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TOWARDS ENTREPRENEURIAL HIGHER EDUCATION INSTITUTIONS IN SOUTH EAST EUROPE AND TURKEY

SEECEL PILOT PROJECT FRAMEWORK FOR ENTREPRENEURIAL LEARNING IN NON-BUSINESS STUDIES

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South East European Centre
for Entrepreneurial Learning

TOWARDS ENTREPRENEURIAL HIGHER EDUCATION INSTITUTIONS IN SOUTH EAST EUROPE AND TURKEY

SEECEL Pilot Project Framework for Entrepreneurial Learning in Non-Business Studies

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SEECEL organisational profile

The South East European Centre for Entrepreneurial Learning (SEECEL) is a regional think tank for human capital development and lifelong entrepreneurial learning. SEECEL's mission is to work on the systematic development of lifelong entrepreneurial learning, on entrepreneurship as a key competence, and on the alignment of policies and practices with those of the EU by strengthening structural regional cooperation. SEECEL's vision is to build entrepreneurially literate societies by strengthening entrepreneur-friendly environments and entrepreneurial mind-sets that lead to sustainable economic growth and development.

SEECEL originated from the jointly expressed interest of eight countries of South East Europe and Turkey to work on the institutionalisation of regional dialogue and targeted cooperation in the area of lifelong entrepreneurial learning in line with EU policy essentials, particularly within the *Small Business Act for Europe* (SBA, under Principles 1 and 8).

SEECEL was established in 2009 in Zagreb, Croatia, at the initiative of eight pre-accession countries and with the support of the Government of the Republic of

Croatia, which took the lead in founding SEECEL with two co-founders: the Ministry of Entrepreneurship and Crafts and the Croatian Chamber of Economy. SEECEL enjoys the full support of all its member states: Albania, Bosnia and Herzegovina, Croatia, Kosovo*, the former Yugoslav Republic of Macedonia, Montenegro, Serbia and Turkey, and of the European Commission, in particular the Directorates-General for Neighbourhood and Enlargement Negotiations (DG NEAR), for Internal Market, Industry, Entrepreneurship and SMEs (DG GROW), and for Education and Culture (DG EAC). SEECEL is governed by an International Steering Committee composed of two representatives of each SEECEL member state — one from the ministry of education and one from the ministry in charge of the implementation of the SBA. This structure ensures policy dialogue between education and the economy, participation in institutional strategic development, as well as full ownership of the developments achieved.

Since entrepreneurship (and especially entrepreneurial learning) is a cross-cutting policy area, SEECEL cooperates with a range of relevant stakeholders, including the European Commission (in addition to DG NEAR, DG GROW and DG EAC, SEECEL cooperates with the Directorate-General for Regional and Urban Policy [DG REGIO], and the Directorate-General for Employment, Social Affairs and Inclusion [DG EMPL]), the European Training Foundation, the Organisation for Economic Co-operation and Development (OECD), and the Regional Cooperation Council (RCC).

SEECEL was the first institution derived from the implementation of the SBA. It shares its developments with all national and regional stakeholders, European and international institutions and agencies, EU Member States and other interested parties. Its methodology is based on the principles of evidence-based policy-making and the open method of coordination. SEECEL's operations are either an integral or complementary part of the following key policy documents: *Europe 2020 Strategy*, *Entrepreneurship 2020 Action Plan*, *South East Europe 2020 Strategy* (*SEE 2020 Strategy*), the *EU Strategy for the Danube Region*, and the *EU Strategy for the Adriatic and Ionian Region*. The ultimate aim of SEECEL's work is that every citizen should think and act entrepreneurially, thus leading towards better economic governance and stronger economic development and competitiveness.

SEECEL is funded by the European Union (through the Instrument for Pre-Accession Assistance's Multi-beneficiary Programme) and by the Croatian government. SEECEL member states also make financial contributions based on the solidarity principle.

SEECEL has achieved international recognition and received awards from the European Commission, the Knowledge Economy Network, the Regional Cooperation Council, the European Project Awards, and just recently 'Creators for Centuries'. SEECEL has also been recognised by the European Commission as the best practice for good conceptual solutions in the field of entrepreneurial learning and strategic regional cooperation. SEECEL's work is featured in numerous European Commission reports; SEECEL participates in high-level working groups on entrepreneurial learning in Europe.

Introduction

This publication presents the results of a series of piloting activities implemented by higher education institutions in South East Europe and Turkey to engage in entrepreneurial learning. The piloting activities were framed within a regional pilot project framework developed by the South East European Centre for Entrepreneurial Learning (SEECEL) and co-funded by the European Commission. The pilot project framework was itself part of a large-scale project for introducing and promoting entrepreneurial learning in primary, secondary and higher education in eight countries of South East Europe and Turkey.[1]

1 The project (which formed the basis for SEECEL's 2013–2016 work programme) is entitled *Developing the entrepreneurial society in Western Balkans and Turkey – support to the South East European Centre for Entrepreneurial Learning (SEECEL)*, and is financially supported by the European Union through the IPA Multi-beneficiary Programme (Grant Contract 2013/316-501), as well as co-funded by the Croatian Ministry of Entrepreneurship and Crafts.

The significance of the SEECEL pilot project framework for higher education is that it is the only structured initiative in the region for promoting entrepreneurial learning in higher education. The pilot project framework is also significant since its initial focus on promoting the development of entrepreneurial competences through teaching and learning paves the way for a broader (and more ambitious) long-term goal, which is fostering the development of entrepreneurial higher education institutions. As will be described in the publication, both entrepreneurial learning and the entrepreneurial higher education institution feature prominently in contemporary debates about the role of higher education in social and economic development. They are also increasingly emphasised as priorities in European Union policies. However, these policy issues have not yet become prominent issues on the higher education policy agenda in South East Europe and Turkey.

The SEECEL pilot project framework therefore provided a strategic, multi-country approach to introduce higher education institutions (and their students) to entrepreneurial learning, especially in non-business studies (including pre-service teacher training studies). The word 'piloting' is important in this context: the aim of the SEECEL pilot project was not to apply a 'one size fits all' solution to institutions. Rather, the project explored how to successfully engage with higher education institutions on such a new policy agenda, established whether 'buy-in' could be ensured by management of higher education institutions, and further explored what kind of activities would work best for pilot institutions to promote entrepreneurial learning, depending on the national and institutional context. The publication presents the range of piloting activities that were carried out by each partner higher education institution, as well as an assessment by the pilot institutions themselves on what future prospects exist for making entrepreneurial learning sustainable at each institution and in the region as a whole.

The structure of the publication is the following:

Part I provides an overview of how the role of higher education is increasingly framed (both through research and in policy) in terms of its social and (predominantly) economic impact, making the link to entrepreneurship increasingly relevant.

Part II details how the SEECEL pilot project framework emerged, what its objectives and main activities were and how it was operationalised.

Part III provides detailed information on the types of activities that took place and their related outcomes at the regional level. The chapter also includes feedback from pilot institutions on the future prospects for entrepreneurial learning in higher education.

Finally, Part IV provides a summary of the achieved results, an overview of some of the critical factors or obstacles to successfully promoting entrepreneurship/ entrepreneurial learning in higher education, and policy recommendations on possible next steps.

Acknowledgements

The SEECEL pilot project, of which this publication is a result, required the partnership, commitment and active participation of 15 higher education institutions from South East Europe and Turkey. In total, 49 staff members of the pilot institutions were directly involved as 'Entrepreneurial Learning Teams' in coordinating and implementing the pilot project activities. A large number of additional staff members and (most importantly) students were also directly involved in each pilot project. In total, 1120 students were directly involved in entrepreneurial learning activities (including 80 through the Entrepreneurial Learning Student Club), and as many as 2452 individuals were indirectly involved (as event/conference participants or recipients of promotional materials).

We would hereby like to thank the EL Coordinators from each institution for successfully leading and implementing their piloting activities and for their cooperation through the process. The institutions and the EL Coordinators were (listed alphabetically by country):

1. Agricultural University of Tirana, Faculty of Biotechnology and Food (Albania): Renata Kongoli, PhD, Dean
2. University of Tirana, Faculty of Natural Sciences (Albania): Klodian Xhanari, PhD, Lecturer
3. University of Banja Luka, University Entrepreneurship Centre (Bosnia and Herzegovina): Mario Milanović, Project Leader, Mentor; Milena Ljubičić, Project Coordinator, Trainer, Mentor
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01

Background – entrepreneurial higher education institutions

1.1.

KEY CONCEPTS AND GLOBAL TRENDS

Over the past decades, increased attention has been paid (both in research and policy) to the impact of higher education on economic and social development. Indeed, higher education institutions are increasingly under pressure by governments to provide evidence of their economic and social impact as part of a new culture of accountability in higher education (e.g. Rizvi & Lingard, 2009; Benneworth & Jongbloed, 2010). A range of interrelated terms is now used to refer to the new ways in which higher education institutions can achieve such an impact, including: 'the Triple Helix', 'innovation systems', 'knowledge transfer', 'Mode 2' approaches to research, 'knowledge triangle', 'university-business cooperation', 'the third mission' of universities, and 'the entrepreneurial university'. Since this publication focuses on the potential to develop entrepreneurial higher education institutions in South East Europe and Turkey, the following introductory section aims to provide a brief overview of relevant research on the role of higher education in responding to social and economic needs, and how some of the aforementioned terms and concepts are defined and relate to each other.

Higher education and human capital

It has become a global trend in national and trans-national education policies to frame education primarily in terms of its relationship to the economy, with an emphasis on its contribution to creating knowledge-based societies (e.g. Brown & Lauder, 2001; Bell & Stevenson 2006; Rizvi & Lingard, 2009). One of the main ways in which higher education is seen as contributing to economic development is through human capital development. According to human capital theory, which emerged in the 1960s (e.g. Schultz, 1960, who first coined the phrase; Denison, 1962; Becker, 1967), investment in education provision results in the formation of a workforce with the knowledge and skills necessary for industries that drive economic growth, thus ensuring a return on the investment in education. Higher education plays a particularly important role in this context, since the move from industrial to post-industrial (or knowledge-based) societies in a globalised economy has resulted in a radical shift in labour force needs, characterised by the increased need for a higher-skilled

workforce (Brown & Lauder, 2001). Increasing the proportion of the population with a university degree therefore became a policy priority for countries wishing to increase their economic competitiveness, thus resulting in massive increases in university enrolments in the past 50 years (and hence in the newly coined term of the 'massification' of higher education — Trow, 1974).

Higher education, innovation and the 'third mission'

Another way in which higher education is seen as playing an economic role relates to innovation. Since the 1980s, the pressure on higher education institutions to legitimate their cost to the tax-payer and to demonstrate wider economic impact led higher education institutions to take an active role in 'national innovation systems' (Zomer & Benneworth, 2011; Van Vught 2009). Research emerging at the time noted that the development, diffusion and use of innovation were the key to ensuring international competitiveness (Edquist, 1997, 14, as cited in Van Vught, 2009). Higher education institutions were identified as key players in fostering innovation, not only through research and development or engaging with industry, but through developing highly skilled human capital (Van Vught, ibid.). It is in this context that many of the interrelated concepts and terms mentioned in the introductory paragraphs emerged:

1. **The 'Mode 2' approach to research:** refers to the emergence of a new approach to knowledge production through scientific research that emphasises interdisciplinarity and the practical application of science to solve 'real-world' problems (Gibbons et al., 1996).
2. **The Triple Helix model:** a model outlining triangular cooperation between government, industry and the university in the production, transfer and application of knowledge (with an emphasis on technology), thus leading to innovation and economic development (Etzkowitz & Leydesdorff, 1995).
3. **Knowledge transfer:** effectively embedded in the previous two concepts, this term refers to the ways in which research results can be made available to a wider range of users (especially government and business) who can then further develop and exploit the knowledge to create new processes, products or services. Technology transfer is perhaps the most widely recognised and practised form of knowledge transfer.

In addition to being closely related to innovation, the terms above represent manifestations of a more general paradigm shift in the role of higher education in the twentieth century — namely, the development of a **'third mission'** of universities. According to this term, the two traditional core missions of universities (teaching and research) are supplemented by a third mission, which Etzkowitz and Leydesdorff (2000) define as the direct engagement of universities in addressing concrete economic and social problems (although with a stronger emphasis on the economic aspect), in particular in contributing to regional development through innovation.

Entrepreneurial universities: From 'third stream' to innovation

The concept of the entrepreneurial university certainly developed as a result of the trend of increased scrutiny by public authorities (and the public) of the economic efficiency and social impact of higher education. One of the earliest concepts of the entrepreneurial university was developed by Burton Clark (1998), who framed the term broadly to encompass a type of university that can strategically and effectively respond to opportunities and address challenges in an increasingly complex environment, i.e. a university that is able to transform and adapt to change, albeit with a primary focus on the economic aspects of the functioning of universities. In a further elaboration on the concept, Clark (2004) stated:

> Universities are entrepreneurial when they are unafraid to maximise the potential for commercialisation of their ideas and create value in society, and do not see this as a significant threat to academic values. Behind this lies recognition of the need for a diversified funding base involving raising a high percentage of their income from non-public sources. (p. 77)

This underlines an important aspect of the entrepreneurial university concept: it did not only develop due to external or 'top-down' demands for universities to become entrepreneurial and thereby better contribute to national development priorities. It was equally based in the more pragmatic need for universities to respond to lowering levels of public funding through ensuring so-called 'third stream income', meaning income other than from the state or from tuition fees (Zommer & Benneworth, 2011).

The concept of the entrepreneurial university, however, is perhaps more associated (in academic and public debates) with the role that universities play in innovation, in particular with the Triple Helix Model of university partnerships with business and government (HEInnovate, 2014). Indeed, according to Etzkowitz and Zhou (2008), 'the university's contribution to innovation in economic and social development is the heart of the entrepreneurial university concept' (p. 629). Brown (2016) describes how the development of such kinds of entrepreneurial universities started intensely during the 1990s, with universities developing a range of new initiatives and bodies such as technology transfer offices, science parks, incubator facilities, entrepreneurship education, venture capital funds, and business angel networks. However, while Brown (ibid.) acknowledges that the development of such universities can play an important role, he also presents a critique of the policy of encouraging all universities to develop such models and approaches (although his critique is focused on Scotland, it is relevant internationally):

> Universities play a crucial and highly complex role in enriching society that goes way beyond technology-transfer indicators, not least their crucial role in producing human capital and undertaking basic research. Therefore, attempting to turn universities into quasi-economic development agencies seems a highly reductionist policy objective. (p. 200)

Similar critiques regarding the narrow focus on measuring the economic impact of higher education have been echoed by a range of scholars, from a variety of different perspectives. Collini (2012) and Benneworth and Jongbloed (2010) note that such an approach marginalises disciplines such as the humanities, social sciences and the arts, which have a significant 'non-economic' social impact. Other scholars have also voiced criticism of the overall trend of 'academic capitalism' (in the context of the United States): Slaughter and Leslie (1997) warn that a focus on commercialisation and meeting short-term economic objectives at universities risk jeopardising other roles of the university (including the development of knowledge, equipping students with relevant competences or responding to social problems).

Entrepreneurial higher education institutions: Broader definitions

In this context, it is significant that more recent studies of the entrepreneurial higher education institution adopt a broader definition. First of all, the use of the term 'higher education institution' instead of university (e.g. in HEInnovate, 2014) already indicates a significant change, since the term 'university' effectively excludes professional higher education institutions (e.g. polytechnics or universities of applied sciences). Additionally, according to broader definitions, social/community engagement features more strongly (rather than only business cooperation and other links to the economy). Gibb (2013, as cited in HEInnovate, 2014) provides a definition of such an entrepreneurial higher education institution:

> Entrepreneurial higher education institutions are designed to empower staff and students to demonstrate enterprise, innovation and creativity in research, teaching and pursuit and use of knowledge across boundaries. They contribute effectively to the enhancement of learning in a societal environment characterised by high levels of uncertainty and complexity and they are dedicated to creating public value via a process of open engagement, mutual learning, discovery and exchange with all stakeholders in society — local, national and international. (p. 3)

In providing the term 'entrepreneurship' with such a broader definition, the concept of the entrepreneurial higher education institution described here effectively covers other similar concepts such as the 'engaged university' (Benneworth [Ed.], 2013), which focuses on community engagement (including engagement with socially excluded communities) and a commitment to transform the lives of its citizens, communities, industry, business, and the civil and voluntary services.

In developing a guidance framework for the entrepreneurial higher education institution (OECD, 2012), the European Commission and the OECD appear to be aiming for such a broader definition. As will be presented in greater detail in Part II, the emphasis of the guidance framework (and of its subsequent tool: HEInnovate) is on an institution that is adaptable and responsive to the changing needs of society, and to the multiplicity of demands by various stakeholders (both internal to the institution and external), and that

actively works on developing an entrepreneurial mind-set among its staff and students.

