts differ in some cases. Secondly, the sample size in Finland is smaller than in Latvia and Estonia. Thirdly, vocational schools are not represented enough to make regional group-specific conclusions; this is equally true for the lifelong learning centres in Estonia. Percentages indicated with respect to some topics (e.g. university-industry cooperation, evaluation methods) are not aiming to demonstrate quantitative strength, but to illustrate the differences among the samples as far as this study is concerned.

Once the training programme for the educators is developed and piloted, it is of an utmost importance to measure its impact and make a decision about further dissemination. Beyond the impact on educators it would be valuable to assess the change in their students’ learning in further research.

To conclude, the output of this study is both theoretical and practical. It adapts, applies and complements the Béchard & Grégoire's theoretical framework of teaching models in entrepreneurship. The up-to-date primary research fills the informational gap on how entrepreneurship is currently taught in the Central Baltic region. The derived conclusions inform the development of the training programme for the entrepreneurship educators. All in all, this analytical report, along with the ensuing PDP, envisions contributing to the development of the European EE research and, subsequently, practice as well as provides some input into making the entrepreneurial success in the region more systematic through advancing EE.

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MATRIX MAP OF TARGET GROUPS AND ENTREPRENEURSHIP TEACHING DIMENSIONS – SHOWING ASSUMPTIVE NEEDS AND PROBLEMS OF EDUCATORS

Target groups/Areas	*Methodology & Assessment*	*Curricula*	*Environment & Equipment*	*Regulations & Financing*
1. University educators	-Differences in academic teaching and entrepreneurship training. -Tensions between the two groups. -Weak entrepreneurship background of teachers. -Lack of academic teachers knowing EE methods. -Trainers are a minority and industry representatives are unprepared to deliver training courses. -One leading trainer for the whole programme. -No united agreement about evaluation principles, obsolete methods. -Teachers lack moderating and facilitating skills. -Insufficient participation of practitioners in EE, difficult to attract. -Where to guide students for further development once EE course is finished? -Underdeveloped U-I cooperation.	-Insufficient understanding of EE and its objectives, of process approach to EE. -EE is not understood as a mindset development for life. -EE is not integrated across curricula. -EE perceived similarly to basic business education. -Absence/lack of links to non-EE courses. -Interdisciplinarity as a "luxury", not a norm. -Standardisation of curricula in EE (personalised approach unfavoured). -Rigid curriculum structure linked to "old methods". -Search and attraction of practitioners increases workload for EE educators.	-Lack of social skills among academics (and limited vision of developing social skills). -Preconceived attitudes of other academics. -Too big groups in academic studies. -Attitude of students, consumerism (careless, unwilling to make effort in applying working materials, even when innovative methods are used, desire to be entertained). -Language barriers (minimum materials in native language). -Unfavourable and demotivating psychological environment. -"Mass approach" to trainees. -Lack of knowledge how to use and access to virtual teaching technologies. -Students are afraid to be creative, fear to dream. -Density of physical spaces for training/learning.	-HE standards. -Poor commitment from managers. -Lack of funding to expand the physical space and provide modern equipment. -Language barriers within legislation. -Study materials preparation is low paid. -University standards in conflict with academic freedom. -Time limitations: university teaching staff is overloaded. -Virtual space requires license fees, but no funding for licenses to use virtual courses. -University standards are not supporting personalised approach. -Practitioners require higher salaries.
2. Vocational school educators/trainers	-Insufficient entrepreneurial experience of teachers. -Lack of e-trainers. -No awareness of EE novel methods. -Obsolete assessment methods. -"Totalitarian" role of teachers. -Perception: teacher-active, student-passive. -Lack of U-I links.	-Insufficient understanding of EE and its objectives, process approach to EE. -Lack of links to non-EE courses. -Position of EE in a general professional programme: lack of emphasis, problems with sequence of subjects.	-Language barriers. -Psychological environment problems. -Stigmatisation of mistakes. -Mass approach to trainees. -Students are not ready for active participation. -Limited technological capacities.	-Absence of structures to develop ideas for businesses (KT & TT). -No funding for personalised curriculums and/or innovative U-I platforms.
3. Educators in lifelong learning	-Practitioners are not prepared for EE. -Difficult to find good new trainers and mentors. -Developmental needs for School – Industry co-operation. -Strong experience from substance, but lack of pedagogical skills. -Lack of understanding of entrepreneurial pedagogy including methods. -Lack of knowledge of EE theories. -Traditional teaching methods, old fashioned learning orientation.	-Involvement of practitioners increases workload. -Lack of interdisciplinarity. -Continuing education does not have any long-term course for EE. -Lack of EE trainer certificate or diploma. -Need to increase interdisciplinary co-operation among trainers. -Lack of team teaching.	-Perception of trainers as service providers, who can "copy-paste" knowledge from brain to brain. -Limited technological capacities. -Lack of testing new technology for education. -Too much bureaucracy and hierarchy. -Lack of courage to test and use new methods.	-Trainers from real life require higher salaries for EE than academics. -Lack of funding to exploit innovative U-I platforms. -The norm is: no participations fees for EE education. -Bureaucracy and hierarchy.

