

CONTEMPORARY APPROACHES TO ENTREPRENEURSHIP EDUCATION

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Abstract

Over the last decade entrepreneurship education has become an increasingly vital area of research, practice and policy regulations.

The primary aim of this article is to explore contemporary approaches towards entrepreneurship education in order to depict frameworks and methods that are acknowledged by renowned experts. The secondary aim is to assess their relevance for the Latvian entrepreneurship education at present.

Throughout the research, the author analyses the newest frameworks of entrepreneurship education by reviewing scientific articles published in Europe, dated no earlier than 2009; explores practical models successfully applied in Europe; examines results of Flash Eurobarometer Surveys No.260 (2009), No.283 (2010) and the Special Global Entrepreneurship Monitor Report (2010); compares results of the scientific articles overview and the surveys, and identifies prospects for further research.

This research applies general scientific research methods, including modeling, monographic and logical construction methods, and is based on a pure literature review.

The analysis of the modern practice-based approaches to entrepreneurship education revealed the major shift from passive/formal modes of learning and teaching towards experiential/social forms as the rationale underpinning the emergence, development and usefulness of such frameworks as: Education FOR Entrepreneurship and Experiential Learning Theory, Learning by Developing, Authentic Competence-Based Learning Theory, which are closely interrelated with each other, being conceptually similar, but contextually different. Pedagogical methods related to these frameworks are of an interactive nature and targeted to develop multiple social dimensions, such as employability, intrapreneurship and venture creation. The principle of "learning by doing" is fundamental to these methods. As opposed to theoretical approach, which provides only book knowledge of management issues, holistic/dynamic approach targets a change in individuals' "know-how".

Examination of Flash Eurobarometer survey results highlighted a number of deficiencies in the entrepreneurial environment and entrepreneurship education system of Latvia: the lack of information and skills, small number of start-ups versus high proportion of individuals trained in starting a business, wide gap between intentions and start-ups, low level of cooperation between universities and businesses, and decreasing entrepreneurial activity, institutional and administrative barriers to entrepreneurship. The author concludes that there is an ample market for quality entrepreneurship education and the discussed contemporary approaches are of a very high relevance for the Latvian entrepreneurship education system.

The major challenge for universities at present is to shift from passive modes of learning and teaching towards experiential forms establishing closer contact between students and the business world. The author suggests this can be achieved by refocusing the existing curriculum and transferring successful practice-based models from other countries.

In view of the fact that the topic has not been widely researched in Latvia yet, the results, ideas and concepts can be useful for academics, practitioners and other involved stakeholders.

Keywords: entrepreneurship education, experiential learning theory, authentic competence-based learning, cooperation of universities and businesses, Latvia.

Introduction

Over the last decade entrepreneurship education has become an increasingly vital area of research, practice and policy regulations. The number of scientific publications on entrepreneurship education soared by over 300% in 2010 as compared to 2000, whereas articles focused on Europe represent 1/5th of the total number of publications (Rizza & Varum, 2011)¹⁶. H. Haase and A. Lautenschläger (Germany), M. Raposo (Portugal), D. Higgins and C. Elliott (UK), J. Nab, A. Pilot, S. Brinkkemper and H. Ten Berge (the Netherlands) are some of the bright contributors to the formation of contemporary approaches to

¹⁶ Based on a bibliometric study carried out through SCOPUS, Science Citation Index Expanded (SCI) and Social Sciences Citation Index (SSCI).

entrepreneurship education comprising authentic competence-based learning, experiential learning, education FOR entrepreneurship, and other applicable frameworks. In contrast, very few researchers from Latvia have analysed the topic, e.g. V. Bikse, T. Koke and N. Lace.

Implementation of basic provisions of the Lisbon Strategy aimed “to make the EU the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion” between 2000 and 2010 (European Union Parliament Website, 2010) and the Latvian national programmes based on the Lisbon Strategy (Ministry of Economics of the Republic of Latvia, 2009) mostly depended on increasing the quality of entrepreneurship education (Bikse, 2009). By 2010, most of the set strategic aims were not achieved, and “the strategy should be rebooted” (EurActive, 2009). In March 2010, the new Europe 2020 strategy was launched, which affirms “education and entrepreneurship have a critical role to play in maintaining and further enhancing Europe’s position as a key global player in the coming years” (World Economic Forum, 2010). The new strategy reiterates conceptual frameworks from the Oslo Agenda for Entrepreneurship Education worked out in the end of 2006 by the European Commission and the Norwegian Government putting a clear emphasis on promoting entrepreneurial mindsets, involving students in enterprise projects, innovative pedagogies to build an entrepreneurial spirit, development of creativity, initiative, self-confidence (European Commission, 2006).

Nowadays in Latvia, the crucial problems as stated by the European Commission and Global Entrepreneurship Monitor reports (2008) are weak entrepreneurial environment and low level of entrepreneurial activity as compared to other EU Member States; the overall assessment of business programmes deficient in interdisciplinary approach is also weak (European Commission, 2009). There is no united system of entrepreneurship education management on a national level (Bikse, 2009). The most evident is the socio-economic rationale, because entrepreneurship as such started to develop only in 1990s. At the same time, these weaknesses, once recognised, open new opportunities for development and improvement.

The majority of scientific researches on entrepreneurship education originate from innovation-driven economies coinciding with the Global Entrepreneurship Monitor classification (2010), e.g. Australia (Asia Pacific), Finland, Germany, the Netherlands, Spain, United Kingdom (Western Europe), amongst others. These researches are generally based on sound practical examples. Latvia, in turn, has been identified as an efficiency-driven economy in transition to the innovation stage. Still, there are a limited number of good-practice examples here, one of them being the Riga Business School (EC, 2008).

To sum up, the topicality of researching contemporary approaches and methods of entrepreneurship education is conditioned by the escalating attention of the scientific world to the issue and the EC-initiated strategies as the external reasons as well as weak entrepreneurial environment, activity and overall assessment of entrepreneurship education in Latvia as the local (internal) reasons.

This article *primarily aims* to explore contemporary approaches towards entrepreneurship education in order to depict frameworks and methods that are acknowledged by renowned experts. *The secondary aim* is to assess their relevance for the Latvian entrepreneurship education at present.

The study focuses on entrepreneurship education as **the research object** and its contemporary frameworks as **the research subject**. The ensuing **tasks** are as follows:

- a) To analyse the newest frameworks of entrepreneurship education by reviewing scientific articles published in Europe, dated no earlier than 2009.
- b) To explore sample practical models of entrepreneurship education applied in the European innovation-driven countries having generated positive academic results.
- c) To examine results of Flash Eurobarometer Surveys No.260 (2009), No.283 (2010) and the Special Global Entrepreneurship Monitor Report (2010) underpinning the current entrepreneurship education tendencies in the EU in general and in Latvia specifically.
- d) To contrast results of the scientific articles overview and the surveys.
- e) To make the research-based conclusions and recommendations; to identify prospects for further, more detailed and deeper, research of the issue.

This research applies general scientific **research methods**, including modeling, monographic and logical construction methods, and is based on a *pure literature review*. The researched content though provided sufficient data to make general conclusions and recommendations applicable to entrepreneurship education in Latvia, which has naturally narrowed the study, as well as the chosen time scale, representing the research *delimitations*.

1. Overview of entrepreneurship education frameworks

The overview of entrepreneurship education frameworks addresses definitions and aims, teaching methods and impact indicators of entrepreneurship education based on the latest scientific publications.

