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# ENTREPRENEURSHIP EDUCATION IN TRANSITION

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## Abstract

In this key note speech I will inform about a research project I was involved in. We, three universities in the Nordic countries, were challenged to improve our entrepreneurship educational offerings. This is some of the reflections we made along the way. We wanted to find and transfer best practice within entrepreneurship education, but we ended up being inspired by good practises. This as a routine or another innovation always has to be reinvented by the adopter, and as the context differ for different institutions offering entrepreneurship education; we realized that we could only be inspired by each other. This speech is then about how we went along to be inspired by each other's good practice. My hope is that you could be inspired from the toolbox we invented to improve your own educational offerings, adjusted to your own local context.

*Keywords:* Entrepreneurship Education; Inspired By Good Practice; Measuring Success in Entrepreneurship Education; Transfer of Best Practice.

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## 1. Introduction

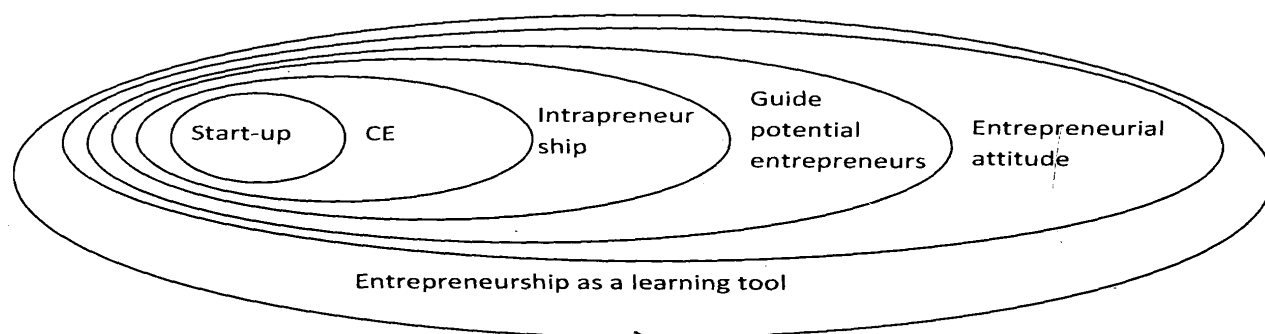
Entrepreneurship is regarded as a tool government could use in order to enhance the competitiveness of the country or a region within the country. Enhanced entrepreneurship education is then one of the means that could assist in reaching the goal of an improved competitiveness, and by this a raise in the living standard for its citizens. The Norwegian central government as well as different local governmental bodies has lately turned to entrepreneurship for achieving its overall goals of prosperity for its citizens. This has led to an ever increased focus on research on conditions for entrepreneurship, how to spur more entrepreneurship and how the society could stimulate to more and better forms of entrepreneurial behaviour. This has led to an ever increased interest in research on entrepreneurship education. A White book presenting The Action Plan for Entrepreneurship in Education (Handlingsplan, 2009, p 3) expressed the new role for entrepreneurship in education: "The education system is central to efforts to develop a culture of entrepreneurship and a community that values the pursuit of knowledge and creativity." The Government wants Norway to be the leading country in entrepreneurship in education and believes that entrepreneurship skills are relevant to all areas of life, business and industry. The Government wants to promote entrepreneurship expertise in all aspects of education, within kindergarten, primary and secondary school, vocational and secondary schools in general, and in all facets of higher education. This is an ambitious goal. Our research reported here could assist by showing how teachers and educational institutions could contribute at their local level. It is important to fit the general ideas of entrepreneurship to the local context in order to make operative and contributing results. Entrepreneurship education has to fit to the cultural and industry context in order to be useful for the graduate and the society (Hytti, 2008). The White Paper on the Quality Reform in Higher Education (Stortingsmelding, 2000-2001) highlights the educational institutions' responsibility for letting the student succeed in their learning career, and that the

courses offered allows the student competence to be attractive and relevant to community needs. The message stated in the White papers is that educational institutions must develop the ability to listen and to dialogue with those who have legitimate expectations about the results of education. Our research point to how this could be done.

## 2. Different Types of Entrepreneurship

The entrepreneurship term is related to many contexts and many different activities. There has been a development over time in what the entrepreneurship concept contain and describes. For some it means starting a businesses, for others it means renewal and revitalization of existing businesses, while for others entrepreneurship describe personal qualities and attitude that makes the person who has these properties actively seeking their own and new solutions to economic and other problems (Bridge et al ., 2009). This last type of entrepreneurship may then be regarded as an individual fundamentally attitude, an attitude that includes exploration and development, leadership and initiative. In recent years the concept of entrepreneurship also includes new forms of teaching in which students engage more deeply in the design of their own learning situations (Ødegaard, 2003).

