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What can an Entrepreneurship Education Ecosystem for Initial Primary Teacher Education look like?

Abstract

Analyses of European policy documents reveal an increasing priority of entrepreneurship education over the past two decades. However, the implementation of EE varies significantly within European countries, especially when it comes to primary schools and primary teacher education. In the course of the EIPTE project, pre-service primary teachers from six different countries participated in different intensive weeks. To ensure that more future primary teachers with EE competences will follow, even after the project completion, we need to understand the ecosystem for their education. Therefore, we firstly analyzed theories for university-based entrepreneurship education ecosystems and their usability for (primary) teacher education. Secondly, based on interviews with Entrepreneurship Education experts from six different countries, who were all involved in the EIPTE project, we gave an overview of the different stages of ecosystems in six different countries and provided a series of first recommendations for the development of a comprehensive ecosystem for EE in initial primary teacher education.

1. Introduction

Over the past two decades, entrepreneurship education (EE) in Europe gained more and more importance. Analyses of European policy documents reveal an increasing priority of EE. For example, "Implementing the Community Lisbon Programme: Fostering entrepreneurial mindsets through education and learning" (Commission of the European Communities, 2006); "Entrepreneurship in Vocational Education and Training" (European Commission, 2009); "Policy Brief on Youth Entrepreneurship" (European Commission, 2012a). These documents indicate that the „sense of initiative and entrepreneurship" is identified as one of the eight key competences of the European Union.

Other official documents, such as the "Council conclusions on entrepreneurship in education and training" (Official Journal of the European Union, 2015), the "Entrepreneurship 2020 Action Plan" (European Commission, 2013) or the document "Rethinking education: investing in skills for better socio-economic outcomes" (European Commission, 2012b) have also emphasized the need for entrepreneurial skills and thus EE on different levels: **"***Member States should foster entrepreneurial skills through new and creative ways of teaching and learning from primary school onwards, alongside a focus from secondary to higher education*" (European Commission, 2012).

However, EE varies a lot within the European Union (EU), especially when it comes to primary teacher education. For this reason, our project "Entrepreneurship in Initial Primary Teacher Education" (EIPTE) follows the objective to get higher education institutions to implement EE and/or enhance the quality of existing entrepreneurship education in their initial primary teacher education. Our understanding of EE is based on the following definition: *"Entrepreneurship is when you act upon opportunities and ideas and transform them into value for others. The value that is created can be financial, cultural or social"* (FFE 2012).

In the course of the EIPTE project, pre-service primary teachers from six different countries participated in different intensive weeks. To ensure that more future primary teachers with EE competences will follow, even after the project completion, we need to understand the ecosystem for their education.

Due to the lack of research on entrepreneurship ecosystems specifically designed for (primary) teacher education, this paper will analyze ecosystems for EE and their usability for initial primary teacher education in two steps:

Firstly, we will analyze existing theories and recommendations for university-based entrepreneurship education ecosystems. Secondly, based on interviews with EE experts from six different countries, who were all involved in the EIPTE project, we will provide an overview of the different stages of ecosystems in six different countries and provide a series of first recommendations for the development of a comprehensive ecosystem for EE in initial primary teacher education.

2. Theoretical framework

2.1 Ecosystems in Entrepreneurship Education

Isenberg (2011) is the first one to mention ecosystems in entrepreneurship as a cost-effective strategy and a new paradigm for stimulating economic prosperity. EE can be viewed as a sub-ecosystem of entrepreneurship (Regele & Neck, 2012).

Based on six case studies, Rice, Fetter and Greene (2014) determined seven success factors that enable universities to achieve a sustainable high-impact entrepreneurship ecosystem:

1. Senior leadership vision, engagement and sponsorship
2. Strong programmatic and faculty leadership
3. Sustained commitment over a long period of time
4. Commitment of substantial financial resources
5. Commitment to continuing innovation in curriculum and programs
6. An appropriate organizational infrastructure
7. Commitment to building the extended enterprise and achieving critical mass.

