Entrepreneurship Training and Incubator Management

End report

August 2012

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Programme: LIFELONG LEARNING PROGRAMME
Sub-programme: LEONARDO DA VINCI
Action type: PARTNERSHIPS
Action: LEONARDO DA VINCI Partnerships
PREFACE

This report is an end report for the Leonardo Da Vinci Partnership project “Entrepreneurship training and incubator management”, financed by the EU Lifelong Learning programme. The project period has been from August 2010 to August 2012.

The aim of this project has been to exchange experience from entrepreneurship training and incubator management by bringing together different partners with experience from these fields.

This report is a documentation of some of the findings.
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1. **INTRODUCTION**

1.1. **OUTLINE OF THE PROJECT**

The economic and financial situation in the world is in a difficult and unstable situation, and is calling on a wide variety of measures in all sectors. In the education and training sector one of the key focal points should be to train the young people to be better skilled to employ themselves.

In many countries in Europe entrepreneurship training have taken part at different levels in the education/training systems. Most of these training have taken place at higher level of education. However, in Norway there has been widely established entrepreneurship training at secondary level (in vocational school system). There have also been minor trials of introducing such training at primary level.

Developing good entrepreneurs is not done only by training, but also calls for a system of follow up when entrepreneur starts his/her work in developing their own company and services. Nearly all entrepreneurs have rather good understanding of the product/services they want to develop. However, the understanding and focus on the business side is not so well developed and focused on. In most countries there have been set up incubators where the entrepreneurs can start their business activities. How these incubators work and function differs widely.

1.2. **GOALS, OUTCOMES AND STRUCTURE OF END REPORT**

The aim of this project was originally divided in four:

1. The aim of this project has been to exchange experience from entrepreneurship training (ET) and incubator management (IM) by bringing together different partners with experience from these fields.

2. We will develop a common framework for entrepreneurship training and incubator management, and test these in the different institutions.

3. This project will address the need for knowledge about the impact of entrepreneurship-promoting actions, by exchanging experience and ideas on different actions and their effect, seeking best practice.

4. This project will develop long-term cooperation between peer partners with the aim to exchange trainers and hopefully young entrepreneurs in the future.

At the first meeting in Bergen (26.-27.01.2012) the goals was discussed. At first all the partners got to share their main goal of participating in the partnership, and to say so if they wanted any of the already established goals for the project to be changed in any way. The result of this round around the table was that all partners agreed that the main goals stated in the project proposal, were the ones they actually wanted to have for the partnership.
The following two goals had such similar results that the group decided they could be joined together: “This project will exchange experience from entrepreneurship training and incubator management by bringing together different partners with experience from these fields” and “develop a common framework for entrepreneurship training and incubator management, and test these in the different institutions.”

Based on these goals, the partnership decided to develop a common conceptual framework for entrepreneurship training and incubator management (Outcome for goal 1 and 2). Each partner has presented their work on entrepreneurship training and incubator management. This is summarized in chapter 5.

Regarding goal 3, each partner has presented their work on entrepreneurship training and incubator management. A description on different practices from the different partners is found in Appendix 1. A summary of the partners reflections on the different practices is found in chapter 5.

Goal 4 has been to develop long-term cooperation between the partners, with the aim to exchange trainers and hopefully young entrepreneurs in the future. The following goal was difficult to work with specifically, as it turned out to be a new project in itself, and not really part of this one. The conclusion was to document the thoughts from the group, and for the different partners to start thinking about this, and start talking with the partners who would be relevant to do exchanges with in the future. The purpose of this would be to have a basis to start from when this partnership ends, rather than starting from scratch, not having thought about it at all.

2. PARTNERS
The following organizations have been part of the partnership during the project period. These differs in level (vocational school/university level), role (education, incubator, development agencies).

<table>
<thead>
<tr>
<th>Participating organization</th>
<th>Level</th>
<th>Engagement</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bergen University College</td>
<td>Higher education</td>
<td>Entrepreneurship training</td>
<td>Norway</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Incubator management</td>
<td></td>
</tr>
<tr>
<td>Odda Secondary School</td>
<td>Upper secondary</td>
<td>Entrepreneurship training</td>
<td>Norway</td>
</tr>
<tr>
<td>Hordaland County Council</td>
<td>Regional development agency</td>
<td></td>
<td>Norway</td>
</tr>
<tr>
<td>Seinäjoki University of Applied Sciences</td>
<td>Higher education</td>
<td>Entrepreneurship training</td>
<td>Finland</td>
</tr>
<tr>
<td>Sedu Adult Education</td>
<td>Adult training</td>
<td></td>
<td>Finland</td>
</tr>
<tr>
<td>Fachhochschule Jena</td>
<td>Higher education</td>
<td>Entrepreneurship training</td>
<td>Germany</td>
</tr>
<tr>
<td>Gründer- und Innovationszentrums Stedfelt</td>
<td>Incubator</td>
<td>Incubator management</td>
<td>Germany</td>
</tr>
<tr>
<td>Technologie- und Berufsbildungszentrum Eisenach</td>
<td>Vocational school/secondary level</td>
<td>Vocational training</td>
<td>Germany</td>
</tr>
<tr>
<td>Bundeshandelsakademie und handelsschule Völkermarkt</td>
<td>Upper secondary</td>
<td>Entrepreneurship training</td>
<td>Austria</td>
</tr>
<tr>
<td>BCS Poslovno Podporni center</td>
<td>Regional</td>
<td></td>
<td>Slovenia</td>
</tr>
</tbody>
</table>
3. WORK PROGRAM
The partnership has undertaken the following work program during the project period 2010-2012:

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Place of meeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.-27.01.2011</td>
<td>Partnership kick-off</td>
<td>Bergen, Norway</td>
</tr>
<tr>
<td>25.-27.05.2011</td>
<td>Workshop</td>
<td>Eisenach/Jena, Germany</td>
</tr>
<tr>
<td>11.-14.10.2011</td>
<td>Workshop</td>
<td>Kranj, Slovenia</td>
</tr>
<tr>
<td>18.-20.01.2012</td>
<td>Workshop</td>
<td>Seinäjoki, Finland</td>
</tr>
<tr>
<td>14.-16.05.2012</td>
<td>Workshop</td>
<td>Odda, Norway</td>
</tr>
</tbody>
</table>

4. UNDERSTANDING ENTREPRENEURSHIP TRAINING AND INCUBATOR MANAGEMENT
A goal of this project was to develop a common framework for entrepreneurship training and incubator management. During the first meeting in Bergen 26-27 January 2011 it was agreed upon that it would be a common conceptual framework.