Finally, the South East European Centre for Entrepreneurial Learning (SEECEL) is one of the first institutions in Europe to adopt an strategic and coordinated approach to promoting the development of entrepreneurial higher education institutions, offering an valuable and innovative perspective to complement those previously discussed. In its framework for promoting entrepreneurial learning in higher education in South East Europe and Turkey (SEECEL, 2011), SEECEL placed an emphasis both on developing the entrepreneurial university in the classic sense, as well as on developing the 'entrepreneurial student' in non-business studies and in teacher training programmes. The SEECEL framework (discussed in more detail in Part II) provides a comprehensive set of learning outcomes for applying entrepreneurial learning to such study programmes, thus emphasising the broader relevance of entrepreneurship in higher education, i.e. to equip all young people with the key competence of entrepreneurship and thereby contribute to strengthening their employability.

1.2.

EU POLICY FRAMEWORK

European Union policies have closely mirrored the main trends described in the previous section with regard to the role of higher education in economic growth in the context of the knowledge-based economy, as well as in better responding to social needs in other spheres. Additionally, a growing emphasis has been placed in the last decade on entrepreneurial learning at all levels of education and on fostering entrepreneurial higher education institutions.

Higher education's role in human capital development and innovation

One of the main objectives in the *Europe 2020 Strategy* (European Commission, 2010), which aims at achieving 'smart, sustainable and inclusive growth', is to improve human capital development in the European Union by increasing the level of educational attainment, with a focus on producing a higher-skilled labour force. The goal of the Strategy is to increase the share of generation (30–34 years) who have completed higher education to at least 40% by 2020, and to prevent early school leaving. Furthermore, the *Europe 2020 Strategy* suggests the following priorities in the field of education through some of its Flagship Initiatives:

- **Innovation Union:** Better linking education, entrepreneurship, research and innovation, in particular in order to bridge the gap between research and the market;
- **Youth on the Move:** Improving the efficiency of higher education; increasing the quality of education (with the encouragement of excellence and equity) and mobility in higher education;
- **Plan to acquire new skills and job creation:** Facilitating lifelong learning, especially for groups with lower levels of education; enabling flexible learning paths, particularly between different sectors of education and training; strengthening the attractiveness of vocational education;
- **European platform against poverty:** Developing programmes for equal opportunities in education, training and the labour market for vulnerable and socially disadvantaged social groups.

In short, the *Europe 2020 Strategy* recognises the crucial role of higher education for ensuring a faster recovery from the economic crisis, for increasing employability and for fostering social inclusion.

The EU's *Modernisation Agenda for Higher Education* (European Commission, 2011) further elaborates the importance of higher education for human capital development and innovation:

> […] education, and in particular higher education and its links with research and innovation, plays a crucial role in individual and societal advancement, and in providing the highly skilled human capital and the articulate citizens that Europe needs to create jobs, economic growth and prosperity. Higher education institutions are thus crucial partners in delivering the European Union's strategy to drive forward and maintain growth. (p. 2)

More specifically, the *Modernisation Agenda* highlights not only the need to increase the quantity of higher education graduates at all levels, but also 'to enhance the quality and relevance of human capital development in higher education,' as well as 'to strengthen the knowledge triangle between education, research and business' (p. 3). With regard to the knowledge triangle, the following key policy issues are to be addressed at the EU and Member State level:

- Stimulate the development of entrepreneurial, creative and innovation skills in all disciplines and in all three cycles;
- Promote innovation in higher education through more interactive learning environments and strengthened knowledge-transfer infrastructure;
- Strengthen the knowledge-transfer infrastructure of higher education institutions and enhance their capacity to engage in start-ups and spin-offs;
- Encourage partnership and cooperation with business as a core activity of higher education institutions;
- Promote the systematic involvement of higher education institutions in the development of integrated local and regional development plans. (p. 4)

Entrepreneurial learning at all levels of education

The emphasis on the importance of strengthening entrepreneurial competences at all levels of education (including higher education) has also been reflected in the EU's policy framework for education and training in the last decade. In 2006, 'a sense of initiative and entrepreneurship' became one of the eight key competences for lifelong learning defined by the European Parliament and Council of the European Union as the set of knowledge, skills and attitudes that are fundamental for each individual in a knowledge-based society and that should be acquired at the end of compulsory education and through lifelong learning. Since then, entrepreneurial learning has featured among the priorities of the EU's strategic framework for European cooperation in education and training, *ET 2020* (Council of the European Union, 2009), *Rethinking Education: Investing in skills for*

better socio-economic outcomes (European Commission, 2012), *Council conclusions on entrepreneurship in education and training* (Council of the European Union, 2015) and the European Parliament resolution of 8 September 2015 on *Promoting youth entrepreneurship through education and training* (European Parliament, 2015).

The importance of developing entrepreneurial competences through education has been equally emphasised within the EU's policy framework for entrepreneurship and small and medium-sized enterprise (SME) development. Within the *Small Business Act for Europe (SBA)* (European Commission, 2008), entrepreneurial learning is defined as a key success factor for achieving the first SBA Principle of 'creating an environment within which entrepreneurs and family businesses can thrive and entrepreneurship is rewarded,' and the main measure planned for 'stimulating innovative and entrepreneurial mind-sets among young people' is to ensure entrepreneurship education at all levels of education. The *Entrepreneurship 2020 Action Plan* also places entrepreneurial learning in the first of its three areas for immediate intervention ('entrepreneurial education and training to support growth and business creation') and refers to 'dynamising the culture of entrepreneurship in Europe by nurturing a new generation of entrepreneurs' (European Commission, 2013). The *Entrepreneurship 2020 Action Plan* sets the objective that all EU Member States should ensure that everyone completing compulsory education must have been given the opportunity to participate in at least one practical entrepreneurial experience (such as working in training firms, or implementing a business-related or social project).

In the latest development in this area, an *Entrepreneurship Competence Framework* (European Commission, 2016) has been developed with the aim to establish a bridge between education and work and to be used as a reference by any initiative aiming to foster entrepreneurial learning.

The entrepreneurial and innovative higher education institution

In addition to promoting entrepreneurial learning, the *Entrepreneurship 2020 Action Plan* specifically states that 'universities should become more entrepreneurial.' The Plan acted as a basis for developing a framework for encouraging the development of entrepreneurial higher education institutions through the use of an 'entrepreneurial university guidance framework', which eventually became the self-assessment tool entitled HEInnovate (www.heinnovate.eu).

The rationale for HEInnovate echoes the initial point made in this chapter: that 'higher education institutions are being judged by the ways in which they respond to the social and economic needs of society' (HEInnovate, 2014, p. 2), and they are expected to show results and demonstrate impact. Overall, the tool predominantly emphasises the economic role of higher education institutions: their role in human capital development (through entrepreneurial learning), fostering innovation (through knowledge/technology transfer; links with businesses), and supporting entrepreneurship at/through the higher education institution (by students and staff). However, an interesting facet of the tool is that it strongly

emphasises that the entrepreneurial higher education institution is more than a response to economic imperatives. Indeed, much of the rationale for the tool as elaborated in its background paper (ibid.) presents the entrepreneurial higher education institution as a much broader endeavour: an endeavour to effectively provide a new conceptual and organisation model for managing higher education institutions in a context of increasing complexity due to multiple institutional missions and multiple stakeholders (both within and outside the institution) at national, regional and global level:

> The complexity of our world is constantly adding new challenges for higher education institutions. […] Some scholars call for a "deep, radical and urgent transformation" (Barber et al., 2013), questioning in particular the relevance of traditional conceptual and organisational models of higher education institutions. […] Within complex organisations and their networked environments, entrepreneurship as a process can promote change and development through enhancing the capacity to recognise and act upon new opportunities. (ibid., p. 2)

So in the same way that the key competence of entrepreneurship effectively redefines the term entrepreneurship as 'turning ideas into action' (rather than being confined to business-launching, with for-profit connotations), the HEInnovate tool embraces entrepreneurship as an *approach* to institutional management and to development. The tool further emphasises this new framing of entrepreneurship as also giving priority to *social* engagement, rather than simply business engagement:

> Much of the academic and wider public debate on the notion of the engaged higher education institution has focused on the Triple Helix Model of triangular partnerships with business and government […][This has] partly neglected the humanities departments on the assumption that these lie outside of the entrepreneurship paradigm, despite the growing practice of many departments and their students being highly engaged with external stakeholders. (p. 9)

In short, HEInnovate acts as a tool that blends the European Commission's emphasis on the economic role of higher education through human capital development, innovation and entrepreneurship with its emphasis on higher education to better respond to broader social needs, including fostering equity and social cohesion.

02

SEECEL pilot project framework for entrepreneurial learning in higher education

The South East European Centre for Entrepreneurial Learning (SEECEL) was established in order to support the efforts of the economies of South East Europe and Turkey to introduce entrepreneurial learning as a key competence into their education systems. With the full support of relevant ministries, SEECEL works directly with practitioners at schools and higher education institutions to embed entrepreneurial learning into their teaching practices and to foster the development of entrepreneurial educational institutions.

At the level of higher education, acknowledging the increased emphasis in EU policy documents on the role of higher education in human capital development, entrepreneurship and innovation (as described earlier in this section), SEECEL decided to take action to kick-start the development of entrepreneurial higher education institutions in the region of South East Europe and Turkey. SEECEL developed a framework that allowed higher education institutions throughout the region to develop and implement their own piloting activities towards building entrepreneurial higher education institutions.[2]

2 See Introduction, Note 1, for more information on the project.

2.1.

HIGHER EDUCATION CONTEXT IN SOUTH EAST EUROPE AND TURKEY

Before describing the SEECEL pilot project framework, it is helpful to provide a summary overview of the current state of play of entrepreneurial learning and university-business cooperation in the region. A recent and comparative source of data in this area is the 2016 *SME Policy Index: Western Balkans and Turkey*, which includes an assessment of whether entrepreneurship is promoted in a 'cross campus' way, whether there are good university-business cooperation developments, and whether any initiatives are in place with regard to sharing good practice in this area.

The findings for the region demonstrate that, while there are pockets of good practice in some areas, there is currently a weak link between entrepreneurship (including entrepreneurial learning) and higher education institutions. With the exception of the former Yugoslav Republic of Macedonia, there was little evidence in any country that (at a system level, or at least in several institutions) entrepreneurship courses are provided across faculties and departments, or that entrepreneurship is incorporated as a key competence in existing courses. The university-business cooperation was a better performing area, although it is questionable whether the quality and quantity of such cooperation is sufficient: most examples of such cooperation focused on student work placements (which are compulsory in most countries as a part of the Bologna Process) and career fairs, rather than other areas. Also, , it is difficult to assess how many higher education institutions in each country have cooperation agreements with businesses, because there are no formal monitoring arrangements in place.

Despite a generally weak performance, there are several examples of good practice in the region that could provide inspiration for further developments. For example, Turkey has launched an Entrepreneurial and Innovative Universities Index to benchmark the performance of universities in areas such as commercialisation, entrepreneurship and innovation. The former Yugoslav Republic of Macedonia is the only economy with a National Entrepreneurship Educators' Network which exchanges good practice between educators both in higher education and at earlier levels of education.

A clear conclusion from the *SME Policy Index* is that more efforts are needed to promote both entrepreneurial learning (as a key competence) in higher education and to promote the development of entrepreneurial higher education institutions. The *SME Policy Index* recommends to hold national seminars involving education and economy ministries, business representatives and the higher education community (e.g. rectors' conference) in order to discuss how higher education could better contribute to each country's SBA objectives. Another recommendation is that higher education institutions should make use of the European Commission's tool to assess institutional capacity in entrepreneurship promotion: HEInnovate.

SEECEL chose to address these needs using its own framework, using institution-based piloting activities to promote entrepreneurial learning and, in parallel, to foster the development of entrepreneurial higher education institutions.

2.2.

THE SEECEL PILOT PROJECT FRAMEWORK

Objectives of the framework

The specific objective of the pilot project framework was to incorporate entrepreneurial learning into existing study programmes and/or develop awareness of and aspirations for entrepreneurship among students in partner higher education institutions.

The first crucial aspect of the framework is that it focused on entrepreneurial learning, or more specifically on the **key competence of entrepreneurship**. By focusing on the development of relevant knowledge, skills and attitudes among students (and teaching staff), the assumption of SEECEL's approach is that all students who complete higher education should acquire the set of eight key competences that will equip them to live more productive and fulfilled lives and careers (including entrepreneurship).[3] In this sense, entrepreneurial learning is not to be perceived as an optional 'add-on' to the existing teaching and learning activities of higher education institutions; it should be an integral part of the learning outcomes of all study programmes and courses.

Another crucial aspect of the framework is that it focused on higher education institutions and/or study programmes **outside the academic disciplines of business or engineering studies — focusing on natural sciences, education and humanities and social sciences instead. SEECEL also places specific emphasis on developing entrepreneurial learning within pre-service teacher training programmes — since such study programmes form the teachers who will be responsible for equipping school students with the key competence of entrepreneurship**. By focusing on this group of higher education institutions, SEECEL wished to underline the fact that entrepreneurship and entrepreneurial learning have a significance that go far

3 The eight key competences defined at the EU level (European Parliament and Council of the European Union, 2006) are the following: (1) communication in the mother tongue; (2) communication in foreign languages; (3) mathematical competence and basic competences in science and technology; (4) digital competence; (5) learning to learn; (6) social and civic competences; (7) sense of initiative and entrepreneurship; and (8) cultural awareness and expression.

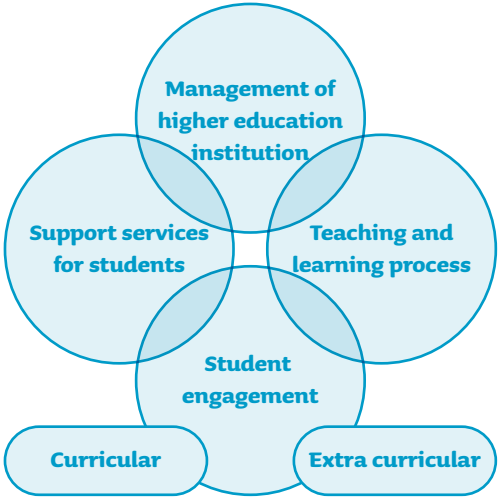
beyond business and innovation, and that developing an entrepreneurial mind-set can be equally applicable to (and feasible in) all academic disciplines.

The initial SEECEL pilot project framework was developed in 2011 and piloted among 16 higher education institutions in South East Europe and Turkey in 2011/2012, the results of which are collected in a separate SEECEL publication (SEECEL, 2011). The latest piloting framework is based on the results and lessons learnt from the previous piloting cycle.

Structure and core activities of the pilot project framework

SEECEL structured the pilot project framework on the following pillars:

Figure 1: Structure of SEECEL pilot project framework



In terms of **institutional management**, SEECEL acknowledged that entrepreneurial learning would not be able to take root in higher education without the full support and 'buy-in' of rectors, deans and/or heads of departments. For this reason, the institutions' piloting activities aimed to engage — where possible — decision-makers to support the project and to provide concrete commitments to further supporting the entrepreneurial learning agenda after the end of the piloting.

Teaching and learning was obviously the focal point of each of the piloting activities of partner institutions, since the objective of SEECEL's pilot project framework was to incorporate entrepreneurial learning into all study programmes. However, the approach taken by SEECEL was both flexible and cautious: full respect was given to the autonomy of higher education institutions with regard to their curricula; equal respect was given to the fact that even small curricular changes could be subject to lengthy formal or administrative procedures, and might not be possible to achieve in a short time frame. For this reason, the SEECEL pilot project framework allowed for teaching and learning activities to take place either as curricular or extracurricular activities.

Support services for students were also included in the framework since a number of higher education institutions have institutional structures in place that can directly address student needs with regard to entrepreneurship or the labour market, generally. Such structures include career advice centres, entrepreneurship/start-up centres, incubators, etc.

The pilot project framework encouraged the use (or development) of such structures to contribute to entrepreneurial learning.

Finally, students are of course at the centre of the whole process. In this case, we think of **student engagement** as providing students with entrepreneurial learning within their study programme, through extracurricular activities such as workshops, lectures and business plan competitions, as well as through their inclusion in an Entrepreneurial Learning Student Club (ELSC). This initiative was launched by SEECEL to engage students more directly in the project, by encouraging them to provide articles, essays and self-reflections for a bi-annual ELSC newsletter and to virtually network and exchange experiences.

