INTRINSIC

INnovative educaTion foR sustaInable eNtrepreneurShip In Life sCiences

ICA Edu Colloquium 2019, 15 - 16 May 2019, Leuven Institute for Ireland in Europe, Belgium
DI Dr. Andreas Zitek, MSc

University of Natural Resources and Life Sciences Vienna
Higher Education Development, E-Learning & Didactics

Definition of sustainable entrepreneurship

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- **Conventional entrepreneurship** is more associated with **counteracting sustainable development**.

- **Sustainable entrepreneurial action** is seen as a promising way to preserve ecosystems, counteract climate change, reduce environmental degradation, improve agricultural practices, and maintain biodiversity.

- Activities performed by entrepreneurs in the pursuit of gains **must not undermine the ecological and social environments in which they operate; and when necessary, they must restore or nurture such environments towards recovering the balance between the environment, society and economic activity.**

- **Overarching aim: balance the competing demands for environmental protection and economic development, emphasizing economic, ecological and social goals in equal degrees.**

Erasmus+

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ERASMUS+ Strategic partnership - total grant 305.640 €

Strategic Partnerships in HE must focus on activities designed to improve HE provision across the participating countries.

- Projects are expected to **develop innovative outputs.**
- Applicants have the possibility to request a dedicated budget for **Intellectual Outputs** and **Multiplier Events** in order to directly answer to the innovation aspect of the Action.
- there is a strong link with **policy objectives**
- it is based on a **solid needs** analysis
- the needs identified are relevant in the context of the **HE Modernisation Agenda**
- there is clear **added value** from **transnational dimension**
- the project involves an **appropriate mix participating organisations**

9 Partners

1. BOKU – UNIVERSITY OF NATURAL RESOURCES AND LIFE SCIENCES, HIGHER EDUCATION DEVELOPMENT UNIT (ANDREAS ZITEK, BARBARA HINTERSTOISSER)

2. AUA – AGRICULTURAL UNIVERSITY OF ATHENS (PANAGIOTIS PANAGAKIS, CHRIS BRIASSOULIS, DEMETRES BRIASSOULIS)

3. BUAS - UNIVERSITATEA DE STIINTE AGRICOLE SI MEDICINA VETERINARA A BANATULUI ,,REGELE MIHAI I AL ROMANIEI'' DIN TIMISOARA (TEODOR TRASCA)

4. FAZ - UNIVERSITY OF ZAGREB, FACULTY OF AGRICULTURE (RENATA BAŽOK)

5. ICA - ASSOCIATION FOR EUROPEAN LIFE SCIENCE UNIVERSITIES (SIMON HEATH)

6. UGENT – GHENT UNIVERSITY (MIA ECKHOUT)

7. UH - UNIVERSITY OF HELSINKI (JANNA PIETIKÄINEN, LÄHTEVÄNOJA, ANTTI J)

8. UniTE - UNIVERSITY OF TERAMO, FACULTY OF BIOSCIENCE AND TECHNOLOGY FOR FOOD AGRICULTURE AND ENVIRONMENT (PAOLA PITTIA, EMILIO CHIODO)

9. UW – UNIVERSITY OF WAGENINGEN (THOMAS LANS, LISA PLOUM)

Background & need

- **Development of entrepreneurial competencies in students** is promoted by many universities with courses **offered in specialised departments**.

- **Development of entrepreneurial competencies is not well integrated** into the mainstream curriculum at the Bachelor and Master levels.

- **Lack and need** of **structured and aligned materials** for HE teachers in the field of SE education and assessment across LSUs in Europe - only fragmented practices in LS in each country are available so far

- As a result, **significant latent potential** of students' entrepreneurial innate skills **remains untapped**.

General aim

…to empower Life Science Universities to develop their students' Sustainable Entrepreneurship Competencies…

Specific Goals & Objectives

- To improve the capacity of LSUs to integrate innovative practices in the offer for sustainable entrepreneurial education in a modern and effective higher education system.

- To provide and support LSUs teachers with innovative modular entrepreneurial pedagogical practices, didactic materials and training via an open, interactive and digital ePlatform.

- To enhance and extend entrepreneurial education in LSUs with a bottom-up approach by fostering the adoption and implementation of SE by LSUs teachers.

- An INTRINSIC network of teachers in LSUs focusing on SE will be created and will be supported by the INTRINSIC Connected Entrepreneur Educator APP.