Definition and aims of entrepreneurship education

One of the most precise definitions of entrepreneurship in educational context is “the ability of an individual possessing a range of essential skills and attributes, to make a unique, innovative and creative contribution in the world of work, whether in employment or self-employment” (the Northern Ireland Government’s “Entrepreneurship and Education Action Plan”, 2002; cited in Bridge et al., 2010). Very close interpretation refers entrepreneurship “to an individual’s ability to turn ideas into actions. It includes creativity, innovation and risk-taking as well as the ability to plan and manage projects in order to achieve objectives” (Curavic, 2011).

Mwasalwiba (2010) identified key terms in the meaning of entrepreneurship education having analysed over 20 scientific articles with this particular purpose, and these are: attitude, values, intentions and behavior (32%); personal skills (32%); new business (18%); opportunity recognition (9%), managing existing firms (9%). The abovementioned, more up-to-date, definitions are conceptually similar referring to an individual’s ability, skills, creativity, and work.

Raposo and do Paco (2011) cite the US Consortium for Entrepreneurship Education 2008 Report suggesting that the core knowledge created via entrepreneurship education includes:

- the ability to recognise and pursue opportunities by generating new ideas and attracting required resources
- the ability to create and operate a new firm
- the ability to think in a creative and critical manner.

The most usually referred aims of entrepreneurship education are:

- to develop entrepreneurial drive among students (raising awareness, motivation), to promote new start-ups and other ventures
- to identify and train students in the skills they need to set up a business and manage its growth
- to acquire relevant knowledge
- to increase capacities in the use of techniques, examination of business situations, creation of action plans
- to enable to deal with the changing environment

(Jamieson, 1984; Garavan & O’Cinneide, 1994; Henry, Hill & Leitch, 2005; cited in Raposo & do Paco, 2011; Kontio, 2010).

The analysis of Mwasalwiba (2010) also showed that entrepreneurship education is generally aimed at creating or increasing entrepreneurial attitudes, spirit and culture among individuals in the general community (34%); other scholars associate it with new venture and job creation (27%), contribution to the community (24%), and stimulating entrepreneurial skills (15%).

The broader approach to entrepreneurship education is brought by the Northern Ireland Centre for Entrepreneurship (NICENT), formed as a partnership of the University of Ulster and Queen’s University Belfast. From the very beginning the project adopted the approach of encouraging the development of enterprise attributes and competences rather than focusing on business start-up having opposed the widely spread view with a narrow focus on business creation to maximise personal profit (Bridge et al., 2010). Within the project, entrepreneurship education had three targets *developing multiple social dimensions*:

1. Employability (being able to get a job):
 - to prepare for working for other people
 - to be able to “sell” oneself to employers
 - to contribute once in employment with appropriate skills and knowledge.
2. Intrapreneurship (preparing to create a venture):
 - to be an entrepreneurial employee
 - to develop skills of a social entrepreneur
 - to learn to respond positively to change
 - to develop own business ideas for later spin-out.
3. Venture creation (being able to start a business):
 - to set business creation targets
 - to acquire business planning.

Some scholars (Garavan & O’Cinneide, 1994; Jones & English, 2004; Gibb, 199; cited in Mwasalwiba, 2010; Kontio, 2010) can be considered as participants of the debate in application of terms, such as “entrepreneurial or enterprise” versus “entrepreneurship” education, which has both geographic and conceptual grounds. For example, “entrepreneurship education” could be regarded as the term mostly used in the USA and Canada, whilst “enterprise education” in the UK and Ireland. The former was concerned with creating an attitude of self-reliance and the latter was for creating opportunity-seeking individuals. “Entrepreneurial education” could apply to all forms of education, while “entrepreneurship education” to new venture creation and innovation. The author questions rhetorically how it is possible to distinguish between entrepreneurial and entrepreneurship education in the real-life context of educational programmes. Irrespective of these contrasting views, “entrepreneurship education” is the widely accepted term at present, used in the majority of articles and European Commission reports. Otherwise, the abovementioned terms are used interchangeably.

To sum up, entrepreneurship education has two simultaneous directions: to produce *entrepreneurs per se* and/or *entrepreneurial personalities*.

Methods of teaching entrepreneurship

The current understanding of entrepreneurial learning in the context of higher education is much broader, more competitive and challenging as compared to traditional, formal modes of passive education. Higgins and Elliott (2010) as well as Haase and Lautenschläger (2010) suggest that entrepreneurship education should desist from teaching knowledge on business creation and focus on experiencing entrepreneurship and developing practitioners. These authors contribute to the Experiential Learning Theory, which is an established and effective alternative methodology for linking theory and practice (Govekar & Rishi, 2007; cited in Lee et al., 2010).

Experiential Learning Theory is an active learning pedagogy, where experiences are transformed and create implicit knowledge as a collection of social practices (Kolb & Kolb, 2005, cited in Lee et al., 2010). It comprises problem-based learning and scholarly engagement taking place beyond the domain of classroom meetings through experiential and discovery-based assessments. The form of scholarly engagement is community-based learning comprising work-based learning, group work-based learning and curricular engagement. Cooperative student placement is an example of curricular engagement, where students work with industry partners on specific projects to benefit themselves, academic institutions and the community. Experiential learning can include such techniques as case studies, action researches, problem solving, and learning by doing (Lee et al., 2010). The development of experiential knowledge in this context is an incremental process that can *evolve over time* (Higgins & Elliott, 2010).

On the contrary, traditional approaches to learning assume that knowledge must be transmitted and received in the form of explicit information and applied by learners afterwards (i bid, 2010). This teaching scheme was teaching-oriented, aimed at imparting theoretical and specialist knowledge (Haase & Lautenschläger, 2010). However, Higgins and Elliott (2010) argue that, who are exposed to this kind of passive learning, are spectators rather than active participators on the outcome students. And the Experiential Learning Theory explains, why.

Figure 1 shows classification of experiential learning methods coupled with some modal characteristics.

Explicit information *about* entrepreneurship is a weak motivational driver to transform hard facts into action and tangible results. Haase and Lautenschlager (2010) acknowledge that there is no need to explicitly teach “know-what” within entrepreneurship education, which must primarily target a change in the individual’s “know-how”, whereas the latter is the ability to view an opportunity by observing the practice – this refers to education *for* entrepreneurship, where it coincides with the cognitive theory that is concerned with the nature of human knowing (Higgins & Elliott, 2010).

Education *for* entrepreneurship takes the hard facts about business creation and management, including accountancy, finance and marketing, for granted. However, without an entrepreneurial conviction – the right mindset, awareness, motivation and attitudes, which are formed by soft skills, such as creativity, proactiveness, leadership, risk taking propensity – it is unfeasible to undertake sustainable affords towards business creation. These constituencies can also be grouped into entrepreneurial “know-what”, “know-how” and “know-why”. It is quite evident that hard facts can be easily taught, while experience-based soft skills are rather difficult to impart or develop, but they are much more important (Haase & Lautenschläger, 2010).

Figure 2 summarises the frameworks of education *for* Vs *about* entrepreneurship and passive Vs dynamic approaches to teaching and learning, its objectives and outcomes as building blocks of entrepreneurship education.