However, this analysis is based on leading university-based entrepreneurship ecosystems und requires the existence of certain structures and may not be directly applicable to (primary) teacher education, especially in a country like Germany, where EE is still considered “exotic”.

Apart from these success factors, there are numerous models that describe EE ecosystems (e.g. Basu, 2014; Brush, 2014; Matlay 2015). As a prominent example, the model by Brush (2014) is explained in the following.

Brush (2014) identifies the “internal entrepreneurship ecosystem” as a central component of a university-based entrepreneurship ecosystem. Internal entrepreneurship activities are located within the community and school, and consist of the curriculum, co-curricular activities, and research**,** which are the main working areas universities and colleges engage in with regard to entrepreneurship (Alberti, Sciascia, & Poli, 2004; Kuratko, 2005). Deduced from Fetters et al. (2010), Brush (2014) adopted the dimensions *infrastructure, stakeholders, resources* and *culture* to characterize the internal entrepreneurship education ecosystem defining these for a school or university. *Figure 1* illustrates how the dimensions encircle the entrepreneurship activities within the school/university/college and the community.

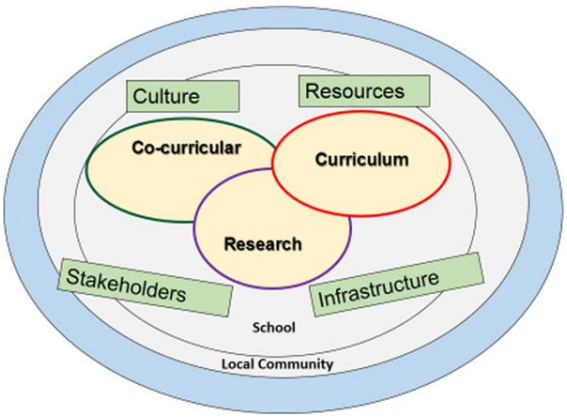

Fig. 1: Domain of Internal Entrepreneurship Education Ecosystem (Brush, 2014)

The domains in the middle contain the curriculum, such as materials in courses, pedagogies and delivery mechanisms; co-curricular activities, like programs, workshops, networking, business plan competitions and also decisions about the leadership, resources, audience served, faculty incentives, and resource allocations; and research, which covers theoretical and applied research, including decisions about research foci, faculty incentives, financial support, access to data, and the dissemination of findings.

The dimension *stakeholders* means all social and human components of a school: faculty, staff, and students. Stakeholders hold different interests are engaged in networks, and connected individually across the school and throughout the community. Determining the different needs of stakeholders, connections, and motivations is indispensable when building an ecosystem.

Resources contains financial factors, but also technology, physical facilities, social capital, organizational partnerships, capabilities, and the skills of faculty and staff.

Generally, *Infrastructure* refers to the physical campus (roads, buildings, facilities), but also covers the technological or digital environment.

Culture implies the symbolic aspects, norms, values, and traditions of the school. It represents "the touch and feel" of a campus, meaning the intangibles, and core values that guide work in the school.

At this point, it is important to note that this model is one of many. Numerous case studies have analyzed entrepreneurial universities and the main conclusion that can be drawn from these studies is that "there are as many models as there are universities to study" (Müller & Toutain, 2015, p. 8).

2.2 Entrepreneurship Education Ecosystem in Teacher Education

Even though ecosystems for EE exist, research puts strong emphasis on business/economics schools or study programs, e.g. the prominent study by Rice et al. (2014) who identified seven success factors based on the analysis of six universities that were selected due the longevity, breadth, and maturity of their entrepreneurship programs. The structures of such institutions might not be transferrable to e.g. (primary) teacher education, especially in countries where EE is underdeveloped.

Furthermore, EE definitions might differ in different contexts. As Lackeus (2015) points out, there is, on the one hand, a rather narrow definition of entrepreneurship viewed as starting a business. On the other hand, which is similar to our understanding of EE, entrepreneurship is defined in a broader sense and about creativity, opportunity, innovation and being proactive, hence relevant for different areas of life instead of just starting a business.