Annex II. Basic interview questions

Block 1. Educators'/Trainers' background and introductory questions

1.1. For how many years have you been teaching entrepreneurship (as an educator/trainer)?
1.2. What is your primary teaching/training expertise and interest in entrepreneurship?
1.3. How old are you?
1.4. What is your typical target audience (age, main field of study, practical work experience, level)?
1.5. Do you have experience in entrepreneurship (and/or business management)? If yes, what industry background do you possess? Please describe briefly (including the number of years).
1.6. What is your favourite definition of entrepreneurship?

Block 2. Methodology

2.1. What teaching/training methods do you usually use in practice? How many hours do you lecture and use other methods (in %)?
2.2. What other teaching/training methods are you familiar with/heard of, but do not use yet?
2.3. What kind of teaching/training methods do you consider the most effective in your practice?
2.4. What kind of teaching/training methods do you consider the most effective for yourself to enhance your entrepreneurial teaching/training competences?
2.5. How do you develop your entrepreneurship teaching/training options?
2.6. Does your institution organise additional educational programmes for training EE personnel? How often do you participate in entrepreneurial team trainings or other activities that enhance your teaching/training potential?
2.7. Do you invite (other) practitioners to your classes?
2.8. What kind of activities outside the classroom have your students been involved in recently?
2.9. What kind of activities outside the classroom have you been involved in recently?
2.10. Do you cooperate with companies to improve your teaching/training practice (e.g. with joint industry-based projects)?
2.11. Do you use interdisciplinary teamwork as part of the teaching/ training process? If yes, how do you form the teams? Please elaborate briefly.

Block 3. Assessment

3.1. How do you usually assess students/trainees?
3.2. Do you modify these assessment methods? How?
3.3. What is your view of your students'/trainees' recent progress?
3.4. What are the assessment methods you have heard of, but do not use yet?
3.5. Do you consider feedback from students for improving your teaching/training? Please give some examples.
3.6. Do you measure EE outcomes in the short- and long-term? Does this kind of measurement system exist in your institution?

Block 4. Curricula

4.1. What are the main objectives of your teaching practice?
4.2. What are the main expected outcomes of your teaching practice?
4.3. How well do you achieve these objectives and expected outcomes?
4.4. Are there any other important results of your entrepreneurship course besides a business plan?
4.5. Do you participate in creating/renewing the EE curriculum according to which you are teaching/training students?
4.6. How do you structure the topics you teach within the entrepreneurship course?
4.7. How many academic (contact & self-study) hours does your course provide and how many ECTS points are granted for passing the course?

Block 5. Social environment

5.1. Do your students act proactively during classes and engage in the activities you initiate?
5.2. What are the main obstacles that arise between you as a teacher/trainer and your students in the teaching process?
5.3. How would you describe the attitude of your institution's management to new entrepreneurship teaching initiatives?
5.4. How do you ensure students practice and solve real-life problems during your entrepreneurship course? What is your experience of creating an authentic entrepreneurial atmosphere during classes?
5.5. Do you bring your own entrepreneurial experiences into the classes? How?
5.6. How do you use humour during your classes?

Bock 6. Physical environment (equipment)

6.1. Do you develop your own materials or use the ones provided by the school/institution?
6.2. How do you renew your teaching materials?
6.3. Do the teaching materials you use help you to achieve the teaching/training goals?
6.4. Do you use distance teaching technologies and/or specific software solutions in your practice? Please, describe briefly.
6.5. Which teaching technologies and/or software have you heard of, but have not used yet?
6.6. Are you satisfied with the physical space/rooms, where you meet with your trainees/students, and use for teaching/training?
6.7. How would you improve the technological equipment for teaching/training purposes you have at your disposal?

Block 7. Regulations

7.1. What is the role of EE in the education policy of your country?
7.2. What is the status of entrepreneurship courses in curricula in your institution?
7.3. Do you foresee that the number of EE students will change (increase or decrease)?
7.4. How is EE institutionalised in your institution? Are there any support structures, where students can get assistance, after/while completing the entrepreneurship course in your institution?

Block 8. Financing

8.1. How is EE financed in your institution (vs other disciplines and/or institutions)? Is it foreseen that the allocated budget will change?
8.2. Do you see a need for changing the way EE is financed?

Block 9. Final questions

9.1. What is your vision of the "ideal" approach to EE? Does this vision conflict with reality? If yes, how and why, in your view?
9.2. Could you please tell us about EE best practices in your country? How do you tackle existing problems?

