

Co-creation: Student-business-collaboration in sustainable entrepreneurship

Virtual ISPIM
June, 22, 2021

Facilitators: Frans Stel, Klaus Fichter, & Olof Hjelm,
Charlotte Norrman, Karsten Hürrelmann, Giulia Viero, Hanna Zanatta
Technical support: Rogier de Jong

WELCOME



Co-funded by the
Erasmus+ Programme
of the European Union

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Before we start ...

The session will be recorded

Please mute your microphone **but** keep your video on

Questions / suggestions: YES please! Use the public chat facility

We discuss all chats in the 2nd part of the workshops (breakout sessions and wrap-ups)

Slides will be shared at <https://www.scaleup4sustainability.eu>



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Program S4S at ISPIM 2021

10:05 Welcome – Who is who - program introduction

10:10 – 10:30 Exchange or experiences

- ☞ Full-term Challenge-based learning (Charlotte Norman - Linköping University, Sweden)
- ☞ Short-term Challenge-based learning (Frans Stel - University of Twente, NL)
- ☞ Business perspective (Giulia Viero – Circular Economy expert ECOR, NL)
- ☞ Students perspective (Hanna Zanatta, student Linköping University, Sweden)

10:30 – 10:55 Discussing Experiences (in break-out rooms)

10:55 – 11:05 Plenary conclusions

11:15 – 11:35 New horizons of student/business challenges

- ☞ Introduction "Challenge-4-Impact" (Frans Stel)
- ☞ Good practices of international virtual challenge formats (Olof Hjelm, Linköping University, Sweden).
- ☞ Intermediation & measuring impact (Klaus Fichter & Karsten Hürrelmann, University of Oldenburg).
- ☞ New full-term & special topics challenges (Frans Stel)

11:35 – 12:05 Discussing new ideas & approaches (in break-out rooms)

12:05 – 12:15 Plenary conclusions

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Discussion statements

I: Exchange or experiences (10:30 - 10:55)

1. What are your **experiences** of student /business collaborations?
2. What are the main **challenges and drivers** of Challenge Based Learning activities?
3. What are the pros and cons of **full-term versus short-term** challenges?
4. **Formulation criteria** of a circular challenge for student business collaboration.

II: New horizons of student/business challenges (11:35 – 12:05)

1. What are your ideas/wishes of **virtual or hybrid** international student business collaborations?
2. Do you have **ideas or suggestions** for development and implementation of such challenge based collaborations?

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S4S - PROGRAM



- E+ program: S/B collaboration in green venturing (2019 - 2022)
- Germany (Oldenburg Uni. - lead), Sweden (Linköping Uni.) and Netherlands (Vas, Uni.Twente, Tilburg, Avans)
- full and associated business partners in all countries
- evaluation /developing / testing tools-> digitalisation, upscaling
- transnational exchange & learning; dissemination e.g. at ISPIM
- website: <https://www.scaleup4sustainability.eu>



Scale-Up4
Sustainability

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S4S - CONCEPTS



- **Modules:** Eco-venturing, Environmentally driven Business Development., Fujifilm Future Challenge
- **Challenge workshops:** Circular Challenge, Againty International Expansion
- **Skills workshops:** Tools for Venturing, Negotiation, Creativity
- **Standardized trainings:** training material, videos, playbooks etc.
- **Research:** Role of Ecosystem partners at Upcycling business, Innovators DNA, Entrepreneurial Traits



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S4S-CONCEPTS



SIMILARITIES & DIFFERENCES

- Students & Businesses collaborate
- Sustainability
- International exchange: Y/N -> local complexity
- Duration: 2 hrs /2 days/ 10 weeks
- (Extra) curricular => sometimes combined
- # of companies involved: 1/many
- # of universities involved: 1/many
- E-learning: Y/N/ Hybrid
- Scale: 2 - 150 students
- Individual / team
- Research/ education / mix



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CHALLENGE BASED LEARNING

Charlotte Norrman
Linköping University

h.u. LINKÖPINGS
UNIVERSITET



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CBL is an inductive method!

