Enhancing Entrepreneurship in Education

A co-operation between SØR-Trøndelag Fylkeskommune and Province of Antwerp
A brief introduction

ENHANCING ENTREPRENEURSHIP IN EDUCATION (E3)

The E3-project wants hold a mirror so the partners can learn from their own approach towards entrepreneurship through introspection and peer review. This, we think, is necessary to form a positive attitude towards entrepreneurship, for pupils, students and teachers.

The project aims at raising a greater awareness for economic reality and commerce, but without narrowing entrepreneurship down to economy and commercial activities alone.

2 regional authorities, 1 goal: enhancing entrepreneurship in education

Province of Antwerp
Public administration in Belgium has a complex structure in which the provincial governments are on an intermediate level. Belgium is divided in 10 provinces. In the province of Antwerp there are 1,781,904 inhabitants, of which almost 500,000 live in the city of Antwerp.

The provincial authority is responsible for ...

Sør-Trøndelag County Authority
Public administration in Norway has a 3-tier structure: central government, county government and municipal government. Norway is divided into 19 counties (fylker) and more than 400 municipalities (kommuner). In Sør-Trøndelag there are 295,000 inhabitants. Almost 174,000 live in the city of Trondheim.

The county authority is responsible for tasks that are too large or too complex for the municipalities to manage alone.

Activities and services Province of Antwerp
- Regional development
- Safety
- Education services
- Culture
- Environmental services
- Recreation
...

Activities and services Sør-Trøndelag County Authority
- Regional development
- Transport
- Economic development
- International engagements
- Education services
- Dental care

...
A brief introduction

ENHANCING ENTREPRENEURSHIP IN EDUCATION (E3)

Province of Antwerp

- Provinciaal Instituut Sint-Godelieve (Antwerp)  www.stgodelieve.be/
- Provinciaal Centrum voor Volwassenenonderwijs Antwerpen  www.cvoprovincieantwerpen.be/
- Koninklijk Atheneum Kapellen  www.atheneumkapellen.be
- Province of Antwerp  www.provincieantwerpen.be/

10 schools and organisations, 1 goal:
enhancing entrepreneurship in education

Sør-Trøndelag

- Frøya videregående skole  fraya.vgs.no/
- Tiller videregående skole  www.tiller.vgs.no/
- Næringslivets hoveorganisasjon – Trøndelag  www.nho.no
- Norges teknisk-naturvitenskapelige universitet  www.ntnu.no/
- Sør-Trøndelag fylkeskommune  www.stfk.no/
The model

The framework used here is based on a modified version of the CRCL model developed by ADEPTT, an international project that considers enterprising teaching as a driver of enterprising learning.

The CRCL model was developed as scaffold to structure the contents of a teacher training module in entrepreneurial approaches to teaching. The model was chosen as a framework to the structure and recommendations from the partners in the E3 project.

CRCL stands for
- creativity
- reflective practice
- community engagement
- learning environments

CRCL model for entrepreneurship education

The CRCL-model for entrepreneurship education
Dare to dream, that’s where it all starts. Entrepreneurship without curiosity, freedom to experiment and dreams will never be successful.
In all subjects, all through the education of the students they need coaching in creative processes.

Teachers should be able to coach their students in creative processes, but it cannot be expected from them that they know how to do it without being trained for it themselves. This can be done during teacher training, but also through self-study. The book Creashock by Dirk Deboe can be a good starting point.

CRCL: creativity

Creativity is the cheapest way to develop something new with existing assets - Edward de Bono

Students need coaching from their teachers, but also through the use of didactic tools that teach them how to be creative. During this project, there were several references to a so-called “business plan generator”. This could in fact be one of many possible ways to structure a creative process, within a confined space, and with a business plan for a mini-company as the outcome.

UE, Ungt Entreprenørskap, presented the members of this project a website where students are guided in setting up their mini-company. One of the first steps is guiding them through a creative process that will help them to set up a business plan and a business strategy. It does not present them with a list of ideas, but helps them conceiving their own ideas.

To be creative, students, teachers – and all current and future entrepreneurs for that matter – need a helicopter view of what is happening around them. This will enable them to be open-minded and find the best solution to a problem.

In fact, all of the above is not a unique starting point to begin with entrepreneurship. It is, as Edward de Bono states, just a different way to develop something new with things that (might) already exist. Nevertheless, all through this project, it was made clear that creativity is the condition sine qua non for entrepreneurship, a train of thought without which entrepreneurship will be unsuccessful.
After the planning and dreaming, it is time for a reality check, more specifically a reflective practice. In order to critically reflect upon their own ideas, students be aware of their own talents and competences. Through co-operation and feedback they should grow aware of their strengths and weaknesses.

CRCL: reflective practice

Students and teachers need to have the ownership of their own ideas and be responsible for the reflective process and its outcomes. Teachers can help forming the reflective practice, by co-operating on all levels: with the students and their colleagues within the school, but also with other schools and with companies and organisations outside the school.