Support for the framework: SEECEL entrepreneurial learning instrument

The pilot project framework was supported by a tool previously developed and piloted by SEECEL: *Entrepreneurial Learning: A Key Competence Approach – ISCED Level 5/6* (SEECEL, 2011). Developed by a working group of national and international experts, this 'entrepreneurial learning instrument' formed part of a series of similar tools developed for entrepreneurial learning (using the key competence approach) for educational levels from primary and secondary education (ISCED levels 1, 2 and 3) to higher education (ISCED levels 5/6). Known as the SEECEL entrepreneurial earning instrument, it comprises detailed learning outcomes (defined in terms of knowledge, skills and attitudes) and corresponding teaching and assessment practices.

The unique feature of the SEECEL entrepreneurial earning instrument is that it approaches entrepreneurial learning in a holistic way, encompassing not only changes in the curriculum and in teaching, learning and assessment practices, but also changes with regard to teacher training and to educational institution management. The entrepreneurial learning packages for each level of education thereby include guidelines for teacher training, whereby in-service teacher training is covered in the primary- and secondary-level SEECEL packages (ISCED 1–3), while pre-service teacher training is included in the higher education-level SEECEL package (ISCED 5/6). The packages also include detailed guidelines for the management of the entrepreneurial school/higher education institution.

As mentioned above, the SEECEL package for entrepreneurial learning in higher education follows the same structure as the packages for ISCED levels 1, 2 and 3 — focusing both on the teaching and learning process (defining learning outcomes and proposing teaching and assessment practices), and then on management of the entrepreneurial higher education institution (defining three different models of such an institution). The instrument is designed specifically for entrepreneurial learning in non-business studies and in pre-service teacher training programmes, and differentiates between study programme-level learning outcomes and module-level learning outcomes. Recognising that not every student should be expected to be interested in starting their business, but that every student should develop an entrepreneurial mind-set and

be entrepreneurially literate, the package proposes three different modules for entrepreneurial learning (which are sequential and progressive, from a basic module to a more advanced one):

- **Entrepreneurial Culture:** a module for raising awareness about entrepreneurship
- **Entrepreneurial Process:** a module for hands-on basic project and management skills
- **Entrepreneurship in Practice:** a module for hands-on business planning and firm creation

Students can elect to take the form of entrepreneurial learning that best meets their needs.

Overall, the approach to entrepreneurial learning used in the SEECEL instrument is about developing life skills competences through a modern, **student-centred and competence-based** approach to teaching and learning**.** Such an approach focuses on learners acquiring pre-defined knowledge, skills and attitudes, with a strong focus on changing *attitudes* towards an entrepreneurial mind-set, which relates most of all to acquiring sufficient self-confidence towards innovative/creative problem-solving and turning ideas into action.. Using active, collaborative and induced learning, the teacher/lecturer is placed in the role of facilitator rather than instructor, facilitating the learning of individuals rather than the entire class. The instrument also emphasises learning activities outside the classroom, case studies, and practical entrepreneurial experience making necessary connections with the world of work. 'Peer mentoring' between students is also encouraged as an innovative approach.

The pilot project approach: Realistic short-term objectives; ambitious long-term goals

The approach used in the current pilot project framework acknowledges that building support for entrepreneurial learning is a gradual (and slow) process, especially in a region in which entrepreneurial learning has not reached the higher education policy agenda. Adding to this, the pilot project framework has both a limited time frame (one academic year) and even more limited financial possibilities (modest budgets to cover mainly event-related costs). In such a context, the main priority of the SEECEL pilot project framework was to ensure that each pilot institution organised targeted entrepreneurial learning activities, with the expectation that this process would raise awareness among management, teaching staff and students about the significance and value of entrepreneurial learning. Additionally, the priority was to encourage pilot institutions to undertake efforts to institutionalise entrepreneurial learning (through course syllabi or other structures), which in turn makes a contribution to the development of entrepreneurial higher education institutions.

The claim that a small-scale intervention can lead to a more ambitious long-term goal of institutional change is supported by research from Rae et al. (as cited in Benneworth and Osborne, 2015), which argues that one of the success factors in building an entrepreneurial culture within a higher education institution is the existence of 'entrepreneurial learning teams'. According to their definition, an entrepreneurial learning team is a group of people within a higher education institution that join together based on a shared enthusiasm

for entrepreneurial approaches/activities within the institution in order to try and apply this to their teaching and learning. Commenting on this research, Benneworth and Osborne (2015) note that

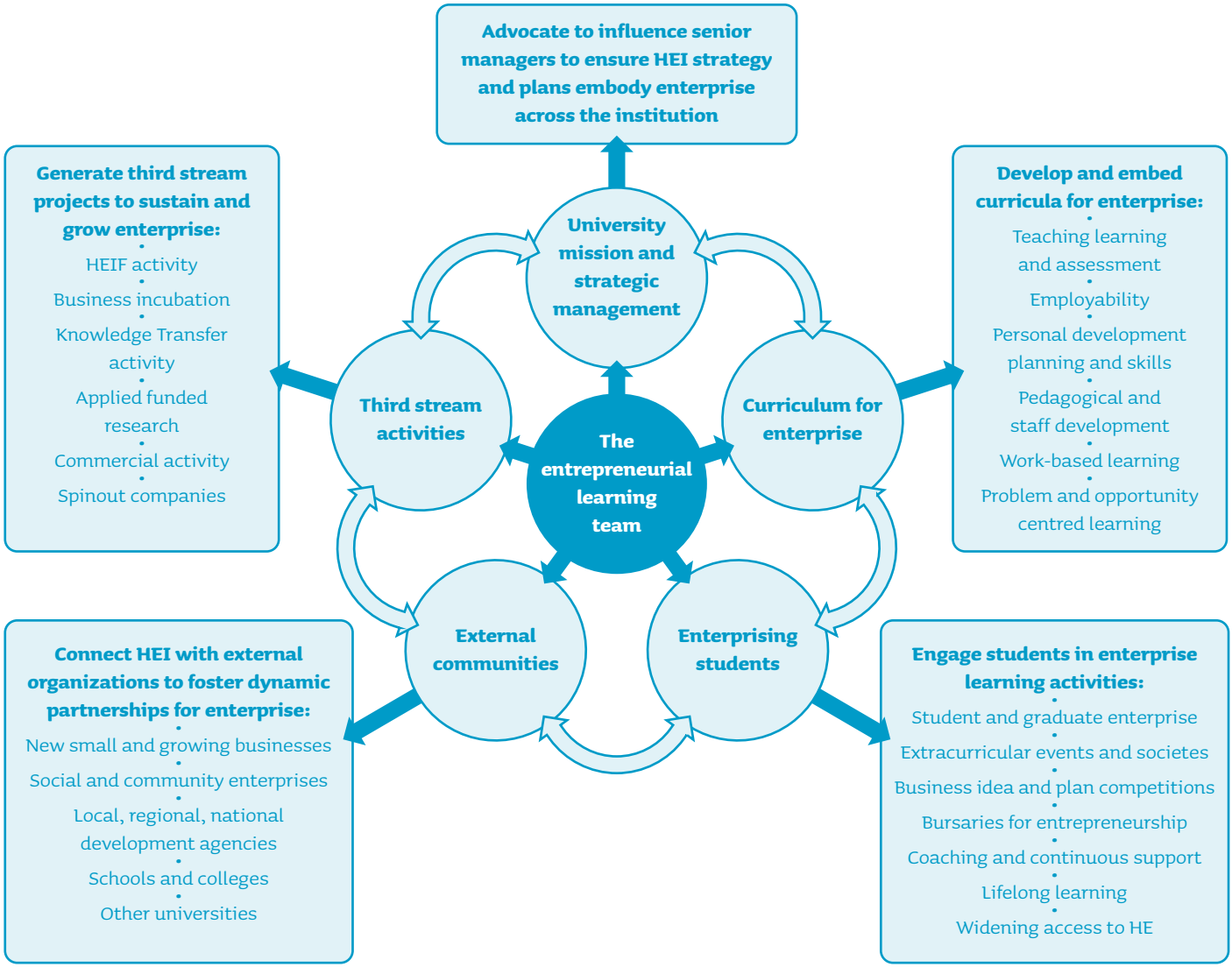
> [The entrepreneurial learning teams'] experiments in creating core university value from experimental entrepreneurship activities may have a demonstrative value that is able to influence other spheres of the university, its mission, the curriculum, students, external communities and third stream activities. Part of the success of this depends on the extent to which the team is able to build connections between the various participants, and create shared resources that at the same time are valued by other university constituencies who are changing what they are doing to be in part more entrepreneurial. (p. 15)

In other words, entrepreneurial learning teams can become agents of change, ultimately helping the higher education institution as a whole to become more entrepreneurial. Figure 2 provides a detailed illustration of the key areas with which entrepreneurial learning teams can interact to successfully achieve such change.

By forming Entrepreneurial Learning Teams at each pilot institution, which will begin the process of interacting with other stakeholders within the university and implementing some of the activities listed in Figure 2, the SEECEL pilot project framework provides a stepping stone for the development of entrepreneurial higher education institutions in South East Europe and Turkey.

The next section will provide more information on the higher education institutions that participated in the pilot project framework and on the operational arrangements for the definition, implementation and evaluation of the partner institutions' piloting activities.

Figure 2: Five key areas of interaction for entrepreneurial learning teams at higher education institutions



Source: Rae et al. (in Benneworth and Osborne, 2015)

2.3.

PILOT INSTITUTIONS

Selection of institutions

The first preparatory activity of the pilot project framework was the selection of pilot institutions. Each SEECEL member state had to select at least two higher education institutions to participate in piloting entrepreneurial learning. The pilot institutions were nominated as a result of close cooperation between ministries of economy/entrepreneurship and education of the SEECEL member states (since they are also members of SEECEL's Steering Committee). A total of 15 higher education institutions actively participated in piloting entrepreneurial learning.

Profile of nominated institutions

The SEECEL pilot project framework focused on higher education institutions and/or study programmes outside the academic disciplines of business or engineering studies. Table 1 provides a list of all nominated higher education institutions.

Table 1 shows that the participating institutions can be grouped as follows:

- **Teacher training:** four pilot institutions are teacher training institutions and/or institutions in the area of natural sciences that provide both teacher training degrees and academic (research-oriented) degrees (Faculty of Education, Bitola; Faculty of Science and Education, Mostar; Hasan Ali Yücel Faculty of Education, Istanbul; Faculty of Natural Sciences, Tirana).
- **Non-business/non-engineering studies:** eight pilot institutions cover a range of academic disciplines including three in the **natural sciences** (Faculty of Natural Sciences and Mathematics — in Sarajevo and Skopje; Faculty of Food Technology, Food Safety and Ecology, Podgorica; Faculty of Biotechnology and Food, Tirana); two in the **humanities and social sciences** (Faculty of Philosophy, Nikšić; Faculty of Humanities and Social Sciences, Split), and one in **sports science** (Faculty of Kinesiology, Split). While two institutions implemented their activities through business departments (University of Tuzla; Hacettepe University, Ankara), the target groups of activities were students from a range of non-business studies. While most of these institutions also provide teacher

Table 1: *List of higher education institutions nominated to participate in SEECEL pilot project for entrepreneurial learning*

	COUNTRY	NAME OF INSTITUTION
1.	ALB	Agricultural University of Tirana, Faculty of Biotechnology and Food
2.	ALB	University of Tirana, Faculty of Natural Sciences
3.	BIH	University of Banja Luka, University Entrepreneurship Centre
4.	BIH	University of Mostar, Faculty of Science and Education
5.	BIH	University of Sarajevo, Faculty of Natural Sciences and Mathematics
6.	BIH	University of Tuzla
7.	HRV	University of Split, Faculty of Humanities and Social Sciences
8.	HRV	University of Split, Faculty of Kinesiology
9.	MKD	Ss. Cyril and Methodius University in Skopje, Faculty of Natural Sciences and Mathematics
10.	MKD	University St. Kliment Ohridski in Bitola, Faculty of Education
11.	MNE	University of Donja Gorica, Faculty of Food Technology, Food Safety and Ecology
12.	MNE	University of Montenegro, Faculty of Philosophy
13.	SRB	Business Technology Incubator of Technical Faculties, Belgrade
14.	TUR	Hacettepe University, Department of Business Administration
15.	TUR	Istanbul University, Hasan Ali Yücel Faculty of Education

training degrees, the piloting activities were not specifically targeted only at that group.

- **Entrepreneurship support structures:** finally, the pilot project framework also included two institutions that are part of (or affiliated to) higher education institutions and provide support to potential entrepreneurs and to all those who wish to develop entrepreneurial and employability skills (Business Technology Incubator of Technical Faculties, Belgrade; University of Banja Luka Entrepreneurship Centre).

The SEECEL pilot project framework intentionally placed an emphasis on teacher training study programmes. Namely, future teachers will be directly responsible for developing the entrepreneurship competence among pupils in primary and/or secondary education. In order for them to confidently incorporate entrepreneurial learning into their classrooms, they will need to develop the entrepreneurship competence as part of their pre-service teacher training in higher education.

Operationalising the pilot project framework

The implementation of the pilot project framework developed in the following stages:

Table 2: *Stages of implementation of the SEECEL pilot project framework*

Kick-off meeting and training	An initial meeting was held for all pilot institutions before the start of the pilot project to present the project, clarify the concept of entrepreneurial learning and introduce the SEECEL entrepreneurial learning instrument for ISCED 5/6 institutions.
Cooperation agreements	Cooperation agreements were signed between SEECEL and each pilot institution defining each other's obligations in terms of (support to) the implementation of piloting activities. The cooperation agreements included defining each pilot institution's Entrepreneurial Learning Teams (EL Teams) — clarifying responsibilities for the development and implementation of piloting activities by each institution.
Action plans and budgets	Each pilot institution was requested to develop its own action plan for piloting activities. Budgets for implementing project activities had to be specified in detail and were covered through the SEECEL pilot project.
SEECEL 'Task Box' management tool	To facilitate the piloting process, SEECEL developed a special project management and communication tool on its web site entitled 'Community of Practice', consisting of a forum for communication among pilot institutions and a 'Task Box', an individualised page listing piloting activities and where expected deliverables were uploaded by each pilot institution (agreements, reports, articles, photographs, etc.).
Reporting and evaluation	Each pilot institution was requested to submit a narrative and financial report on the implementation of their piloting activities (both a mid-term and final report were requested). In addition, pilot institutions were requested to complete evaluation forms regarding the success of their piloting initiatives.
SEECEL support and monitoring	Finally, SEECEL staff were in continuous contact with each pilot institution to provide support with regard to activity planning and implementation. Where and when possible, SEECEL staff travelled to pilot institutions to hold progress meetings (meetings were held with eight out of the 15 institutions).

In line with the flexible approach adopted by SEECEL, pilot institutions were requested to develop action plans based on their own interpretation of how entrepreneurship would best be defined (or would best fit) within their institutions, as well as based on what activities would be realistic to implement with existing capacities. The core activities could therefore include, for example:

- Incorporating learning outcomes into existing courses
- Institutional plans for developing entrepreneurship within study programmes
- Guest lectures and workshops for students
- Study visits to businesses, social enterprises or other relevant institutions
- Business idea/business plan competitions
- Setting up cooperation agreements with businesses or other stakeholders

Nevertheless, and also in line with the pilot project framework developed by SEECEL, each pilot institution was encouraged to include at least the following piloting activities:

- **Institutional commitment:** each pilot institution was requested to evidence that its management

agrees for entrepreneurial learning to be integrated into the institution's core activities or work programme.

- **Entrepreneurial Learning Student Club (ELSC):** each institution was requested to nominate at least ten students and their mentor for active participation in the Entrepreneurial Learning Student Club, structured around writing student articles for the ELSC newsletter, as well as participation in an online ELSC Forum.

SEECEL therefore avoided using a 'top-down' or 'one size fits all' approach, instead providing pilot institutions with helpful tools to define their own needs, activities and methods. Part III will provide an overview of the results of piloting by SEECEL higher education institutions, focusing on the main types of activities implemented, their outputs and feedback/evaluations of institutions regarding the success and sustainability of the piloting.

SEECEL piloting results

Table 3 provides a summary overview of the different types of activities carried out by each of the 15 higher education institutions participating in the SEECEL pilot project framework. A wealth of different approaches was used, with most institutions incorporating at least four different types of activities. The following section will provide a more detailed overview of specific piloting activities, including illustrative examples.

