

EFFECTUATION-ORIENTED ENTREPRENEURSHIP EDUCATION

– EMBEDDING EXISTING RESOURCES IN HIGHER EDUCATION TEACHING

Dr. Verena Liszt-Rohlf,
University of Applied Sciences Burgenland, Austria
& COOP Sustainable Universities of Applied Sciences, Austria

Agenda

“The Effectuation-Oriented Entrepreneurship Education (EOEE) represents a transformative approach to entrepreneurship education in higher education, emphasizing sustainability and the integration of diverse identities and biographies.”

1. Current challenges and related tasks of higher education institutions
2. Focused examination of entrepreneurship education and its four problem areas
3. Theoretical foundations and practical implementation of Effectuation-Oriented Entrepreneurship Education

Current challenges



Climate
catastrophe and
biodiversity loss

(IPCC Synthesis Report
2023, WWF Report
2023)



Changes in the
labour market,
global economic
conflicts and wars
over raw materials

(ILO 2025, World Trade
Report 2024)



Urge for
individuality

(UNESCO – Trends
Report 2023, OECD
2024, EU Goals and
Values)

Nussbaum (2012), p. 2

„Thirsty for national profit, nations, and their systems of education, are heedlessly discarding skills that are needed to keep democracies alive. If this trend continues, nations all over the world will soon be producing generations of useful machines, rather than complete citizens who can think for themselves, criticize tradition, and understand the significance of another person’s sufferings and achievements.”

Tasks of higher education institutions

- (1) Research,
- (2) Research-led teaching,
- (3) Service to society, and
- (4) Active and formative influence on society.

Henning (2018)

„Academic restraint is now considered outdated, and a conscious attitude is regarded as urgently necessary.“

(Cocorullo 2017, p. 5; Henning 2018, p. 138; Kretz & Sá 2013, p. 503)



FOCUSED EXAMINATION OF ENTREPRENEURSHIP EDUCATION AND ITS FOUR PROBLEM AREAS

Entrepreneurship Education

Definition

"Entrepreneurship education is the scientifically based examination of the promotion of competences relevant to starting a business and the educational structures required for this, while taking a reflective approach to the effects of entrepreneurship-related activities on society." (Halbfas & Liszt-Rohlf 2019, p. 18)

1. about (learning to understand entrepreneurship) => building understanding or knowledge
2. through (learning to become entrepreneurial) => entrepreneurial mindset
3. versus **for (learning to become an entrepreneur)**

(Lackéus 2015, p. 10; Lindner 2016, p. 6)

Problem areas of entrepreneurship education

Fundamental orientation of business administration:

managerialism vs. Entrepreneurialism
(Johanisson, 2011);
goal orientation vs. means orientation
(Sarasvathy, 2008)

Understanding economics:

mainstream-economics vs. plurality of theories
(Friedman, 1970 vs. Handy, 2002; Tafner, 2020)


Problem areas of
entrepreneurship education

Objectives of entrepreneurship education:

object vs. subject (Halbfas & Liszt-Rohlf, 2019)
sustainable EE (Schaltegger & Wagner, 2011),
social EE (Smith et al., 2014)

Target group of entrepreneurship education:

privileged white cis men shaped by Western culture
with classic linear biographies vs. diverse biographies
(Bührmann, 2020; Große et al., 2024)