There is an array of definitions of entrepreneurship. Most of these focus upon the development of new enterprises, but they direct various parts of the (entrepreneurship) process. With regard to entrepreneurship education, one tends to divide between three approaches to the phenomenon:

- Education *about* entrepreneurship; the objective is to teach on entrepreneurship as a societal phenomenon.
- Education *for* entrepreneurship; the objective is to acquire skills and knowledge of necessity when starting up a new enterprise.
- Education *through* entrepreneurship; in which entrepreneurship is used as a pedagogical method, and entrepreneurial processes are used as an instrument to achieve a particular set of learning objectives.

The following section summarizes the partnerships understanding of entrepreneurship training.

THE PARTNERSHIPS UNDERSTANDING OF ENTREPRENEURSHIP TRAINING
The basics for this summary came from the individual answers by partners of this Leonardo project to the following three questions:

- What does entrepreneurship (education) mean?
- How should entrepreneurship (education) be promoted?
- What are the biggest obstacles to entrepreneurship (education)?

The individual answers show partners’ different points of view according to their background and the particular institution (university level, schools or regional development agencies, respectively incubators) as well as corresponding to the culture and stage of development in entrepreneurship in the particular countries the institutions come from.

4.1. WHAT DOES ENTREPRENEURSHIP (EDUCATION) MEAN?
Due to the different backgrounds of the partners the answers to the first question show the strongest distinctions.

The partners from the educational field, both university level and school level agree on following points:

- Entrepreneurship education should try to teach people the ability to recognize changes, to see possibilities and do something with them – that includes also creativity.
- Entrepreneurship education includes basic business knowledge for starting up a new business (e.g. about how to create a business plan)
- Entrepreneurship education doesn’t only focus on potential business founders, entrepreneurial spirit and skills are also needed by employees in established companies.
- Entrepreneurship education is also a teaching method as a kind of “learning by doing” in close cooperation with partners’ form outside (which could be development agencies as well as incubators or companies).

The partners of the regional development agencies and incubators focus mainly on their key task to give support in different ways and see entrepreneurship as

- an important factor in macro-economic policy and job creation
- a part of the government’s strategy to encourage entrepreneurial spirit
- a possibility for regional development
- a way to create new ideas and develop new products for new enterprises in a national economy

4.2. How should entrepreneurship (education) be promoted?
The following structure shows the bottom line of the discussions and workshops and expresses that any kind of promotion of entrepreneurship should always be based on an intensive cooperation between the institutions and organizations concerned.
The cooperation between the organizations and institutions ensures the mutual communication about educational and didactical knowledge and the exchange of know-how concerning entrepreneurship education as a teaching method as well as the experience with several kinds of projects and measures of support. It also provides the opportunity to coordinate measures, which aim at the same target group, e.g. people who want to start a new business.

Each organization / institution has different possibilities to promote entrepreneurship (education) in their field, especially on the university level a deeper theoretical basis is self-evident, but all partners agree, that activities and projects with a close contact to the real economic life are essential for a sustainable impact of the measures.

Such activities and projects could be:

- the possibility for students to join in an Enterprise Team, which includes also the support of a wide co-operation network from outside
- work experience days in business companies
- sponsoring companies, which support students during their whole education by offering excursions, presentations, workshops
- involvement of successful entrepreneurs

### 4.3. What are the biggest obstacles to entrepreneurship (education)?

The answers to this question are widely spread. They depend on the one hand on the stage of development and the attitude of the government towards entrepreneurship training and
incubator management in the several countries and on the other hand on the particular institution with their special point of view.

Moreover the arguments focus partly on the challenge to provide a professional entrepreneurship education and apart from that, obstacles where mentioned, which concentrate on the difficulties for potential entrepreneurs to set up a real business.

- Partners from countries where entrepreneurship training is part of the national strategy and where all educational institutions are required to integrate it in their programs focus on the problem that there are no compulsory guidelines how to do it. Different institutions have different levels of education and they are using different tools and contents. No best practice is established.
- Partners from the educational institutions emphasize that teaching entrepreneurship is not a traditional teaching subject and therefore lack of highly committed teachers with a “new understanding” of the teacher’s role are often a problem.
- Partners from the university level point out that well-educated people have a lot of attractive possibilities to make carriers in higher employed positions.

Furthermore the following items were mentioned:

- Cultural barriers like the general attitude towards business failures or the missing willingness to take risks in a welfare state
- Still to little cooperation between the educational institutions and the real economy
- Absence of experiences and knowledge about how to identify new businesses
- Absence of creative thinking and behaviour
- Too many rules and regulations in the startup-process

5. **Main Tools for Entrepreneurship Training**

A central part of this project has been for each partner to exchange their experience from entrepreneurship training and incubator management. Each partner has been given the opportunity to present their tools and practice. The matrix below is an overview of partners’ mail tools for entrepreneurship education. A full description of each practice is found in appendix 1, page xx.