One EE ecosystem model that is based on a similar understanding of EE as ours, is the one by Müller & Toutain (2015). In their thematic paper, Müller & Toutain (2015) look at ecosystems of entrepreneurship education with the overall goal to encourage entrepreneurial learning processes.

Their model is designed to be mainly applied in actual schools, meaning primary and secondary schools, but also for the development of entrepreneurial competences of teachers.

The model displays five dimensions that mutually influence each other. In the following, each dimension will be explained. The original model by Müller & Toutain (2015) also includes "motivation". When dealing with the different dimensions, it is assumed that motivation may be individually linked to any of the five dimensions and thus influencing the entrepreneurship education ecosystem. However, "motivation" is not discussed any further, because this would go beyond the scope of this paper. All relevant dimensions for the present study are visualized in *Figure 2* and depicted in the following.

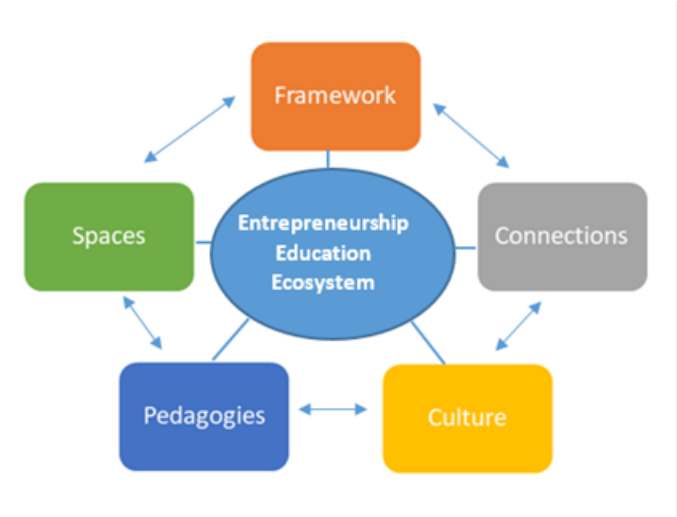

Fig. 2: The Entrepreneurship Education Ecosystem Model adapted after Müller & Toutain (2015)

The **framework** describes whether a suitable context for EE is given. Briefly, this may refer to the teachers' as well as to the learners' level. The teachers' and students' *EE competences*[1], including the teachers' didactic and methodological knowledge towards entrepreneurship-oriented lessons also fall under this dimension. *Practice* is also covered by this dimension: activities that focus, inter alia, on the creation of economic and social value and the development of an entrepreneurial mindset. For our study, based on our understanding of what a framework entails, we went a step further and also considered *curricula standards* for this dimension.

The dimension **connections** refers to explanations aimed at developing or maintaining links within one's own educational institution and with stakeholders outside the educational institution. Possible partners can come from a variety of backgrounds. Crucial factors to precisely describe this dimension are: the intensity of relationships, which we interpreted as *dependency,* including financial

[1] For more information about the EIPTE project's framework and competences, read "Framework: Entrepreneurship Education for HEI´s with Initial Primary Teacher Education" on the website www.eipte.eu, section "Dissemination". And see the following article: Arruti, A., & Paños-Castro, J. (2020). How do future primary education student teachers assess their entrepreneurship competences? An analysis of their self-perceptions. *Journal of Entrepreneurship Education*, *23*(1).

dependency, similar to Brush's 2014 "resources", *long-term network development* and *support*. Having connections means opening up to the outside world and allowing the development of closer collaborations (Tuunainen, 2005).

Culture in the sense that it is addressed here means "entrepreneurial culture". It describes the potential of schools and out-of-school actors to pro-actively develop a shared vision. Culture develops based on existing connections. The goals of the connections can be of different kinds. In a nutshell, decisive factors for this dimension are *communication* and *initiative*.