Intellectual Outputs

- O1 INTRINSIC modular interactive web-platform & INTRINSIC Connected Entrepreneur Educator APP

- O2 INSTRINSIC Entrepreneur Monitoring APP

- O3 INTRINSIC Design tool for teaching sustainable entrepreneurship in Life Sciences

- O4 INTRINSIC Staff development module

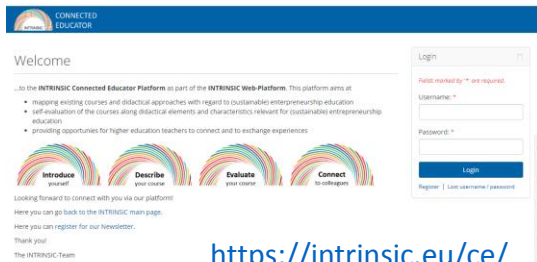- O5 INTRINSIC Case studies, testimonials & application recommendation/good practice

Structure of the INTRINSIC Platform

O1 Connected Educator App, course mapping

https://intrinsic.eu/ce/

https://apps.liveapp.eu/pwa/intrinsicteacherapp

O1 MOOC platform for course

https://learning-intrinsic.boku.ac.at/
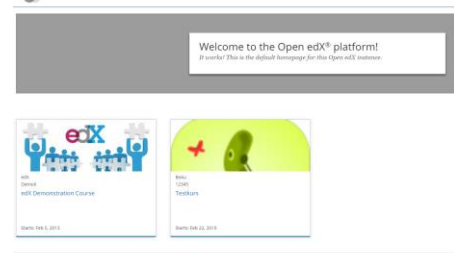
O2 Student app with Monitoring tool (Teacher App?

https://apps.liveapp.eu/pwa/intrinsic

Newsletter

INTRINSIC Newsletter registration
back to INTRINSIC main page

https://www.newsletter2go.de/

Social media

https://twitter.com/INTRINSIC_EU

https://www.facebook.com/INTRINSIC.EU

https://www.linkedin.com/groups/8719364/

O1 INTRINSIC Webpage

INnovative educaTion foR
sustaInable eNtrepreneurShip
In Life sCiences

https://intrinsic.eu/

O3 Teaching Design Tool (Ughent)
O4 Staff Development Module (BOKU

O5 Case studies (UH)

Teacher questioannaire
For teachers sent with first newsletter

Questionnaire for teachers to scan students

https://docs.google.com/forms/d/1DUydX057mGQEqd54DHKMtRXloPDmxMGw5-8lwkFbpqM/copy

Webinars

Webinars of the INTRINSIC project
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Webinar of VR in entrepreneurship education
ur first webinar will deal with the potential use of Virtual Reality (VR) in entrepreneurship education.

Webinar 2
Webinar to be planned. You will be notified, if you have registered to one of the prior webinars.

Webinar 3
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Webinar 4
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https://intrinsic.eu/webinars-of-the-intrinsic-projectback-to-intrinsic-main-page.html

Intellectual Output 1

- ePlatform and its modular elements
    - ePlatform itself
    - Course Mapping & exchange (professional Portfolio Tool, Mahara)
    - Connected Educator App (PWA, open source Siberian CMS) – elements for teachers – direct link to resources, microlearning
    - Subsections for
        - App tool for student monitoring (O2)
        - Teaching Design Tool (O3)
        - OPEN EDX - staff development module (O4)
        - Webinar section with registration etc. (ZOOM)
        - Social media links
            https://twitter.com/INTRINSIC_EU
            https://www.facebook.com/INTRINSIC.EU
            https://www.linkedin.com/groups/8719364/

O1-1a Webplatform

https://intrinsic.eu

O1-1b Connected educator App

Challenges

- Select design & functionalities
- Select way of publishing (PWA)
- Implement knowledge & communication elements (quiz, social media, push, links to other resources)
- Make it attractive to use be used
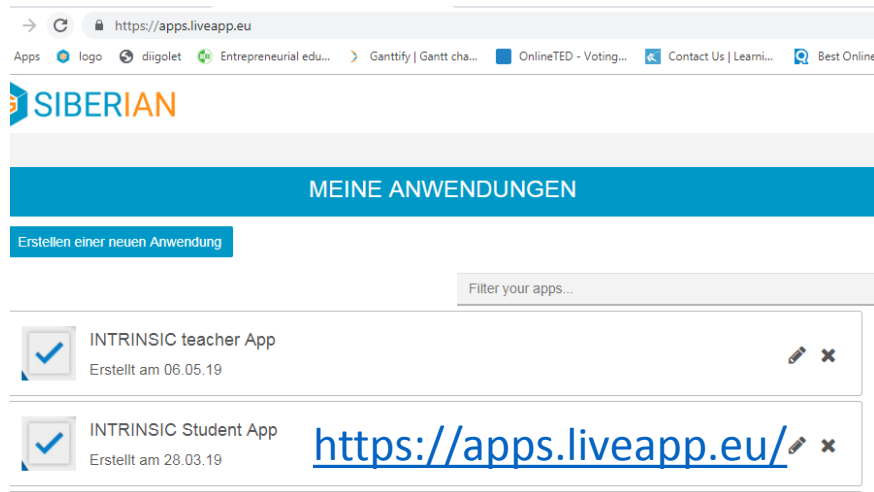
O1-2 Course Mapping & exchange