<table>
<thead>
<tr>
<th>Name of practice</th>
<th>Institution</th>
<th>Goal</th>
<th>Target group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Learning companies</strong></td>
<td>Regional development agency of Gorenjska, Business Support Centre Kranj</td>
<td>Learning companies represent a simulation of working process, where students are employed in a specific position in the company.</td>
<td>Secondary school (age 17-18)</td>
</tr>
<tr>
<td><strong>Workshops for secondary/vocational</strong></td>
<td>Regional development agency of Gorenjska, Business Support Centre Kranj</td>
<td></td>
<td>Secondary school (age 17-21)</td>
</tr>
<tr>
<td>and primary schools</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Turizmu pomaga lastna glava – tourism gets help from our own head</td>
<td>Regional development agency of Gorenjska, Business Support Centre Kranj</td>
<td>Primary school/Secondary school</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Innovation Camp</td>
<td>Odda secondary school</td>
<td>Training camp in creativity and innovation</td>
<td>Secondary school</td>
</tr>
<tr>
<td>“Blacksnail”</td>
<td>Odda secondary school</td>
<td>brainstorming - learn to think outside the box</td>
<td>Secondary school</td>
</tr>
<tr>
<td>“My everyday problems”</td>
<td>Odda secondary school</td>
<td>Idea development</td>
<td>Secondary school</td>
</tr>
<tr>
<td>Idea Competition Jena-Weimar</td>
<td>Fachhochschule Jena</td>
<td>Idea competition/idea development</td>
<td>Students in higher education, scientists, creative people from the region</td>
</tr>
<tr>
<td>Science to market</td>
<td>Fachhochschule Jena</td>
<td>Development of patents and research results into business models</td>
<td>Students and scientific assistants of the university of applied sciences Jena, the university Jena and non-academic institutions</td>
</tr>
<tr>
<td>Business creation course</td>
<td>Fachhochschule Jena</td>
<td>identify business ideas, business plan, start up a business</td>
<td>Students of business administration, students of engineering</td>
</tr>
<tr>
<td>Steps into and after self-employment</td>
<td>Fachhochschule Jena</td>
<td></td>
<td>Students of business administration, students of engineering</td>
</tr>
<tr>
<td>Programme for Idea capture</td>
<td>Bergen University College</td>
<td>Idea capture/idea development</td>
<td>Students in higher education</td>
</tr>
<tr>
<td>Storm starting day</td>
<td>Seinäjoki University of Applied Sciences</td>
<td>Student entrepreneurial orientation, networking</td>
<td>Students in higher education</td>
</tr>
<tr>
<td>Young Skills co-op</td>
<td>Seinäjoki University of Applied Sciences</td>
<td>Trying out entrepreneurship in low-risk setting</td>
<td>Students in higher education</td>
</tr>
<tr>
<td>Focal enterprise activities</td>
<td>Seinäjoki University of Applied Sciences</td>
<td>Cooperation with real firm lowers threshold for entrepreneurship</td>
<td>Students in higher education</td>
</tr>
<tr>
<td>Company fairs</td>
<td>Bundeshandelsakademie und handelsschule Völkermarkt</td>
<td>Students organize company fair</td>
<td>Upper secondary school</td>
</tr>
<tr>
<td>Sponsor company</td>
<td>Bundeshandelsakademie und handelsschule Völkermarkt</td>
<td>One company accompany one class for five years</td>
<td>Upper secondary school</td>
</tr>
</tbody>
</table>
6. IMPACT OF ENTREPRENEURSHIP TRAINING

One of the partners in this project, Seinäjoki University of Applied Sciences (Finland), is coordinating a wide research project into the impact of entrepreneurial initiatives on the development of entrepreneurial intentions. The study is particularly focused on longitudinal assessment of how entrepreneurial training influences individual students’ entrepreneurial intent. The study uses Ajzen's Theory of Planned Behaviour as its theoretical grounding.

Preliminary results from higher education, with three follow-ups of the survey analyzed, suggest that generally speaking the impact of higher education is negative rather than positive for entrepreneurial intentions. Intentions increase mainly for business students. Initial level of a student’s intentions is a factor; the most positive impact occurs for students with low initial intent. However, the results show that entrepreneurship courses do in fact have a positive impact on the students’ assessment of their own abilities as a potential entrepreneur. Panel data (follow-up of same individuals from first to third study year) further shows that entrepreneurial intent is more likely to increase for students who feel their relevant abilities have increased; there is a strong correlation which suggests that entrepreneurship skills, at least, can be increased and that this has an impact on intentions.

Altogether the results from Entre Intentio show that it is challenging to foster entrepreneurial intent in higher education, and that positive influence takes place through change in attitudes and the perceived abilities of students. Versatile action-oriented pedagogies, as opposed to traditional lecture-based teaching in entrepreneurship education, appear to have more impact. At the same time, the results show that there are clear differences in impact of entrepreneurship education for men and women and for students in different study fields, and that the overall impact of higher education is less than positive.

The results of the study programme are being more closely reported in publications of SeAMK and in various international publications.

7. MANAGEMENT OF INCUBATORS

Developing good entrepreneurs is not done only by training, but also calls for a system of follow-up when entrepreneur starts his/her work in developing their own company and services. Nearly all entrepreneurs have rather good understanding of the product/services they want to develop. However, the understanding and focus on the business side is not so well developed and focused on. In most countries there have been set up incubators where the entrepreneurs can start their business activities.

7.1. DIFFERENT TYPES OF INCUBATORS

In this project the partners have visited different types of incubators and technology parks. How these incubators work and function differs, regarding both target groups (students, R&D-clients,
business entrepreneurs, technology startups etc), length of incubator period (1-3 year to 20+ years), level of support (subsidized office space – manufacturing labs) etc.