Again, all of the above is not new and should be part of any form of education. But it also shows that when thinking about entrepreneurship and dividing it into feasible chunks and specific thinking activities, it is not as difficult to practice as most people think.

Having a good idea is not the end, it is not the beginning of the end, it is the end of the beginning - Winston Churchill
The helicopter view that was mentioned earlier is necessary to know what is going on around you. Without knowing the needs of society, dreaming and thinking creatively cannot and will not lead to a win-win situation for both the entrepreneur and society. Only a good process of co-operation will lead to a long-term relationship between all partners.

**CRCL: community engagement**

Innovation is bringing those creative connections into the world in a way that adds value - Bob Eckert

Schools can benefit from engaging in community as an entrepreneur (or the “producer” of entrepreneurs) by bringing outside expertise to their classrooms. Entrepreneurship is not (only) taught from schoolbooks or courses. People see, people do; that should be the main inspiration and motivation to bring entrepreneurs to the students and vice versa. UE’s Leder for en dag or Vlajo’s Ondernemers voor de Klas are the easiest ways to make sure entrepreneurship is apprehensible for students and teachers, and it also gives a face to an abstract idea such as entrepreneurship.

Society will definitely receive something in return: new companies will emerge and the culture and economy will benefit from it. Through co-operation social awareness will increase.
Apart from school books, creative sessions, workshops, study visits, … social media and digital tools are relatively new, but very important learning environments to generate ideas, think of new possibilities or work out new plans. Again here the so-called business plan generator could provide an interesting starting point for students.

CRCL: learning environment

Students should be free to learn, but within a freedom framework, a controlled environment in which they are free to experiment with entrepreneurial ideas. Even though it is a controlled learning environment, they need to take risks, get out of their comfort zone, and still be responsible for their choices and actions. It is within this framework that they can learn that failure is an option, that it is acceptable to make mistakes and that they should learn from their mistakes.

It would be easy to define the freedom framework as a class room, since that is a controlled learning environment. Some of the dreams that awoke during this project was the creation of a class room for entrepreneurial education, just like there are class rooms for woodwork classes or nursing courses. Nevertheless, entrepreneurship is all about thinking outside the box, so students and teachers should step outside the box that is their class room and enter the world of entrepreneurship.

You cannot mandate productivity, you must provide the tools to let people become their best. - Steve Jobs
Questionnaire for teachers

Q1: IN YOUR OPINION, WHAT IS THE BEST DEFINITION OF ENTREPRENEURSHIP?
- Entrepreneurship is a dynamic and social process where individuals, alone or in collaboration, identify opportunities for innovation and act upon these by transforming ideas into practical and targeted activities whether in a social, cultural and economic context. (European commission, 2006)
- Entrepreneurship is concerned with all the stages of businesses (startup, continuity, growth, restart, ...) within a wide range of industries, both within the private sector and non-profit sector. Entrepreneurship requires a good understanding of the functioning of the economy and the opportunities and challenges that a manager or an organization faces. (Action plan on entrepreneurial education 2011-2014, Flemish Government)
- Entrepreneurship is concerned with establishing new activities and about being able to perceive new opportunities and making them work in a number of social areas. (Action plan on entrepreneurship, Norwegian Government)

Q2: IN YOUR OPINION, DO WE USE ENOUGH ENTREPRENEURIAL METHODS/STRATEGIES IN EDUCATION?
- Yes / No

Q3: WHEN SHOULD ENTREPRENEURIAL EDUCATION START?
- primary education
- secondary education
- higher education

Q4: ENTREPRENEURIAL EDUCATION SHOULD
- be a part of the curriculum
- be a separate course
- not be taught at school

Q5: DO YOU, AS A TEACHER, FEEL THAT YOU CAN CONTRIBUTE TO ENTREPRENEURSHIP?
- Yes / No / I’m not a teacher

Q6: DO YOU, AS A TEACHER, FEEL CONFIDENT ENOUGH TO USE ENTREPRENEURIAL METHODS AND STRATEGIES?
- Yes / No / I’m not a teacher

Q7: DO YOU FEEL YOU NEED EXTRA TRAINING TO USE ENTREPRENEURIAL METHODS/STRATEGIES IN YOUR COURSES?
- Yes / No / I’m not a teacher

Q8: DO YOU HAVE ACCESS TO COURSES/BOOKS/OTHER MATERIAL PUBLISHED ON ENTREPRENEURIAL METHODS/STRATEGIES?
- Yes / No / I’m not a teacher

Q9: DO YOU KNOW IF THERE ARE STUDENTS FROM YOUR SCHOOL WHO INTEND TO START THEIR OWN BUSINESS AFTER GRADUATING?
- Yes / No / I’m not a teacher

Q10: DO YOU BRING YOUR STUDENTS INTO CONTACT WITH ENTREPRENEURS (NO: GRÜNDE)
- Yes / No / I’m not a teacher

We asked 50 Norwegian and 50 Flemish pupils to fill out the questionnaire. 50 teachers and policy makers did the same thing in SØR-Trøndelag and the province of Antwerp.