Figure 1: Developments in the content of the concept of entrepreneurship



## 3. Entrepreneurship defined

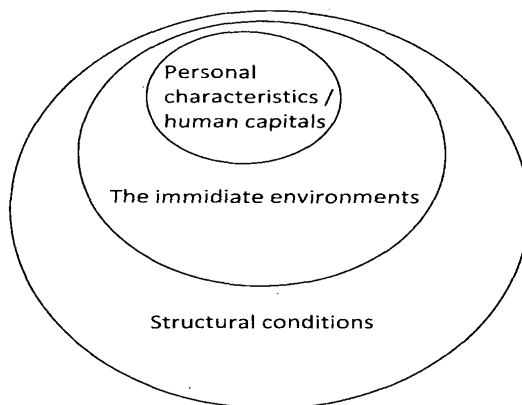
Hornaday (1992) summarizes some of the many definitions of entrepreneurship by focusing on three main dimensions of the entrepreneurship concept; an entrepreneur 1) creates an organization where a 2) financial innovation is used as a means to 3) seeking profits in a financial market. The three dimensions are, therefore, organization, innovation and profit. Hornaday argues that one needs different definitions of entrepreneurship for different purposes, but that all definitions of entrepreneurship should relate to these three dimensions to a greater or lesser degree.

## 4. Different Drivers for Entrepreneurship

It is common to assume that the qualities and competencies of the person affect how likely it is that the person engages in entrepreneurial activities. Competence is the characteristics a person can use in a job situation (Boyatzis, 1982). These properties are classified to as human capital, social capital, and financial capital and personality traits. Likewise, an individual's personal characteristics and attitudes are also assumed to affect the individual's entrepreneurial behavior. The motive for such activity, according to McClelland and Winter (1969) is the need to succeed, cohesion and power. Others point to the need for individual autonomy and desire for influence (Bridge et al., 2009). A widely used model to explain the behavior linked to confidence (Bandura, 1997), is Ajzens theory of planned behavior (1988), linking a person's own attitude, subjective norms and perceived control to behavioural intentions. Moreover, aspects

related to the immediate environments as family situation, job situation and role expectations all contribute to form the individual's entrepreneurial behaviour. So do also structural conditions facing the individual. Supported by structuration theory (Sarason et al., 2006), Global Entrepreneurship Monitor (GEM) (Bosma et al., 2009) proposes a model of entrepreneurship that connects institutional characteristics, demographics, entrepreneurial culture and socio-economic conditions together as explanations of individual entrepreneurial behaviour.

Figure 2: Structures that affect entrepreneurship



Norway's economy is classified as an innovation-driven economy (Porter, Sachs & McArthur, 2002). An innovation-driven economy is characterized by being complex, knowledge intensive and that companies must produce and deliver goods and services using sophisticated production processes in order to survive (Sala-I-Martin et al., 2008). Entrepreneurs in Norway must therefore deal with complex regulations, technologies, market needs and organizational structures to be competitive. The competitiveness of entrepreneurs in an innovation driven economy is dependent on the ability to offer knowledge-based products and services (Martinez et al., 2010). This means that it is knowledge-intensive to establish and conduct business in Norway.

**5. Entrepreneurship Typologies**

There are different typologies of entrepreneurship activity, each of them links to each of the core element (organization, innovation and profit) differently. Running a lifestyle firm enjoying a hobby or talent for fun or running a social enterprise does not link strongly to profit, even if the activity need to balance its income and costs. Running a lifestyle firm does not necessary link strongly to innovation, and intrapreneurs does not necessarily need to create a new organization in order to succeed. Figure 2 indicate these differences.

Figure 2: Different types of entrepreneurship and how these links to organization, innovation and profit, \* indicate a weak link, \*\* indicate a moderate link, and \*\*\* indicate a strong link.