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Type of incubator</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nyskapingsparken Inkubator</td>
<td>Bergen, Norway</td>
<td>R&amp;D-incubator</td>
<td><a href="http://www.nyskapingsparken.no">http://www.nyskapingsparken.no</a></td>
</tr>
<tr>
<td>Build! Gründerzentrum Kärnten GmbH</td>
<td>Kärnten, Austria</td>
<td>Business incubator</td>
<td><a href="http://build.or.at/">http://build.or.at/</a></td>
</tr>
<tr>
<td>Technology and Innovation Park Jena</td>
<td>Jena, Germany</td>
<td>Technology park</td>
<td><a href="http://www.tip-jena.de">http://www.tip-jena.de</a></td>
</tr>
<tr>
<td>Frami Technology Centre</td>
<td>Seinäjoki, Finland</td>
<td>Business incubator</td>
<td><a href="http://www.frami.fi">http://www.frami.fi</a></td>
</tr>
<tr>
<td>Odda Næringshage</td>
<td>Odda, Norway</td>
<td>Growth garden</td>
<td><a href="http://www.nhodda.no/">www.nhodda.no/</a></td>
</tr>
</tbody>
</table>

Business incubators are programs designed to support the successful development of entrepreneurial companies through an array of business support resources and services, developed and orchestrated by incubator management and offered both in the incubator and through its network of contacts. Incubators vary in the way they deliver their services, in their organizational structure, and in the types of clients they serve. Incubators differ from research and technology parks in their dedication to start-up and early-stage companies.

An R&D Incubator is targeted at newly founded businesses sprung out from the academic and scientific environments. The goal is to encourage more commercialization of research from higher educations, and to give the businesses a quicker and safer way from establishment to growth. A more “lightweight” version is the student incubators, targeted at students willing to develop their ideas.

Technology parks, on the other hand, tend to be large-scale projects that house everything from corporate, government or university labs to very small companies. Most research and technology parks do not offer business assistance services, which are the hallmark of a business incubation program. However, many research and technology parks house incubation programs.

An industrial/business park (in Norway: Growth gardens) is an area zoned and planned for the purpose of industrial development. A more "lightweight" version is the business park, which has offices and light industry, rather than heavy industry.

### 7.2. INCUBATOR MANAGEMENT

Incubators vary in the way they deliver their services, in their organizational structure, and in the types of clients they serve.

The package of services offered by a incubator is designed to enhance the success and growth rates of new enterprises. Often, these services consist of five dimensions:

- Help to develop enterprise;
- a network of business consultants;
- entrepreneurial synergy/knowledge spillover;
- flexible affordable working space; and
- shared office services.

**Help to develop enterprise**
The incubator manager and other members of the incubator management team can play an important role in assisting their clients to launch and grow their business. It is typical for the incubator manager to know a great deal more than an incubator client about the entrepreneurial process. The incubator manager will have experienced the entrepreneurial process at close quarters on many occasions with a variety of business ventures. This experience is valuable, particularly early in the life of a client firm.

In addition to this, it is typical for the incubator manager to bring expertise in strategic planning for small enterprises, and to be well connected to small business resources and contacts in the business community, as links to information and advice.

**Network of business consultants**
An incubator consultancy network or business development network consists of individuals drawn from the ranks of professional business service providers, experienced business people and educators who are willing to provide advice and assistance to entrepreneurial enterprises.

**Entrepreneurial synergy/knowledge spillover**
Co-locating entrepreneurial firms provides the prospect of generating an environment where entrepreneurs share resources and experiences, learn from one another, exchange business contacts and establish business relationships. One other important contribution that co-location of entrepreneurs can make, is to overcome the loneliness of the entrepreneurial work environment.

**Flexible space offering**
Commercial real estate developers normally find it unattractive to let entrepreneurs rent their space, due to both the risk of clients not paying and the fact that entrepreneurs often only needs a small office space, making it not commercial viable for real estate developers to lease.

Incubator often offers to lease small spaces, commonly on short-term leases. In addition, incubator buildings usually contain spaces in a variety of sizes so that as a firm grows, there is the potential to relocate to a larger incubator unit.

**Shared service**
The shared services dimension refers to incubator-provided pooled equipment, services and facilities such as photocopier, fax, receptionist, mail handling, board room, loading dock and the like. Start-up firms have a need for such services but are often too small to justify the cost of providing these services in-house. Access to those services through the incubator means that entrepreneurs can focus their attention and capital on the critical task of getting their product or service to market, while still presenting a professional image to their business contacts and customers.
8. TRANSFER OF BEST PRACTICE, THE WAY FORWARD

As we have learned during each partner’s presentation of their work on entrepreneurship training and incubator management in this project, each partner has already implemented multiple entrepreneurship pedagogies, so there may be no immediate need to introduce new practices based on other partners’ work. However, part of this project’s aim has been to give partners new ideas on how to promote entrepreneurship, and maybe test some of these methods in their own institutions.

Part of the goal of this project has also been to develop long-term cooperation between partners. As discussed during the first meeting in Bergen, the goal was difficult to work with specifically, as it turned out to be a new project in itself, and not really part of this one. The conclusion was to document the thoughts from the group, and for the different partners to start thinking about this, and start talking with the partners who would be relevant to do exchanges with in the future. The purpose of this would be to have a basis to start from when this partnership ends, rather than starting from scratch, not having thought about it at all.

Below is a few of the on-going initiatives listed. Some partners have already tried out practice in their own institution during the project period, while other partners have engaged in discussions with partners about future potential cooperation.

- **Parxis-hak Völkermarkt** has during the project period tried out workshops for secondary, vocational and primary schools based on the practice from the regional development agency of Gorenjska, and workshops with experts and students of different age groups based on the practice of Bergen University College. A detailed description of Praxis-hak Völkermarkt’s transfer process can be found in appendix 2.