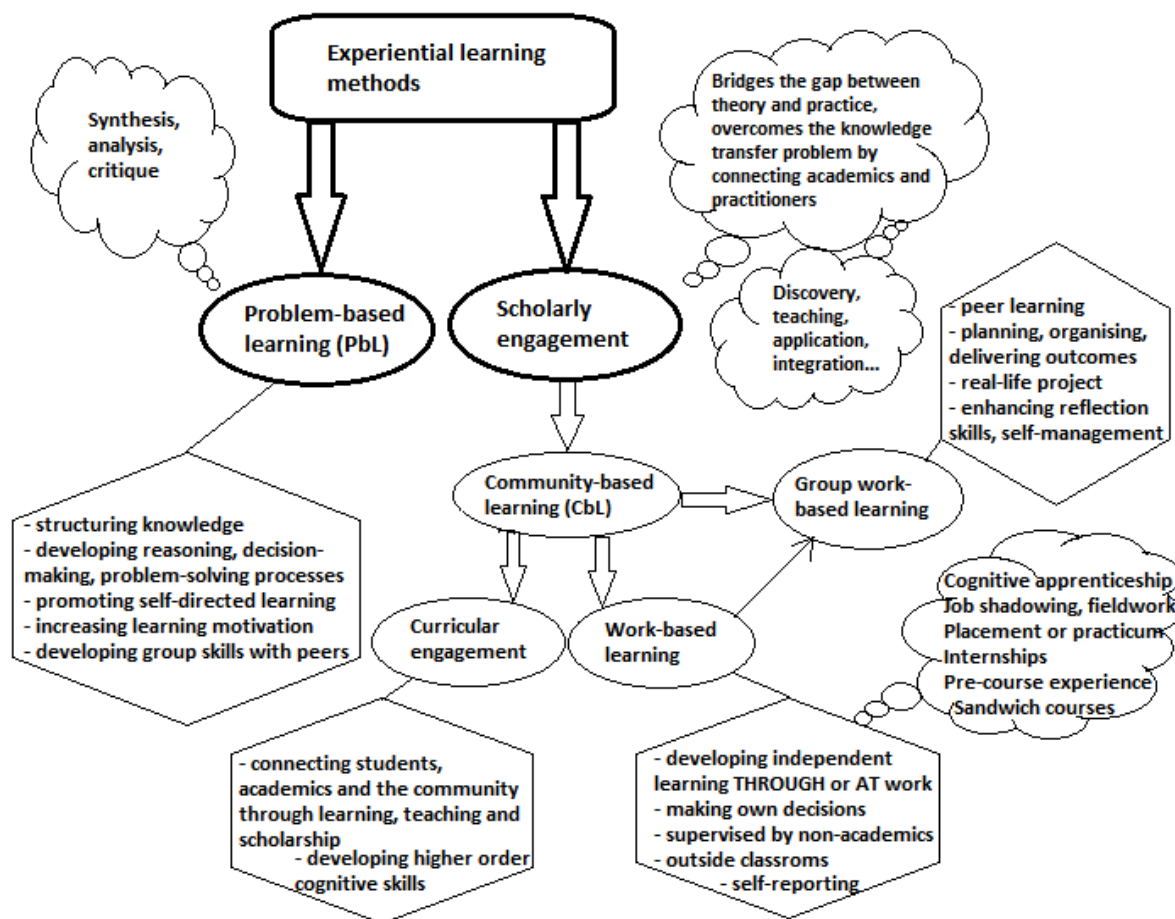


Figure 1. Experiential learning methods
 Source: devised by the author based on Lee et al. (2010)

Another conceptual framework is Authentic Competence-Based Learning, which overlaps with the experiential learning in its essence. The authenticity refers to a degree of similarity between educational and professional tasks. The concept of authentic learning is an integral part of competence-based learning. The concept of competences, in turn, integrates personality and behavioural perspectives, the learning environment and cognitive approach to entrepreneurship. Competences comprise several entrepreneurial elements that can be learned and taught: motives and intentions, attributes, self-concept (attitudes), traits, knowledge and skills (Nab et al., 2010; Sanchez, 2010).

Laurea University of Applied Science (Finland) has introduced the concept of Learning by Developing, a pedagogical and collective approach to learning, in which learning is linked to an applied research and development culture. This refers to learning expertise that arises from social interaction, the sharing of knowledge and competence arising from, research and problem solving related to authentic objectives (Pirinen, 2009).

It is evident that both Learning by Developing and Authentic Competence-Based Learning are very similar to Education FOR Entrepreneurship and Experiential Learning Theory. In fact, all these frameworks are conceptually similar, although can be contextually different. For instance, competence-based learning is more related to cognitive and behavioural theories developed by Ajzen, I. and Shapero, A. in the end of the 1980s.

The empirical evidence suggests that students generally have little contact with the business world and key stakeholders influencing the business environment. They lack the relevant social capital. Even if students are entrepreneurially ready, they are not business savvy (Bridge et al., 2010). Entrepreneurial intentions among youngsters are high, but not actions, while these intentions tend to be higher in developing countries. Furthermore, economic and institutional frameworks are unfavourable to entrepreneurial activity (Nabi & Linan, 2011). Therefore, the present challenge for higher education is to move from an imposed curriculum to realise the opportunities facilitated by cooperation of universities and businesses (Rossin & Hyland, 2003; cited in Lee et al., 2010).