Table 3: *Number and types of piloting activities implemented by participating higher education institutions*

		EL THROUGH EXISTING COURSES	NEW EL COURSE	STUDY VISITS	RAISING AWARENESS	SKILLS DEVELOPMENT	BUSINESS PLAN COMPETITION	STUDENT ARTICLES	CONFERENCES/ ROUND TABLES	OTHER ACTIVITIES	NUMBER OF ACTIVITIES
1.	Faculty of Biotechnology and Food, Tirana (ALB)		×		×	×		×	×	×	6
2.	Faculty of Natural Sciences, Tirana (ALB)			×	×					×	3
3.	University of Banja Luka (BIH)				×	×	×	×	×		5
4.	Faculty of Science and Education, Mostar (BIH)	×		×		×		×			4
5.	Faculty of Natural Science and Mathematics, Sarajevo (BIH)				×			×			2
6.	University of Tuzla (BIH)			×	×		×	×	×		5
7.	Faculty of Humanities and Social Sciences, Split (HRV)	×				×	×	×			4
8.	Faculty of Kinesiology, Split (HRV)				×	×	×	×	×		5
9.	Faculty of Natural Sciences, Skopje (MKD)		×		×			×	×	×	5
10.	Faculty of Education, Bitola (MKD)	×	×	×	×			×			5
11.	University of Donja Gorica (MNE)		×			×	×	×			4
12.	Faculty of Philosophy, Nikšić (MNE)	×		×				×			3
13.	Business Technology Incubator of Technical Faculties, Belgrade (SRB)				×	×		×			3
14.	Department of Business Administration, Hacettepe University (TUR)	×		×	×			×			4
15.	Faculty of Education, Istanbul (TUR)	×				×		×			3
	TOTAL	6	4	6	10	8	5	14	5	3	-

3.1.

INSTITUTIONS' PILOTING ACTIVITIES AND OUTPUTS

Entrepreneurship incorporated into existing courses

Among the 15 pilot institutions, six institutions chose to incorporate content related to entrepreneurship into existing courses. One approach (applied by four institutions) was to incorporate entrepreneurship learning outcomes into syllabi of existing courses. Another institution succeeded in organising entrepreneurial learning within an existing course, without formally altering their course syllabi, but rather applying new methods and approaches to teaching those courses. Another type of approach involved extracurricular-type activities (such as guest lectures, study visits and workshops), but which were framed within existing courses and were obligatory for all students within the given course — in this sense, these can be considered as curricular activities. The institutional profiles in the Annex to this publication provide a description for each pilot institution, whereas the two examples in the box below illustrate the approaches adopted.

Among the institutions that did not adopt such approaches, some institutions mentioned administrative obstacles, such as the lack of flexibility of faculty procedures to approve syllabus changes. Others, however, chose to focus on other approaches to strengthening entrepreneurial learning and an entrepreneurial culture at the institution, as will be seen below.

Illustrative examples

University of Split, Faculty of Humanities and Social Sciences (Croatia):
Using the SEECEL entrepreneurial learning package as a reference, specific learning outcomes relevant to the entrepreneurship key competence were incorporated into three courses at the Faculty: Education policy (Department of Pedagogy); Philosophy of education (Pre-School Education); and Sociology of entertainment (Department of Sociology). Participants in the piloting were students in the second year of graduate studies (45 students) and first year of undergraduate studies (35 students).

University of Montenegro, Faculty of Philosophy (Montenegro):
By linking the entrepreneurship competence with a course in English language and literature (with a focus on women's studies), the Faculty adopted a broad definition of entrepreneurship as 'turning ideas into action' and focused teaching and learning activities on considering careers of women writers, cultural workers and community activists in terms of entrepreneurship. The approaches combined workshops/group discussions in which students presented their opinions about gender equality and entrepreneurship and organised study visits to female writers, cultural workers, NGOs and other social entrepreneurs. Around 60 students participated in the piloting activities.

Hacettepe University, Department of Business Administration (Turkey):
The Department of Business Administration is an example of pre-existing cooperation modalities with other faculties at Hacettepe University, with professors from the Department providing elective courses on entrepreneurship to students from natural and technical sciences.

Developing new separate courses on entrepreneurship

Three pilot institutions achieved a result that exceeded SEECEL's expectations by using their piloting activities as opportunities to develop or plan special courses on entrepreneurship. Other pilot institutions (as a result of the piloting process) reached the conclusion that such a separate course would be beneficial to their students and to the institutions. One pilot institution managed to both develop and implement a special course on entrepreneurship within the duration of the pilot project. Two other pilot institutions developed proposals to their faculty councils to approve the development of a special elective course on entrepreneurship for their students, and in both cases this was approved (see box below).

Among the remaining pilot institutions, as many as eight mentioned in their final reports that their piloting activities discussed how their faculties could better address entrepreneurial learning. These institutions concluded that developing a separate, elective course on entrepreneurship that would be available to all students from their faculty would be highly beneficial. Although such statements of recognition did not take the form of binding commitments to develop such courses, they are nevertheless significant indicators of potential future developments.

Illustrative examples

University of Donja Gorica, Faculty of Food Technology,Food Safety and Ecology (Montenegro):
As part of their piloting activities, a special course entitled Introducing entrepreneurship was developed and implemented for first-year students as an elective course worth 4 ECTS. In total, 37 students attended classes on entrepreneurship, and all of them decided to take the final exam. The course incorporated guest lectures by entrepreneurs, a study visit to a Food Fair, encouraging internships with industries and laboratories and participation at a round table discussion at the Faculty.

Agricultural University of Tirana, Faculty of Biotechnology and Food (Albania):
A new module on entrepreneurial learning for the Master's programme in Food Technology (second year) was approved by the Faculty Curriculum Board and Faculty Council, and developed as part of the piloting process. The module is worth 3 ETCS, with 15 hours' theoretical part and 15 practical part (including seminars, exercises, etc.). Additionally, there are plans for a new Bachelor's special study programme in Food Science and Nutrition, with an EL module incorporated.

Ss. Cyril and Methodius University in Skopje, Faculty of Natural Sciences and Mathematics (former Yugoslav Republic of Macedonia):
The Faculty approved a proposal (initiated by the Vice-dean) to develop an elective course on entrepreneurship, which would be available to all students of the Faculty. The Institute of Geography, which by its mission acts as a link between natural and social sciences, was appointed for future incorporation of entrepreneurial learning into study programmes at the Faculty. The course will also feature as an integral part of a new study programme at the Faculty that is awaiting approval by the national agency for accreditation of higher education.

Extracurricular activities and events to promote and raise awareness about entrepreneurship

Extracurricular activities refer to activities that are offered by higher education institutions but do not belong to regulated or accredited degree or other formal study programmes. Extracurricular activities are optional and students do not gain formal credits for participating in these activities (European Commission, 2015). Most of the pilot institutions chose to organise extracurricular activities as part of their piloting — sometimes as the main activities, and sometimes to complement curricular activities. The extracurricular activities can be divided into the same three groups that formed the three modules of the SEECEL entrepreneurial learning package for ISCED 5/6 institutions (mentioned in Part II):

- **Entrepreneurial Culture**: for raising awareness about entrepreneurship
- **Entrepreneurial Process**: for hands-on basic project and management skills
- **Entrepreneurship in Practice**: for hands-on business planning and firm creation

Due to the fact that the piloting was taking place in non-business institutions (many of which did not have any experience with entrepreneurship prior to this project), the majority of extracurricular activities implemented fell under the 'entrepreneurial culture' heading — meaning an introduction to entrepreneurship.

The most common form of extracurricular activities was hosting guest lecturers to present the basics of entrepreneurship (this was an activity in all pilot institutions). This took place either as the hosting of an academic with expertise in entrepreneurship, or hosting an event to meet entrepreneurs. Another form of activity was the organisation of study visits to entrepreneurs and to relevant business support institutions. Finally, a number of conferences and round table discussions was organised to raise the awareness of management, teaching staff and students on the topic of entrepreneurship, and to launch a discussion on how to better link non-business studies and entrepreneurship.

Illustrative examples

University of Mostar, Faculty of Science and Education (Bosnia and Herzegovina):
In addition to incorporating relevant entrepreneurial learning outcomes into three existing courses, the Faculty organised a variety of activities for their teaching training students including guest lectures, workshops and study visits. The guest lectures featured presentations by an academic expert on entrepreneurial learning and by a representative of the Federal Ministry of Development, Entrepreneurship and Crafts. Three study visits were organised to a local technological park (INTERA Mostar), a local Chamber of Commerce and a business fair. Finally, a workshop was organised on how to develop and evaluate entrepreneurial ideas.

Istanbul University, Hasan Ali Yücel Faculty of Education (Turkey):
As in the previous example, this pilot institution combined the incorporation of entrepreneurship into existing courses with the organisation of extracurricular activities. In this case, a study visit was organised for students of teacher training to meet a social entrepreneur (Mustafa Onul, the founder of 'Psychohome' and 'Educational Clinique'), as an example of entrepreneurship directly relevant to their field of study.

Business Technology Incubator of Technical Faculties (BITF), Belgrade (Serbia):
In addition to its work as a business incubator, this pilot institution works to address the lack of interest and motivation among young people in Serbia to become involved in entrepreneurship. As part of its piloting, BITF implemented an awareness-raising campaign of entrepreneurship as a career option covering all faculties at Belgrade University, and organised two student workshops entitled Think entrepreneurially. Attended by 30 participants, the workshops aimed to raise entrepreneurial aspirations, in particular by show-casing entrepreneurs that successfully emerged from the incubator as examples of good practice.

Extracurricular activities to develop entrepreneurial skills and mind-sets

A smaller number of institutions (four in total) chose to go a step beyond raising entrepreneurial awareness and aspirations among students and to work more intensively with students to develop concrete skills that are directly relevant to entrepreneurship (at the intermediate level: project and management skills; at the advanced level: skills for business planning and firm creation). Two of the pilot institutions were specifically established to provide such services (University Entrepreneurship Centre in Banja Luka, and the Business Technology Incubator of Technical Faculties from Belgrade). But two other pilot institutions also decided to organise such training — the University of Tuzla and the Faculty of Natural Sciences and Mathematics at the University of Sarajevo.

Illustrative examples

University of Tuzla (Bosnia and Herzegovina):
Among its piloting activities, the University provided a 30-hour training (over six days) for 13 students from different faculties of the University, who were selected to participate in an open call. The main aim was to introduce and involve students in the world of entrepreneurship, to teach students how to analyse themselves, their personal skills, and how to recognise new opportunities in their immediate surroundings. One of the sessions involved students developing their own ideas, and another involved visiting a local incubator (BIT Centre Tuzla) to network with young entrepreneurs.

University of Sarajevo, Faculty of Natural Sciences and Mathematics (Bosnia and Herzegovina):
As a central activity in the piloting, 22 students attended a two-day seminar about entrepreneurship. Led by a professor from the Faculty of Economics and Business, the main objective of the seminar was to familiarise student with basic aspects of entrepreneurship and answer, among others, the following questions: what is entrepreneurship, what makes a successful entrepreneur, what are the characteristics of BH society from an entrepreneurial point of view, how to look for a business idea and how to make and present a business plan? The students were asked to design a basic business plan and to discuss it at the end of the seminar.

From idea to action: Fostering business idea development

Closely linked to the activities described under the previous heading, some faculties placed an emphasis on encouraging creativity among their students and on developing business ideas. As could be expected, the pilot institution that applied this approach most comprehensively was the University Entrepreneurship Centre at the University of Banja Luka, which organised a series of workshops, entrepreneurial camps, mentorship and other events with the aim of reaching high-potential business ideas — more information is provided in the box below.

However, a looser approach to idea-generation was also encouraged among other pilot institutions — focusing on encouraging idea-generation without yet addressing feasibility or profitability. This was the case for the Faculty of Humanities and Social Sciences and Faculty of Kinesiology at the University of Split, and the Faculty of Science and Education at the University of Mostar.

Illustrative examples

University of Banja Luka (Bosnia and Herzegovina):
The University Entrepreneurship Centre implemented a comprehensive set of piloting activities for developing new business and project ideas among students, with an emphasis on recruiting students from non-business studies. The activities included a project management camp and an entrepreneurial camp, a mentoring scheme, a simulation of an idea-pitching competition, and a speed networking event between students, professors and entrepreneurs. Around 30 students in total participated, and one of the student teams was placed in pre-incubation at the Entrepreneurship Centre.

University of Split, Faculty of Kinesiology (Croatia):
Following the implementation of a range of lectures, round tables and workshops relating to entrepreneurship, the Faculty organised a student competition entitled Entrepreneurship in kinesiology/sport', with awards planned to the best business plan and the best essay regarding entrepreneurial ideas in this area. Reviewed by a faculty-based committee, the three best students in each category received an award.

Platform for students' voices: The Entrepreneurial Learning Student Club newsletter

In order to allow students to explore specific aspects of entrepreneurship, provide reflections on entrepreneurial learning and share their entrepreneurial ideas and experiences with peers from around the region, SEECEL launched a regional Entrepreneurial Learning Student Club (ELSC). With 80 members from all participating pilot institutions, the ELSC is structured around a newsletter that is issued twice a year and that publishes articles, interviews and reflections of student members. A mentor from the teaching or administrative staff of the pilot institution assists them in the definition of topics and submission of articles.

A total of four ELSC newsletters were published from November 2014 to June 2016, with a fifth newsletter to be published by the end of 2016, featuring a total of 44 student articles from all participating countries. The articles included:

- Overviews of the meaning of entrepreneurship and of what makes a successful entrepreneur;
- Student ideas on how to address local social issues using an entrepreneurial approach, as well as examples of successful entrepreneurial initiatives by students;
- Reflections by students on what the experience of entrepreneurial learning meant to them and what impact it had on their aspirations.

The following section includes a more detailed look at the outcomes of the ELSC newsletter, with more information on specific articles.

Illustrative examples

Student article on entrepreneurship in the wine industry (Albania):
Ledio Baze, a student at the Faculty of Biotechnology and Food, Agricultural University of Tirana, prepared an article presenting an inspiring entrepreneurial story of how he directly participated in an entrepreneurial feat of the Bardha winery in Albania to launch a new type of wine in Albania (a rosé wine). The article also provided an overview of rosé wine production as a global business opportunity.

Student reflection on the importance of entrepreneurial learning for employability and personal development (former Yugoslav Republic of Macedonia):
Viktorija Jakimovska, a student at the Faculty of Natural Sciences and Mathematics, Ss. Cyril and Methodius University in Skopje, provided a personal reflection on the importance (and necessity) of developing entrepreneurial skills along with technical skills as an important competitive advantage on the labour market — enabling students 'to find a good employer, to progress in their work, maybe even to become a leader and have the opportunity to become a real expert in their field.'

Using piloting activities for institutional development and cooperation with stakeholders

Finally, a number of pilot institutions were able to advance other areas of their institutional development that were closely related to their entrepreneurial learning activities. For example, the Faculty of Natural Sciences and Mathematics in Skopje used the piloting as an opportunity to move forward with the establishment of a career advising centre at the Faculty, which would have close links with entrepreneurship as a career option. Eventually, the career advising centre took over the coordination of the piloting. Two other examples are featured in the box below (both from Albania).

For other pilot institutions, partnering with external stakeholders was not necessarily among their initial goals, but materialised as result of other activities. For example, the Faculty of Natural Sciences and Mathematics in Sarajevo teamed up with the Faculty of Economics and Business in order to organise an entrepreneurship training event. Similarly, the Faculty of Humanities and Social Science and the Faculty of Kinesiology at the University of Split decided to jointly organise a lecture — which was the first time the two faculties had cooperated.

Illustrative examples

Agricultural University of Tirana, Faculty of Biotechnology and Food (Albania):
The Faculty used the piloting to strengthen university-business cooperation. As a part of the piloting (which resulted in the development of a new course on entrepreneurship), meetings were organised with the members of relevant Albanian sectoral business associations to discuss future cooperation possibilities: ADAMA (dairy processors), AOOA (Albanian Oil Association), SHKVV (Albanian Association of Vines and Wine). The piloting was also used to discuss cooperation regarding entrepreneurial learning with other universities in the region with study programmes in similar fields.

University of Tirana, Faculty of Natural Sciences (Albania):
In order to contribute to building the capacity of the Faculty teaching staff with regard to entrepreneurial learning, a special workshop was organised for lecturers at the Faculty (in addition to one provided for students). The lecturers expressed their interest in the new concepts and there was an interesting and practical discussion time during the workshop on how to include these concepts into existing curricula. In addition, project funds were used to translate the SEECEL entrepreneurial learning instrument into Albanian, in order to ensure wider usage and impact among staff.

3.2.

PILOTING OUTCOMES, SUSTAINABILITY AND (POTENTIAL) IMPACT

The previous section demonstrates the wide variety of approaches that can be taken when addressing the place of entrepreneurial learning within higher education institutions. This variety was an expected result, seeing as the SEECEL pilot project framework intentionally adopted a flexible approach that encouraged each participating institution to develop its own approach, based on their assessments of their own needs and their capacities.