Pedagogies in this context mean experiential learning methods that aim to encourage pro-active behaviour of both, teachers and learners and can be used as a bridge between external partners. It covers "activities that encourage learners to take actions based on their individual interests, values and ideas" (Müller & Toutain, 2015, p. 18). We sum this dimension up in two categories: *traits of entrepreneurship* and *beliefs towards entrepreneurship education.* Beliefs struck us as important, because as Falk-Lundqvist et al. (2011) found out, political pressure to implement entrepreneurship in education has resulted in a negative attitude on the part of teachers.

In the dimension **Spaces**, Müller and Toutain (2015) include both *extracurricular learning locations* and *appropriate design of learning locations.*

We decided to structure our research around this model for four reasons:

1. Even though it is mainly designed to be applied in (primary and secondary) schools, the authors mention it can be applied regardless of the discipline of the school and the age of the learner. We even consider the fact that it was primarily designed to be used in the school context as an asset, because not only can it still be applied to higher education institutions, but future teacher will first experience being part of such an ecosystem in their own education and bring their experience and knowledge to their future workplace.
2. Müller & Toutain take teachers' competences into consideration.
3. The underlying assumptions about EE are similar to ours.
4. It has numerous overlaps with the model by Brush (2014):

- Brush's (2014) dimension *stakeholders* overlaps greatly with the dimension *connections* as she mentions different interests, engagement in networks and individual connections across the school and community
- Brush's (2014) dimension *resources* shows similarities with *framework* (in terms of competences and practice), *spaces* (in terms of physical facilities) and *connections* (in terms of organizational partnerships).
- Brush's (2014) dimension *infrastructure* covers, inter alia, the physical campus and the technological and digital environment, which is similar to *spaces*

- *Culture* occurs in both models in a similar sense
- Brush's (2014) domain (not to be confused with dimensions) *curriculum* includes course materials, delivery mechanisms which is similar to *framework* in terms of practice. In addition, she refers to pedagogies, which is a separate category in the model by Müller & Toutain.

The domain "research" (Brush, 2014) has no direct overlap with the Müller & Toutain (2015) model, but is, of course, crucial. In the context of the EIPTE project, different research output was produced and brought about important results and insights[2]. However, since the implementation of EE varies widely in the participating institutions, the research domain was not specifically included or rather "added" to the model by Müller & Toutain (2015) in the present study.

3. Methods

3.1 Semi-structured interviews with EE experts

We carried out semi-structured interviews with experts on EE in ITE from six different countries that were involved in the EIPTE project: Spain, Belgium, Denmark, Germany, Sweden and Lithuania. For this kind of interview, a guideline was developed (Flick, 2016) based on the question for each dimension proposed by Müller & Toutain (2015) that served as an aid to orientation, a reminder and contained all important questions, as well as instructions on how individual question blocks should be initiated (Stigler & Felbinger, 2012). The intended use of a guideline interview is to collect concrete statements on the research subject and to make a comparison between the individual interviews possible. The guideline should also structure the interview situation and serve as a guide; with the aim of keeping interviewer influences as low as possible (Stigler & Felbinger, 2012).

Two interviews took place in person and four were carried out online via Skype, five took place in English and one in German.

3.2 Interview partners

For the interviews, we chose six entrepreneurship education experts. They came from the six countries involved in the EIPTE project: Denmark (University College Absalon), Belgium (AP Hogeschool), Germany (Leuphana University), Lithuania (Vilniaus Kolegija/ University of Applied Sciences), Spain (University of Deusto) and Sweden (Mid Sweden University) and with the exception of the interviewee from Germany, all of them were directly involved in the project. Four of the interview partners identified as female, two as male. They were on average 40-49 years old and had an average experience with entrepreneurship education of five to six years. Five work as lecturers and one is a university professor.

[2] To read more, go to the EIPTE website www.eipte.eu

3.3 Data Evaluation

First, all interviews were transcribed with the transcription system from Kuckartz et al. (2008). For this study, this system is particularly suitable, because it is a good mixture of commentary and readability and thus suitable for the evaluation of qualitative content analysis.