Questionnaire on entrepreneurship education

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Questionnaire for students

Q1: IN YOUR OPINION, WHAT IS THE BEST DEFINITION OF ENTREPRENEURSHIP?
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• Entrepreneurship is concerned with all the stages of businesses (startup, continuity, growth, restart, ...) within a wide range of industries, both within the private sector and non-profit sector. Entrepreneurship requires a good understanding of the functioning of the economy and the opportunities and challenges that a manager or an organization faces. (Action plan on entrepreneurial education 2011-2014, Flemish Government)
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Questionnaire on entrepreneurship education

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Q5: DO YOU WANT TO START YOUR OWN BUSINESS AFTER GRADUATING?
• Yes, and I already told a teacher about it.
• Yes, but I did not tell this to a teacher.
• I don’t know yet.
• Definitely not.
We asked 50 Norwegian and 50 Flemish pupils to fill out the questionnaire. 50 teachers and policy makers did the same thing in SØR-Trøndelag and the province of Antwerp.

**Definition of entrepreneurship**
Only 19% of the pupils agreed with the definition of entrepreneurship as stated in the Norwegian action plan (*Entrepreneurship is concerned with establishing new activities and about being able to perceive new opportunities and making them work in a number of social areas*) as the best definition.

43% agreed with the first definition (*Entrepreneurship is a dynamic and social process where individuals, alone or in collaboration, identify opportunities for innovation and act upon these by transforming ideas into practical and targeted activities whether in a social, cultural and economic context*), which is the definition of entrepreneurship as set up by the European Commission in 2006. 77% of the responding teachers and local policy makers agree with the pupils on this definition.

**Questionnaire on entrepreneurship education: the results**

**When should entrepreneurial education start?**
68% of the responding pupils stated that entrepreneurial education should start during secondary education. This could partly be explained by the fact that they themselves only came into contact with entrepreneurial education in secondary education.

62% of the teachers and policy makers, however, answered that they want entrepreneurial education to start in primary education.

**Plans of becoming an entrepreneur**
An enormous 68% of the responding pupils do not know yet whether they would like to start their own business or not. A combined 22% wants to start their own business, 8% of them say they already discussed this with a teacher.

**Entrepreneurial education in the curriculum**
77% of the teachers feel that they, as a teacher, can contribute to entrepreneurship and entrepreneurial education. However, 38% of them, does not feel confident enough to use entrepreneurial methods and strategies during their lessons.

Whether or not they feel confident enough to use entrepreneurial methods and strategies, 85% of the teachers indicate that they feel the need for extra training to use these methods and strategies. This is an opportunity for teacher training courses, pedagogical guidance centres and other organisations focussing on training courses for teachers!

There is no big need for more courses, books or other material published on entre-
Q: During this school year, have you ...  
- discussed economic news?  
- talked about national/local companies?  
- discussed with a teacher how to manage your budget?  
- discussed entrepreneurship in connection to your hobbies?  
- had to write an essay/make a presentation about entrepreneurship/your future working life?  
- had to create marketing etc. material for companies?  
- had to make a business plan?  
- visited companies with a teacher/your class?  
- taken part in a competition connected to entrepreneurship?  

Entrepreneurship education in the classroom

Students  
Since making a business plan is part of the curriculum for most of the responding students, this aspect of entrepreneurship education is most used in the classroom. Discussions on budget management, economic news and national or local companies are also common.

Teachers  
According to the teachers, inviting entrepreneurs into their classrooms is the best way to bring students into contact with entrepreneurship. These sessions lead to inspiration, creativity, stimulation and might start their professional network. Inviting entrepreneurs into the classroom lets students experience the right drive and attitude they will need as an entrepreneur.

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Enhancing Entrepreneurship in Education: how?

Ever tried. Ever failed. No matter. Try again. Fail again, Fail better - Samuel Beckett

5 rules of thumb to be used in classrooms to enhance the spirit of entrepreneurship in class and school management

Bring entrepreneurs into your classroom.

Numerous organisations (such as Ungt Entreprenørskap and Vlajo) have special programs to bring students into contact with entrepreneurs, be it through a meeting in the classroom, a visit to a company, a contest, ...

Build a special classroom for entrepreneurial activities.

Set up a special shop in school, build an office or create an interesting, challenging, "real life"-like environment to learn about entrepreneurship.

Introduce entrepreneurial education to children from a young age onwards.

You can never start too young. Young children can (and should) learn about creativity and (entrepreneurial) opportunities from a young age onwards.

Entrepreneurial education is more than preparing students to set up their own business.

Entrepreneurial education is a perfect way to teach children to be independent, to solve problems themselves, to see opportunities and to be creative. Don’t waste the chance of teaching them these vital lessons in life!

Give teachers the opportunity to learn more about entrepreneurial education.

Teachers cannot be automatically expected to be experts in entrepreneurial education and entrepreneurship themselves. Organise special courses, focusing on the different aspects of entrepreneurship, and give them the means and confidence to use entrepreneurial methods and strategies in their courses.