Prince & Felder (2006)

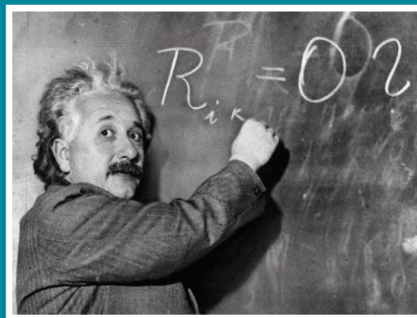
- Starts with observations to be interpreted, questions to be answered, problems to be solved
- Student centred method – i.e. the knowledge is created by the student – not transferred from the teacher
- Includes active and collaborative learning



Why CBL ...

“We cannot solve our problems with the same thinking we used when we created them.”

Albert Einstein



CBL enhance...

- Innovative thinking abilities (Martin et al 2007)
- Improves interaction in the group (Mahoney et al 2012)
- Makes students more involved (Baloian, Nelson, et al. 2006)



A good challenge is...

- Open, by means of that it could be adapted by the students to fit the group
- Searching for “a” solution rather than “the” solution
- Challenge providers takes the role of a “speaking partner” rather than being a customer
- Able to “own” by the students





Some general conclusions from our experience

- Lots of VUCA (volatility uncertainty ambiguity complexity)
- Operations outside the comfort zone
- Lots of own responsibility
- Cross disciplinary teams forces individuals to contribute and communicate
- Makes students gain knowledge and self confidence

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Case CIRCULAR CHALLENGE



- 2 day virtual **interactive** program: preparation + challenge
- companies** presented their circular challenges (NL / Germany; small/large)
- student teams developed **innovative & feasible** ideas and presented these to an expert jury
- different (academic or national) background in **interdisciplinary** teams
- the companies and **coaches** assisted the teams on demand
- students from Sweden/Germany/NL - high entrepreneurial attitude: **3.86** (1-5 Likert) = 77.2%
- jury of circular experts & companies: discussion of results
- certificates of participation / winning



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Program CIRCULAR CHALLENGE



11 September : preparing the challenge

10.00 – 14.00 Circular Business cases ECOR, CEWE, DSM Niaga (3x1h - interactive)
14.00 – 15.00 Preparation for day 2 – tools, formation of teams, Q&A



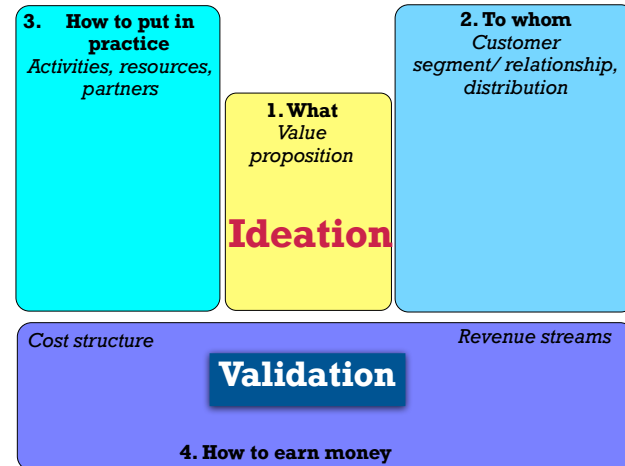
12 September: circular challenge

9.30 – 11.00 Start Circular Challenge in virtual teams (I: ideation)
11.15 – 12.30 Circular Challenge in virtual teams (II: feasibility and viability)
13.30 – 15.00 Circular Challenge (III: pitches) - Evaluation, Jury assessment, and Q&A.