In a second step, the material was evaluated using qualitative content analysis (Mayring, 2010) and the software MAXQDA. Based on the theoretical framework, deductive categories were applied to the material. After going through the material multiple times, the category system (see annex) was finalized.

4. Results and Discussion

In this section, the results will be displayed and discussed. The focus here is to see the different stages of the different more or less developed ecosystem dimensions.

Framework

Curriculum and Competences:

Entrepreneurship education is officially embedded in the curriculums of Denmark, Lithuania and Sweden[3].

For Denmark, the guidelines are clear and implemented in the law for teaching and teacher education. Moreover, the institution of the interviewee has a module for EE. EE guidelines are also embedded in the Lithuanian curriculum of primary schools. There is no differentiation between the subjects and the decision on how to concretely implement EE lies with the school. In Sweden, EE is briefly mentioned in the curriculum, but concrete approaches are missing. The Swedish interview partner mentions that the status quo leaves too little space for EE. Event though in teacher education, there is a good number of courses that foster EE competences, there is not sustained long-term commitment. Thus, it is crucial to put more emphasis on EE in the curriculum (as a first step).

In Spain, the guidelines in the law and curriculum are less clear, because even though EE is not directly embedded in the law, there are numerous clear defined competences related to EE. The interviewee from Spain emphasizes the importance to concretely implement EE in the curriculum, because EE competences for (future) teachers are crucial. Teachers should be part of an ongoing learning process and encourage their students to take initiative.

In Belgium and Germany, EE as a term is not officially embedded in either primary schools curriculums or teacher education. When asked about official guidelines or rather the lack thereof, the German

[3] For more information on official documents and the implementation of EE in the different countries, see the "Report for Policy Makers" on the EIPTE website www.eipte.eu, section "Dissemination".

interviewee emphasized the importance of a wider definition of EE in Germany. At this point, it becomes clear again how important a wider definition of EE is (Lackeus, 2015).

Practice:

With regard to the actual practice, the interviewees from Belgium and Denmark both mentioned the need for good teaching material in schools and teacher education. The interview partners from Spain and Lithuania emphasized (future) teachers' professional knowledge and entrepreneurial mindset.

Connections

Dependency:

The Danish interview partner describes a dependency between stakeholders that is not financial. The financial resources are sufficient. The Spanish interview partner prefers the term "relationship", but also reflects that, just like the Belgian interviewee, financial resources are imperative. Both, the German and the Swedish Interviewees concentrate solely on financial dependency. The financial factor is not explicitly, but rather implicitly, mentioned in the model by Müller & Toutain (2015); this factor does however occur in Brush's model (2014) and falls under the dimension *resources.*

Cooperation and long-term network development:

The institution of the Danish interviewee has various cooperation partners, e.g. different projects and museums. In addition, they have developed a solid long-term network with a foundation that has been in place for more than ten years. The foundation is also one of the partners in the EIPTE project.

The interviewee from Lithuania mentions a variety of connections: they are involved with other institutions, have connections with primary schools that implement EE. In terms of networks, they have built formal and non-formal networks, involving policy makers and primary schools.

The institution of the Swedish interviewee has established contacts with primary schools. They also have a solid collaboration with a science center, which is also part of the EIPTE project.

The Spanish institution has connections with different schools and institutions from the Basque Country. They also have contacts that e.g. give workshops and/or seminars on EE-related topics at the institution.

For the institution in Belgium, some cooperation partners exist and schools are also trying to meet more stakeholders. All in all, the interviewee concludes that there is room for improvement. It is similar in Germany; the interviewee explains the importance of both inner and outer connections. Because opening up for the outside world is crucial for closer collaborations (Tuunainen, 2005), which is important for an entrepreneurial school (Müller & Toutain, 2015).

Support:

The different interviewees talked about support in different manners. Some answers aimed at the teacher education level and some at the primary school level. For the former, the German interviewee wishes for more active approaches to meet stakeholders outside of one's own institution. The Spanish interviewee made a link between the two and considers former students to be a great support for schools. For the latter, the Swedish interviewee mentions e.g. a museum, where learners can interactively sell products on a Christmas market. In Lithuania, there are also collaborations with museums. Moreover, parental support is crucial; there are school visit for parents and even a "Family Day" at school.