Typology/elements	Organization	Innovation	Profit
Business start up	***	***	***
Lifestyle firm	*	*	*
Comfort zone firms	**	*	**
High growth firm	***	**	***
Intrapreneurship	*	**	**
Export oriented firms	***	**	***
Social entrepreneurship	***	**	*
Entrepreneurial spirit	*	**	*

To complicate it even further, we know that different groups of people are different regarding personal characteristics and human capitals, and that they perceive the cues from the immediate environment differently, and that they faces different structural conditions. We know that males and females enact entrepreneurship differently; we also know that youths have their special needs when it comes to entrepreneurship. Immigrants and different ethnic groups are also facing different conditions for entrepreneurship based upon their group. There are even differences regarding conditions for entrepreneurship for different regions in a country. We need to take account of all this in order to assist in allowing people to reach their full entrepreneurial potential.

## **6. Entrepreneurship Education : Goals – Processes – Results**

The school's basic function has been and still is to prepare the next generation in order to function in a society as the society is at any given time (Illeris, 2009). Learning is a process where one compiles input from the environment together with past experiences and then constructs new meaning (Krueger, 2009). Learning is a permanent change in human behavior or potential performance as a result of interaction with and experience of the world (Driscoll, 2000). Knowledge cannot be passively transferred; it is created on the basis of what is known from before and constructed through the loops of completed guesswork and practical experience (Bruner, 1997). The purpose of education is to develop an individual's intellectual capabilities. Higher education has an additional responsibility in preparing students so that they can create the world they will inherit (Green, 2009).

Gibb (2005) argues that entrepreneurship education has three purposes. It should prepare for entrepreneurship, promote the understanding of entrepreneurship and to promote learning through purposeful activity. Moreover, entrepreneurship education is a targeted process (Engelsen, 2009). Entrepreneurship is an important mechanism to achieve economic development, employment, innovation and welfare (Shumpeter, 1934; Acs & Audretsch, 1988). This has led to recognition of the importance of a relevant entrepreneurship education as a means to achieve these benefits (Fayolle & Kyrö, 2008).

Diamond & Spence (1983) suggests four different types of evaluations:

- Program Plan questions
- Program Monitoring Questions
- Efficacy Measurements
- Efficiency Measurements

These can be roughly divided into the measure of input, i.e., program planning issues; process goals, that is, program monitoring issues, and output measures, i.e. measurements of efficacy and efficiency. One can thus measure the input, process or output of an activity or action. The result that can be measured are the elements of competence and the actions one seeks for by education, process is related to the pedagogical and didactic grips that are taken to promote learning in entrepreneurship education, and input is the educational theoretical foundation which upon entrepreneurship education is based.

Output measures often include community impact, the number of companies established by former students, and the economic value of innovations created in these firms. Fayolle & Degeorge (2006) criticizes such goals by pointing out that for many of the goals set up; one cannot acquire data until long after the impact took place. Importance for society may not appear until several decades later and it is also difficult to specify the importance of a single factor in such complicated relationships (Block & Stumpf, 1992). Even

more difficult is it to measure the effect of the teaching on students' entrepreneurial attitudes and how education has influenced the culture of society (Fayolle & Degeorge, 2007). Although it is easier to measure the number of businesses which graduates are creating, how many employees they have and what turnover they have, there are many other purposes with an entrepreneurship education that is not caught up by such measures. A simple evaluation is made difficult by the many tasks and roles of an entrepreneur hold and the intricate context of entrepreneurial action takes place in (Lans & Guliker, 2010). Input measures are furthermore often critiqued for not taking account of self selection bias.

Process objectives express something about how the participants experience the process itself. The number of students who register for a course can be an indication of the course's popularity, popularity can be a measure of the extent to which students assume that the course will help them achieve their life goals. How well the course responds to their expectations could be measured by drop-out analyzes. Other process measures could be the number of students who apply for an education, it may be the grades the students achieve, and it may be how easily the students get a job after graduation. Other process measures may be that studies attract students with certain age-, gender- or other demographic characteristics. It is also customary to invite students to mid-term and final evaluations of courses. Here, students can express how well or poorly they find that educational programs are organized. This evaluation assesses mainly the educational presentation of the subject matter. The value of such an evaluation prerequisites that the academic content is actually adapted to future needs. As the world is constantly changing, it is not necessary so that the problems felt today will be important also in a distanced future. The educational institution is thus responsible for knowing which knowledge elements the student and the community need in the future. The discussion provided has shown that it is difficult to measure the result of or processes within an entrepreneurship education and that one rather should focus on measuring the input. A strong academic foundation is thus the best assurance that an entrepreneurship education provides the effects that society and the individual student needs. Many business schools therefore have a strong research focus and are actively looking for new explanatory models for different entrepreneurial behavior. We now turn to one such research and present its result.