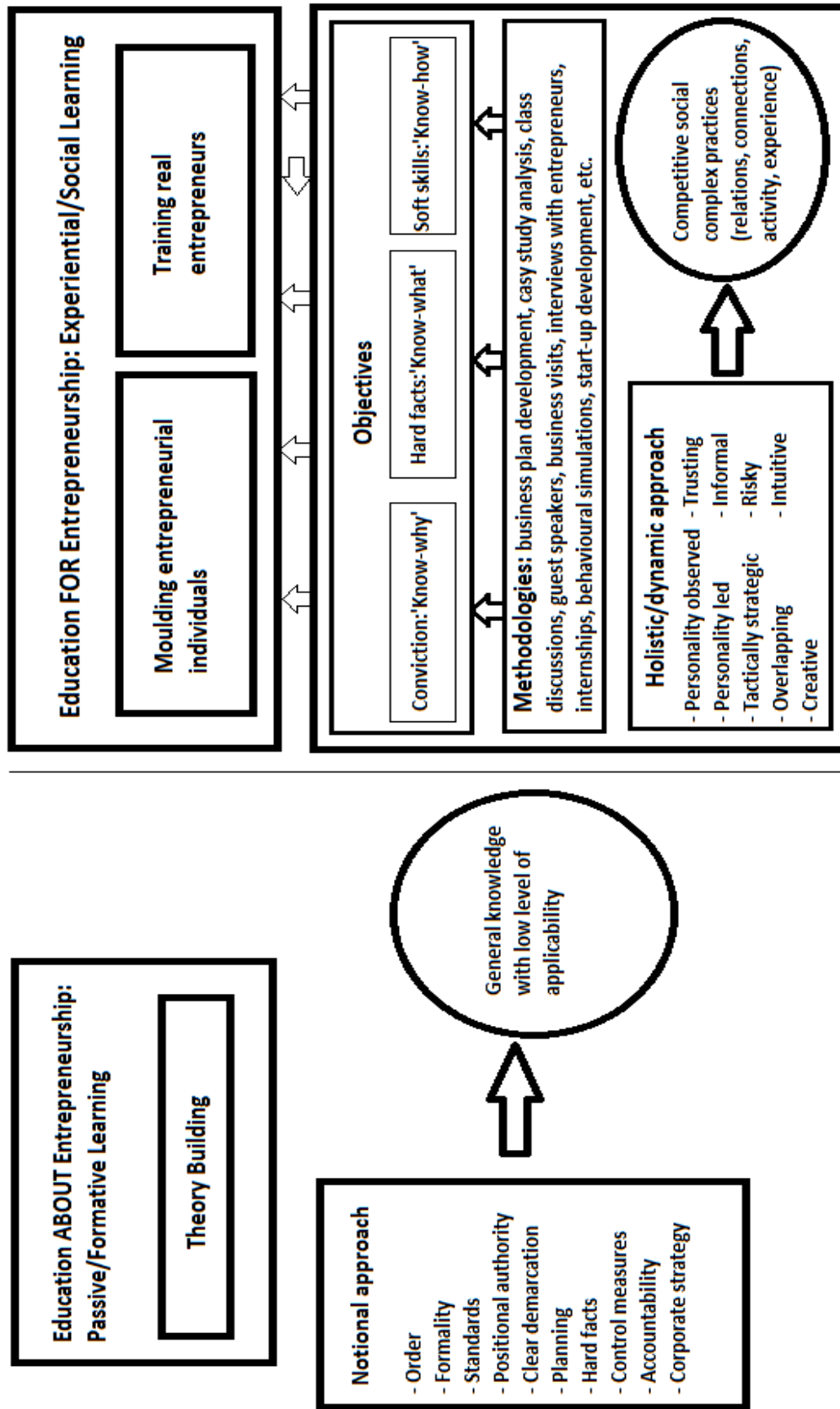


Figure 2. Building blocks of entrepreneurship education

Source: based on Haase & Lautenschläger (2010); Higgins & Elliott (2010)

'The teachability dilemma' of entrepreneurship and measurement of educational impact

Entrepreneurship education development emanated from the Anglo-Saxon regions (Lee et al., 2010). Indeed, according to the QS World University Rankings 2011/12, all universities from top 15 are the UK and US ones (with Cambridge – 1st, Harvard – 2nd, Massachusetts – 3rd, Yale – 4th and Oxford – 5th) (TopUniversities Website, 2011).

At the same time, it was stated in the Global Entrepreneurship Monitor Report 2010 that all innovation-driven economies not surprisingly dominate the business services sector. This sector tends to rely on highly educated human capital, which is more widely available in these regions, and supplied by a well-established higher education system. The report also communicates that in Latvia three entrepreneurship framework conditions valued most negative are: finance, national policy regulation and government programmes.

However, there are two fundamental questions linked to the topic: whether an individual needs to get higher education or study entrepreneurship to become an entrepreneur or skilled manager, on one hand, and whether entrepreneurship is teachable, on the other.

The recent survey by Paris Tech University (MINES Paris Tech, 2011) addresses these questions directly. The researchers have analysed 500 largest international companies managed by 508 people. They have gathered information about 487 of them and found out that only 13 do not have higher education, whilst there is no data about 21 managers. This leads us to a proportional range from 2.7% to 7% of non-educated top-managers within the Paris Tech research (2011). The top 5 entrepreneurship education universities according to Paris Tech are: 1. Harvard University (USA), 2. Tokyo University (Japan), 3. Keio University (Japan), 4. HEC (France), 5. Kyoto University (Japan) and University Oxford (UK).

Furthermore, the studies have shown that individuals with a university degree are more inclined towards starting their own business. Some authors proved that enterprises originated from the academic environment have a greater growth and innovation potential (Sternberg et al., 2007; Steffensen et al., 2000; cited in Haase & Lautenschläger, 2010; Johansen, 2010). On the other hand, Wennberg et al. (2011) found out that firms started by university-educated entrepreneurs as commercial spinoffs perform better than firms started by university-educated entrepreneurs as university spinoffs in terms of growth in sales revenue and survivability. Firms started by university-educated entrepreneurs as university spinoffs benefit more from the knowledge sources by years of experience in the same sector in terms of survival and employment growth than firms started by university-educated entrepreneurs as commercial spinoffs.

Impact assessment of entrepreneurship education is one of the most challenging issues in the themed scientific literature at present. Usually entrepreneurial intentions and graduate start-ups are used as success indicators. For instance, Johansen (2010) and Sanchez (2010) come to similar conclusions that young people who participate in specialised educational programmes are more likely to become entrepreneurs, in other words, intentions to become self-employed increase by the end of the programme. The research of Mwasalwiba (2010) proves that the number of graduate start-ups is the highest ranked success indicator followed by academic results and change in entrepreneurial intentions.

Nevertheless, along with the emergence of social entrepreneurship and broader view on entrepreneurship education objectives, the rate of new business creation is not any more the most suitable indicator to evaluate results of entrepreneurship programmes as the respective literature has been suggesting. The results are not immediate requiring longitudinal studies (Raposo & do Paco, 2011). As far as the contemporary approaches to entrepreneurship education are concerned, intentions to start-up can evolve over time and one of the primary objectives is not to promote the start-ups but to develop entrepreneurial personalities.

2. Successful practical models from Finland and the Netherlands

The theoretical frameworks discussed in the preceding section are all practice-based, i.e. it is practice at first instance that has determined development of approaches evolved into theories by Haase and Lautenschläger (2010), Higgins and Elliott (2010), Lee et al. (2010). Some of the bright examples of entrepreneurship education in context are the cases of Turku University of Applied Sciences (Finland) and the University of Twente (the Netherlands). Being based on the discussed theories, these practical examples demonstrate the applicability of introduced models and positive results that their application can bring as an academic outcome.

The strategy of Turku University of Applied Sciences (TUAS) connects entrepreneurship, applied R&D and teaching together. The University tries to actively inspire inner entrepreneurs in students and increase number of enterprises. The TUAS model for entrepreneurship education consists of three phases as shown on Figure 3 (Kontio, 2010).

On the first phase “*What is entrepreneurship?*” students acquire the basics of business operations in small multidisciplinary groups using problem-based learning. The project is called Practice Enterprise. It lasts for one year and gives 15 credit points. The established practice enterprises operate in a virtual enterprise network, which models the real life. Instead of just sitting on lectures students learn basic laws of business in a pragmatic way, at the same time they work in teams, develop self-discipline, learn to plan their work and deal with risks. A series of lectures is an essential part of the project that supports practical learning. At this stage, students can also run a real-life project as an alternative.

In the second phase “*Learn real entrepreneurship in safe environment*” students establish or join existing co-operatives and run a business for real. They can also joint support centres on Microsoft server products or Cisco network equipment and work with real customer problems. At this stage the business is for real – salaries, value-added taxes, products and services, subordination, etc. A student can get a maximum of 90 credits by working and studying in a cooperative. Reading literature, making reports and presentations increase the number of credits. The co-operative reduces risks for students, who want to experience real entrepreneurship. This option is not compulsory. Another possibility is to join an Educational Support Centre run together with Microsoft Finland and Faculty of Telecommunication and e-Business as an employee. The faculty offers premises and tutors for the centre.

On the third phase “*Become an entrepreneur*” students can exploit business ideas they have and start their own business under guidance of a personal mentor. To support initiation of new ideas the university runs specialised student competitions.