In Denmark, support is very complex and extends through different levels of society. E.g. the Crown prince of Denmark is known as a prominent supporter.

Culture

Initiative and projects:

In terms of initiative, all interview partners' answers were quite similar. They all describe an active approach as a recurring action, which starts from an entrepreneurial mindset. It is more about thinking outside the box than primarily profit-orientated. These answers are reflected by the kind of projects the interviewees mention: in Sweden, students take part in projects, which may, in some cases, become more economic-oriented as students get older. In Lithuania, students have the option to participate in actual fairs or to invite business people.

Communication:

With regard to communication, the partner from Belgium names interaction as meaningful in order to learn about the abilities and thoughts of other people. The Spanish interview partner mentions communication as important for dissemination to people outside EE and to policy makers. For the Danish interview partner, the dialogue especially with children is important in order to understand what is on their minds. All these different levels of communication are important and are part of a shared vision and culture. As Müller & Toutain (2015, p. 17) state: "Language is understood here in a wider sense and touches on shared meanings and behaviors and a common vision for society".

Pedagogies

Traits of entrepreneurship:

The interview partner from Belgium states that value creation can arise from all aspects of EE. The Danish interviewee stresses the social part and uses the term "Social Entrepreneurship". The German interview partner focuses on self-efficacy experience, empowerment, learning in combination with

exploring as goals that should be reached. He also clarifies that this is a best-case scenario and not yet realized in Germany.

The answers illustrate again the possible variety of experiential learning methods in EE as also indicated by Müller & Toutain (2015).

Beliefs towards entrepreneurship education

Regarding beliefs towards entrepreneurship education, the interview partner from Belgium describes unwillingness to deal with new approaches as a kind of fear. According to the Danish interview partner, teachers and/or students seem not interested in new approaches and thus in EE. The interview partner from Lithuania refers to historical reasons, according to which business has a negative connotation and also adds that traditional teaching methods are still very common.

These statements are consistent with the study by Falk-Lundqvist et al. (2011) who have shown in their study that the political pressure to implement entrepreneurship in education has resulted in a negative attitude. Moreover, there has been and is an ongoing discussion that contrasts between a “traditional” and “entrepreneurial” way of teaching (Lackeus, 2015).

Spaces

Speaking about extracurricular learning locations, the Spanish interviewee describes that any space can be a learning space and specifically refers to learning situations outside the institution. Going outside for learning is also stated by partners from Belgium, Denmark and Lithuania. In particular, visiting museums is mentioned by Denmark and Lithuania.

Concerning appropriate designs of learning locations, the partner from Denmark states that rooms at the university may in some cases be limiting and inflexible, therefore she prefers to go outside with students. The problem with inflexible classrooms as strictly separated rooms with traditional equipment is also criticized by Müller & Toutain (2015). The interview partner from Sweden says that their learning spaces are technically equipped and may be re-arranged in various settings as required and are therefore more flexible. The Spanish interview partner also indicates that the organizational structure has been improving and that there are more special rooms and facilities available than before.

5. Recommendations and Limitations

Before giving recommendations for different dimensions, we want to give a general recommendation for the use of the model by Müller & Toutain (2015). It is not only valuable to get a sense of what a

current ecosystem looks like, but also to make aware, which stakeholders might already be unconsciously involved. At the same time, it is important to keep in mind that it is a theory-based model and that "there are as many models as there are universities to study" (Müller & Toutain, 2015, p. 8). In the case of countries where EE is already embedded in the curriculum and in an advanced stage of development, like in the case of Lithuania and Denmark, we would also recommend the use of more business-based models or parts of them. This would allow to include the dimension *research*, which we would recommend to consider in future analyses.

For the development of a comprehensive ecosystem for EE in ITE for primary teachers, different dimension need to taken into account and the status quo needs to be identified.