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https://intrinsic.eu/ce

CONNECTED EDUCATOR

Welcome

Login

Challenges

- Make it attractive and easy to use for teachers to participate
  - Access to the student scan form, guiding videos, pre-defined categories for course descriptions
- Create a REAL network
- Privacy statement (GDPR)

Introduce yourself **Describe** your course **Evaluate** your course **Connect** to colleagues

Here you can find a short video on how to register and start to participate in the INTRINSIC connected educator platform (*it is recommended to open the video in a new tab by right-clicking and selecting the "open in new tab" option.*)

Looking forward to connect with you via our platform!

Here you can go back to the INTRINSIC main page.

Here you can register for our Newsletter.

Thank you!

The INTRINSIC-Team

O1-3 Course mapping tool

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My course collection for evaluation

You are on page 2/2 ▾ ◀ ▶

My first course description (please change name to your course name)

by Connected Educator

✏ Edit   📋 Copy   ⋯

Template: My first course description

A University name

Please add your University name here.

A Lea...

Please ad...

A Study program

Please provide th...

A EC...

CONNECTED EDUCATOR

INTRINSIC

Search users 🔍   ✉   👤⌄   🔧   ☰

DIDACTICAL DETAILS, TASK and METHOD EVALUATION FRAMEWORK

by Connected Educator

A Subject fi...

In which subject
entrepreneurship

Natural Scie...
Social Scien...
Engeneering...
Business
Agricultural...
Forestry
Water Mana...
Other (plea...

A Name of

Please add HERE
a link to the or

...u must enter a
...s that apply, and

...e to your course

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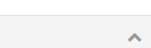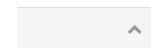
Challenges
- Define & relevant fields for collecting information
- Implementation for easy filling

Advantage
- Additional information (videos, pdfs, images etc. can be integrated easily, as it is a Portfolio software

the SDGs

2 Scope of task   ^

O1-4 - Open EDX & LRS

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Challenges

- Setup of platform & finetuning of layout & functionality etc.
- Define course content & interactions
- Implementation in staff development programs at Universities

O1-5 – Webinar page (ZOOM)

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Webinars of the INTRINSIC project
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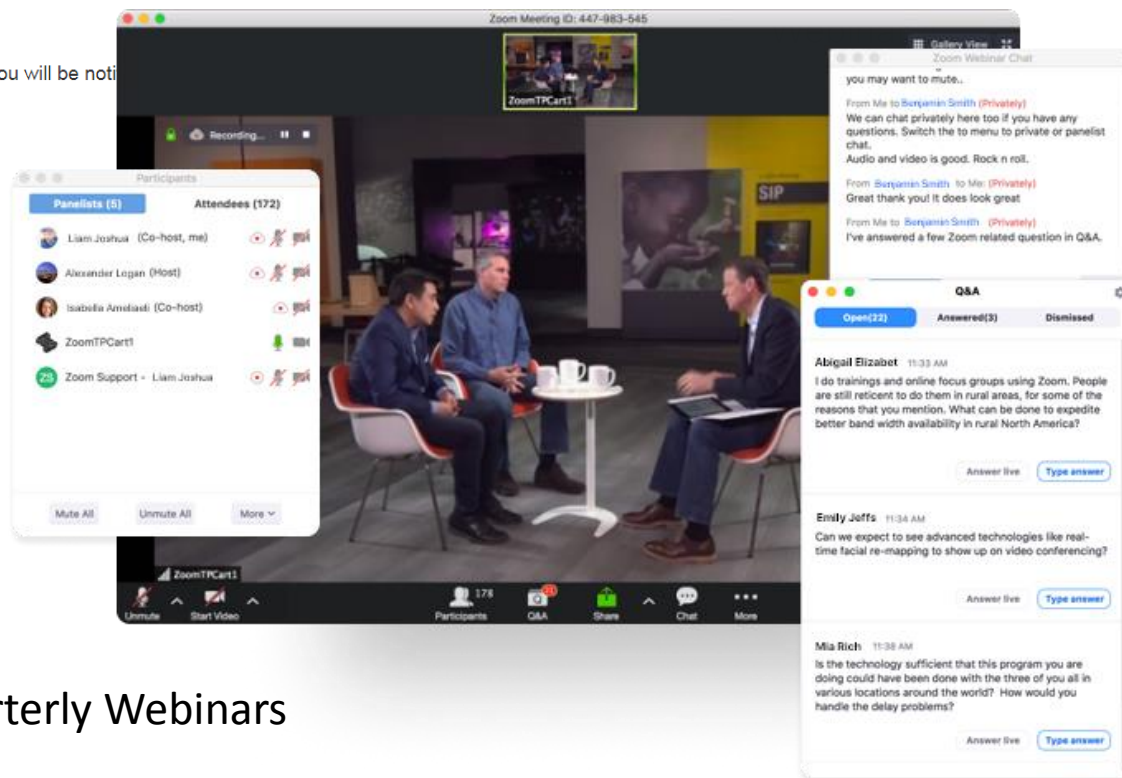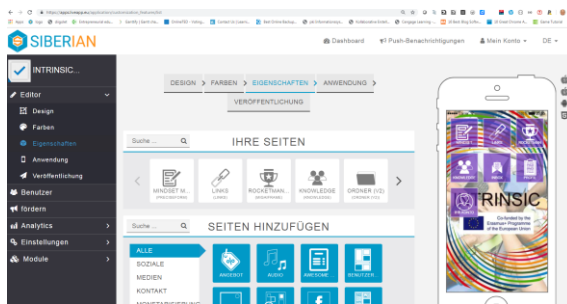
Quarterly Webinars