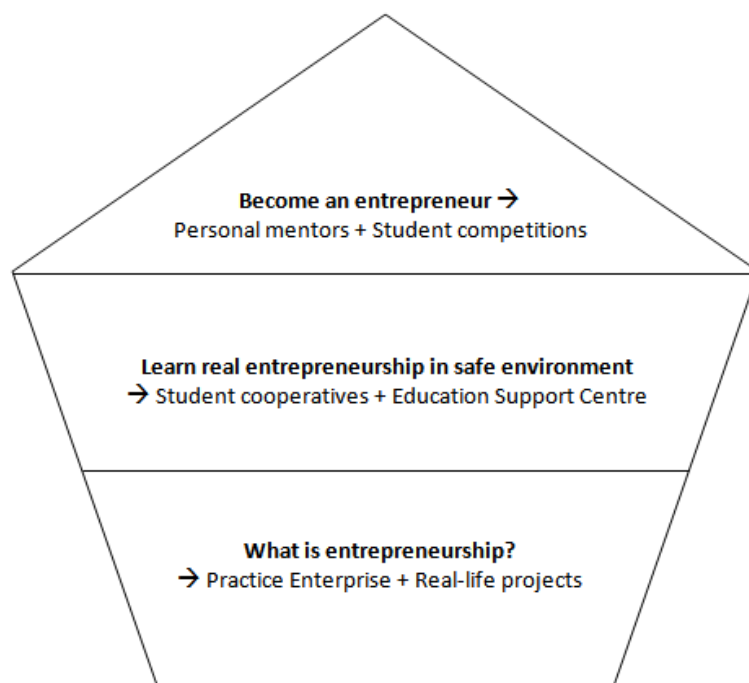


Figure 3. Entrepreneurship education in Turku University of Applied Sciences (Finland)

Source: devised by the author based on Kontio (2010)

All the phases can be integrated into a student’s study plan, if he/she decides to focus on entrepreneurship.

In 2009, Finland had the highest rate of entrepreneurial activity of 25%, according to Eurobarometer.

Another successful example is the University of Twente practical model. The model comprises three programmes: “BTC-Twente”, “TOP” and “Become your own Boss” (Sijde & Ridder, 2008) (see Figure 4).

The business incubator BTC (Business and Technology Centre) was created for young companies originated from the university in 1980s providing flexible office hours and production space. Over time, it expanded onto the 40 ha Business & Science Park Twente and Knowledge Park for SMEs to take tenancy. The space is also equipped with special facilities for high-tech companies (Innovation Lab).

The start-up programme TOP (Temporary Entrepreneurial Positions) was established in 1984 to enable graduates to start a company with the university support consisting of an interest free loan, office space, access to the university’s networks and training for 1 year. In the 1990s, University Student Enterprises (USE) was formed to support students via training, networks and office facilities. Another TOP project –

“Successfully your own Boss” – is aimed at motivating potential entrepreneurs and helping them to identify a business idea within 6 months. Venture Lab Twente project has started recently to assist high-tech and high-potentials. Through TOP programme, the university creates an entrepreneurial climate by engaging researchers, PhDs and executive staff in tailor-made courses. The programme has already given start to over 500 companies.

An elective training course “Become your own Boss” was developed at the same time with BTC to teach students how to write and present a business plan. The course was primarily developed for owner-managers of companies as Growth Programme, but later the students were involved to do the “leg work” – finding information, writing sections of a business plan thus getting an insight into operations of SMEs. The programme also provides options of proceeding into MA courses.

As a result of these programmes, about 70% of involved students become economically active, i.e. start a company or find a job.

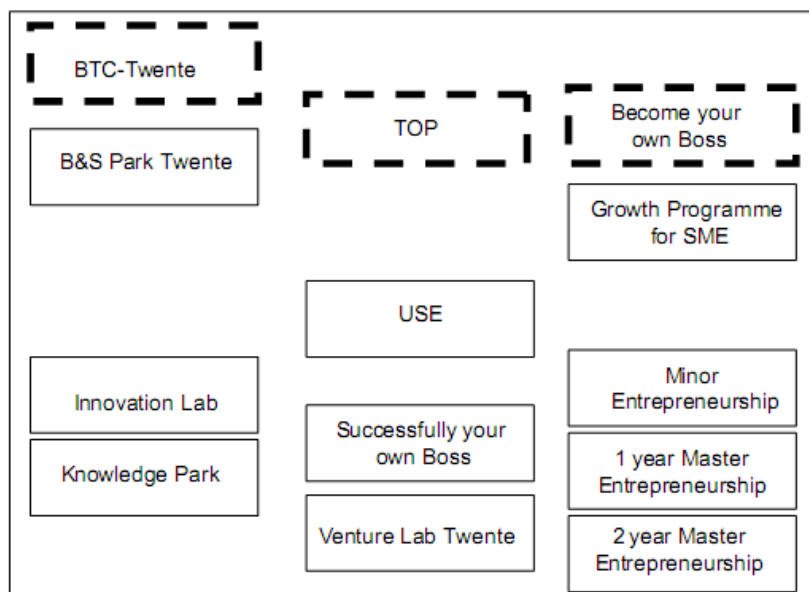


Figure 4. Entrepreneurship education in the University of Twente (the Netherlands)

Source: Sijde & Ridder (2008)

3. Latvia: entrepreneurship education survey results

At present, there are 58 universities, university-colleges and colleges in Latvia. However, the number of students has been decreasing since 2006/2007, including those, who study social disciplines (see Figure 5). The latter has reached its minimum in the last academic year (2010/2011), according to the Central Statistical Bureau of Latvia.

In terms of entrepreneurship education quality assessed from the viewpoint of contemporary frameworks, the overall situation is generally weak, as in other new Member States (European Commission, 2009). Inter-disciplinary approaches are rare, preferences of self-employment among young people are low, the entrepreneurial activity is decreasing (i bid). At a positive side of the spectrum is the social understanding of the situation that should be established concerning study programmes and its purposes, cooperation of businesses and universities (i bid).

This section explores results of Flash Eurobarometer surveys No.260 “Students in Higher Education Reform” (2009), No.283 “Entrepreneurship in the EU and Beyond” (2010), as well as “Global Perspective on Entrepreneurship Education and Training” report (2010) in relation to Latvia revealing the abovementioned tendencies, amongst others.

The survey No.260 (hereinafter referred to as Survey I) was conducted by Latvian Facts from 12 to 20 February 2009 using WebCATI (web-based computer assisted telephone interviewing) and face-to-face (F2F) methodology. It targeted HEIs specifically and used a sample of 525 students aged from 18 to 25+, all in higher education on BA level or above and various fields of study, mostly – social sciences.

The survey No.283 (hereinafter referred to as Survey II) was conducted from 10 December 2009 to 16 January 2010. It consisted of random telephone (70%) and face-to-face (30%) interviews targeting the sample of 504, various socio-demographic groups aged from 15 to 55+, educated or still in education, representing different income groups. In order to compute a marginal total, where Latvia contributes to the

EU result, a weighting factor was applied to the national results. The population weighted number of interviews equaled 92, or 0.5% of total EU 27 weighted (19635) in case of Latvia. The number of interviews actually carried out represented 1.9% of total 26168.

A margin of error at 95% confidence interval did not exceed 4.5%. A margin of no more than 3% would require a sample of 1000. To reduce the margin to 1.5% would require a sample size of 4000, which is more costly and time-consuming.