- **Gründer and Innovationszentrum Eisenach** has signed a letter of intent with Nyskapingsparken Inkubator, mutually agreeing on updating each other on incubator management methods and affairs, be a national point of contact for future exchange of incubator companies, offer office space etc for exchange companies etc.

- **Odda Secondary School** has engaged in talks with both Praxis-hak Völkermarkt and Bergen University College in entrepreneurship-related cooperation.

- **SeAMK** already implements multiple entrepreneurship pedagogies, so there is no immediate need to introduce new practices. However, during the programme SeAMK representatives’ attention has been drawn to several details in the other partners’ entrepreneurship training, many of which can be utilized in day-to-day work. Furthermore, the practice of Bergen University College in organizing traineeship in foreign innovative start-up firms is highly interesting. As SeAMK Business School begins its new curriculum development process in fall 2012, this idea will be presented to the working group for traineeship development and proposed as a possible alternative. Further, the ideas on cooperation between incubators and universities picked up in Eisenach have been utilized in planning cooperation between SeAMK and the Technology Centre in Seinäjoki. They have had an effect on the practices of new Protomo-project.
APPENDIX 1: MAIN TOOLS FOR ENTREPRENEURSHIP TRAINING

1. Regional Development Agency of Gorenjska, BSC Business Support Centre Kranj
   a. Learning companies
   b. Workshops for secondary/vocational and primary schools
   c. Project turizmu Pomaga Lastna Glava – Tourism gets help from head
2. Odda Secondary school
   a. Innovation Camp
   b. "Black snail"
   c. My everyday problems
3. Fachhochschule Jena
   a. Idea competition Jena-Weimar
   b. Science to market
   c. Business creation course
   d. Steps into and after self-employment
4. Bergen University College/Programme for Idea capture
   a. Inspirational seminars
   b. Student-led business plan competitions
   c. Idea development through Student incubator
   d. Growth through "Nyskapingsparken Incubator"
5. Seinäjoki University of Applied Sciences
   a. Storm Starting Day
   b. Young Skill’s Co-op / Raami Co-op
   c. Focal enterprise activities
6. Vocational Adult Education Sedu
   a.
7. Hordaland County Council
8. Praxis-hak Völkermarkt
   a. Company fairs
   b. Sponsor company
   c. Work experience days

3 BEST PRACTISES

1. LEARNING COMPANIES

Learning companies represent a simulation of working process, where students are employed in a specific position in the company. Practical classes take place in a specialized classroom in groups according to their jobs:
- Board of Directors
- Registry
- Personnel Department
- Accounting
- Marketing department (purchasing, sales, marketing communication).

In learning company mentor teachers from specific subjects of economics are working with students.

Main content that students are learning and also simulate in practice are:
Setting up a business, business communication, secretarial business, purchases of goods, sale of goods, payment, marketing, management, investment and financing, planning, organization, control, HR function, insurance, transportation, cessation of business.

In addition to formative learning objectives they are trying to follow the company primarily socialization following objectives:
- Development of sense of responsibility for work done
- Development of the capacity for teamwork and communication
- Learn about future job
- Development of entrepreneurial thinking
- Development of solidarity and moral-ethical qualities
- Gaining a sense of belonging to the collective
- Development of organizational skills
- Recognition of the importance of achieving business goals.

Goal groups: young in secondary school (3 year) 17-18

9. WORKSHOPS FOR SECUNDARY/VOCATIONAL AND PRIMARY SCHOOLS

Workshops (3-4 for 1 class) with time frame (max 2 hours/workshop).

Main topics: theoretical and mostly practical overview of entrepreneurship; what is business idea, what I need to start up a business, how I register, what I need to know in marketing, prices, management, how to be innovative, where are the main challenges, how to calculate a price of a product/service,…

Main goals: to recognize and develop creativity, innovative spirit of every young person.

On workshops/training students in groups gradually develop their proposal for business ideas. They also all (in groups) prepare a draft of business plan that are present at the end of workshops.

Very important is also first recognition of the phenomenon "enterprise" in an interesting way.

Methods used: team work, research of literature, field work (competition, prices,…), evaluation of idea (mentor), good ideas are especially recognized.

Goal groups: secondary and higher school (age 17-21)

10. PROJECT TURIZMU POMAGA LASTNA GLAVA – TOURISM GETS HELP FROM OUR OWN HEAD

It is organized on national level and has long tradition. Content of the competition is development of entrepreneurial ideas in tourism. Interested groups of young (primary, secondary schools) explore together with mentors local offer and where it can be improved. During school year they develop ideas for new touristic products/services. Finally they prepare the written presentation of ideas, which are then evaluated by experts. The best ideas receive awards, all ideas (groups) are presented in big “fair” where all groups need to present their ideas in a innovative way to broader public.

Methods used: team work, field work, mentors (school teachers), research of literature, competition
1. InnovationCamp (Gründercamp)

Innovation Camp is a training camp in creativity and innovation. Students get a real mission with a defined problem which they will present a solution within a limited period of time. The assignment is given by a company or organization from the private or public sector. Students working on the assignment in groups of 3-6 students and presents solutions for a jury, which selects a winner based on certain criteria.

**Phases:**
- Phase 1: Opening, presentation in groups, team building and creative processes
- Phase 2: The task is revealed, students are working and teachers are coaching
- Phase 3: Shared meals and social program
- Phase 4: Submission business plan, presentation and assessment by a jury

**Cooperation**
Cooperation with local business is central to an Entrepreneur Camp. The client (a company or organization) gives students the background information they need to solve the challenge. The group must work together to find the most innovative solution. Guidance during the process increases the students’ learning/outcomes. It is natural that some local business are supervisors. Entrepreneur Camp ends with students presenting their solutions for a jury, which then evaluates them.

A innovation camp can be held over one or several days.