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Business Model



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SUMMARY CHALLENGE 4 IMPACT

- follow up for Scale-up -for -Sustainability (S4S)
- same academic partners (UOL-LiU-VAS)
- E+ Cooperation Partnership project 2022 - 2024 (30 months)
- climate change and with other environmental issues => new learning, teaching and skills development programs
- International Student Business Challenges in Sustainable Entrepreneurship
- development of Attitudinal, Behavioral, and Cognitive (ABC) competences

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ISPIM Conference 2021 (Berlin) BUSINESS PERSPECTIVE

Giulia Viero

ECOR
Venlo, the Netherlands
22.06.2021

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Motivation and
interest to join S4S

To unlock new ideas & validate them, to foster
long-term relationships with educational
institutions & branding



ECOR: When technology unlocks
potential, brilliant ideas come to live

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Assessment on Student-Business Collaboration

Current impacts

Future challenges

Internal aspects

- Degree of Business Lead personal involvement matters:
promotor/observer
- Corporate **Attention**: Urgency & Priority
- Insights on **learning** abilities of company

- How to retain / enforce Student/Business activities vs. company's Urgency-Priorities agenda?
- establish internal **new team/division**
 - create a fully dedicated **spin-off on S-B collaborations**


External aspects

- Show **colleagues** the results of EU activities (e.g. Circular Challenge)
- Network** extensions & branding
- Raising students' **awareness** on ECOR Technology

Collaboration: bringing more students together → How to foster networking opportunities & promote collaborative culture/relations on a more **global-level**?




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Scale-up4 Sustainability

Student Perspective

Hanna Zanatta




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ISPIIM Innovation Conference 2021 2021-06-22 2

Student perspective


Circular Challenge




INTERNATIONAL
COLLABORATION




REAL-LIFE CASE
STUDIES





BEYOND THE
OBVIOUS



TIME
PERSPECTIVE



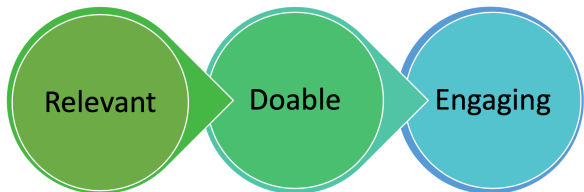
SPREAD
AWARENESS






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ISPIIM Innovation Conference 2021 2021-06-22 3

How to formulate a circular challenge for student business collaboration?



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Program S4S at ISPIIM 2021

2nd workshop

11:15 – 11:35 **New horizons of student/business challenges**

- 🗣 Introduction “Challenge-4-Impact” (Frans Stel)
- 🗣 Good practices of international virtual challenge formats (Olof Hjelm, Linköping University, Sweden).
- 🗣 Intermediation & measuring impact (Klaus Fichter & Karsten Hürrelmann, University of Oldenburg).
- 🗣 New full-term & special topics challenges (Frans Stel)

11:35 – 12:05 **Discussing new ideas & approaches (in break-out rooms)**

12:05 – 12:15 **Plenary conclusions**

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OBJECTIVES / RESULTS

CHALLENGE 4 IMPACT



1. European **network / platform** for CBL sustainable entrepreneurship and innovation
2. long-term **partnerships and infrastructures** for the implementation of international virtual Student Business Challenges in sustainable entrepreneurship
3. develop **skills and competencies** of students (curricular & extracurricular) and business partners in fighting climate change and other sustainability challenges by entrepreneurship
4. Increase the quality of **challenge-based and digital** teaching and learning formats
5. Establish impact management procedures and skills that allow to **assess** and improve the positive impacts on the Sustainable Development Goals (SDGs)
6. Working in **international** teams (students, lecturers, business) to share knowledge, values, learning experiences and to prepare students for an international labour market and create the ability to work cross-cultural
7. Evaluations, manuals, best practice reports, research, new formats

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Good Practices of International Virtual Challenge Formats

Olof Hjelm and Charlotte Norrman, Linköping University, Sweden

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The pandemic made us all go on-line

- > Long wanted expectations for higher education to become more digital.
 - > Modernization.
 - > Higher education more accessible.
 - > Larger impact (e.g. MOOCs).
 - > Changed business models and competition for HEIs.