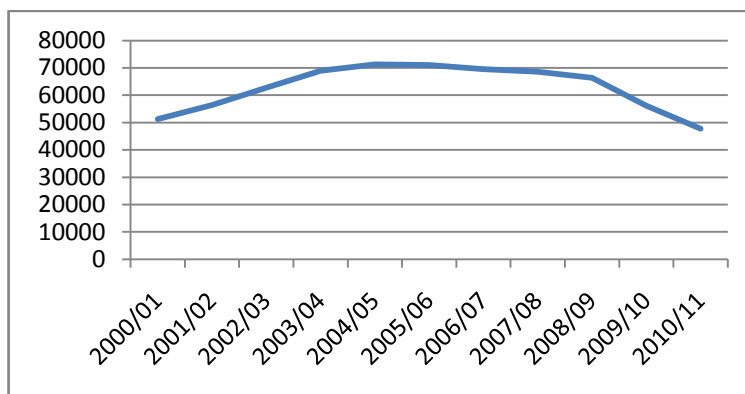


Figure 5. Number of students studying social disciplines (business management, law, etc.) in Latvia
Source: Central Statistical Bureau of Latvia, 2011

The special report by Global Entrepreneurship Monitor (2010) communicates results of its annual Adult Population Survey (APS) (hereinafter referred to as Survey III) of at least 2000 individuals aged between 18 and 64 in each participating country to show the relationship between training in starting a business and entrepreneurship. In Latvia, fixed-line phone and mobile phone surveys were conducted having reached 2001 respondents by random digit dialing and random dial from list.

Results of Survey I provide the opinion of respondents towards composition of study programmes, aims of higher education as well as cooperation of universities and businesses. First of all, an absolute majority (86%) of respondents agreed that study programmes **should include communication skills, teamwork, and “learning to learn” techniques**. Half of the interviewed students agreed with this statement, roughly a third rather agreed (36%), and 12% disagreed. 78% agreed that HEIs should **ensure that a variety of social and cultural backgrounds are represented at universities**, while 85% considered that HEIs should **provide more life-long learning courses**. 19% disagreed with the former and 12% with the latter. In addition, 99% of respondents supported the importance of providing students with the **knowledge and skills necessary to be successful in the labour market**, 93% consider **enhancement of personal development** as a crucial purpose of education, 91% also value the **development of critical mind**.

A vast majority of respondents considered there should be a **possibility to undertake work placements in private enterprises** as part of a study programme and HEIs should **provide tailor-made study programmes for enterprises to upgrade their workforce** – 87% per each statement. 91% agreed that **HEIs should foster innovation and entrepreneurial mindset** among students and staff. 83% agreed that **enterprises should be more involved in higher education management, curricula design and funding**. As compared to the previous sections, the statements about cooperation of universities and businesses received more supporting percentage points than the EU average.

Survey II conveys information on preferences and feasibility of being self-employed, image of entrepreneurs in society, entrepreneurial activity, experiences in setting up a business, perceived barriers to entrepreneurship, attitudes and personality characteristics of entrepreneurs, and the impact of school education.

Latvia remains among the EU countries, where citizens appear to be almost evenly divided in their **preference for being self-employed** or having an employee status – 45% versus 48% in 2009, respectively – quite the same as in the EU on average. However, in Latvia 29% of respondents, who **do not consider self-employment feasible** (68% of respondents), mentioned their **lack of requisite skills** to become self-employed (see Figure 6) as compared to just 5% in the Netherlands, for example. If added on with 10% **lacking business idea**, it results in 39% of people, who presumably did not experience an appropriate business education. 31% of these respondents were aged below 40, 23% were highly educated or have a qualification, 9% were still in education, 21% lived comfortably and 28% got by.

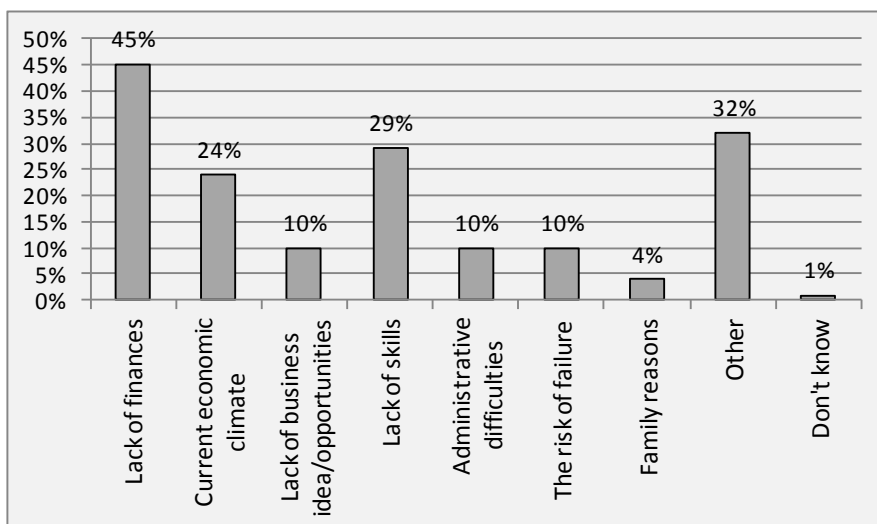


Figure 6. Reasons for self-employment not feasible
 Source: devised by the author based on Flash Eurobarometer No.283

Reflecting the average EU results, 50% of respondents agreed that entrepreneurs think only about their own wallet, while the other half does not agree with this statement. 55% think that entrepreneurs exploit other people’s work. In general, **the image of entrepreneurs** in Latvia is quite positive considering its Soviet past.

Irrespective of the high percentage of Latvians, who **never thought about starting up a business** – 45% as seen on Figure 7, the EU-level results showed 50%. Simultaneously, 24% of the Latvian interviewees were attracted by this idea. 28% of respondents were aged below 40, 37% were whether in education or already graduated, 22% lived comfortably and 45% got by.

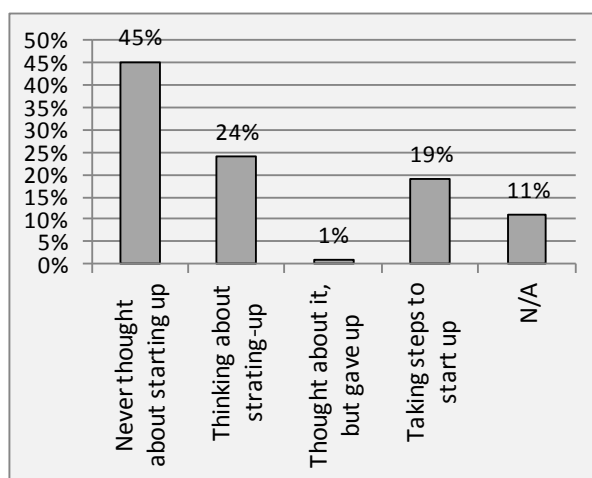


Figure 7. Experience of starting up a business
 Source: devised by the author based on Flash Eurobarometer No.283

Interestingly enough that 72% of Latvian respondents among those, who were thinking about starting-up, thought about it but gave up and were taking steps to start up, considered **dissatisfaction with regard to previous results** as an important and rather important factor when starting-up a business, while **contact with an appropriate business partner** hit the record of 86%. At the same time, a considerable proportion of interviewees (around 21%) gave a “don’t know” response evaluating such an important factor as **addressing an unmet social or ecological need**.

According to Survey II, Latvia demonstrated one of the largest **decreases in entrepreneurial activity** in 2009, to around 10% of respondents, who started up (from 18% in 2007). If compared to the GEM Global Report 2010 related to APS conducted in 2008, it showed 21.4% of entrepreneurial intentions, being very close to Eurobarometer’s 24% thinking of starting up. Hence, there is a clear gap between intentions and real start-ups.