The following section will analyse what patterns emerge from piloting activities in terms of overall outcomes of the SEECEL pilot project framework, how sustainable these outcomes are and whether they might result in a greater impact on the participating institutions in the future. The analysis is based on direct feedback collected through the final reports prepared by each pilot institution and on responses to a self-evaluation questionnaire administered after the completion of the piloting phase.

Active support and 'buy-in' for entrepreneurial learning by faculty management

As previously mentioned in the description of the pilot project framework, SEECEL encouraged the direct participation of the management staff of higher education institutions in the individual piloting activities. Formally, the management staff were included through the signing of piloting agreements. After this, however, it was up to each institution to decide upon the members of the Entrepreneurial Learning Team in charge of implementing the piloting activities and on what role the management staff would play in the piloting.

A highly positive outcome of the SEECEL pilot project was the fact that management staff played a leading role in six of the 15 piloting activities. In one case, the dean of the faculty was the EL Team Coordinator (Faculty of Biotechnology and Food, Tirana), and in five cases vice-deans acted as EL Coordinators.

Vice-deans of the remaining pilot institutions were requested to provide their own feedback on the pilot

project and the entrepreneurial learning agenda from their own perspective. Out of 15 participating pilot institutions, responses were received by vice-deans from nine institutions and the support for the importance of incorporating entrepreneurial learning in non-business studies at their institution was unanimous.

Positive impact on developing an entrepreneurial culture within higher education institutions

Due to their limited scope and time frame, the SEECEL pilot project framework did not plan for the piloting activities of institutions to have an immediate impact on institutional development. However, an unexpected positive outcome of the pilot project framework was that several institutions reported such a positive change.

Assistant Prof. Marita Brčić Kuljiš, Vice-dean of the Faculty of Humanities and Social Sciences in Split, reported a positive impact of the pilot on the institution as a whole:

> 'The main goal and reason why the Faculty applied to become a pilot institution in the SEECEL project was to try and develop an entrepreneurial culture in a totally non-entrepreneurial environment. […] [As a result of the project], the Faculty has started talking and thinking about entrepreneurship and we think this a great step for our academic community. […] We will keep on developing this entrepreneurial culture through the newly established Centre for Entrepreneurship, Initiative and Creativity.'

Prof. Valentin Mirčevski, Vice-dean of the Faculty of Natural Sciences and Mathematics in Skopje, also noted that the pilot project not only had strong backing by the entire management staff at the faculty and department level, but inspired additional initiatives:

> 'The implementation of entrepreneurial learning and promotion of entrepreneurship as a necessary activity of the Faculty is fully supported by the faculty management including the Dean, its closest collaborators and the head of each institute. […] In addition, motivated by this project, the Faculty management considered developing a new strategy for fostering applicative work and business-oriented activity of the Faculty, in light of the new opportunities offered by the Law on Innovation Activity. Presently, preparatory activities are under progress for establishing two spin-off small companies by the members of the Institute of Biology and Institute of Chemistry, which is a completely new and unique activity of the Faculty.'

Dr. Renata Kongoli, Dean of the Faculty of Biotechnology and Food in Tirana, also noted how 'the Faculty is now able to build up a steady entrepreneurial culture, first within the faculty and then in the university as a whole, through strategic management.' Concretely, this hopes to be achieved by fitting the module of entrepreneurial learning (developed through the pilot project) to other study programmes at the level of the university.

Finally, the fourth pilot institution that reported a positive impact, the Faculty of Kinesiology in Split, managed to connect the pilot project with two other

strategic initiatives at the Faculty: the first is the development of the qualification standards for kinesiology (in line with the newly developed Croatian Qualification Framework), which will specifically incorporate the entrepreneurship competence; the second is the new Faculty strategy — whose vision and mission make explicit references to forming 'entrepreneurial, market-oriented and socially included kinesiologists' and 'creative, innovative, competent and enterprising experts and researchers.' It is notable that the Faculty's EL Team had as many as seven members, including three vice-deans, three teaching staff and one administrative staff member.

Lasting changes to course curricula have been made (or planned)

As described in the previous section, eight of the 15 pilot institutions succeeded in either incorporating entrepreneurial learning into existing courses (by revising syllabi), or developing special courses on entrepreneurship to be provided across their faculties. The significance of such changes is that they are, by definition, lasting changes within those courses and study programmes. This also means that they are likely to be sustainable — although this is based on an assumption that no additional investment is required to implement those curricular changes, which is not necessarily the case when it comes to entrepreneurial learning. Namely, entrepreneurial learning can benefit from practical elements, such as interactive workshops, study visits or project-based activities, which may require additional funding to implement effectively. Nevertheless, the changes that have been made by the pilot institutions represent a significant first step for making entrepreneurial learning an integral part of the curriculum in non-business studies.

Another valuable outcome of the piloting activities has been the interest expressed by the remaining pilot institutions (that did not implement curricular changes but rather focused on organising extracurricular entrepreneurial learning) to making curricular changes in the future. This point will be further expanded upon in Part IV; however, one illustration of undertaken activities can be of use. The University of Tuzla (which focused on extracurricular training of selected students on entrepreneurship, as well as on general promotion of entrepreneurship) developed a syllabus draft proposal for a separate course on entrepreneurship that could be offered as an elective course in non-business studies at the University. In addition, the piloting activities at the University included mapping the subjects within existing study programmes at the faculties at the University that could integrate lectures in the area of entrepreneurship skill development.

Raised awareness of management and teaching staff of the significance of entrepreneurial learning in non-business studies

Linked to the point above regarding the interest in developing special courses on entrepreneurship in non-business studies, the overall outcome of the SEECEL pilot project framework was to raise awareness of entrepreneurial learning among higher education institutions and to build support for the entrepreneurial

learning 'agenda' in higher education. Namely, the feedback from the management and teaching staff that participated in the piloting activities or overlooked their implementation was unanimously positive regarding the question of whether, based on their experience in the piloting, they saw that entrepreneurial learning should remain part of their study programmes and specific teaching and learning practices. The two following quotes by teaching staff members (who wished to remain anonymous) illustrate the types of positive responses received.

> 'I strongly believe that we should proceed further with introducing entrepreneurial learning concepts in our curricula. At [our Faculty] we are in the first stage of it, working on raising awareness on the subject and its benefits to lecturers and students.'

> 'Yes, it should remain a part of my (and my institution's) teaching and learning practices. I think that it is very important to emphasise how entrepreneurial learning is something that has strong value and is important for all non-economic students. It develops different, but very important competences. It changes the view about the entrepreneur in a positive way.'

Student testimonials on the positive impact of entrepreneurial learning

Finally, the evaluation of the success of the piloting activities would not be complete without the feedback of the final beneficiaries: the students themselves. The final reports of each pilot institution included comments on the engagement and satisfaction of students in the entrepreneurial learning activities. Two patterns emerged from the final reports of the pilot institutions:

- **Low level interest for participation in extracurricular activities:** Several institutions organising target workshops or events on entrepreneurship (e.g. faculties of natural sciences in Sarajevo and Tirana; University of Tuzla; University of Banja Luka; Business Technology Incubator of Technical Faculties, Belgrade) commented that it was hard to engage students to participate in workshops or events. Reasons often included not recognising the topic as relevant to them or as being a topic that they will address 'later' in their academic career.
- **High level of motivation and satisfaction by most participants:** On the other hand, the reports of pilot institutions confirmed that those attending the events, lectures or regular classes that incorporated entrepreneurial learning positively evaluated their learning experiences.

In addition to such feedback, the SEECEL Entrepreneurial Learning Student Club (ELSC, consisting of students nominated by each pilot institution, many of whom provided articles for the ELSC newsletter), represents a valuable focus group providing more in-depth and individualised responses to the experience of entrepreneurial learning from the perspective of non-business studies. The examples selected in the box below provide an overview of the outcomes of the SEECEL pilot project framework for students.

Student responses to entrepreneurial learning: illustrative examples

Matea Lhotak, student, Faculty of Science and Education, University of Mostar (Bosnia and Herzegovina):
'Before I joined this project, I never even thought about entrepreneurship or the development of competences in an entrepreneurial way. […] It was very interesting for me to realise that even though I do not study economy or something similar, I can well become an entrepreneur, i.e. start my own business and, for example, run a private kindergarten.'

Irena Vareškić, student, Faculty of Kinesiology, University of Split (Croatia):
'Since the moment I realised that I must mobilise myself and find my own place in the labour market, I have been going to my classes with a completely different attitude and set of goals. I am proud because I had the opportunity to think about projects which, not so long ago, seemed very demanding and unfamiliar. Now I know that they are not only a privilege of big, adult businessmen!'

Viktorija Jakimovska, student, Faculty of Natural Sciences and Mathematics, Ss. Cyril and Methodius University in Skopje (former Yugoslav Republic of Macedonia):
'If a young person, today, knew just a few basic things like how a company works, or how to handle him/herself in the business world, even how to lead their own firm, he/she would have at least a little of that entrepreneur's touch and would have many more possibilities for finding a good employer, progress in their work, maybe become a leader and then be a real expert.'

Amra Mujagić, student, Faculty of Economics, University of Tuzla (Bosnia and Herzegovina):
'Thanks to entrepreneurship, the wishes of young people are no longer focused only on high salaries. Priorities have changed: the focus is largely placed on their own progress and success, and their contribution to community and society.'

Amela Duraković, student, University of Tuzla (Bosnia and Herzegovina):
'Companies with a social purpose, or companies that generate profit which they then donate to social causes, persist in finding a way of using the market to help vulnerable social groups. That is why in the coming period it is necessary to pay special attention to the development of programmes that will enable the application of the model of social entrepreneurship in Bosnia and Herzegovina, but also at the local level.'

Anonymous student at the Faculty of Philosophy of the University of Split (Croatia):
'The differences between the economic and the civil market are obvious, but the underlying logic is the same: to produce something that may be useful, sold or utilised for future growth and development. Civil society is doing just that. It places new ideas, values and innovation that others may have the opportunity to participate in, on a basis that should create room for growth and development within society, as well as for the individual who is actively involved in the work of a civil society organisation.'

Vedad Ćosićkić, student, University of Tuzla (Bosnia and Herzegovina):
'The Students' Club (that we established) is a great example of non-for-profit organisation transformation to a company and of the skills for recognition of business opportunities and turning them into a potentially successful business.'

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Overall, the results of the piloting activities implemented within the framework provided by SEECEL indicate that there is significant potential for incorporating entrepreneurial learning into non-business studies in South East Europe and Turkey. At their best, some of the 'success stories' illustrated above (where faculty leaders assessed the projects as having a significant and positive impact) demonstrate how much the concept of the entrepreneurial university can resonate not only among higher education management, but among teaching staff as well. In some cases, it can be a source of inspiration for future development that breaks with traditional moulds in which higher education institutions are often set—for example, for an institution that provides study programmes in the humanities and social sciences but equally wishes to embrace entrepreneurial learning.

Even the piloting activities that had less obvious visible impact within the given time frame still showed that there is fertile ground for entrepreneurial learning to take root: in all the participating institutions, both management and teaching staff positively responded to the question whether entrepreneurial learning should be incorporated into their study programme(s). The significance of the piloting results is that there has been an equal recognition of the value of entrepreneurial learning in all academic disciplines represented by the pilot institutions: natural sciences, teacher training, humanities, social sciences, and sports science/kinesiology.

The questions that remain, however, in order to assess the feasibility of further developing entrepreneurial learning at these institutions (and at other institutions throughout the region) are the following: how do management and teaching staff at pilot institutions perceive the opportunities (and threats) for further developing EL at their institutions? Is the current environment (within the institution and at the national level) conducive to supporting (specifically) the entrepreneurial learning 'agenda' and (more generally) the agenda of better linking higher education with the labour market? Are there any specific obstacles to making entrepreneurial learning a reality? The next section will analyse responses to these questions provided by management and teaching staff of higher education institutions collected after they completed the piloting.

3.3.

PILOT INSTITUTION REFLECTIONS ON FUTURE PROSPECTS FOR ENTREPRENEURIAL LEARNING

In order to better assess how entrepreneurial learning fits into institutional and national contexts beyond the immediate scope of the SEECEL pilot project framework, pilot institutions were requested to provide feedback on several topics that are immediately relevant to entrepreneurial learning:

- Teaching and learning (to what extent teaching staff use or are encouraged to use student-centred and innovative teaching practices);
- The role of higher education in ensuring graduate employability and links with employers;
- Obstacles to implementing entrepreneurial learning and to creating closer links with external stakeholders.

In addition to these questions, the two pilot institutions acting as entrepreneurship support structures (the University Entrepreneurship Centre at the University of Banja Luka and the Business Technology Incubator of Technical Faculties in Belgrade) were requested to reflect on the level of support that they received at the level of the university or at the national level.

In order to ensure open and critical feedback from the institutions, the principle of anonymity was ensured in the presentation of the feedback within this publication.

Since the feedback and comments were collected only from individuals participating in the piloting, the findings cannot be interpreted as necessarily reflecting national or regional trends. Instead, the findings should be interpreted as those of a focus group of relevant institutions, covering management staff, teaching staff and support-service staff. From this perspective, the findings (which do point to similar trends across the range of institutions) can provide valuable insights into the reality on the ground and into challenges or opportunities which could be further taken into account when considering the promotion of entrepreneurial learning and of entrepreneurial higher education institutions in the region.

Priority level given to teaching and learning in higher education

Teaching and learning is crucial to entrepreneurial learning. Research on effective approaches to entrepreneurial learning emphasises the importance of student-centred learning and especially with the use of non-traditional teaching practices such as active/collaborative learning (e.g. group discussions, case studies, projects, peer-learning, etc.). Closely connected to student-centred learning is competence-based learning, in particular the use of learning outcomes for defining what a learner is expected to know, understand and able to do upon completing a learning process (European Commission, 2014). The EU key competences for lifelong learning (one of which is entrepreneurship) further reinforce the importance of applying learning outcomes in education systems.

The extent to which a higher education institution and its teaching staff recognise the value of these approaches to teaching and learning and make use of them is therefore highly relevant in terms of their capacity and willingness to incorporate entrepreneurial learning. Overall, such questions fit into a wider debate about whether high-quality teaching and learning is incentivised by higher education institutions and whether it is seen as priority by higher education institutions. A recent study by the EU High-Level Group on the Modernisation of Higher Education (2013) has shown that, among the increasing range of priorities for higher education institutions (including research excellence, quality assurance, funding, internationalisation), in many EU countries improving teaching and learning is often not found among the priorities of the institution, and hence of the teaching staff itself.

The qualitative responses of pilot institutions (both management and teaching staff)[4] resulted in the following findings:

- Among the pilot institutions, student-centred approaches to teaching appear to be the norm, as is the use of learning outcomes in study programmes. While not all higher education institutions had yet had discussions about the role of key competences in the context of higher education, there was little question that this was a highly relevant topic for the higher education community, within the context of ensuring the relevance of higher education for preparing young people for the world of work.
- However, around half of the respondents noted that additional training would be necessary to ensure that learning outcomes are defined and used appropriately and effectively.
- With regard to the level of priority assigned to teaching and learning, a somewhat surprising finding was that almost all pilot institutions assessed that excellence in teaching and learning is awarded a high profile among the institution's priorities. In terms of incentives for quality teaching, most respondents

4 A total of 22 responses to the questionnaire was received from pilot institutions (from 12 teaching staff and 10 management staff).

made reference to the fact that student evaluations of teaching staff are taken into account in the process of staff promotion.

The feedback of pilot institutions appears to show that there are few obstacles in terms of the importance of teaching and learning, or in terms of staff familiarity with the use of student-centred learning, learning outcomes or key competences. Such an institutional environment is therefore highly conducive to introducing innovations in teaching and learning, such as the application of entrepreneurial learning.

Priority level given to graduate employability and university links with business

Employability of graduates has become a key concern in higher education in Europe, and many measures are being promoted to improve students' employment chances after completing their studies. Measures to improve the employability of graduates can include curriculum development in cooperation with business/external stakeholders, providing career advising services, organising internships/work placements, organising job/recruitment fairs and including students in joint projects with employers. Such activities often include direct cooperation with businesses or other external stakeholders (Mevlin & Pavlin, 2012; Rakovska et al., 2014).

Entrepreneurship can neatly fit into debates about graduate employability, so the question of whether pilot institutions assess that this area is seen as a priority at the institutional or national level is of relevance regarding the prospects for increasing the provision of entrepreneurial learning in higher education.