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The need for virtual and international collaborations

- > Sustainability challenges are often global
- > New demands on future work life
 - > E.g 21st Century Skills (Griffin and Care, 2014)
- > Virtual formats can be resource efficient.
- > Virtual formats can make international collaborations easier.
- > Virtual formats can be challenging.
- > Much experimentation and fast development during the pandemic.

Learning and Innovation "The 4 C's"	Digital Literacy	Career and Life
Critical thinking & problem solving	Information literacy	Flexibility & adaptability
Creativity and innovation	Media Literacy	Initiative & self-direction
Communication	ICT Literacy	Social & cross-cultural interaction
Collaboration		Productivity & Accountability
		Leadership & responsibility

Table 1 - P21 Skills



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We want to identify good practice!

- > Examples of full time modules.
- > Examples of short term activities.
- > Pedagogics.
- > Set up and organization.
- > Technological support.
- > Out-put.
- > Satisfaction among participants (Students, Teachers and Challenge providers).
- > Etc.



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About the InGenious course

- 25 %, English, 8 ECTS
- Cross disciplinary teams
- External challenge providers
- Scheduled events such as ...
 - Kick Off
 - Workshop "Shitty Prototyping"
 - Pitch training and pitches in front of audience
 - Graduation Event



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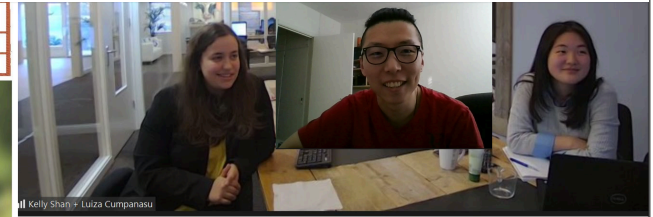


**EUROPEAN SUSTAINABLE
INNOVATION CONTEST**
The best university teams from Sweden, Netherlands, Germany & Belgium
INVITATION - 4 March 2021: 9h00 - 11h30



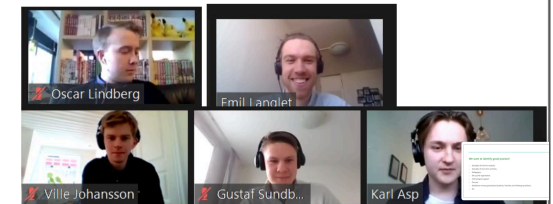
7 INNOVATIVE SUSTAINABLE SOLUTIONS
Prizes: CEWE photobook vouchers

- **FARMERS FRIEND** (Linköping): Market place for local and organic food
- **POTTERHOUSE** (Trondheim): Single-reusable paper pods
- **GOLWCO2** (Linköping): Climate footprint of food
- **IMPRIMUS** (Aarhus & Linköping): Affordable sustainable lenses
- **LOCALCHIPS** (Göteborg): Photo made from renewable raw materials
- **MOBILITY MEMORIES** (Göteborg): Portable Photo book
- **VIRTUAL BRAINS** (Göteborg & Oldenburg): ChatGPT-based waste collection



Above: Team **Imprimus**, Auxulus sustainable lenses. Winners in two categories: Most Original Idea and Best Movie

To the right: **GOLWCO2** (Linköping): App for Climate Footprint of Food. Winner in the category: Most Sustainable Idea.