When assessing barriers to entrepreneurship, many Latvians seemed well-informed about the process of starting up, 33% still agreed that it was **difficult to obtain sufficient information**. **Complex administrative procedures** (77%) and the **lack of financial support** (92%) remained the major obstacles. According to GEM Global Report (2010), entrepreneurship framework conditions valued most negative in Latvia are: finance, national policy regulation and government programmes.

Slightly over a half of respondents (52%) assessed their **willingness to take risks** positively, although less Latvians preferred to **compete with others** (44%) – 13% and 11% below the EU average. 64% considered themselves to be **inventive** and full of ideas, while 73% **changed things** they did not like (17% and 11% below the average). The **possibility of being rejected by others** for standing up for their decisions would not stop 67% of the respondents. Latvians also appeared to be **self-assured** (87%) and rather **optimistic** about their future (67%). At the same time, the greatest fears when starting up a business were: the **possibility of going bankrupt** (50%), the **uncertainty of income** (44%) and the **risk of losing property** (43%).

According to Survey III, 28% of Latvian individuals aged 18-64 were trained in starting a business (whereas 39% were trained in HEIs) and 42% are trained among early-stage entrepreneurs. Yet, by mapping percentage points related to efficiency-driven economies, GEM found out that there may be diminishing returns to training in terms of conversion to entrepreneurial activity as training becomes widespread.

The core measure of the relationship between training in starting a business and entrepreneurship used by GEM is “gain from training”. In Latvia, the gain from training in early-stage entrepreneurial activity was equal to 1.2, i.e. an individual’s chances of starting own company were 1.2 times higher, if he/she underwent compulsory business training. Intentions featured the 3.2 gain, attitudes – 1.3 on average, and awareness – 1.6.

While Survey I targeted students in higher education, mostly acquiring social sciences, the Latvian population represented in Survey II was selected randomly. Nevertheless, the socio-demographic characteristics provided in the report allow distinguishing the relevant population group in the latter. The results could be more valuable if the sample was increased from 500 to 1000, reducing a margin of error from 4.5% to 3.0% in both surveys. The special GEM report used the results of Adult Population Survey conducted in 2008 – the data could have evidently modified by this time. GEM also employed the random sampling method.

These survey results do provide an overall picture of downsides of entrepreneurship education in Latvia, but do not provide information on concrete experiences across the existing 58 institutions, which presumably vary. For example, Riga Business School (RBS), an independent management education institution within Riga Technical University, is acknowledged as the good-practice example based on “Survey of Entrepreneurship in Higher Education in Europe” (European Commission, 2008). The primary emphasis in RBS is on the process of starting a venture; entrepreneurs meet with classes and share their experiences; Harvard Business School case studies are part of the course, etc., but its entrepreneurship programmes are for prospective MBA students. The survey report also states that “entrepreneurship is a totally new field in Latvia, and there is no word for entrepreneurship – there is so to speak a complete lack of culture in the field. This means that the framework conditions of entrepreneurship education in general are weak and making things happen and bringing this area forward is person-driven” (European Commission, 2008).

4. Discussion of results

The survey results clearly indicate on problem areas in the Latvian entrepreneurship education in terms of insufficient cooperation of universities and businesses, composition of study programmes, decreasing entrepreneurial activity among trained citizens, risk-averse and uncompetitive profiles, in other words, quality, applicability and returns of education. Some questions in the surveys cannot be directly applied to education. Nonetheless, taking into account the socio-demographic profile of respondents, they can be generalised to the discussed issues.

Notwithstanding the relatively high proportion of individuals trained in starting a business (28%, or 560 per 2001), while 39% of them underwent formal training at tertiary level, the overall entrepreneurial activity has experienced a considerable decrease from 18% in 2007 to 10% in 2009. On average, 21% of Latvians have entrepreneurial intentions, but only half of them actually start-up, which confirms the conclusion of Nabi and Linan (2011). The wide gap between intentions and start-ups proves that the former is not an appropriate indicator for measuring the impact of entrepreneurship education and corresponds with the research of Mwasalwiba (2010) suggesting the number of graduate start-ups as the highest ranked success indicator.

When assessing barriers to entrepreneurship, 33% (166 per 504) agreed that it was difficult to obtain sufficient information about the process of starting up. Thus, on one hand, there is a considerable quantity of trained individuals, but on the other – they are not sufficiently informed, and 45% of Latvian respondents never thought of starting a business at all. Other barriers included complex administrative procedures and lack of financial support overlapping with the most negatively valued entrepreneurship framework conditions identified in GEM Global Report (2010), as well as with Nabi and Linan (2011), who also acknowledged that economic and institutional frameworks are unfavourable to entrepreneurial activity.

Preferences of being self-employed or work for an employer are almost evenly divided in Latvia. However, over a half of respondents not considering self-employment feasible for various reasons, including lack of financing and current economic climate, mentioned lack of requisite skills and business ideas to become self-employed.

Among those individuals, who were thinking about starting-up, thought about it or gave up and were taking steps to start up (44%), two thirds regarded dissatisfaction with previous results as a vital factor to start up a business, while addressing an unmet social or ecological need remained in the “don’t know” area for 21% of respondents instead of being considered as an important innovation-led factor. This result signifies that entrepreneurship in Latvia is rather necessity- than opportunity-based and that social entrepreneurship has not developed yet.

Confirming the acknowledgments of Haase & Lautenschläger (2010), Johansen (2010), Sanchez (2010) that participation in specialised educational programmes increases the likelihood of becoming an entrepreneur, and such companies have a greater growth and innovation potential, Martinez et al (2010) employed “gain from training” in early stage entrepreneurial activity, which is a core measure of the relationship between training in starting a business and entrepreneurship introduced by GEM, at the level of 1.2 for Latvia and an average of 1.8 for 16 efficiency-driven economies included in the report. Most of innovation-driven economies feature higher gains, e.g. 2.1 in Japan, 2.4 in the UK and 4.3 in France, adding value to the MINES Paris Tech research (2011) described in section 1.

The entrepreneurial profile of Latvians deserves special attention. In general, Latvians were 13% and 11% less risky and competitive in comparison to the EU average (52% and 44%). Most of respondents considered themselves inventive (64%) and ready to change things they did not like (73%), but it was still 17% and 11% below the average. Self-assured and optimistic about their future, but in fear of going bankrupt (50%), risk of losing property (43%) and uncertainty of income (44%), when assessing the option to start up. Lack of competitiveness can be regarded as part of the local mentality, but it is one of the key drivers in terms of entrepreneurship and should be developed throughout training.

The literature review suggested that the major problem and challenge for universities at present is to establish closer contact between students and the business world. The survey results also show that respondents perceive possibility to undertake work placements in private enterprises integrated into a study programme as a necessity. They also think that one of the key aims of universities is to foster innovation and entrepreneurial mindset among students and staff, which is among the goals of entrepreneurship education, discussed earlier referring to Raposo and do Paco (2011), Kontio (2010), Lee et al. (2010) and other authors. Provision of tailor-made study programmes for enterprises to upgrade their workforce and involvement of enterprises into higher education management, curricula design and funding can be regarded as the means of facilitating the nexus of universities and work organizations. The whole section on cooperation of universities and businesses proves that the programmes have to focus more on experiencing entrepreneurship so that to enable participants with the demanded social practices as the Experiential Learning Theory suggests.