**Innovation Camp encourages:**

- Using creative processes
- Cooperation and group dynamics
- Training to organize and different roles at work
- Courage to try and fail
- Awareness of how to collect information
- Awareness of different presentation techniques
2. "Black snail"

1. Objectives of the task: brainstorming - learn to think outside the frame! Find new uses for known products, finding new connections, putting together things in new ways - using creativity and not be afraid to come up with some wild ideas (entrepreneurship and innovation).
   Organization: Groups of 3-5 students
   Time: about 45 minutes.
   Utilities: overhead sheets, markers in several colors

2. Part 1 (5 min) (do not tell students about the next tasks at this time) Find 25 things how to use a snail. Write on the sheet. The ideas will then be read in class.

3. Part 2 (4 min) Finding 45 new things how to use a snail. Write on the sheet. The ideas will then be read in class.

4. Part 3 (3 min) Finding 60 new things how to use a snail. Write on the sheet. The ideas will then be read in class.

5. Part 4 (20 min) Circle the three ideas the group thinks is the best. Change sheets with another group. The new group will choose one of the three selected ideas the other group picked out - and marketing this product. (Only your imagination)

6. Part 5 (5 min) Finally, presents the group's marketing in class.

3. My “everyday” problems
A mission to bring new ideas, start with something as simple as a play with words ...

1. Student group is split into smaller groups of 2-4 people each. One begins by saying a random word, such as “car”. Another will spontaneously come up with a new word. It has not to be any correlation with the first word. Switch on how to say the words. Write down every word that comes up. Example: cat - path - seat - ice - jacket, etc. Continue until there are 30 words on the list.

2. See the list of the 30 words. Are there some everyday problems associated with them? Take the word "cat". The problems can be: peeing in sand boxes, disrupts sleep, pee in the flower beds, they scratch... Each group will find 10 everyday problems. They can be based on words or be something that pops up by itself. In this phase it is important not to think about solutions, but only reveal problems!

3. Look at the ten everyday problems. Discuss various solutions to the problems. Make a note. Think. - What are the irritations you want to avoid the problem? - How will you solve the problem? - What is your kind of ideas? Then choose a solution. Write down
your thoughts about - Who will use the idea and who benefit from it? - How does it work and how to solve the problem? - Describe the idea short.

4. Present for the others in the class!

5. NB! This case might be used for different purposes, for example focus on learning, school democracy etc.
Ideenwettbewerb Jena-Weimar / Idea Competition Jena-Weimar

Who can enter?

- Students
- Scientists
- Creative people from the region

How do participants enter?

- Idea paper
  - Short Description of business idea
  - Customer value
  - Competences of participants
  - Approaches to implementation
- Registration form

Who evaluates the concepts?

Each copy of entries will be viewed by judges and organizers only. The jury is composed of people from science and business.

What do winners get?

1st 1.000 €
2nd 750 €
3rd 500 €

Special prizes:

- Patent application for Germany
- special prize from city of Jena 500€
- special prize from city of Weimar

Who is behind the competition?

Network consisting of

- three universities
- startup incubators
- chamber of commerce and industry
Bergen University College

A description of one of our methods for teaching entrepreneurship in higher education:

1. Programme for Idea capture

In order to realize a larger share of the region’s young creative spirit, Bergen University College manages a programme called “Idea capture”. The purpose of the programme is to instill entrepreneurial spirit among students at higher education institutions in the region. The aim is to increase the number of ideas among students with growth potential and to increase the students ability to develop ideas to businesses.

The target group is primarily the around 25,000 students in Bergen in higher education (Bergen University, Bergen University college and the business school Norwegian School of Economics).

Idea capture is an “early stage offer” to students, adapted to their different needs for practical and theoretical knowledge about entrepreneurship. “Idea capture” is based on the theory of linear innovation process, where the development of ideas takes place through various stages. Inspirational seminars, motivational speakers, various social gatherings and business idea competitions will motivate and inspire students to entrepreneurship and idea generation, while students who want to develop their ideas further will be offered office space in Student incubators, participation in idea development seminars, business courses and so on.

Presentation of some of the initiatives:

**Inspirational seminars**

Inspiration seminars, such as “Young Entrepreneurs” and innovation camps are events where students can meet other students and other young entrepreneurs who have started businesses at young age. The aim of these events is to inspire students to entrepreneurship activities and building network among young entrepreneurs/students. The events are open to students from all sectors interested in entrepreneurship and innovation.
Business plan competitions

The annual business plan competition "Venture Cup" lets students test their ideas in competition with other students from higher education institutions in Hordaland. In such a competition students needs to formalize their ideas through a business plan. In addition, it brings students in contact with other students interested in entrepreneurship.

Idea development through Student incubator

Student Incubator is an office space for young entrepreneurs (students). In addition to working facilities, students are provided with business skill training. Student incubator is an offer to all students committed to develop their ideas into businesses.

Growth through “Nyskapingsparken Incubator”

Nyskapingsparken R&D-incubator is an office space with an infrastructure which is put to disposition for startup businesses. The goal is to give the businesses a quicker and safer way from establishment to growth. The target group is newly founded businesses sprung out from the academic and scientific environments in Hordaland with a great growth potential and grade of innovation. Graduated students from higher education institutions with a business idea with growth potential can apply for admission to the incubator.

***
Seinäjoki University of Applied Sciences: 3 examples

Storm Starting Day

A day of entrepreneurship orientation is organized for all first year students together. The aim of the day is to raise interest towards entrepreneurship and lower the threshold for making friends and doing things together between students from different fields. The themes are entrepreneurship, creativity and grouping/networking. Students from all sectors take part (business, engineering, health/social, crafts/design etc.) and work together.

Summary of the day: A welcome address, short inspiring lecture for all (usually delivered by a stand-up comic). Then young entrepreneur cases (3-4) presented (ex-students if possible). Participants are split into groups and tackle tasks from themes which 2nd year entrepreneurship students + tutor students have prepared. Groups rotate from tasks to task. At the end, there is a general assembly again.