## **7. Our Study**

University of Nordland (Norway), Luelå Technical University (Sweden) and Kemi-Tornio University (Finland teamed up for to improve our educational offerings in entrepreneurship education. The project began to develop a tool to provide a description of what each university has of offerings in entrepreneurship. Then, we developed tools to be able to challenge each other whether our objectives were consistent with the expectations of key players have to the results we deliver.

As the first tool we listed all the educational offerings related to entrepreneurship that the universities offered. We then indicated the level of education (BSC, MSC, PhD), and which elements of entrepreneurship the course focused upon (see fig 1). The second tool we developed helped us to systematize the knowledge elements of the course which the student needs to master after the course is completed. The tool also requires us to state the purpose of the course and what context the information will be used in. We also believe that it is important to specify how to motivate students through action and how to generate learning situations and which knowledge elements we should focus on. For to achieve this we added Content, Purpose and Context as a second dimension to the Knowledge, Motivation and Action dimension in figure 3.

Figure 3: Tool 2: Knowledge, Motivation & Action versus Content, Purpose & Context

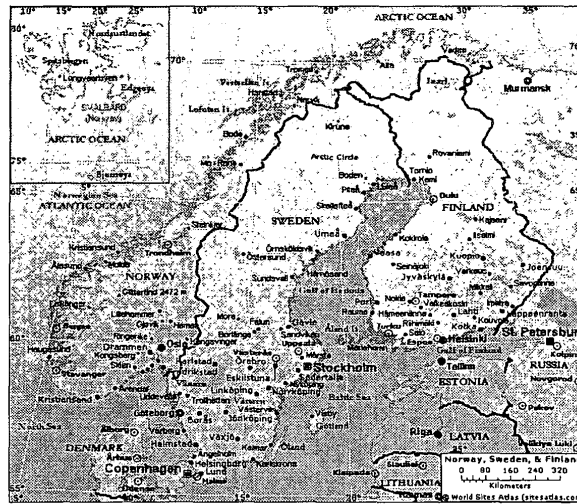


As our third tool, we prepared a stakeholder analysis. We revealed who were the stakeholders to entrepreneurship education and asked them what they regarded as a successful outcome from entrepreneurship education, how they defined entrepreneurship, what could be better, what they missed in it, how could we measure if it became better, and how they could contribute to an improved education. The stakeholders were central and local government, some governmental and third sector bodies aimed for improving conditions for entrepreneurship and actors within the university itself; rector, teachers and students as well as representatives from the local industry. The stakeholders offered a lot of interesting and applicable suggestions for improvements.

Along the way we realized that even if Norway, Sweden and Finland is very much similar, there are important structural elements that differ; structural elements that have a significant influence on how entrepreneurship is taught and how it should be taught. We then turned to data from Global Entrepreneurship Monitor in order to develop our fourth tool. Utilizing expert data, population data and background data from official statistical databases, we managed to poke out specific challenges for each country.

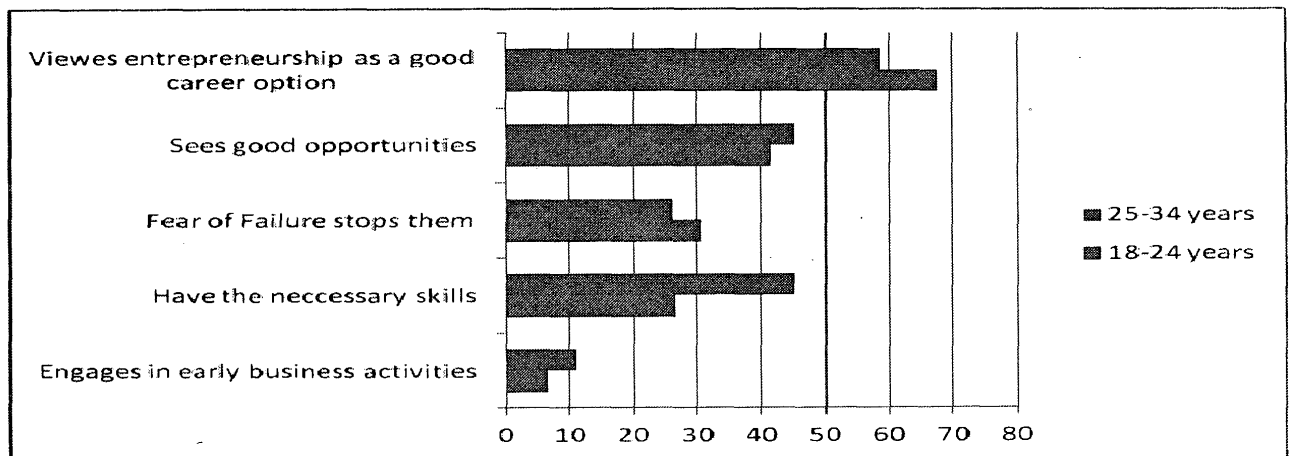
There are many entrepreneurs in Finland. Finnish entrepreneurs like to start businesses alone, where they will be working full time, and they do it in order to achieve greater independence. The Finns also have lower growth ambitions for their businesses. We see a potential for improved entrepreneurship in Finland by allowing students to work in groups. This will eventually form bigger start-up teams combining and adding human, social and financial capitals to the start-up effort. There is also a potential for more entrepreneurship in Sweden. Although the Swedes have good faith in their own entrepreneurial abilities and see many business opportunities and believe they will to start business within the next three years, there are fewer entrepreneurs in Sweden. More student-firms will eventually bring more people from intention to action as they learn how to do it. Norwegian entrepreneurs start businesses with high growth aspirations; they use new technology to produce familiar products in foreign markets. The challenges for Norwegian entrepreneurs are to improve their business idea so that growth aspirations become a reality. Universities could focus more on improving business ideas and how to hold on to intellectual properties created.