The responses of pilot institutions resulted in the following findings:

- Among the pilot institutions, virtually all responses claimed that the issue of graduate employability was seen as a high priority, both at the level of the higher education institution, and at the national level.
- While the existing activities of pilot institutions in the area of improving graduate employability are limited, many institutions mentioned that career fairs and career advising services were organised with this aim.
- Some pilot institutions have indeed ensured a link to business in the development of curricula. However, such examples are only from institutions whose study programmes have intrinsic links to a specific industry (e.g. agriculture, biotechnology).
- Additionally, virtually all respondents saw a benefit in opening up the university to external stakeholders (with only a couple of responses showing a more cautious approach and mentioning that there might be downsides to such cooperation).

Such responses suggest, as in the case of teaching and learning, that the broader environment at the pilot institutions is conducive to the institutionalisation of entrepreneurial learning, since there is broad acceptance of the role of higher education in preparing students for the world of work, and there is broad support for

including external stakeholders in the process of defining the curriculum.

Obstacles to entrepreneurial learning

Following an overview of the environments within which the pilot institutions are operating, each institution was asked whether (based on their experience of the SEECEL pilot project framework) they thought entrepreneurial learning should remain a part of their teaching and learning practices. Additionally, pilot institutions were asked directly whether they felt that their teaching staff already had the required competences to actively engage in entrepreneurial learning (in terms of ability to adopt new teaching practices that are recommended for entrepreneurial learning), or whether additional training might be needed.

Resistance or opposition by some members of teaching staff

A common thread through almost all the responses of both teaching and management staff was that an obstacle to making entrepreneurial learning a reality would be resistance or opposition by part of the teaching staff. The responses indicated that different types of resistance (or reasons for resistance) could emerge, such as:

- The conservative nature of the academic community and its general reluctance to accept change of any kind ('I think there is always a resistance against changes at the university;' 'It is not easy to convince the staff of the need to adapt the curricula, especially the older staff');
- An opposition to breaking boundaries of separate academic disciplines and to including content from other fields ('Some teachers believe that their subject requires only "science", not entrepreneurship;' 'We still believe that those kind of competences belong to other spheres of education and not to (our academic discipline');
- Lack of support or understanding for the idea of equipping students with a set of transversal competences in all academic disciplines ('The main obstacle is the idea of entrepreneurship as a key competence: we still do not see the purpose of that kind of learning or about that kind of competence;' 'The exam is the only goal of the study. Only a small number of teachers and students think about how students could be more successful in their future careers already at university').

For these reasons, some respondents emphasised that the inclusion of entrepreneurial learning could not happen overnight, and could only happen as a gradual process.

Overburdened courses and administrative obligations

Although this point is also related to teaching staff resistance, certain responses pointed to the fact that resistance may arise not necessarily due to negative

teaching staff attitudes, but rather due to objective challenges of not being able to implement the proposals due to being overburdened. On the one hand, a comment by one respondent indicated that course syllabi were already full, meaning that any additional learning outcomes might require removing other content or learning outcomes ('The study programmes of individual courses are already overburdened and it is very difficult to incorporate entrepreneurship in some of them'). On the other hand, the number of requirements made of higher education institutions and their teaching staff (in the context of an increasing 'accountability culture' in higher education) may actually put quality at risk. For example, one respondent noted:

> 'I fear that everyone (including teaching staff, students and administrative staff) can become overburdened with new approaches, requirements, evaluation methods, associated administration, and that all this, if not done properly and systematically, can draw attention away from the actual teaching and learning of subject-related topics, issues and skills.'

Teaching staff need additional training to deliver entrepreneurial learning

Only one of the 12 respondents assessed that existing teaching staff already had the necessary competences for delivering entrepreneurial learning. All other respondents agreed that delivering entrepreneurial content would require additional training for the use of such new teaching methods ('In my opinion this is one of the biggest challenges we face at [our Faculty]. There is need for the staff to receive additional training on the new teaching methods').

Negative perceptions by external stakeholders about higher education (and graduates)

Pilot institutions were asked what they saw as obstacles to establishing closer links with external stakeholders, both in terms of curriculum development/delivery and in terms of improving graduate employability (which is closely related to entrepreneurial learning). Several responses noted business and other external stakeholders' lack of trust in the quality of higher education and in the relevance of the qualifications obtained by students — which therefore had a negatively impact on the wish to engage with higher education institutions.

Administrative barriers to developing entrepreneurial higher education institutions

Finally, although not included in the survey of pilot institutions, there is an important obstacle that needs to be added to the list based on the piloting experience. Namely, a number of pilot institutions faced a major administrative obstacle of the most basic kind: to being able to receive a grant instalment and to be able to make payments based on an agreed project budget. Namely, many faculties or other units of a larger higher

education institution do not have a separate bank account, meaning that all payments go into the central university account. As many as five of out 15 institutions noted that this posed a major administrative challenge, and that there was a significant risk that the funds would not reach the faculty at all, or would do so with major delays. Two institutions were able to receive the funds without a problem, but experienced significant delays in implementation due to internal administrative procedures and legal requirements for public tenders (even for small sums). As mentioned by one respondent:

> '[Our university] is an integrated university and largely financed by [public funds]. Any payments therefore go through the treasury payment system, which in many ways slows the process of payment of the planned activities. It is one of the biggest obstacles hindering the implementation of planned activities, and causes delays in the implementation of some activities.'

Obstacles for the development of entrepreneurship support structures

The entrepreneurship support structures represented in the SEECEL pilot project framework were the University Entrepreneurship Centre (UEC) of the University of Banja Luka and the Business Technology Incubator of Technical Faculties (BITF) in Belgrade (which is formally not a part of the university but was set up by technical faculties in cooperation with local government and international donor organisations). Among the missions of both centres is the promotion of entrepreneurship among non-business students, as well as the 'key competence' approach to entrepreneurship, in terms of developing a range of employability-relevant skills, and not only focusing on business creation.

The challenges encountered in their work are identified below.

Low student interest for entrepreneurship-related activities

Since one of the missions of the entrepreneurship support structures is to promote entrepreneurship among the broader student population (and not only business students), a challenge mentioned by both institutions was the lack of student engagement and motivation for entrepreneurship. BITF emphasised an overall unfavourable climate in Serbia in terms of low interest of young people in entrepreneurship, despite very high youth unemployment and despite its role in innovation and job creation. This lack of interest is reflected in a lack of interest for courses provided by BITF, which means that significant efforts are put into awareness raising campaigns and public sessions to increase interest for other services provided by BITF.

The UEC agreed that one of the key challenges in implementing the piloting activities was recruiting students and ensuring their longer term dedication to the programme. The problem of lack of engagement persisted even among many participants that decided to take part in the courses ('We noticed that student motivation to work on pre-defined projects was low,

and that the proposed projects were too complex for them. Also, as a general rule they were not open to stepping out of their comfort zone and learning things that were outside of their study fields'). They concluded that the best way of recruiting students was 'direct communication and personal recommendations by other students,' as well as motivational workshops, which are 'not the most efficient, but are the most effective tool to engage students in the programme.'

Low motivation of teaching staff for entrepreneurship and/or for working with the centre

Although both entrepreneurship support centres confirmed that they did train some teaching staff on entrepreneurship, an overall challenge is the lack of motivation of teaching staff for such trainings. BITF also noted that this lack of interest was the main institutional obstacle to achieving closer connections to teaching staff at the university. On the other hand, however, BITF did acknowledge that there were inspiring individual examples of teaching and research staff that started their own business or supported start-up companies with their expertise.

Agreeing with the point above, the UEC noted an additional problem: lack of motivation of professors to act as trainers or mentors in the centre's activities. Professors usually agreed to act as mentors if they had other benefits from participation, which were not related to improving student competences or to improving their teaching methods, since this kind of involvement with students is neither required nor formally validated on an institutional level: 'Therefore for these types of activities to be implemented outside of externally funded projects, this kind of engagement needs to become institutionally relevant.'

Variable institutional support by university and by government

The pilot institutions were asked to what extent graduate employability was seen as a high priority in education policy at the national level and at the level of the university. Both responded that employability was a high priority, at both levels. The pilot institutions were then asked to assess whether there was any recognition by the national authorities and by their local higher education institutions of the importance of entrepreneurship-supporting institutions, especially in the context of meeting the goal of graduate employability.

With regard to institutional support and recognition by the university, the responses differ strongly and appear to be directly linked to the fact that one centre is a part of the university and the other is not. Namely, the UEC is linked to the central administration of the University, is mentioned in the University strategy, receives financial support from the University, and is made use of by the University to make links with local businesses; this is not the case at BITF, which is a limited liability company. Despite being established by University faculties, BITF assessed that the value of their centre was 'not at all' recognised by University leaders as a framework for improving university-business

cooperation, linking different faculties or for designing or delivering curricula.

With regard to recognition by the government, the responses both acknowledged insufficient support as a challenge, but from slightly different angles. BITF acknowledged that it received funding from the Ministry of Education and from the local authority of Belgrade. However, their assessment was nonetheless that the significance of BITF was not recognised by public authorities, since only partial funding was received, with most of the funding provided by international donors or through their own income generation.

> 'The biggest problem we encounter is the lack of systematic approach of the government in the long term and this is what inhibits the development of business incubation in Serbia.'

The UEC, on the other hand, assessed that the national and local authorities recognised the importance of the centre, but that this did not translate into concrete financial support:

> 'On the contrary, we do not have any support from the government, either the State government of Bosnia and Herzegovina or the local government of The Republic of Srpska. Activities that we deliver to students and to the wider community are financed through international projects while our salaries are financed by the University of Banja Luka.'

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This section has provided a summary overview of how pilot institutions perceive their national and institutional environments, having in mind the aim to institutionalise entrepreneurial learning and to support the development of entrepreneurial higher education institutions. The feedback by management and teaching staff has suggested that there is a strong potential for entrepreneurial learning in their institutions. Improving the quality and relevance of teaching and learning is acknowledged by all, as is the importance of labour market relevance of graduates' skills. The entrepreneurship support structures also identified a clear role of their institutions in supporting this agenda.

Obstacles, of course, often stand in the way of change in higher education. Overall, the dominant obstacle identified appears to be resistance to change or lack of motivation by existing teaching staff — although other challenges such as overburdened workloads, administrative obstacles and lack of support from the university, government or external stakeholder level were also mentioned.

The overall conclusions of the SEECEL pilot project framework, with recommendations on how to link (and/or) reconcile the project's outputs, outcomes and the challenges/opportunities identified in this chapter, will be addressed in Part IV.

04

Lessons learnt and future perspectives

The specific objective of the SEECEL pilot project framework was to incorporate entrepreneurial learning into existing study programmes and/or develop awareness of and aspirations for entrepreneurship among students in partner higher education institutions.

The significance of the SEECEL pilot project framework for higher education is that it is the only structured initiative in the region for promoting entrepreneurial learning in higher education. The pilot project framework is also significant since its initial focus on promoting the development of entrepreneurial competences through teaching and learning paves the way to a broader (and more ambitious) long-term goal, which is fostering the development of entrepreneurial higher education institutions. Both entrepreneurial learning and the entrepreneurial higher education institution feature prominently in contemporary debates about the role of higher education in social and economic development. They are also increasingly emphasised as priorities in European Union policies.

The approach used by SEECEL in its pilot project framework acknowledged that building support for entrepreneurial learning is a gradual (and slow) process, especially in a region in which entrepreneurial learning has effectively not reached the higher education policy agenda. The word 'piloting' was important in this context: the aim of the SEECEL pilot project was not to apply a 'one size fits all' solution and to measure the results. It was rather to explore how to successfully engage with higher education institutions on such a new policy agenda, whether 'buy-in' could be ensured by management of higher education institutions, and to further explore what kind of activities would work best for pilot institutions to promote entrepreneurial learning, depending on the national and institutional context.

The main results of the SEECEL pilot project framework — many of which exceeded initial expectations — are listed below, followed by recommendations on how to move the entrepreneurial learning/entrepreneurial higher education institution agenda forward in South East Europe and Turkey and ensure successful implementation.

4.1.

CONCLUSIONS OF PILOTING

The entrepreneurial higher education institution is a concept that should be relevant to all kinds of higher education institutions

Linking the results of the SEECEL pilot project framework with the introductory chapter on the key concepts and global trends in higher education (Part I), the first conclusion is that being an entrepreneurial higher education institution does not necessarily require a technology transfer office, spin-offs or commercialisation of research. Some higher education institutions can and should be drivers of innovation and economic development (as framed within the Triple Helix concept). However, higher education institutions that work on promoting entrepreneurial competences among their students and work with an ethos of openness to change and engagement with stakeholders should have an equal claim to use the title of 'entrepreneurial institution'. The pilot institutions included in the SEECEL pilot project (covering non-business and non-engineering studies) were obviously not able to 'turn into' such institutions within the short timeframe provided by the project. However, the fact that several institutions recognised the need to develop a more 'entrepreneurial culture' at their institutions underlines the relevance of this broader definition.

Entrepreneurial learning can also be successfully incorporated into a range of different higher education institutions and study programmes

Similarly, the project has shown that higher education institutions in the disciplines of the arts, humanities, natural sciences, pedagogy and sports science were able to equally identify with aims of entrepreneurial learning. Within the piloting activities implemented within the SEECEL framework, activities at these institutions promoted entrepreneurship in a traditional sense (e.g. raising awareness about the opportunities and benefits of launching one's own business), entrepreneurship as a transversal competence or mind-set (a set of knowledge,

skills and attitudes that strengthens employability, whatever the type of employment in question), and social entrepreneurship. All three approaches to entrepreneurship can be applicable at any type of higher education institution.

Entrepreneurial learning can be an impetus for developing an entrepreneurial higher education institution

In Part II, which described the SEECEL pilot project framework, reference was made to Rae et al. (2010) and Benneworth and Osborne (2015) regarding the role of entrepreneurial learning teams (as groups of entrepreneurship 'enthusiasts' within the learning community of a higher education institution) in influencing other spheres of the higher education institution, its mission, the curriculum, students, external communities and third stream activities. The SEECEL pilot framework attempted to pilot this approach in an exploratory manner. The results at several of the pilot institutions exceeded SEECEL's expectations in terms of their apparent impact on the institution — some institutions have already launched or are developing elective entrepreneurial learning courses; others have openly acknowledged the positive influence of the pilot project on the development of a more entrepreneurial culture at the level of institution as a whole.

There is a strong basis for further developing entrepreneurial learning at all the pilot institutions (and possibly at the regional level)

The combined result of the successfully implemented entrepreneurial learning activities and of the feedback received by management staff, teaching staff and students at all pilot institutions indicates that there is no major obstacle to entrepreneurial learning finding its way onto the policy agenda of higher education institutions (for implementation, however, obstacles are listed below). Namely, no institutions encountered major challenges or resistance while implementing their piloting activities, and they positively assessed the elements that are important if entrepreneurial learning is to become a reality: that there is institutional support for quality teaching and learning and for the employability of graduates/labour market relevance of higher education. In addition, all responses from the pilot institutions indicated that, even if they have not always been the direct subject of debate at the institutional level, the key competences for lifelong learning are a highly valid and relevant reference point that higher education institutions should incorporate into their teaching.

Although the SEECEL pilot project only took place at a limited number of higher education institutions, these findings could be of relevance when considering wider application in the region of South East Europe and Turkey.

Non-business students value the experience of entrepreneurial learning

The participation of students in SEECEL's Entrepreneurial Learning Student Club and their reflections on entrepreneurial learning (through articles written for the ELSC newsletter) demonstrate how entrepreneurship is relevant beyond business studies. The broader concept of entrepreneurship being about turning ideas into action (whether in a business or non-profit context) was recognised by students from technical studies, humanities, teacher training and other fields.

But there is a number of obstacles to making entrepreneurial learning a reality at the pilot institutions (and possibly at the regional level)

The above conclusions, however, exist side by side with concrete obstacles to making entrepreneurial learning a reality at the pilot institutions (and, by association, at many higher education institutions in the region of South East Europe and Turkey).

- Resistance or opposition by some members of teaching staff (due to traditional/conservative approaches to teaching strictly by academic discipline and a misunderstanding or rejection of the concept of 'key competences' relevant to all students);
- Overburdened courses and administrative obligations (lack of time or incentives to engage in changes to existing study programmes or extracurricular activities, in addition to other administrative obligations);
- Low student motivation for extracurricular entrepreneurship events;
- Teaching staff need additional training to deliver entrepreneurial learning;
- Administrative barriers to developing entrepreneurial higher education institutions (e.g. for engaging in projects or cooperation with external stakeholders).

As already mentioned, although they are based on a limited number of pilot institutions, these findings could be of relevance when considering wider application in the region of South East Europe and Turkey.