Young Skill’s Co-op / Raami Co-op

Real cooperative companies, where both staff and students are members, are used for practical learning. There is easy access and exit. The 100€ membership cost which will be refunded when exiting company makes it possible for students to try entrepreneurship with relatively small risk. The cooperatives give students the possibility to do real business-to-business projects without the need to start a company of their own. The cooperatives use school facilities + machines in doing business/doing project works.

Focal enterprise activities

For the degree programme in SME Business Management, a system has been organized where the students are formed into teams and the teams have long-term cooperation each with a focal enterprise of their own. The firms act as a real example of the theoretical content of the business studies, and the students can also do development projects for the firms as their skills increase; the specifics always depend on the needs of the firm, although the curriculum forms the basic structure. The relationship lasts usually two years.
Best practice

1. Company fairs
   a. students organize the event in the context of the subject project management – practical approach
   b. two students are responsible for one company and take on the following responsibilities:
      i. getting into contact
      ii. gathering information about the organization
      iii. collecting the logo for the fair stand and the printed invitation which is also sent to local politicians and representatives of institutions
      iv. preparation of the fair stand, taking care of the representatives during the company fair.
   c. in the end evaluation and collecting feedback with teachers
   d. company fair is documented on the website

2. Sponsor company
   a. one company accompanies one class during the five years
   b. contents and topics in business administration are first explained in theory (book, ex-cathedra teaching etc.)
   c. contents (legal structure, marketing, personal management, leading competences, materials logistics) are explained by the sponsor company from their point of view in a workshop, a presentation with discussion or an excursion.
   d. students have to write a report about any contact with the company
   e. contents presented by the sponsor company are part of exams and tests
   f. students establish close contact to the company during their school time

3. Work experience days
   a. work experience days take place yearly in every class
   b. parents have to look for possible work places
   c. teachers contact companies before and visit students during the practical work experience
   d. students gain experience in different areas
   e. students have to write a reflection about the work experience days
   f. goals:
      i. getting to know work flows
      ii. experiencing day-to-day work
iii. gaining orientation
iv. getting to know different occupational images
V. using taught knowledge
EU-project: Entrepreneurship training and incubator management

Hordaland County Council (HFK)
By Eva Melvær Langaas and Torill Monstad

BEST PRACTICE:

As a regional public administration unit, Hordaland County Council is not involved directly in entrepreneurship training and incubator management, but rather aims to be a facilitator. Therefore it might be challenging for the other partners to relate to our “best practice”.

1. Close ties with your partners. There is a very close cooperation at the regional level regarding the field of entrepreneurship, which is beneficial for the regional level, but most of all the organizations and local municipalities that we relate to here in Hordaland.

2. High standards regarding the organization Young Entrepreneurship foundation, and a good foundation in the upper secondary schools. Useful to support a non-profit organization which exclusively works with entrepreneurship training.

3. Bringing the people who work with entrepreneurship together, raise their competence and give them meeting places. This has spun off many good projects.
1. „SCIENCE TO MARKET“

Development of patents and research results into business models

Problems

- different activities and projects to enhance start ups (Chlostä et al. 2006; Kulicke und Schleinkofer 2008; Halbfas 2006; Moog 2005)
- „Ideenschmiede Jena“ (EXIST III) ties with the discussions about innovative utilization of knowledge (Schulte 2006; Wagner 2006; Isfan 2000)
- „Hightech to Market“ wants to identify and advance unutilized research results which finally should lead into a start up company, it qualifies and trains students to commercialize (own)research ideas
- Beyond the aspect of commercializing research results the course aims to generate an extensive entrepreneurship education and rise the awareness (Uebelacker 2005; Sternberg et al. 2007)

Course aims

- utilization of unutilized results of research
- training of professional competences
- training of entrepreneurial skills

Target group

- everybody that belongs to institutions of higher education and is interested in the topic of starting up a company
- students and scientific assistants of the university of applied sciences Jena, the university Jena and non-academic institutions (IPHT e.V., Fraunhofer IOF)
- students apply for the course and are selected by different measures

Theoretical background
Importance to involve theoretical aspect to create an effective entrepreneurship education

Thought: using the university as reservoir for competencies (Koch 2002)
  - An overall entrepreneurship education combines teaching and learning arrangements that allows learning in three areas: professional competence, social competence, practical skills (Halfpap 1991; Schulte 2006)

The selection of the learning targets is mainly oriented on three categories that are expected to be mastered by an business like personality... (Ripsas 1997)

Teachability of entrepreneurial personal skills?
  - discover and develop the Potential of participants further

Enabling self directed learning
  - Enabling self-directed entrepreneurial behaviour (Schulte 2006; Siebert 2009; Arnold 2006, Remmele 2007)

Adapted contents for the target groups
  - Less abstraction an different didactic arrangements are necessary for heterogeneous teams(Schulte 2006)

Technical students often have problems with innovative learning arrangements (Schulte et. al. 1996):

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**Course design**

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Course contents

- enabling self directed learning
- accompanying advisory of participants
- participant are in the role of the enterprise promoters
- Task sharing as an result of existing competencies in the team
- „Advisory Board“
  - consists of: members of the university of applied sciences Jena and cooperating partners of the project „Ideenschmiede“
  - possesses technical and economic knowledge to evaluate business ideas
  - participants can get in contact with it when they need help and advise

First experiences

- Carried out in winter and sommer semester (fourth run)
- Successful integration in the different departments of the university of applied sciences
- Ideas/patents from university of Applied sciences Jena as well as IPHT Jena e.V.
- Courses that develop participants further already exist: business plan course, the process of business creation, how to apply for subsidies
Conclusion

