Tool: Design principles for broad entrepreneurship

Deze tool is ontwikkeld op basis van een reviewstudie naar ondernemerschapsonderwijs. Voor meer uitleg en onderbouwing zie http://bit.ly/breedondernemerschap.

Gulikers, Baggen, Lans, & Christoffel (2018). Leren voor breed ondernemerschap. Analyse van leeruitkomsten en leeractiviteiten. Eindrapport NWO-PPO overzichtsstudie dossiernummer 405-17-71.

Grafische vormgeving: www.nicolettevormgeving.nl

Getting started

Instructions

Gain insight into your entrepreneurship education (EE) using the dimensions presented in this tool. Start by ascertaining whether you meet the three foundational principles (see below) of EE and what these look like in your educational programme (yellow principles). Then, determine your programme's position along the continuum (left to right) of 11 EE design principles. What does the entrepreneurial process look like (blue principles)? What do the tasks look like (orange principles)? What is the role of others (green principles)? There is no right or wrong. This way, you can make more deliberate choices in terms of the level of complexity or uncertainty you would like to incorporate, and tailor this to your learning outcomes and the background of your learners. Discuss these EE dimensions and principles with your team, including their variation and progression within specific courses or larger programmes. Together, decide which elements can be maintained or adapted, and how you would like to accommodate these changes within your programmes.

In short, use the table to visualise your EE programmes on the following page by placing blue/blue-green/green cards along the continuum. This will help you determine your development priorities and next steps, which can be filled in using the completion form. Our definition of EE is: "Entrepreneurship is seeing and creating ideas and opportunities and then turning them into value for others. This value can be financial, cultural, social and/or ecological.

A number of critical questions:

- How is the entrepreneurial process embedded?
- What kind(s) of value is/are created and for whom?
- Is there a specific and predetermined goal, or does the learner work from his/her own abilities and needs (method)?
- How does the iterative process take shape (experimentation - reflection - adaptation)?
- How much say do the learner, teacher, and external stakeholders have in the process?
- What is the role of subject knowledge in EE?
- How are the different dimensions related to one another?

The dimensions can be clustered into three categories:

= Entrepreneurial process = Task = Relations and environment

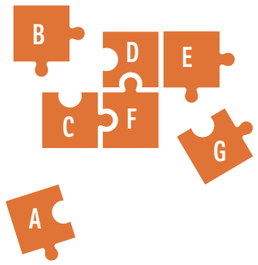
The three foundational principles that must always be present:

1. Undergoing the entrepreneurial process of 1) creating opportunities; 2) evaluating opportunities and 3) taking action, not necessarily in this order.
2. An authentic task with multiple solution paths.
3. The development of an artifact that creates value for someone else.

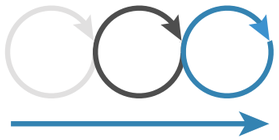
Name of dimension	Blue >	<Blue-Green>	<Green
Method - **Point of departure** - **Process**	Clear goal as point of departure Linear process (causation)	Individual and his/her resources/abilities as point of departure (who am I, what am I capable of, whom do I know? Iterative process (effectuation)	
Degree of autonomy in the value creation process (from idea to result)	Supervised, teacher-driven process	Independent decision-making Student-driven process	
Prototyping, making mistakes, reflection	Trialling and reflection in a safe environment without time pressure	Short cycles of prototyping-testing-reflection where making mistakes is part of the process and there is time pressure.	
Scope	Local/nearby, subsystem	International, system-level	
Complexity	Simple but authentic case with multiple solution paths	Ambiguity in terms of the questions and solutions (i.e. 'wicked problem'). Creation of new knowledge and high level of entrepreneurial innovation.	
Knowledge creation process	Subject/domain knowledge unnecessary; creation process is intuitive and driven by curiosity.	Creating new subject / domain knowledge Innovative entrepreneurship	
Nature of value creation process	Focus on single-level value creation	Aspire to create multiple-level value creation, such as economic, social, cultural, and/or ecological value creation.	
Collaboration	Individual and peer groups	Interdisciplinary team	
Role of external stakeholders	Low level of coordination	High level of coordination and co-creation Multiple external parties involved	
Role models	Heroes and role models as inspiration	Mentors and coaches available for specific areas Geared towards identity formation	
Impact of the result	Result for teacher/peers	Result for domain/sector/society	

Scope

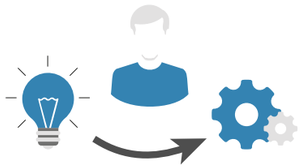
Complexity



Method (point of departure, process)



Degree of autonomy in the value creation process (from idea to result)



Prototyping, making mistakes, reflection

Cooperation

Role of external stakeholders

Knowledge creation process

Nature of value creation process

Role models

Impact of the result

An authentic task with multiple solution paths.

Undergoing the entrepreneurial process of creating opportunities; evaluating opportunities and taking action, not necessarily in this order.

The development of an artifact that creates value for someone else.