In the following, we will present recommendations for the different dimensions.

Framework

On an official level, we recommend that EE becomes an integral part of (primary) teacher education programs. It should be an obligatory content for every pre-service teacher before starting to work in a (primary) school. As stressed several times, EE and an entrepreneurial mindset is not teaching about economics and business, but it is about learning how to become a personality and professional with adequate competences.[4]

On a more concrete level, there is still a strong need for modules and appropriate learning material. For both, the EIPTE project tried to meet the needs. A module for EE in primary teacher education was designed that took place three times and was constantly evaluated.[5] Moreover, a toolbox was created and filled with different tools and kinds of teaching material in different languages. These tools are meant to be primarily used in teacher education, but are also applicable in other contexts.[6] We recommend, especially for countries and institutions that are in the beginning stage of implementing EE, to use these resources.

Connections

Since connections and networks play a crucial role in development an ecosystem, it is important to firstly identify existing stakeholders and connections.

The goal should be long-term network developments as they have proved to be beneficial as we were able to see in e.g. the case of Denmark in this study.

[4] For more information on recommendations for policy makers, see the "Report for Policy Makers" on the EIPTE website www.eipte.eu, section "Dissemination".

[5] To read more about it, see the "Research paper on students´ competences pre and post entrepreneurship education in ITE" on the EIPTE website www.eipte.eu, section "Dissemination.

[6] In the course of the EIPTE Project, a toolbox was created with tools and teaching material that foster EE competences. To learn more, go to the EIPTE website www.eipte.eu, section "Toolbox".

The financial factor plays a role, too, because in some cases unilateral dependencies can be produced, which might create an imbalance. Mutual connections and long-term and transparent financial commitment would be better/ideal.

To sum up, it is important to reflect on all stakeholders of education that are already consciously and maybe unconsciously involved in a collaborative learning process as they are all part of an educational ecosystem.

Culture

We want to emphasize how important it is to find a common language on different levels:

1. To develop a common vision that does not focus on profit, but on thinking outside the box and value creation.
2. To have meaningful interactions with other people, different stakeholders, colleagues, students and school children.

A good starting point is the awareness and the development of an entrepreneurial mindset. Moreover, positive experiences and initiatives should be exemplified and disseminated. There should be possibilities to participate in projects or to initiate own projects.

Pedagogies

Despite the benefits of EE in some countries, our study showed that EE is still predominantly negatively connoted for different reasons. Hence, we recommend an inventory about the beliefs about EE. On the basis of the results, obstacles can be addressed in different ways.

Spaces

With regard to spaces, we recommend that classroom learning should be more often combined with out-of-school learning spaces, even if this means extra work. In addition, schools and universities should make the furnishing of teaching and learning spaces more flexible and multifunctional, since learning spaces can have an active impact on the knowledge transfer.

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Annex

Category System

Category Main Category (MC) Sub Category (SC)	Definition	Examples
MC – Connections	Elaboration that aims to develop or continue connections within one's own educational institution or with stakeholders outside one's own educational institutions. Possible partners can come from a wide variety of areas (Mueller & Toutain, 2015). A description of the content of the relationship does not fall under this category.	
SC – Dependency	Statements about the extent to which the connection to stakeholders is described as free or as relations of dependence.	dependency in the society in Denmark, where we actually depend very much on each other, and very much sort of hope that the skills and the skills from the school are going on to the gymnasium and to the universities and so on. So we depend on each other and the stakeholders.
SC - Cooperation	Text passages that describe that cooperation is seen as a promising condition.	I think five ministries together, they made it and they are working hard and they are working all over the country and on many levels.
SC - Long-term network development	All text passages that emphasize that an exchange with possible stakeholders of an entrepreneurship education ecosystem is actively aimed at over a longer period.	I think some schools try to do that to meet a lot of connections with stakeholders without other levels of education. But that could be better in Belgium.
SC – Support	Offers and options for learners who promote or help to become involved in entrepreneurship education.	former students are also good connectors or because they are in different schools or because they are starting their own educational business
MC – Culture	Culture in the sense mentioned here describes the potential of schools and stakeholder outside the school to develop and share a shared vision in a proactive manner. The culture develops based on the existing connections. A common language and a differentiation of shared values develop that positively influences the ecosystem (Mueller & Toutain, 2015). The goals of the connections can be of various types (Mueller & Toutain, 2015).	
SC - Initiative	Excerpts that describe the stimulation and the tackling of ideas, ideally right through to implementation, but at least until planning.	of course to promote a culture of entrepreneurship that it is a good thing to start your own companies. And well, we want more private initiatives to start companies and businesses. So, that would be a desired cultural effect, but whether