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CARL
VON
OSSIEZKY
universität
OLDENBURG

Scale-up4
Sustainability

Co-creation: Experiences of student business collaboration in sustainable business development

Infrastructure, intermediation services and measuring impact

Karsten Hurrelmann and Klaus Fichter

Chair of Innovation Management and Sustainability

Carl von Ossietzky University Oldenburg, Germany

Co-funded by the
Erasmus+ Programme
of the European Union

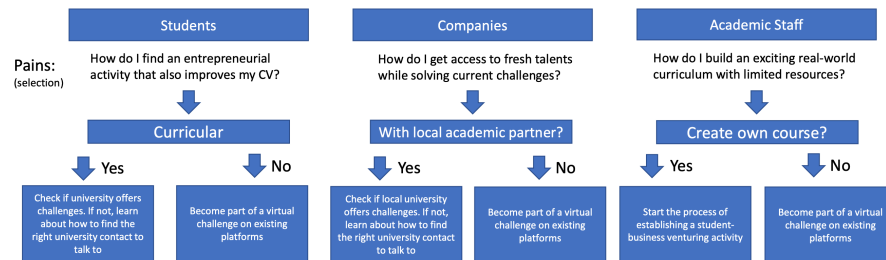


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Student business collaboration in sustainable business development: How to find the right partners?



Need for an infrastructure and intermediation services that could facilitate the successful implementation of international virtual sustainable entrepreneurship student-business collaborations



Schabel (2021)

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Impact assessment of student business collaboration : Challenges



- > Assessment of outcomes and impacts requires medium- and long-term data, but reliable data for KPIs on outcomes and impacts is hard to obtain.
- > No impact evaluation methodologies and tools are available to assess the medium-term outcomes and long-term impacts of student-business collaborations.

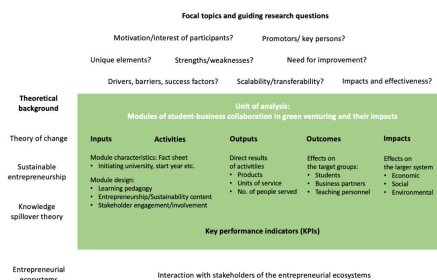


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Impact assessment of student business collaboration in sustainable business development How to measure the impact?



Conceptual Framework



Multi-Case-Study-Elements in the S4S-Project

- List of the tools and methods used for collaboration
- Fact sheets with objectives and characteristics of the student business collaboration
- Evaluation guidelines
- Semi-structured exploratory interviews with (1) students, (2) lecturers and (3) business partners
- Student survey

Case study evaluation reports and Cross-case evaluation analysis

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HOME NEWS UPCOMING EVENTS PROJECTS TOOLKIT BEST PRACTICES PARTNERS CONTACT

<https://www.scaleup4sustainability.eu>

Evaluation manual

In order to facilitate assessment of teaching and learning, focused on collaborative students / business partners development of sustainable business, we constructed a manual with the following objectives: (1) to make transparent costs - benefits - outputs - outcomes and impacts of student / business collaboration in sustainable entrepreneurship and green venturing; (2) to support the identification of strengths and weaknesses; (3) to provide insights for improving existing activities; (4) to stimulate innovation on these topics.

You can download the manual here.

Interview guidelines

- ... for teaching personnel
- ... for students
- ... for business partners

Links to additional resources:

- Questionnaire Sustainable Entrepreneurial competencies
- Framework for evaluation of educational modules
- Factsheet student/business projects
- Evaluation guidelines of collaborative student-business venturing activities (full report)

Coding schemes

- ... of lecturer interviews
- ... of student interviews
- ... of business partner interviews

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FULL-TERM /SHORT-TERM CHALLENGES

CHALLENGE 4 IMPACT



- Complex societal **problems**: cross-border, trans-sectoral, multi-disciplines, multi-faceted, multiple stakeholders
- New educational **formats** (“serious games”)
- Target groups**: Bachelor and Master students (curriculum), teaching staff and program managers of HEIs, process coaches and skills trainers
- What's **new**: global virtual / hybrid teams, transnational and trans-disciplinary,
- Methodology**: design, organise, develop, prepare, implement, evaluate, disseminate
- Results**: playbook with teaching material, publications

duration (10 weeks / 2 hrs)

curriculum (Y/N)

external stakeholders (Y/N)

hybrid (Y/N)

THANK YOU



Slides will be shared at <https://www.scaleup4sustainability.eu>