Abbreviations

EE – entrepreneurship education
HE – higher education
HEI – higher education institution
SMEs – small and medium enterprises

Annex III. The interview implementation and data submission guidelines

Introduction

1. **Semi-structured interviews** are implemented on the basis of a fairly flexible framework that ensure focused and at the same time interactive two-way communication.
2. **The objective** of semi-structured interviews in this fieldwork is to gain a range of qualitative insights on the current training needs of entrepreneurship educators and development of novel university-industry cooperation platforms in the Central Baltic region from a sample of respondents. The task of an interviewer is not only to get answers to the questions, but also the reasons for these answers, following up with probes to obtain in-depth data.
   There are three target groups that have to be covered during the data gathering process, entrepreneurship educators/trainers from:
   a) universities
   b) vocational schools and colleges
   c) lifelong learning centres.
3. **The** interview **framework** is built upon the following question blocks: methodology, assessment, curricula, social environment, physical environment, regulations, and financing, with additional introductory and closing sections. The framework and questions stem from results of the literature review in entrepreneurship pedagogy and brainstorming sessions held at the University of Tartu Centre for Entrepreneurship from 5 to 9 April 2012. The results are reflected in the matrix of entrepreneurship educators' needs and target groups (Annex I). The interview questions (Annex II) address theses specified in the matrix sectors.
4. The obtained information will be processed further using computer-assisted qualitative data **analysis** software, e.g**.** NVivo, in order to work out **recommendations** to fulfil the needs of the current entrepreneurship education practices and policies.

Implementation

1. **The list of experts** selected within each target group should be approved ASAP. It has to envisage cases, when the chosen respondent is unavailable or cannot take part in the interview, i.e. include alternative candidates.
2. The selected respondents must be **entrepreneurship educators/trainers** or, possibly, combine teaching/training with managing positions whether in education, or industry.
3. **The target sample** ranges from 6 (2 in each group) to 12 (4 in each group) experts.
4. Useful tips to keep in mind, when **preparing for an interview**:
   4.1 to be familiar with the questions and be able to freely navigate through the content and make necessary linkages during the interview
   4.2 to make a general search on a respondent's professional background (if not already acquainted) and slightly adjust some questions, if necessary
   4.3 in case the respondent wishes to see the interview questions beforehand, please introduce him/her the framework and send the respective questions
5. **Interviewing:**
   5.1 a semi-structured interview will last from 60 to 90 minutes
   5.2 when starting an interview, introduce yourself to the respondent, reiterate the objective, introduce the framework and topics (if not done before), remind of timing and confidentiality issues; it is important to tell that he/she has been selected as an expert in entrepreneurship education and express your gratitude for participation; ask for his/her verbal consent to be recorded
   5.3 follow the interview framework as a guide, but cover all the planned questions (at the same time, avoid repeating questions you already asked)
   5.4 ensure an interviewee understand the questions thoroughly

5.5 some questions contain cues or sub-questions (depending on a respondent's answer) to obtain more in-depth information, which is crucial; ask extra clarifying questions, when appropriate

5.6 all interviews should be recorded and transcribed afterwards at your convenience, when preparing summaries; take brief notes during an interview too.

Data submission

1. As part of the data collection task, the interviewer has to deliver **transcripts in the working language** and **summaries in English** of all semi-structured interviews to facilitate the ensuing analysis.
2. **The interview summary/transcript form** is provided.
   - **2.1** In summary forms, key answers have to be specified in *English* below corresponding questions.
   - **2.2** In transcript forms, full answers have to be specified in *the working language* of an interview below the corresponding questions.
   - **2.3** Both files have to be submitted together electronically.
3. **1 October 2012** is **the submission deadline** for the interview transcripts and summaries.

This study was implemented as part of the Central Balticum Entrepreneurship Interaction project (CB Entreint). The project was financed by the Central Baltic Interreg IVA Program 2007-2013 (European Regional Development Fund) with national co-financing from the Regional Council of Southwest Finland. The lead partner of the project was Aalto University School of Business Small Business Center (Finland), the partner responsible for the study was University of Tartu (Estonia), and the other contributing partners were: Tallinn University of Technology (Estonia), Stockholm School of Economics in Riga, and Latvian Technological Center (Latvia).
The general aim of the CB Entreint project was to promote entrepreneurial attitudes and behaviours in the Central Baltic (CB) area with a specific focus on improving teaching practices of entrepreneurship educators.

CENTRAL BALTIC
INTERREG IV A
PROGRAMME
2007–2013

Varsinais-Suomen liitto
Egentliga Finlands förbund
Regional Council of Southwest Finland

ISBN 978-952-60-5350-9
ISBN 978-952-60-5351-6 (pdf)
ISSN-L 1799-4810
ISSN 1799-4810
ISSN 1799-4829 (pdf)

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