EFFECTUATION-ORIENTED ENTREPRENEURSHIP EDUCATION

– EMBEDDING EXISTING RESOURCES IN HIGHER EDUCATION TEACHING

Effectuation-Oriented Entrepreneurship Education

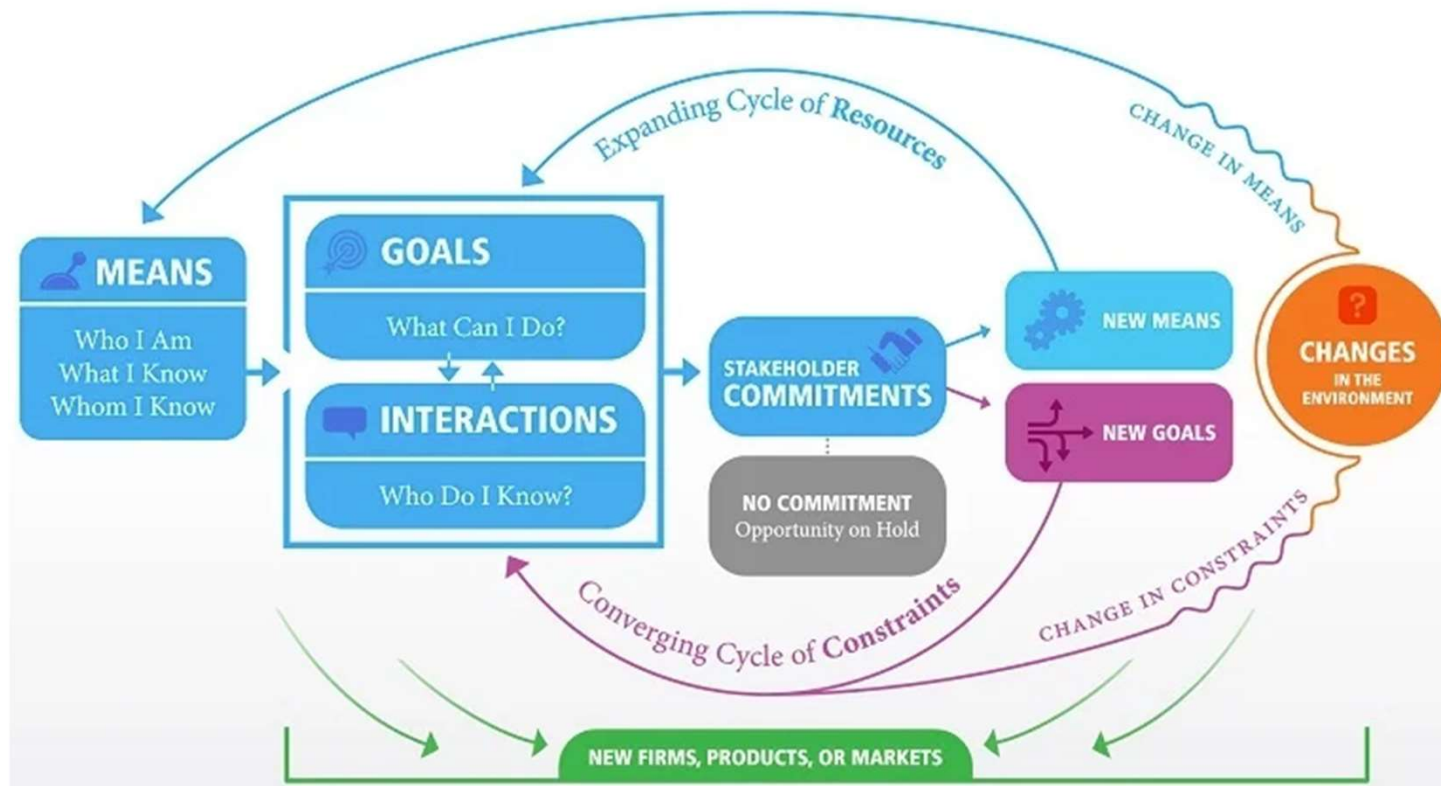
Embedding existing resources in higher education teaching

- Conscious focus on the **effectuation approach** in business administration.
- Develop an understanding of the plurality of theories in economics.
- Focus on the subject and **take responsibility** – as a higher education institution – for changing society.
- Conscious addressing and integration of **diverse biographies**.



Effectuation approach (1/2)

„[takes] a set of means [biographies, competences, network] as given and focus on selecting between possible effects that can be created with that set of means“ (Sarasvathy 2001, S. 245)



Effectuation approach (2/2)

„Effectuation [...] goes to work in spaces where these assumptions [the future is predictable, decision-makers know what they want, i.e. their preferences are given and well ordered; the environment is mostly exogenous to the individual's actions] do not hold. In other words, it helps push the basic economic world-view about individuals, firms and markets beyond its current frontiers.“ (Sarasvathy 2008, S. 8)

| ESG-Categories | Aspect | Contribution of the effectuation theory | Principles of effectuation theory |
|-------------------|------------------------------------|---|-----------------------------------|
| E - Environmental | Resource efficiency | Use of existing funds/resources, avoidance of waste | Bird-in-hand |
| | Adaptability | Development of solutions through flexible processes and thus also risk minimisation | Lemonade Affordable-loss |
| | Local solutions | Use of local resources and networks | Crazy-quilt |
| S - Social | Inclusion and cooperation | Promotion of networks, social interaction | Crazy-quilt Pilot-in-the-plane |
| | Empowerment | Support for individuals, small businesses | Pilot-in-the-plane |
| | Solutions for local needs | Developing solutions that address society's needs | Bird-in-hand |
| G - Governance | Cooperation instead of competition | Promotion of partnerships | Crazy-quilt |
| | Transparent decision-making | Iterative processes enable clear and comprehensible decisions | Pilot-in-the-plane |
| | Adaptability in leadership | Flexible management that can respond to change | Affordable-loss Lemonade |