Having in mind the results and conclusions emerging from the SEECEL pilot project framework and the identified obstacles, the following recommendations should be considered to move forward the entrepreneurial learning and entrepreneurial higher education institution agenda alike at the SEECEL pilot institutions in South East Europe and Turkey. Due to SEECEL's role as a regionally-based organisation working in close partnership with policy-makers and educational institutions, these recommendations should be read as constructive ideas for further development (including through joint cooperation with SEECEL) rather than as fixed solutions to identified challenges.

4.2.

FUTURE DIRECTIONS FOR PILOT INSTITUTIONS

1. **Leadership support and commitment to entrepreneurial learning:** Based on the piloting results, the success factor at many institutions was the full support and active participation of management staff of higher education institutions (deans and vice-deans) in project activities. Ensuring such support (or maintaining it, if it already exists) will be the key to ensuring sustainability of the initiatives launched through the SEECEL pilot project. This is also confirmed by the previous references to research institutional change, which was able to take place thanks to the efforts of committed Entrepreneurial Learning Teams within the institution. Another aspect of leadership support is to make full use of existing resources at the higher education institution (or closely affiliated to the institution) for moving the agenda forward and for providing entrepreneurial learning — in particular, of entrepreneurship centres and incubators. Finally, leadership is necessary to define incentives for academic staff and students to engage in entrepreneurial learning, as well as to address potential obstacles, such as lack of time availability among academic staff, to engage in these types of activities.

2. **Moving from extracurricular activities to curricular activities:** While several pilot institutions succeeded in carrying out entrepreneurial learning as part of the existing curricula, most of the projects focused on extracurricular activities. While such activities have their advantages (often more interactive and less formal), a weaknesses of extracurricular entrepreneurial learning can be potentially compromised quality, lower incentives to participate for students and 'fragile' support in terms of personnel and funding (European Commission, 2015). Moving towards integration of entrepreneurial learning into the curricula (with some extracurricular 'extras') may ensure a more sustainable approach.

3. **Entrepreneurship as a cross-curricular/ transversal competence, and not only as a separate course:** The question of whether

entrepreneurial learning should be provided as a separate course or embedded within existing courses is still a topic of debate among European Union Member States. SEECEL, however, supports cross-curricular approaches to teaching entrepreneurship as a key competence, especially since this has a higher probability of having a wider impact than separate courses, since the latter are often elective and are more likely to attract students who already have business-related aspirations rather than a broader spectrum of students.

4. **Entrepreneurial learning beyond the 'business start-up' approach:** Although some pilot institutions did raise awareness of the concept of social entrepreneurship and the opportunities it provides, most institutions focused their activities on more 'classic' approaches to entrepreneurship and business creation (with expert speakers/trainers in those areas). Since for many institutions this piloting was the first contact with entrepreneurship, such an approach is both a logical and constructive starting point.

   However, linked to the point above, approaching entrepreneurship as a transversal key competence means broadening the scope of what is understood as entrepreneurship. This point is emphasised in the report by the European Commission (2015) on entrepreneurial learning in higher education:

   > In order to reach the largest possible amount of students, it may be helpful to widen the approach: teaching not only 'entrepreneurship' as 'venturing', i.e. starting a new business, but also teaching 'enterprising', i.e. having an idea and making it happen, which does not necessarily imply to start a business. (p. 66)

5. **The role of the Entrepreneurship Competence Framework to further improve entrepreneurial learning through existing courses:** The *Entrepreneurship Competence Framework* is a newly published policy document (European Commission, 2016) towards further enhancing entrepreneurial learning, especially for teacher training study programmes, since future teachers will be directly responsible for developing the entrepreneurship competence in primary and/or secondary education (depending on the approach adopted by countries in their national curricula).

6. **The role of the HEInnovate tool to further develop the entrepreneurial higher education institution:** Finally, all the pilot institutions wishing to make the next step towards adopting a more entrepreneurial culture at the level of the whole institution should consider making use of the HEInnovate tool (www.heinnovate.eu), developed by the European Commission and the OECD, to make a self-assessment of their current strengths and areas of improvement and to plan steps to build more responsive, engaged, entrepreneurial and innovative higher education institutions.

4.3.

FUTURE DIRECTIONS FOR POLICY-MAKERS

1. **Promoting entrepreneurial learning and the entrepreneurial higher education institution on the higher education policy agenda:** Ministries in charge of higher education could consider how to incorporate or emphasise entrepreneurial learning and the entrepreneurial higher education institution into strategies, action plans and programmes for higher education, within existing priorities. For example, entrepreneurial learning can be linked to employability, labour market relevance and human capital development (which are already high on the agenda), while the entrepreneurial higher education institution can be linked to further strengthening university governance, higher education's social impact, and higher education's role in innovation systems.

2. **Awareness of key competences in the higher education context, especially the entrepreneurship competence:** The results of the SEECEL pilot project have shown that all stakeholders within the higher education system (management, teaching and administrative staff, as well as students) could benefit from being better informed about the concept of key competences for lifelong learning. In particular, awareness should be raised about the entrepreneurship competence being focused on 'turning ideas into action' (rather than 'launching a business'), on the relevance of this competence in all occupations, and therefore on the need to incorporate the development of such a competence through all study programmes/academic disciplines.

3. **The entrepreneurship key competence in pre-service teacher training:** In addition to the point above, policy-makers should consider how to emphasise the need to develop the entrepreneurship competence within teacher training study programmes. As previously mentioned, future teachers will be directly responsible for developing the entrepreneurship competence in primary and/or secondary education, meaning that they must be able to confidently incorporate entrepreneurial learning into their classrooms.

4. **The meaning and role of the entrepreneurial higher education institution in the national context:** Linked to the first recommendation, once the topic of the entrepreneurial higher education institution reaches the national policy agenda, a beneficial next step could be to engage the academic community directly in a debate on the concept of the entrepreneurial higher education institution, its possible interpretations and its potential positive impact in the national context. Such an initiative would be especially beneficial since (as discussed in this publication) the term 'entrepreneurial higher education institution' can be perceived in a reductive way, seen primarily through technological innovation, commercialisation of research, or even in terms of institutions focusing on business studies. Such a debate could ensure that a much broader spectrum of institutions embrace the idea of the entrepreneurial higher education institution as an institution that, for example, responds to change, engages with its environment and stakeholders, and uses entrepreneurial and innovative management approaches.

5. **EU tools for enhancing entrepreneurial learning and for strengthening the entrepreneurial higher education institution:** As previously mentioned in the recommendations for the pilot institutions wishing to take the next step, the European Union has developed tools that can assist national education systems and individual higher education institutions in developing both entrepreneurial learning and the entrepreneurial higher education institution. The Entrepreneurship Competence Framework and HEInnovate can be promoted through national policies and platforms to support both national and institutional initiatives.

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The future directions listed above focus on kick-starting the entrepreneurial learning and entrepreneurial higher education institution agenda in South East Europe and Turkey, since these have only recently become policy priority topics in Europe and almost all countries in the region are still at an early stage of development in these areas. Some of the recommendations listed can be implemented with no additional resources (by incorporating entrepreneurship into existing national priorities or existing structures/courses at the level of higher education institutions). However, many of the measures listed would assume that (at least initial) resources are ensured, such as for launching national debates, raising awareness, trainings and professional development, etc. Further operationalising some of the measures would probably require increased resources (e.g. creating incentives for institutions/individuals to be more entrepreneurial; removing institutional or administrative obstacles to developing entrepreneurial institutions; national and international peer-learning opportunities, etc.).

The final recommendation of the publication is therefore for both policy-makers and the pilot institutions to make use of existing national and international funding envelopes and mechanisms to develop further projects to move this agenda forward.

Opportunities include programming European Union and other international donor funds to also cover the above goals, as well as using opportunities provided through the centralised European Union programmes (e.g. Erasmus+ or COSME), which can be accessed by certain countries in the region.

Based on SEECEL's mission, as well as on the promising results and fruitful cooperation from the piloting presented in this report, SEECEL looks forward to working together with policy-makers and practitioners in region to reach these objectives.

05

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06

Annex: Pilot institution profiles

6.1.

AGRICULTURAL UNIVERSITY OF TIRANA, FACULTY OF BIOTECHNOLOGY AND FOOD (ALBANIA)

About the institution

The Faculty of Biotechnology and Food was established in 2007 and is one of the main units of Agricultural University of Tirana. The AUT is a public institution of higher education, located at the University Campus in Kamez, Tirana. It conducts educational and scientific activities within the borders of the Republic of Albania, by offering full-time and part-time study in three cycles, and aims to train specialists and scientists in agriculture, environment, farming, biotechnology and food, as well as forestry. The AUT is unique in its kind within Albanian territory.

The Faculty is being developed as a modern study, research and knowledge transfer centre in the field of biotechnology and food for the creation of technological potential of the country and its contribution to the system of production, research and technological development of the food sector, economic development of the country and European integration.

Number of students and staff

A total of 1091 students were enrolled in all study programmes in 2015/2016. The Faculty has a total of 56 staff (38 academic staff, 11 supporting staff and 7 administrative staff).

Summary of main piloting activities

- A new module on entrepreneurial learning for the Master's programme in Food Technology (second year) was approved by the Faculty Curriculum Board and Faculty Council, and developed as part of the piloting process. The module is worth 3 ETCS, with 15 hours' theoretical part and 15 practical part (including seminars, exercises, etc.). The module is planned to be implemented in the academic year 2015/2016;
- A new Bachelor's special study programme in Food Science and Nutrition is planned to be launched in the academic year 2015/2016, with an EL module incorporated;

- Organisation of workshops and round tables for students on the topics of Entrepreneurial learning, Entrepreneurial behaviour, Transformation of innovative ideas in the new product, Entrepreneurial skills, Business opportunities, etc. A total of 40 students of the Food Technology, Viticulture & Oenology Master's Courses participated in the two sessions;
- Organisation of meetings with relevant business associations and other regional universities, with whom cooperation agreements have been signed to have closer university-business relations;
  Student articles.

EL Team

- Renata Kongoli, PhD, Dean

6.2.

UNIVERSITY OF TIRANA, FACULTY OF NATURAL SCIENCES (ALBANIA)

About the institution

The Faculty of Natural Sciences (FNS) has been part of Tirana University since its creation in 1957. FNS is the main centre in Albania responsible for educating highly qualified specialists in the areas of Mathematics, Physics, Biology, Biotechnology, Industrial Chemistry, Chemistry and Informatics. Moreover, FNS is responsible for training students to become high school teachers in the subjects of Mathematics, Physics, Chemistry, Biology and Informatics. There are 10 Bachelor's study programmes and about 20 Master's level study programmes (including Master of Sciences and Professional Master).

Number of students and staff

A total number of 6430 students are registered at FNS, around 23% of whom are enrolled in Master's studies. 28% of the Master's students are studying to become teachers in the above-mentioned subjects. 201 students (about 49% of the total) are studying in the Master of Science programmes to become teachers in Biology and Chemistry. These two programmes were included as part of the SEECEL pilot project.

There are about 181 academic staff (professors, associate professors and lecturers) involved in teaching and research at FNS. About 15% of them are involved in teaching in the two Master's programmes of interest.

Summary of main piloting activities

- Promotion of entrepreneurship workshops at the University Career Fair organised by Tirana University;
- Workshop for students: Importance of entrepreneurship competence in self-employment and employment;
- Translation of the SEECEL publication *Entrepreneurial Learning: A Key Competence Approach (ISCED 5/6)* from English to Albanian;
- Workshop for teacher training students: Lifelong entrepreneurial learning philosophy as a crucial part in curricula development and implementation;

- Organisation of study visits for students to two businesses in Tirana.

EL Team

- Klodian Xhanari, PhD, Lecturer

Reflections on the implemented piloting activities

The workshop with lecturers raised awareness among the lecturers about the inclusion of EL in the curricula. Further and more detailed discussion time is needed regarding the possibility to include EL concepts into the syllabi of certain subjects. Involvement of the departments is required to discuss and approve the changes which need to go through the FNS and then TU Senate approval. In addition, inclusion of the EL principles in the existing curricula requires training of the lecturers.

6.3.

UNIVERSITY OF BANJA LUKA (BOSNIA AND HERZEGOVINA)

About the institution

The University of Banja Luka is the largest public university in the Republic of Srpska and second largest in Bosnia and Herzegovina. UBL was founded in 1975 and today it is an integrated university with 16 faculties and around 55 accredited study programmes.

The University established the University Entrepreneurship Centre (UPC) in 2009, with the aim of creating a mechanism at the University level for promoting entrepreneurship among students and staff. In this regard UPC is a carrier of non-formal entrepreneurial learning activities and building capacities of the University for the formalisation of these activities. Entrepreneurial learning is formally part of the curriculum at the Faculty of Economics, while at other faculties it is present either through the management and economics groups of subjects, or as part of non-formal activities within projects or work carried out by student and/or professor groups (associations). Faculties that have it present as part of their management/economics classes are the Faculty of Electric Engineering, Faculty of Mechanical Engineering, Faculty of Architecture and Civic Engineering and Faculty of Agriculture. As of recently, we have also identified a group of professors from the Faculty of Political Sciences with an interest in social entrepreneurship.

Number of students and staff

The University provides education for more than 17000 students, while so far it has generated over 19000 graduates, 650 Master's and 300 Doctoral degree holders. The University employs around 600 professors, 400 assistants and 450 administrative staff members.

Summary of main piloting activities

The activities centred on a series of trainings and mentorship for students to develop a business idea or project:

- Initial training for developing ideas;
- Entrepreneurship/Project Camps;
- Mentoring by professors for proposal development;
- Pitching simulation;
- 'Speed networking' event (linking with other pilot institution: University of Tuzla);
- Setting up of a local Entrepreneurial Student Club;
- Student articles.

In total, we had 90 participants at five camps, 17 students working in teams, and 30 currently in the local Student Entrepreneurs Club. For these activities, besides students and UPC staff, seven professors were involved during the programme and five mentors from the business world are currently working with students in the Club. Through promotional efforts, an estimated 1000 people were familiarised with the piloting.

EL Team

- Mario Milanović, Project Leader, Mentor
- Milena Ljubičić, Project Coordinator, Trainer, Mentor
- Prof. Jovo Ateljević, PhD, Mentor
- Milica Rajić, Administrative Assistant

6.4.

UNIVERSITY OF MOSTAR, FACULTY OF SCIENCE AND EDUCATION (BOSNIA AND HERZEGOVINA)

About the institution

The Faculty of Science and Education is one of the faculties of the University of Mostar. It was founded as an independent school in 2005/2006, after separating from the Pedagogical Faculty. The Faculty of Science and Education offers a wide range of fields of study in many scientific areas, at all three cycles of higher education (Bachelor's, Master's and PhD studies).

The education of almost all teaching staff for pre-school, elementary, and secondary education is in the domain of the Faculty. 250 teachers and research assistants participate in the teaching process. Our teaching staff includes experts from our University as well as the universities of Zagreb, Zadar, Split, Rijeka, Osijek, Opatija, Sarajevo, and Tuzla.

Summary of main piloting activities

The piloting activities were implemented as part of the courses within the Study of Informatics, the Study of Pre-school Education and the Study of Tourism and Environmental Protection in the academic year 2014/2015.

- Incorporation of learning outcomes related to entrepreneurial learning into four courses: Teaching models; Intercultural curriculum; Wholesalers in tourism (students of tourism and environmental protection); Management of small and medium enterprises;
- Guest lectures on entrepreneurial competences and management skills;
- Workshops on how to develop and evaluate entrepreneurial ideas;
- Study visits to a technological park, a local Chamber of Commerce and a business fair;
- Student articles.

The total number of direct beneficiaries was 60, with 31 conference participants as additional indirect beneficiaries.

EL Team

- Antea Čilić, Assistant (EL Coordinator)
- Ivana Vasilj, Assistant (EL Coordinator)
- Prof. Dijana Vican, PhD
- Zdenko Klepić, PhD, Associate Professor
- Andrijana Ostojić Mihić, PhD, Assistant Professor
- Marija Šaravanja, Assistant
- Anita Lukenda, Junior Researcher (contact person)

6.5.

UNIVERSITY OF SARAJEVO, FACULTY OF NATURAL SCIENCES AND MATHEMATICS (BOSNIA AND HERZEGOVINA)

About the institution

The origins of the Faculty of Natural Sciences and Mathematics date back to 1950, when the educational and scientific departments of Natural Sciences and Mathematics were part of the Faculty of Philosophy. In 1960, the Faculty of Natural Science and Mathematics separated from the Faculty of Philosophy and became an independent scientific and educational institution, which combines natural and mathematical sciences. The Faculty is composed of scientific teaching departments in Biology, Physics, Geography, Chemistry and Mathematics. Each educational and scientific section contains a full teaching and scientific unit, consisting of teaching and research departments and research centres.

Number of students and staff

At the moment approximately 2200 students are enrolled in the study programmes of the Faculty. At the moment the Faculty employs 117 members of academic staff (professors and teaching assistants) as well as 78 non-academic employees.