Communication and team working skills, “learning to learn” techniques, and life-long learning courses appeared to be demanded by young and adult Latvians. The skills and competences acquired through education should make them competitive in the labour market, enhance their personal development and develop a critical mind, amongst other requirements. In other words, the model described in Figure 1 of the first section can be very useful, if applied in Latvia – problem-based learning, cooperative work placements, curricular engagements, etc. Reiterating the first section, without the right mindset, awareness, motivation and attitudes, which are formed by soft skills, such as creativity, proactiveness, leadership, risk taking propensity – it is unfeasible to create a sustainable business.

Another key conclusion from the first section related to the explored results is that there are two types of entrepreneurship education “products”: entrepreneurs per se and/or entrepreneurial personalities. Referring to the authentic competence-based learning theory, an entrepreneurial personalities possess competences that can be learned and taught (motives and intentions, attributes, traits, knowledge and skill) and evolve over time (Nab et al., 2010; Sanchez, 2010; Higgins and Elliott, 2010). For this reason when measuring the impact

of entrepreneurship education it would be more valuable to consider both elements, not only the number of graduate start ups.

The lack of information and skills, small number of start-ups versus high proportion of individuals trained in starting a business, low level of cooperation between universities and businesses are the indicators of drawbacks of the current entrepreneurship education system. Furthermore, these results address both passive/formative learning and experiential/social learning and demonstrate there is an ample market for quality entrepreneurship education. Referring back to Higgins and Elliott (2010), Haase and Lautenschlager (2010), Lee et al. (2010) and other key authors, who contributed to the development of contemporary frameworks, practical results reflect the identified theoretical conclusions implying that the Latvian entrepreneurship education system should focus on education FOR entrepreneurship (Figure 2) and restructure its curriculum to meet the demand and the ongoing European practices.

These findings imply a number of other vital recommendations. The central one is to transfer the contemporary practice-based theoretical frameworks to Latvia. For instance, there are no or very few projects, gathering multidisciplinary teams and using problem-based learning. The task is not to copy the experience of TUAS or TWENTE, which is not possible due to economic differences, but to focus on experiential learning methodologies and to establish closer cooperation with businesses. This kind of project can become an example for further replications and can be introduced in the curriculum as a compulsory course as a beneficial outcome. It is quite evident, that Latvian HEIs do not have such broad technological capacities, as in the innovation-driven countries, however, the idea of venture labs and technological parks could be implemented in the mid-term perspective.

5. Conclusions, recommendations and directions for further research

The analysis of the modern practice-based approaches to entrepreneurship education revealed the major shift from passive/formal modes of learning and teaching towards experiential/social forms as the rationale underpinning the emergence, development and usefulness of such frameworks as: Education FOR Entrepreneurship and Experiential Learning Theory, Learning by Developing, Authentic Competence-Based Learning Theory, which are closely interrelated with each other, being conceptually similar, but contextually different.

The pedagogical methods related to these frameworks are of an interactive nature and targeted to develop multiple social dimensions, such as employability, intrapreneurship and venture creation. The principle of “learning by doing” is fundamental to these methods. As opposed to theoretical approach, which provides only book knowledge of management issues, holistic/dynamic approach targets a change in the individuals’ “know-how”.

Classified into problem-based learning and scholarly engagement comprising work-based learning, group work-based learning and curricular engagement, involving such techniques as behavioural simulations, business and investment games, job shadowing, internships and corporate placements, interdisciplinary work-based projects, start-up development, action research and fieldwork, business visits, these methods are acknowledged by the prominent experts in the field, e.g. Haase and Lautenschläger (2010), Higgins and Elliott (2010), Bridge et al. (2010), Lee et al. (2010), Kontio (2010), Nab, Pilot, Brinkkemper and Ten Berge (2010).

The literature review also revealed that entrepreneurship education has two simultaneous directions: to produce entrepreneurs per se (training real entrepreneurs) and entrepreneurial personalities (molding entrepreneurial individuals). If the first group tend to include nascent entrepreneurs, than the second – has the potential and require “know-why” techniques, or the stronger conviction to be instilled. At the same time, development of authentic entrepreneurial competencies is crucial for both groups. It is also worth to notice that the experiential learning framework does not deny teaching hard facts, per contra – it implies a combination of theory and practice meant by the learning authenticity.

The empirical evidence (Bridge et al., 2010; Higgins & Elliott, 2010) suggested that experiential knowledge is an incremental process that can evolve over time and that entrepreneurship is teachable (MINES ParisTech, 2011), although it is hard to measure. Measurement of educational impact should be focused not only on graduate start-ups, but also on ‘a degree of personal entrepreneurial development’ (Raposo & do Paco, 2011; Mwasalwiba, 2010).

Examination of Flash Eurobarometer survey results highlighted the problems mentioned in the European Commission reports – weak entrepreneurial environment and assessment of business programmes deficient in interdisciplinary approach; low level of entrepreneurial activity. It appeared that the lack of information and skills, small number of start-ups versus high proportion of individuals trained in starting a business, wide

gap between intentions and start-ups, low level of cooperation between universities and businesses, and decreasing entrepreneurial activity are other indicators of drawbacks of the current entrepreneurship education system, its quality, applicability and returns. This conclusion addresses both passive/formative learning and experiential/social learning and demonstrates there is an ample market for quality entrepreneurship education. Consequently, the discussed contemporary approaches are of a very high relevance for the Latvian entrepreneurship education.

The survey results do provide an overall picture of downsides of entrepreneurship education in Latvia, but do not provide information on concrete experiences across the existing 58 institutions, which most probably vary. Nevertheless, they allowed formulating general research-based recommendations.

The main problem and challenge for universities remains the establishment of closer long-term cooperation between students and the business world (Lee et. al, 2010). The survey results also indicated the importance of work placements in private enterprises integrated into business programmes, long-life learning courses, tailor-made study programmes for enterprises to upgrade their workforce, and involvement of enterprises into higher education management, curricula design and funding. The author concludes that the existing entrepreneurship curriculum should be refocused in line with the experiential learning rationale to meet the demand and Europe 2020 strategy.

National policy regulation and government programmes unfavourable to entrepreneurial activity were admitted as other barriers to entrepreneurship by the respondents and in the literature (GEM, 2010; Nabi and Linan, 2011). Hence, the Latvian Government, as a stakeholder possessing executive power, should address these issues in its policies, and as an option – to initiate and support establishment of the united entrepreneurship education system.

The introduced sample practical models applied in the Netherlands and Finland, having brought positive academic and practical outcomes, suggest that implementation of similar projects in Latvia could significantly benefit the local community. The idea of venture labs and technological parks as well as a university-based centre for entrepreneurship is an open opportunity that has not been explored yet.

Along with these conclusions, the conducted analysis requires further research. For instance, broader time scale of the literature review would deepen the theoretical outcomes allowing to identify interrelations of the newly-formed and preceding frameworks. Additional analysis of the influence of economic conditions could add value to the results. Deeper research across the Latvian universities involving analysis of actual provision of entrepreneurship programmes and methods applied at present could justify and clarify the required and beneficial improvements.

Transference of frameworks from innovation-driven countries as success examples is an adjacent part of further research, which should include a real-life project gathering multidisciplinary teams and using problem-based learning in the Latvian entrepreneurship conditions. That would allow including economic factors into the research and testing the idea of transference as such. The ideal outcome of this research would be an inclusion of real-life projects into curriculum of some or all Latvian universities offering entrepreneurship programmes.

Considering that the topic has not been well-researched in Latvia, the results can be useful for academics, practitioners, policy makers and other interested stakeholders.

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