Biographical work

"Based on a holistic view of humanity, biographical work is a structured form of self-reflection in a professional setting in which the biography is worked on and with. Guided reflection on the past serves to understand the present and shape the future. By embedding the individual life story in its social and historical context, new perspectives are opened up and potential for action is expanded." (Miethe 2017, p. 24)

- Development of support concepts and education based on different mindsets, rather than focusing solely on external characteristics (gender, study programme...) (Krohn et al. 2024)
- Open education for different biographies, including those people who are afraid of starting a business (Große et al., 2024)
- Analysis of other people's biographies (consider diverse biographies) (Liszt-Rohlf et al., 2020 & Liszt-Rohlf, 2023)
- Consideration of one's own experiences, networks and a wide range of competences (effectuation approach) (Frenz, 2024 & Mikkelsen et al. 2024)

Effectuation-Oriented Entrepreneurship Education

Embedding existing resources in higher education teaching

| Problem Areas | Approaches to effectuation-oriented entrepreneurship education | | Guiding questions |
|--|---|---|--|
| Understanding economics | Plurality of theories, criticism of the mainstream | | 1: What direction should entrepreneurship education take to enable potential entrepreneurs to take action? |
| Fundamental orientation of business administration | Entrepreneurialism, behavioural sciences, means orientation/effectuation theory | | |
| Objectives of entrepreneurship education | Subject orientation and effects on society | | 2: How can future-oriented entrepreneurship education be incorporated at different levels of education? |
| | Identity: Who am I? | ESG-Model (Environmental, Social, Governance) | |
| | Competence: What can I do? | | |
| | Network: Who do I know? | | |
| Target group of entrepreneurship education | Biography work with different identities | | 3: How can different biographies be taken into account in entrepreneurship education? |
| | Comprehending the past | ISCED-Level 0 to 8 | |
| | Understanding the present | | |
| | Shaping the future | | |



EFFECTUATION-ORIENTED ENTREPRENEURSHIP EDUCATION

EXAMPLES

Example 1

European Ecosystem

,Small Business Act' for European SMEs, 2008; Entrepreneurship Education: A Road to Success, 2015; [Action plan](#) Entrepreneurship, 2020; Europe 2020-Strategy; EntreComp – The European Competence Framework for Entrepreneurial Thinking and Acting, 2016; Recommendation of the European Parliament and of the Council on key competences for lifelong learning, 2018; EQR; Oslo-Agenda for Entrepreneurship Education in Europe, 2006
European Strategies: Competitiveness Compass, Green Deal, Digitalisation and Innovation Strategy



CloudEARTH*i* is an initiative that includes a series of projects that aim to build innovation capacity of using big data in Environmental Sciences, Sustainability and Circular Economy.



Inspiring the minds

SEEDplus

Seed plus



Boost talent



Mind The Gap



Knowledge Rise

Example 2

Comprehensive evaluation

<https://doi.org/10.1177/25151274251323609>

| ISCED-Level | Description of ISCED level |
|--------------------------------------|--|
| 0 | age-appropriate care for children up to compulsory school age, like crèches, kindergarten, nurseries, children's groups, playgrounds, childminders, male and female, special pedagogy |
| 1 (primary level) | preschool, primary school, and special pedagogy |
| 2 (second. level I) | Compulsory Secondary School, Academic Secondary School (Lower Cycle) |
| 3–5 (second. level II) | Level 3: individual vocational training, part-time vocational school and apprenticeship (dual training), school for intermediate vocational Education, Academic Secondary School Upper Cycle, integrative Education, Level 3–4: Education and Training for Healthcare Professions, Level 4: School for Nursing, Level 5: College for Higher Vocational Education |
| 5–8 postsecondary and tertiary level | That area of education that builds on completed secondary education and provides higher education or prepares for higher professional positions, Level 5: school for people in employment, Add-on Course, Industrial Master College, Building Craftsperson and Master Craftsperson School, Postsecondary VET Course, Level 6/7: Colleges of Teacher Education; University of Applied Sciences, Level 6/7/8: University |





LINKING ACADEMIC RESEARCH WITH ENTREPRENEURIAL SUCCESS

IMPACT SNAPSHOT

2
Entrepreneurial PhD Programs

9
Knowledge-Exchange or Transferability Workshops

72
Academic Entrepreneurs

OBJECTIVES

1. FOSTER ENTREPRENEURIAL THINKING: Help students and early career researchers develop entrepreneurial skills.
2. EMPOWER UNIVERSITIES: Enhance universities' ability to support emerging innovators.
3. BOOST ENTREPRENEURSHIP ACROSS EUROPE: Grow entrepreneurial activity in local innovation hubs.