“Although there daughtlessly is big students and officials interest in that topic, such courses are still in an inferior position to traditional academic courses.” (Schulte 2006)

- interest on innovative utilization of knowledge
- Demand for courses that develop entrepreneurial skills
- Exploit unutilized ideas that are a possibility to start up
- Positive reaction of students according self directed learning
- Interdisciplinary teams boost the development of competencies

**BUSINESS CREATION COURSE**

**Course aims**

- students shall be up to identify and market business ideas based on profitable, sustainable and value oriented planning
- they shall be able to prepare a complete and sound business plan
- knowing how to prepare to start up a business

**Target group:**

- students of business administration
- students of engineering

**Course content:**

- development of basic approaches for business ideas
- evaluation and realising a business plan
- specially following aspects:
  - location for business
  - form of organization
  - taxes
  - employees
  - marketing
  - financing
3. STEPS INTO AND AFTER SELFIMPELOYMENT

Course aim

- students know which pitfalls are existing and are able to avoid them
- develop presentation skills and deliver a speech
- development of leadership and team competencies
- students shall be able to conduct argumentations and negotiations

Target Group

- students of business administration
- students of engineering
- all students which have the objective or interest in starting up a company

Course content

students experience the hole process of business creation based on real founding cases

1. write an idea paper for an business idea and to develope a business plan out of it (group work)
2. convince investors by taking part in an „elevator pitch“, presentation skills and the usage of presentation tecniques are trained
3. Decicion making (group work, role play)
   - how to use argumentation techniques
   - Which name can the start up choose?
4. o What dificulties have I to face when I do the business registration?
5. o Which registrations do I need addicionally?
6. o How do I insure the company?
7. o How do I insure myself?
8. o Private or legal retirement insureancy: can I choose?
9. o Private or legal health insurance: can I choose?
10. o How do I negotiate wihth investors?
11. 4. Discussion about topics: how do I train entrepreneurial competencies, how
12. can I manage difficult conversations with employees and other stakeholders, how do I manage team conflicts?
# Appendix 2: Praxis-hak Völkermarkt’s Transfer Process

## Students meet experts

<table>
<thead>
<tr>
<th>In terms of best practice, we tried out...</th>
<th>Workshops for secondary, vocational and primary schools from the regional development agency of Gorenjska</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Best experience-partner”</td>
<td>Workshops with experts and students of different age groups to develop creativity, to make them interested in business, to make them aware of business possibilities, to help them develop business plans...</td>
</tr>
</tbody>
</table>

### Bergen University College

Business plan competitions let students test their ideas in competition with other students; students need to put their ideas into words.

## Description of the process

Inspired by the best practice examples of the regional development agency Gorenjska and the Bergen University, we adapted them for our school or integrated them into our entrepreneurship education.

### Step one:

Students of the 2AK (age: 15 to 16) are confronted with theoretical input.

- **They hear a lot about how business ideas can be created or generated.**

  Ideas can be created because of the people themselves, e.g. it could be the result of a hobby or dreams or visions are put into practice.

  Ideas can be created because of the market, e.g. you realize market gaps (you bridge a gap in the market), you find solutions to solve problems, you conclude franchising contracts (you adopt a business concept like McDonald’s), you think in an opposite direction (once a clock was an extravagant good, SWATCH thought into the opposite direction; a clock is a daily good or commodity).

- **They are confronted with different creativity methods.**

  Every idea, every proposal is ok. Criticism is absolutely forbidden!

- **They are confronted with the topic – “business planning”.**
They get to know the steps and the aim of business plans.

**Step two:**
Students form groups. 2 – 4 students are in each group and the creativity process begins.

- Students create a lot of ideas. In the beginning of this process it is important that they produce as many ideas as possible. Quantity is more important than quality! No criticism!
  No rating and you are not allowed to praise or dismiss ideas during this creativity process!

- After the creativity process students decide which idea will be their possible new business idea. It is important that all members of a group identify themselves with the result. A new idea cannot be further developed if group members are not motivated and if they don’t “feel the idea in their hearts”.

- Then students present their idea in the classroom and try to describe the benefit of their idea for their potential target group. The business planning process starts. They try to find information about the potential market, they try to define the target group, they simply practice market research. Whenever they reach the step “financial planning”, many questions occur (start-up costs, product calculation, costs of employees, etc.).

**Step three:**
Students take part in the expert workshop.

- All the ideas are briefly presented to the expert group. It is important that they elaborate the benefits for the potential target group and that they show that their idea has a chance to be realized once there is a market for their idea.

- **You set up “expert stations”.** These stations are visited by the different groups.

  **Station “Chamber of Commerce”**: shows them which legal requirements have to be fulfilled and which start-up-facilitations are possible.

  **Station “Chartered Accountant”**: shows them how to calculate their product or service, helps them to develop a financial plan, gives them information about the potential market, gives them hints about possible competitors or substitute products or services etc.

  **Station “Bank”**: gives the young entrepreneurs some information about finance, about the different forms of finance. Shows them what has to be fulfilled to get granted loans.
**Station “Young Entrepreneur”**: gives information about the business, the idea creating process, the steps until now. Should motivate young people to realize their dreams. Should show them that you have to work hard to be successful.

**Step four:**
Participation in a business plan competition

The ideal situation: Some of the ideas will be successfully realized!

**Step five:**
Presentation of the winning business ideas to the Slovenian partners

<table>
<thead>
<tr>
<th>Feedback:</th>
<th>Three of the business student groups won the business plan competition carried out in Carinthia.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>motivated students and teachers</td>
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<tr>
<td></td>
<td>The whole process was carried out not only in German but also in English; their English communication competence increased</td>
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<tr>
<td></td>
<td>it makes fun to be creative</td>
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<tr>
<td></td>
<td><strong>This model should be integrated in the entrepreneurship education in our school.</strong></td>
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</tbody>
</table>