		we reach it or not, it is really hard to say
SC – Communication	Statements referring to the fact that communication is a significant means of contributing to an increase in knowledge about entrepreneurship education.	talking to each other, and knowing each other's skills. So that you can help each other and make the education ecosystem stronger by I think a culture of talking to people getting to know about your good even when children in primary school but definitely students in higher education
SC - Projects	Text passages that describe projects within the framework of entrepreneurship education or the beginning of projects within the framework of entrepreneurship education.	projects to implement it on a more of a case based scale. This school is participating in a project trying to implement entrepreneurial education.
MC – Framework	Statements that describe whether there is a framework for entrepreneurship education or not. Entrepreneurship education can aim for various things: Developing a business idea and creating economic as well as social value and / or developing an entrepreneurial mindset (Mueller & Toutain, 2015). The focus is on creating value for society or the local community (Mueller & Toutain, 2015).	
SC – Competences	Texts describing that the attitude of the teacher, their professional knowledge as well as their methodology and didactics are an impact factor in shaping Entrepreneurship Education.	So considering the way I don't know which one/ entrepreneurship education adapted into the framework, I think that one of the first steps is to have a clear goal on entrepreneurship competence, development of it in the legal documents.
SC – Curriculum	Statements that either show that Entrepreneurship Education is embedded in the curriculum or is not embedded in the curriculum.	entrepreneurship education as such with the name is not really implemented in the educational system. But we have other namings for it.
SC – Practice	Text passages that describe that the attitude of the teacher, their professional knowledge as well as their methodology and didactics represent an impact factor for the design of entrepreneurship education.	It depends on the attitude of teachers. All the time those professionals have, of course, for going to university for instance.
MC – Pedagogies	Pedagogies means independent learning methods that aim at pro-active behavior of both teachers and learners. It is important that the link is made to cooperative approaches that are based on collaboration beyond the classroom. Teaching-learning situations should be based on the real world. In addition, the learners should be made aware that “failure” is welcome (Mueller & Toutain, 2015).	
SC - Traits of Entrepreneurship	Emphasis that entrepreneurship is multidimensional and cannot be assigned solely to an economic or social dimension.	It is very important, and this is why I also say that democratic education for me, is a part of entrepreneurship education. So for me, it's not so

		hard to see that it's important because we have always done that, or done part of that, at least. Maybe we didn't do this economic part so much, but we did all the other things. In Denmark, we say social entrepreneurship. That's important for us.
SC - Beliefs towards entrepreneurship education	Description of the challenge that teachers have reservations about entrepreneurship education for different reasons or a mindset that does not favor the latter. In addition, teaching "with textbooks (only)" is an obstacle.	But this is a system, so we have to change it. Oh, I don't have the answer, I don't know how to do that.
MC – Spaces	Statements that contain the suitability of learning environments.	
SC - Extracurricular learning locations	Statements that describe that entrepreneurship education is not tied to the class or seminar room.	I love to go out with the students to different schools, different systems, different people, also people that don't have anything to do with education
SC - Appropriate design of learning locations	Text passages that describe whether learning locations are designed to be activating or suitable (or not).	So, that is the tech part of the room, but the most important thing in relation to entrepreneurship education I would say is that the group furnishing that allows group work thinking together, and maybe the whiteboard as a tool for thinking together as well to prototype and draw and well, work, develop things together.