Summary of main piloting activities

- Entrepreneurship promotion activities (recruiting students for the training seminar);
- Two-day training seminar on entrepreneurship for 22 student participants (in cooperation with the Faculty of Business). The training focused on: what is entrepreneurship, who is a successful entrepreneur, what are the characteristics of Bosnia-Herzegovina society from an entrepreneurial point of view, how to look for a business idea, and how to make and present a business plan;
- Discussions on incorporating EL into curriculum: the Vice-dean has proposed to the management of the Faculty to introduce an elective course about EL in every study programme when the next change of curriculum is carried out (the curriculum of our study

programmes changes periodically, usually every four or five years);
- Student articles.

EL Team

- Prof. Meliha Zejnilagić-Hajrić, PhD, Vice-dean
- Prof. Elvedin Hasović, PhD, Quality Assurance Coordinator

6.6.

UNIVERSITY OF TUZLA (BOSNIA AND HERZEGOVINA)

About the institution

The mission of the University of Tuzla is to continuously transmit and develop internationally recognisable quality of scientific, artistic and professional research and higher education at the three levels of the Bologna cycles, scientific research and lifelong learning, in order to, through the generations, transfer and apply knowledge from different groups of Sciences, be positioned (and still is) as the leading institution of higher education in the area of north-eastern Bosnia and Herzegovina and beyond.

The University of Tuzla organises and conducts educational and scientific processes at 12 faculties and one academy. The University's Business Start-Up Centre expresses the entrepreneurial initiative of the University, and strives to provide students with education in the field of entrepreneurship and to encourage entrepreneurial thinking. The Centre was established in cooperation with the Republic of Austria, which provided expertise and technical assistance for the establishment of the Business Start-Up Centre.

Number of students and staff

A total of 14500 students are enrolled at the University in all three cycles of study. The University has 450 teaching staff (full or part-time) and works with 800 external experts. In addition, the University employs over 200 workers who perform professional, administrative, technical and supporting activities.

Summary of main piloting activities

- Series of trainings for students entitled Entrepreneurial culture, entrepreneurial process and entrepreneurship in practice (for a core group of 10–15 students);
- Youth Conference entitled I am an entrepreneur (attended by 60 participants);
- Video competition for students on the theme of entrepreneurship;
- Study visit to the University in Banja Luka (Entrepreneurship Centre);
- Student articles.

EL Team

- Selma Smajlović, Senior Assistant, Faculty of Economics, Department of Management

Additional comments

A significant achievement of the piloting was to attract students from a range of faculties, not just Business majors: the participating students also came from Law, Medicine and Engineering.

6.7.

UNIVERSITY OF SPLIT, FACULTY OF HUMANITIES AND SOCIAL SCIENCES (CROATIA)

About the institution

Humanities and Social Studies existed in Split even before the foundation of the University of Split in 1974 through the College of Pedagogy in Split, which was founded in 1945. The Faculty of Humanities and Social Sciences was established as a separate institution (as part of the University of Split) in 2005. The Faculty offers study programmes in Language and Literature (Croatian, English and Italian), Education, History and (as more recent study programmes) Sociology, Philosophy, and Art History.

Number of students and staff

The piloting activities were carried out at the Departments of Sociology, Pre-School Education and Philosophy and involved around 70 students and 3 teaching staff

Summary of main piloting activities

- Integrating learning outcomes into curricula: relevant learning outcomes were integrated into the following courses: Sociology of entertainment, Education policy, and Philosophy of education;
- Student-led presentations and seminars on topics related to entrepreneurship;
- Series of extracurricular lectures: Entrepreneurial competences and the higher education system; Entrepreneurship as a socio-cultural value; Finding your own treasure; How to create an entrepreneurial plan; Entrepreneurship and education policy; Who? What? Entrepreneur!;
- In cooperation with the Faculty Student Council, the Faculty is setting up a Centre for Entrepreneurship, Initiative and Creativity to ensure continued support for entrepreneurial learning after the end of the piloting;
- Student articles;
- Overall, 80 students were directly involved in all the above activities.

EL Team

- Prof. Marita Brčić Kuljiš, PhD, Vice-dean for Academic and International Affairs (Coordinator)
- Ivana Batarelo Kokić, PhD, Associate Professor
- Renata Relja, PhD, Associate Professor
- Anita Lunić, Office Manager

6.8.

UNIVERSITY OF SPLIT, FACULTY OF KINESIOLOGY (CROATIA)

About the institution

Founded in 2008, the Faculty of Kinesiology is the youngest part of the University of Split, but kinesiology has belonged to the University's study programmes for over 60 years.

The Faculty provides study programmes from the level of Bachelor's to PhD in three departments: Kinesiological Education, Kinesiological Anthropology and Kinesiology of Sport. With over 500 courses, KIFST is a respectable scientific and educational instit81ution educating professionals who represent the basis for the development of all areas of kinesiology and sport: professional sport, sport for health, physical education and kinesiotherapy.

Number of students and staff

The Faculty has approximately 800 students, over 50 employees and 50 external associates. Among the total number of professors, seven of them are included in all the EL activities, while the majority of professors implemented EL goals in their syllabi and are trying to promote EL to over 400 students.

Summary of main piloting activities

- Series of four lectures for students on entrepreneurship as part of curriculum (for third-year students);
- Round table: Entrepreneurship in kinesiology and sports, including Faculty management, entrepreneurs and alumni;
- Business plan competition for students;
- Production of video on the importance of entrepreneurial learning for the Faculty;
- New Strategy of the Faculty, which places an explicit emphasis on entrepreneurship in its vision and mission;
- Further work on incorporating entrepreneurship into the Faculty's study programme will continue after the piloting through a project for defining the Faculty's

qualifications standards as part of the Croatian Qualifications Framework;
- Student articles;
- It is estimated that the piloting activities had as many as 500 direct beneficiaries.

EL Team

- Prof. Zoran Grgantov, PhD, Vice-dean, EL Coordinator
- Ana Kezić, Head of the International Relations Office
- Katija Kovačić, external associate
- Boris Milavić, external associate
- Mirjana Milić, external associate, president of Alumni Club
- Prof. Jelena Paušić, PhD, Vice-dean
- Prof. Dražen Čular, PhD, Vice-dean

6.9.

SS. CYRIL AND METHODIUS UNIVERSITY IN SKOPJE, FACULTY OF NATURAL SCIENCES AND MATHEMATICS (FORMER YUGOSLAV REPUBLIC OF MACEDONIA)

About the institution

The Faculty of Natural Sciences and Mathematics is one of the leading educational and scientific institutions in the former Yugoslav Republic of Macedonia. It was established in 1946 as part of the biggest and oldest state university in Macedonia, Ss. Cyril and Methodius University of Skopje. The main mission of the Faculty is to carry out education and research in the area of natural sciences including mathematics, informatics, physics, biology, chemistry, geography, and ethnology with anthropology. The educational activities are divided into eight main study programmes and 29 sub-specialisations. The Faculty is a national and regional leader in basic research in the area of natural sciences. More than 30% of all scientific publications in peer-reviewed international journals coming from the former Yugoslav Republic of Macedonia belong to the members of the Faculty.

Number of students and staff

The Faculty has more than 1400 active students and 140 teaching staff. A total of 10000 Bachelor's students have graduated from the Faculty so far, as well more than 400 PhDs and 650 Master of Science students.

Summary of main piloting activities

- A conference aimed at both students and university staff, focused on entrepreneurship in the context of natural sciences (speaker: leading national entrepreneur);
- A conference aimed at both students and university staff, focused on entrepreneurship and innovation in the context of natural sciences (speakers: national support institutions for innovation, entrepreneurs, etc.);
- Launching process to develop Career Centre, which would include emphasis on entrepreneurship as a career option (inter-departmental support ensued);

- Explicit commitment provided by Faculty management towards the development of a new course on entrepreneurship, developing a career centre, and towards broader developments for commercialisation (through spin-off companies) and cooperation with business;
- Student articles.

EL Team

- Prof. Valentin Mirceski, PhD, Vice-dean for International Cooperation, Science and Application, EL Coordinator
- Dr. Ana Ashtalkovska
- Dr. Irena Stojkovska
- Dr. Ivan Radevski
- Dr. Madjevic Mirjanka
- Dr. Ivanovski Vladimir
- Dr. Miova Biljana
- Dr. Sonja Gadzovska Simic
- Dr. Riste Popeski Dimovski
- Dr. Zajkov Olive

6.10.

UNIVERSITY ST. KLIMENT OHRIDSKI IN BITOLA, FACULTY OF EDUCATION (FORMER YUGOSLAV REPUBLIC OF MACEDONIA)

About the institution

Formally, the Faculty for Elementary and Pre-school Teachers in Bitola, as a higher development phase of the Academy of Education has its roots in 1964, aimed at reaching a higher level in the preparation of staff for class- and subject-teaching in elementary schools in the southwestern region of Macedonia.

The Faculty of Education offers undergraduate programmes for elementary school teachers, pre-school teachers and in language and literature (Macedonian, English, German, and French), as well as in Informatics and technical education. The Faculty also provides Master's and PhD programmes in a range of areas of educational sciences (including education management) and languages.

Number of students and staff

The faculty has around 1000 students and 50 teaching staff.

Summary of main piloting activities

- Entrepreneurship incorporated (by decision of the Faculty's Academic Council) into course syllabi of the following course subjects of existing first-cycle studies:
- Education management with prof. Dobri Petrovski, PhD
- Project management with prof. Metodija Stojanovski, PhD
- Entrepreneurial learning of the major Informatics and Technical Education to be continued further on;
- Two guest lectures for students on entrepreneurship: by CEFE Macedonia and the Business Start-Up Centre;
- Two study visits: UTMS–University of Tourism and Management Skopje, Agency for Promotion of Entrepreneurship and New Man's Business Accelerator Skopje;
- Student articles;
- Basis created (and support fostered) for the introduction of entrepreneurship in higher levels of education at least as an optional subject.

EL Team

- Dobri Petrovski, PhD, Vice-dean
- Prof. Metodija Stolanovski, PhD

6.11.

UNIVERSITY OF DONJA GORICA, FACULTY FOR FOOD TECHNOLOGY, FOOD SAFETY AND ECOLOGY (MONTENEGRO)

About the institution

The Faculty for Food Technology, Food Safety and Ecology is the seventh faculty unit of the University of Donja Gorica (UDG), a private higher education institution established in 2007.

The Faculty was established in September 2012, and this year will enrol its fourth generation of students in four departments: technology engineering (Food Technology), sanitary engineering, engineering the HoReCa system, and environmental engineering.

The Faculty has a strong cooperation with the main industries in the sector of food production, as well as with all stakeholders in the chain of food production and food safety (laboratories, governmental institutions, associations of producers). The Research and Business Strategy at the Faculty is in accordance with national and European strategy priorities of research and development in the field of production and food safety, biotechnology, ecology and sustainable agriculture.

Number of students and staff

There are 40 newly-enrolled students in the first year of studies at the Faculty, and all were directly included in entrepreneurial learning.

Summary of main piloting activities

- Development and delivery of a new elective course, Entrepreneurship, within the Food Technology study programme (37 students took the course and the examinations, earning 4 ECTS points);
- Entrepreneurship promotion activities: The Milocer Development Forum, the Global Entrepreneurship Week and Entrepreneurship School activities (over 400 participants);
- Business plan competition: Fifth stock of entrepreneurial idea.

EL Team

- Jovana Drobnjak, Coordinator of Faculty (EL Coordinator)
- Prof. Dragana Radević, PhD
- Sandra Tinaj, MSc, Associate

6.12.

UNIVERSITY OF MONTENEGRO, FACULTY OF PHILOSOPHY (MONTENEGRO)

About the institution

The Faculty of Philosophy in Nikšić is rooted in a tradition of higher education in Montenegro several decades long, and its beginning is related to the establishment of the Training College in Cetinje in 1947. In 1977, it was transformed into the Pedagogical Training Faculty which in 1988, in accordance with the Programme of Rationalisation of Higher Education and Research Work, was renamed the Faculty of Philosophy. The Faculty of Philosophy in Nikšić is an educational and scientific institution which organises undergraduate, specialist and postgraduate studies as well as doctoral studies.

Undergraduate studies at the Faculty of Philosophy are provided in the fields of Language and Literature (English, Italian, Russian, German, French, Montenegrin, Serbian), Philosophy, Sociology, History, Geography, Pedagogical Studies, Teacher Training, Psychology, Pre-School Education. The Department of English Language and Literature participated in the piloting.

Number of students and staff

The Faculty has about 2500 students, 70 teachers, and more than 80 teaching assistants.

Summary of main piloting activities

- Meetings, lectures and discussions organised for students with experts on entrepreneurial learning for sustainable growth and especially women's entrepreneurship;
- Workshop/focus group in which students presented their opinions about gender equality and entrepreneurship, focusing on artists/writers as a specific form of entrepreneurial career;
- Study visits organised to female writers, cultural workers, NGOs and other social entrepreneurs;
- Around 60 students participated in the piloting;
- Student articles.

EL Team

- Aleksandra Nikčević-Batrićević, PhD, EL Coordinator
- Marija Mijušković, MA
- Saša Simović, MA
- Milena Mićović, MA

6.13.

BUSINESS TECHNOLOGY INCUBATOR OF TECHNICAL FACULTIES, BELGRADE (SERBIA)

About the institution

The Business Technology Incubator of Technical Faculties Belgrade (BITF) was established as a partnership between the four technical faculties of the University of Belgrade (Civil Engineering, Mechanical, Electrical and Technological/Metallurgical), the Municipality of Palilula and the Democratic Transition Initiative, also receiving support from the Organisation for Security and Cooperation in Europe (OSCE).

The objectives of BITF are:

- To encourage and support young and educated people in starting up their own business and to keep them in Serbia;
- To create the conditions for commercialisation of the results obtained through science and research activities of university professors and their associates, by spinning off private enterprises;
- To facilitate the creation of new Hi-Tech SMEs.

Number of students and staff

So far, 620 students have passed trainings on entrepreneurship and 300 young people have engaged in the incubator as enterprises–tenants. 53 small enterprises have been tenants of the incubator and 45 new technologies/services developed in innovation projects; ten patents applications have been made and three clusters/networks established; and one service centre was developed.

Summary of main piloting activities

- Awareness raising campaign of entrepreneurship as a career option at the Belgrade University;
- Two student workshops: Think entrepreneurially (30 participants);
- Round table discussion: Entrepreneurship as a chance for a better life (26 participants);
- Entrepreneurship promotion events:
- Job Fair 2014/2015

- Future is in the start-up entrepreneurship
- From student to entrepreneur;
- Study visit of high school students to incubator;
- Student articles.

EL Team

- Marijana Aksentijević, Project and International Cooperation Coordinator

6.14.

HACETTEPE UNIVERSITY, DEPARTMENT OF BUSINESS ADMINISTRATION (TURKEY)

About the institution

Hacettepe University is a public university established in 1967, located in Ankara. The University's Department of Business Administration was founded in 1974 as a part of the Social and Administration Faculty. It became a part of the Faculty of Economics and Administrative Sciences in 1987 when the Faculty was established. The Department of Business Administration switched to an English Undergraduate programme in October 1990. Currently, the department consists of divisions of Management and Organisation, Accounting and Finance, Production Management and Marketing, Quantitative Methods, Organisational Behaviour, Commercial Law, and Tourism Management. Each year, the Department enrols approximately 100 students chosen by the University Entrance Exam.

Summary of main piloting activities

- Implementing elective courses on entrepreneurship for students enrolled in study programmes in the fields of natural science and technical science;
- Student workshops on entrepreneurship;
- Student articles.

EL Team

- Prof. Azize Ergeneli, PhD, Head of Department
- Anıl Boz, Researcher

6.15.

ISTANBUL UNIVERSITY, HASAN ALI YÜCEL FACULTY OF EDUCATION (TURKEY)

About the institution

The Hasan Ali Yucel Faculty of Education was founded in 1997. The mission of the institution is training qualified teachers who protect the attainments of the Turkish Republic, who are equipped with creative and critical thinking skills, who can cooperate with foreigners, who have national values and who are open to international values. In the 2009/2010 academic year, there were seven departments at the Faculty but now there are thirteen undergraduate programmes with 26240 students.

Summary of main piloting activities

- Incorporating entrepreneurship into existing teacher training courses;
- Conference on entrepreneurship (speaker: Dr. Hasan Ali Ozeroglu);
- Student-entrepreneur encounters (with Vine entrepreneurs: Bulent Mert and Omer Şenturk); Student articles.

EL Team

- Prof. Irfan Bulut, PhD

NOTES:

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