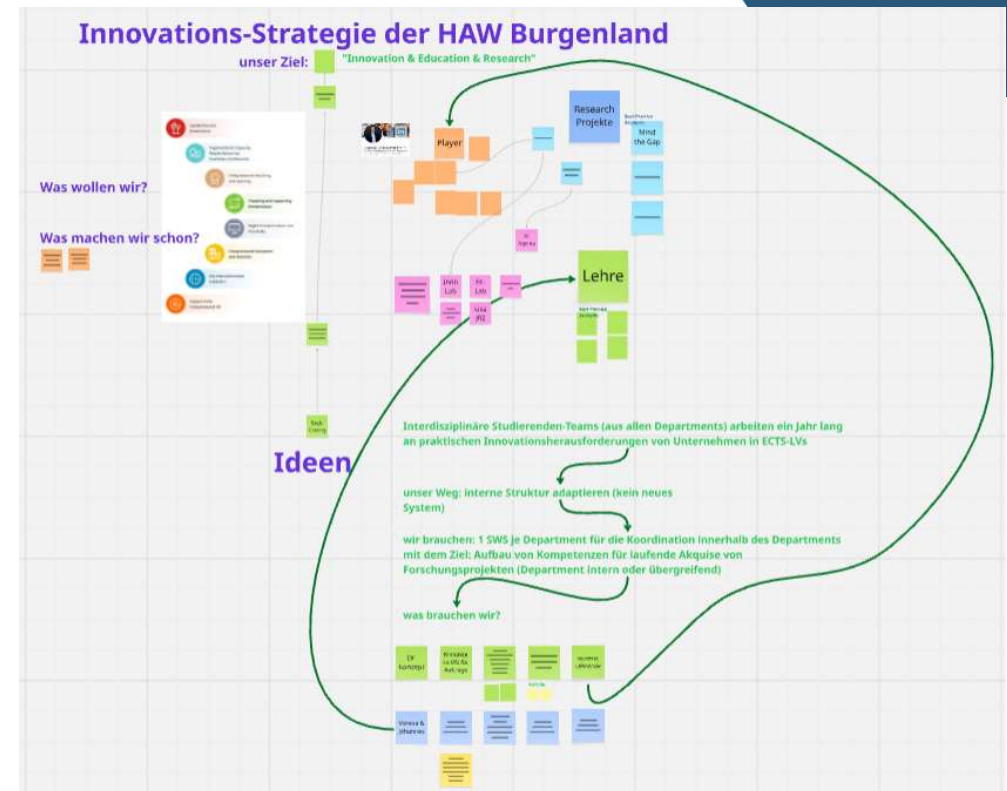


<https://mindthegap.cloudearthi.com/>

<https://www.facebook.com/CloudEARTHi>
https://www.instagram.com/cloudearthi?igsh=OHlvZDcdGhpZmw56utm_source=qr
<https://www.youtube.com/@cloudearthi5407>
<https://www.linkedin.com/company/cloudearthi>



Co-funded by the European Union



Conclusio

What does this mean for the integration of existing resources into teaching?

"The Effectuation-Oriented Entrepreneurship Education (EOEE) represents a transformative approach to entrepreneurship education in higher education, emphasizing sustainability and the integration of diverse identities and biographies."

1. Conscious focus on the **effectuation approach**.
2. Take **responsibility for changing** society.
3. Conscious addressing and integration of **diverse biographies**.

So, let's  **GET-AHED !**

EFFECTUATION-ORIENTED ENTREPRENEURSHIP EDUCATION

– EMBEDDING EXISTING RESOURCES IN HIGHER EDUCATION TEACHING

Dr. Verena Liszt-Rohlf,
University of Applied Sciences Burgenland, Austria
& COOP Sustainable Universities of Applied Sciences, Austria