Erasmus+ The INTRINSIC project is co-funded by the ERASMUS+ program of the European Union under grant no. **2018-1-AT01-KA203-039303.**

O2 - INTRINSIC Entrepreneur Monitoring APP

To open the 'black-box' of entrepreneurial learning for teachers and course developers requires the collection of micro-level learning data which provides better insight in learning processes and the factors influencing those process. We suggest to collect this data via a **web-based/app-based** tool.

SIBERIAN CMS – open source with configurable modules
Progressive WebApp – no stores

O3 - Design tool for teaching sustainable entrepreneurship in LS

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- Easy access tool containing a stepwise method to develop course modules for LS
  - offers guidance to teachers to implement teaching in sustainable entrepreneurship in their curricula.
  - different steps in course development starting with the definition of the domain and the description of the skills and competences students should acquire.
  - selection of relevant course interventions and learning methods
  - assessment of the skills and competences

- Innovation
  - Connection to SDGs & sustainability
  - Situation Judgement Tests (SJTs) for assessing sustainable entrepreneurship competencies
    - **Challenge:** How to collect and also analyse the data? (Learning Record Store, xApi Statement, offered via the App)
  - Design tool framework which
    - assists teacher self-evaluation
    - connects entrepreneurial learning evaluation to the generic evaluation strategies of universities

SDGs mapped to BOKU Competence Areas

O4 - Staff development module

Selected elements

1. The entrepreneurial journey (definitions and process itself)

2. Linking entrepreneurship in Life Sciences to SDGs (with a direct link with the examples from the case in O3-3)

3. Understanding and mapping student characteristics relevant for sustainable entrepreneurship education in different phases of the entrepreneurial journey (latent, nascent, novice, serial).

4. Designing learning activities (including improvement by evaluation) for sustainable entrepreneurship education in Life Sciences for SDGs

O5 - Case studies, testimonials & application recommendation/good practice

- Collecting case studies and making them accessible for others

- Basis is also the course mapping (O1)

- Selected case studies linked to the personal professional teaching profiles of the related HE teachers will be structured and made openly available from the Connected Educator platform

- Instructor/facilitator guideline for best practice

Multiplier Event

International conference on teaching & learning Sustainable Entrepreneurship in Life Sciences

Vienna Jul 2021

Register for our Newsletter!

https://www.intrinsic.eu

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First Name

First Name

Last Name

Last Name

Email

Email

Participate in our Network!

You will be notified by our newsletter!

Contact information

Webpage: https://intrinsic.eu/

Connected Educator: https://intrinsic.eu/ce

Facebook: https://www.facebook.com/INTRINSIC.EU

Linkedin Group - INTRINSIC: Empowering HE for INnovative educaTion foR sustaInable eNtrepreneurShip In Life sCiences
https://www.linkedin.com/groups/8719364/

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The INTRINSIC TEAM

Thank you!