Figure 4: A map over Norway, Sweden and Finland



Our students are mainly young adults. According to data from Global Entrepreneurship Monitor young adults views entrepreneurship as a good career option, and sees good business opportunities around them (see figure 5). Fear of failure stops them, and they do not feel that they possess the necessary skills for succeeding in pursuing these ideas. Furthermore, we see that young adults aged 18-24 years to a lesser degree than adults aged 25-34 years actually act on the possibility they see. The response to this would then be to increase the stock of entrepreneurial skills among the young adults, leading them to engage in entrepreneurship later on. As a result of our analysis we did so.

Figure 5: Start-up activity among adults 18-24 and 25-34 years old in Norway. Data from GEM Norway.



**Figure 6:** Students presenting a new cake product on behalf of a local bakery to customers of the bakery



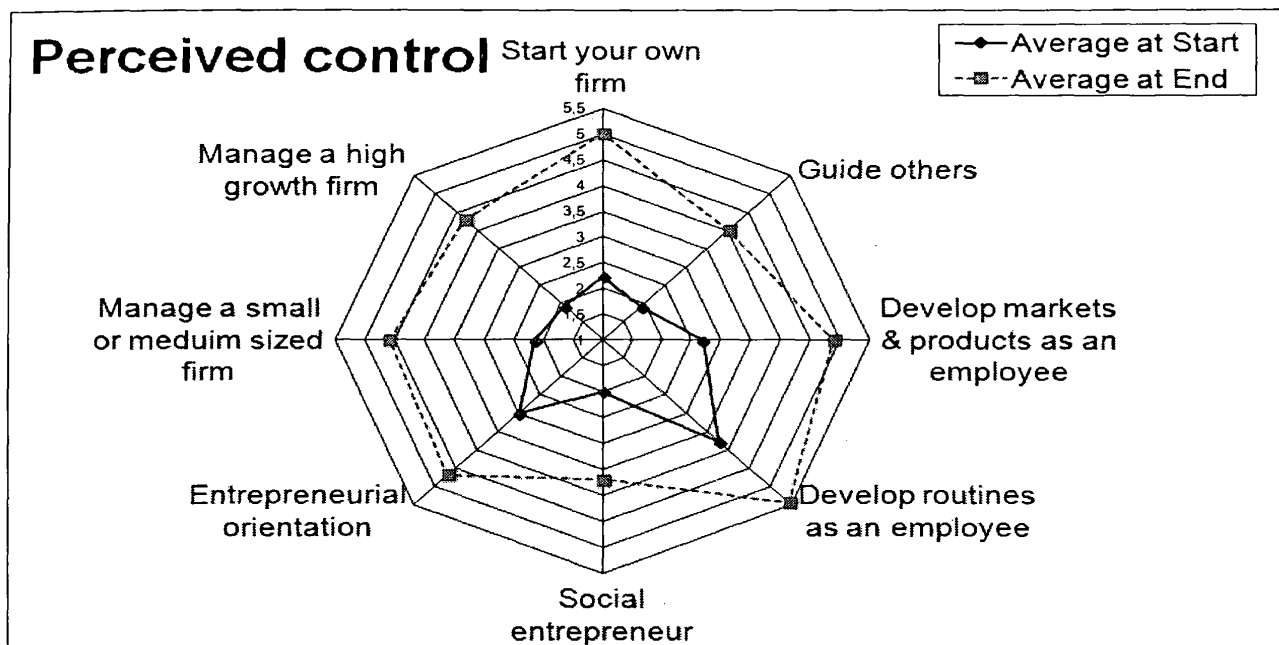
### **8. Measuring Success in Entrepreneurship Education: Output – Process – Input**

