Entrepreneurship Education from ABC to PhD

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- Young Enterprise

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– Young Enterprise

In 2010 four ministries agreed on a strategy for entrepreneurial education at all levels of education – from ABC to PhD

- The mission of FFE-YE is to implement this strategy (funding, consulting, train the trainers, own educational activities, and...)
- to function as a research and knowledge centre

**Study the effects of different types of educational initiatives**

- Follow 6 000 ninth-graders (started in 2011)
- Follow 1 800 master students from 18 different programmes (started 2011)
- Survey Company Programme (secondary level)
- Survey Edison (primary – sixth-graders)
- ASTEE – EU-project surveying entrepreneurial competences in 15 European countries at all levels of education (10 000+ respondents)
Some concepts…

Cognitive and Non-cognitive skills

- **Cognitive skills** are characterized by a high level of declarative knowledge. These skills are easy to codify and examine. The education system has a long experience of teaching these "skills". Cognitive skills are typically easy for individuals with a high IQ to acquire.

- **Non-cognitive skills** are, as the name suggests, all other skills which in many respects have little to do with the individuals IQ, such as character abilities and social skills (concentration, persistence, motivation, self-esteem, self-control, creativity, etc.). These skills are difficult to codify and assess with ordinary tests.
Entrepreneurial skills can both be of a

- cognitive nature (evaluate business ideas, start a company, financial literacy)
- non-cognitive nature (come up with ideas, creative thinking, transform ideas into action, sense of initiative, create and realize new activities)

- EE which focuses on fostering cognitive entrepreneurial skills is often content-oriented and structured as a sole standing discipline (how to start a company) ➔ the goal is to create more entrepreneurs
- EE which focuses on fostering non-cognitive is often pedagogy-oriented and embedded across the curricular (entrepreneurial pedagogy) ➔ the goal is to create more enterprising individuals
Bliver du entreprenør iel, lille ven?
Which types of learning activities promote engagement and spurs interest and motivation?

Self-determination theory (Ryan & Deci, 2000, 2006)
- Autonomy
- Competence
- Relatedness

Lead to intrinsic motivation (curiosity, enjoyment, interest)

However...
- School is compulsory – reflect what society believes students need to learn
- Teachers must work with large classes
- Classrooms are social settings – not only personal disappointment but also public embarrassment when failing
- Students are graded
Students do not necessarily need to enjoy school activities, but they need to perceive them as having value, being meaningful, and worthwhile

- **Authentic and challenging** tasks, which are *novel* and have *personal meaning* (Helme & Clarke, 2001)
- Meet five requirements: (1) fun; (2) authentic; (3) collaborative; (4) provide opportunities for pupils to assume ownership of their conception; and (5) permit diverse forms of talents (Newman, 1991).
  - 1) skill variety (many different skills)
  - 2) task identity (holistic)
  - 3) task significance (provide value to others)
  - *What does this mean to me?*
  - *How can I use this?* (Illeris, 2006)
When the focus is on teaching non-cognitive entrepreneurial skills

- The focal-point of learning is the students’ own motivation and interests
- The tasks and projects are authentic, varied and performed from A to Z, and they involve stakeholders from the local community
- Teachers should provide sufficient scaffolding and support the student in their learning process (mentor and guide more than an expert).
When the focus is on teaching cognitive entrepreneurial skills

- The teachers often have to struggle with a relevance problem
- Since students in this age group are far away from the labour market
- The usefulness should be presented in positive terms (self-employment is often perceived as taking place in a hostile and competitive environment)
The Sample

• 2,000 students born 1997 – 1st survey (40.1%)
  • 801 students (ninth-graders)
• 2,000 students born 1996 – 1st (46.9%) and 2nd (61.4%) surveys
  • 576 students (tenth-graders)
Non-Cognitive Skills

Cognitive Skills

School Engagement

Non-Cognitive Skills

Entrep. Intentions

Non-academic background

1996: $X^2=175.95$ (df:71) RMSEA=.054(.044;.064) CFI=.967 TLI=.957 SRMR=.038
1997: $X^2=160.82$ (df:71) RMSEA=.043(.034;.052) CFI=.977 TLI=.970 SRMR=.039
Non-Cognitive Skills

Cognitive Skills

School Engagement

Action-Based Teaching Methods

Teacher Support

Entrep. Intentions

*Only associations that have a p-value of .05 or lower are presented

1996: $X^2=379.33 (df:158)$ RMSEA=.052(.045;0.059) CFI=.952 TLI=.942 SRMR=.056

1997: $X^2=433.65 (df:158)$ RMSEA=.051(.045;0.057) CFI=.951 TLI=.941 SRMR=.059
## Focus on Entrepreneurial Content

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School engagement

- All
- Method
- Non-academic
Classmates
Intrinsic Motivation
How can you implement this in your own teaching?


www.ffe-ye.dk
www.asteeproject.eu

Tak!
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*Only associations that have a p-value of .05 or lower are presented*
**The results for the younger pupils born in 1997 are presented within parentheses**

1996: $X^2=175.95$ (df: 71) RMSEA = .054 (.044; .064) CFI = .967 TLI = .957 SRMR = .038

1997: $X^2=160.82$ (df: 71) RMSEA = .043 (.034; .052) CFI = .977 TLI = .970 SRMR = .039
Schooldays over…

- Non-Cognitive Skills
- Cognitive Skills
- Action-Based Teaching Methods
- Teacher Support
- School Engagement
- Entrep. Intentions

- .19 (-.12)
- .28 (+.27)
- .47 (+.43)
- .44 (+.40)
- (.30)
- +.36 (+.33)
- +.31(+.46)

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