With the results from the country analysis as guidance we then reconfigured our educational offerings along the suggestions from the stakeholders and our internal university wise analysis. In my university, I changed the course in “Entrepreneurship and small business management we offered for our third year BSc business management students. We introduced that the students should develop an actual product or service for a local business, using real numbers and real resources on behalf of the business. This allowed us to link closer to the need of the industry as well as providing the students with more rich learning situations. Our stakeholders wanted us to expose our students to local cases and practical assignments in order to increase the students learning and future skills in solving actual business problems. Babson College, USA, is a powerhouse for research and teaching in entrepreneurship. Babson has a strong internationally focused research on entrepreneurship while they at the same time are focused on educating students who will succeed as entrepreneurs. Their applied research on entrepreneurship support their teaching and make their educational offering particular updated and relevant. Babson has over time developed what they call an ecosystem for entrepreneurship. An economic ecosystem is economic community built on a foundation of interacting organizations and individuals (Moore, 1993). This ecosystem allows Babson to develop teaching cases based on local resources, traditions and institutions. We are doing a modest start on building the same competence based upon our own context.

Letting the students filling in a questionnaire investigating the students own attitude, subjective norms and perceived control to behavioural intentions regarding eight aspects of entrepreneurship allowed us to see how we succeeded in improving the student’s experience of mastering entrepreneurship. The eight aspects of entrepreneurship covered by the course was; business start up, assisting others in starting and managing their firm, developing new products, services and routines, social entrepreneurship, having an entrepreneurial attitude, managing a SME and managing a high growth firm. As figure 6 indicates, there was a substantial change in perceived control during the course. We did not see a similar difference in before and after values regarding attitude, subjective norms and intention.



Figure 7: Changes in perceived control before and after the BSc course in entrepreneurship



### 9. Advices and Take-Away

I have now presented a toolbox for understanding the current situation and for to figure out which challenges our efforts has to meet. If you want to go somewhere, it could be nice to know where you are and where you want to be. Our toolbox could assist in revealing these issues. One can use the classification scheme to define the profile of the existing educational offering. One can specify which facets of entrepreneurship one would focus on and then create a description of strengths and weaknesses of existing offering. The head, heart, and foot model provides an ability to describe what one does, why one does it and how one does it, and how all this fit into the context of the institution. This provides an understanding of where one is in the landscape of entrepreneurship education. The next step is to get a better grip on where to go. A stakeholder analysis will tell us something about the expectations the environment has toward the educational institution offerings. Who the stakeholders are depends on the institution, the course level and the course size. It is also necessary to know how to get to the wanted position. A cross-tabulation of our offerings and the expectations from our stakeholders will reveal the conditions we need to focus on in our efforts to renew our offerings in entrepreneurship education. We wanted to identify the stakeholder's motivation for getting involved, what stakeholder wanted to see as results and how the stakeholder was working in order to advance their goals. When one compares all the stakeholders' motivation one can see if there is some overlap in their wants and one can see if it is possible to combine the different goals of the various respondents. We invited respondents to tell about how they wanted us to improve ourselves and to make suggestions for what activities we should tackle in order to better respond to their needs.

Still, it is our responsibility to offer the right type of entrepreneurship education. We are the professionals. The discussion indicates that it is difficult, if not impossible to measure the output of entrepreneurship education, as the result will only show itself in a distanced future. It could also lead us on wrong ways to trust to strong on process measures regarding entrepreneurship education, as today's needs does not necessary coincide with future needs. The best would be to build your entrepreneurship educational offerings on a solid foundation of research on what spurs the wanted type of entrepreneurship for any given group of individuals; would it be business start-up, intrapreneurship, entrepreneurial attitudes, social

entrepreneurship, SME management or management of high growth firms by males, females, young people, immigrants or ethnic groups.

Study your context, clarify your goals, investigate your options, do an enlightened choice.

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