



The INOS project: Integrating Open and Citizen Science Into Active Learning Approaches in Higher Education

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INTEGRATING OPEN AND CITIZEN SCIENCE INTO
ACTIVE LEARNING APPROACHES IN HIGHER EDUCATION



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Associated partners

- University of Geneva, Switzerland
- University Library of Southern Denmark
- Scientific Knowledge Services, Germany
- Technical University of Denmark
- AIESEC, Aalborg, Denmark
- Grasshopper Films GBR, Germany
- Traces Association, France

Motivation and Aim

Motivation:

- ✓ Joining **Citizen Science** initiatives engaging citizens in digitized projects for a social purpose in an open framework of collaboration
- ✓ Shaping the future research landscape by stimulating **Open Science**

Aim:

To combine **HE curricula** with Open and Citizen Science activities -> **upskilling HE academic and library staff, and students** in sustaining technology-mediated social participation in and out of the University and at different sectors.



Project Objectives

- Problematize the social impact of Higher Education Institutions (HEIs) as knowledge creation, sharing and (re-) use ecosystems in the digital economy
- Develop a pedagogical foundation based on well-proven active learning pedagogies for open/citizen science practice
- Upskill HE academic and library staff and students
- Enrich HE teaching, learning and training resources on active learning pedagogies with open and citizen science initiatives
- Raise awareness on societal impact from Open Science (OS) and Citizen Science (CS) inside and outside HEIs

Intellectual Outputs (a)

- September 2019 – February 2020 (O1)

Evidence-based overview of trends in OS (and CS) public activities and HEIs role

- September 2019 – June 2020 (O2)

Solidify OS (and CS) practice

- February 2020 – September 2021 (O3)

Encourage a collaborative effort between citizens together with HE staff and students

Intellectual Outputs (b)

- June 2020 – October 2021 (O4)

Encourage collaboration and multidisciplinary approaches between students and HE staff

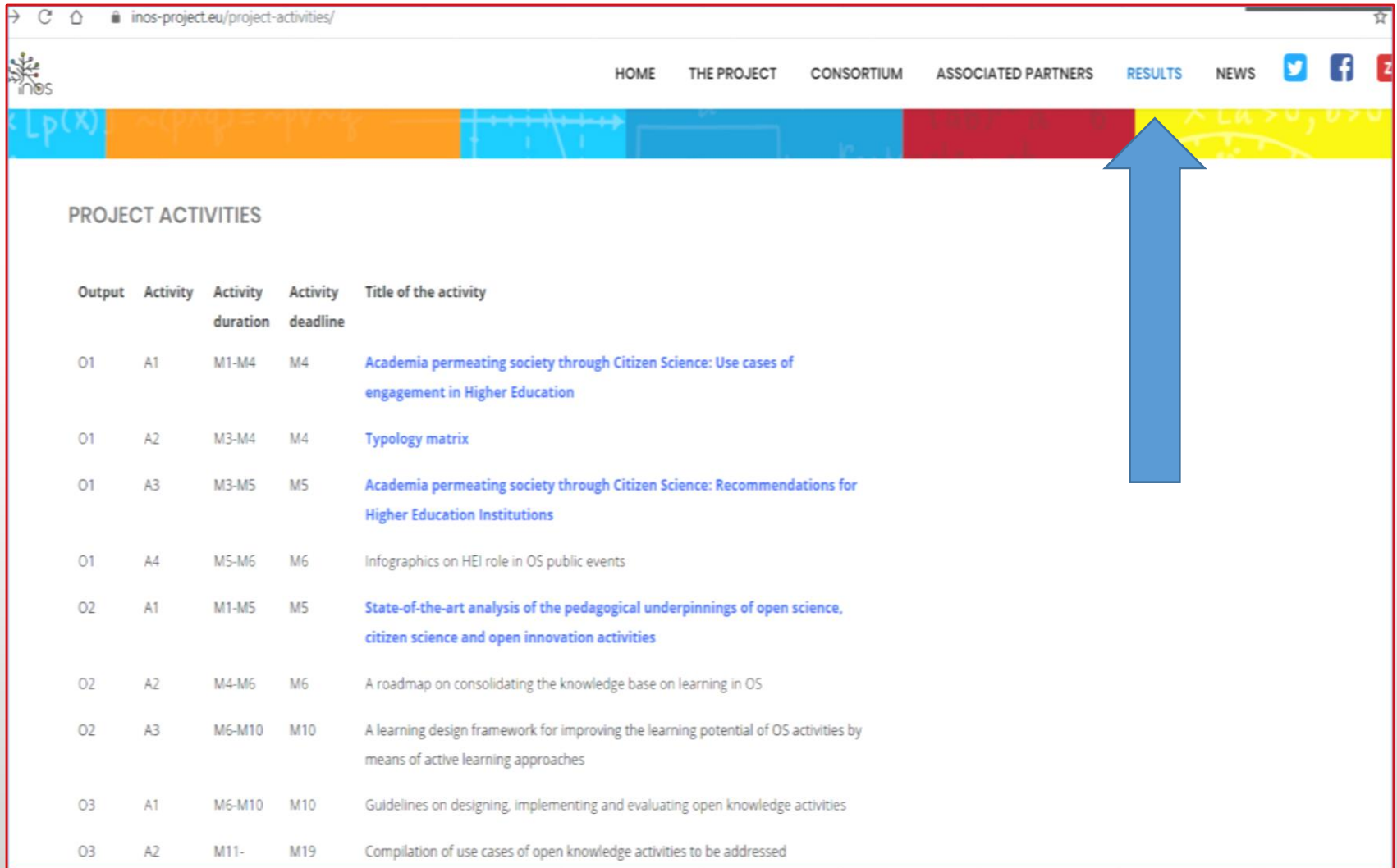
- June 2021 – April 2022 (O5)

Upskill HE staff (academic and library) and students

- February 2021 – August 2022 (O6)

Trigger policy change by raising awareness on societal impact from OS (and CS) inside and outside HEIs

Follow our Results here:



The screenshot shows the website inos-project.eu/project-activities/. The navigation bar includes links for HOME, THE PROJECT, CONSORTIUM, ASSOCIATED PARTNERS, RESULTS, and NEWS. Social media icons for Twitter, Facebook, and YouTube are also present. Below the navigation bar is a colorful banner with mathematical symbols like $Lp(x)$ and x, y, z . The main content area is titled 'PROJECT ACTIVITIES' and contains a table of project activities.

| Output | Activity | Activity duration | Activity deadline | Title of the activity |
|--------|----------|-------------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| 01 | A1 | M1-M4 | M4 | Academia permeating society through Citizen Science: Use cases of engagement in Higher Education |
| 01 | A2 | M3-M4 | M4 | Typology matrix |
| 01 | A3 | M3-M5 | M5 | Academia permeating society through Citizen Science: Recommendations for Higher Education Institutions |
| 01 | A4 | M5-M6 | M6 | Infographics on HEI role in OS public events |
| 02 | A1 | M1-M5 | M5 | State-of-the-art analysis of the pedagogical underpinnings of open science, citizen science and open innovation activities |
| 02 | A2 | M4-M6 | M6 | A roadmap on consolidating the knowledge base on learning in OS |
| 02 | A3 | M6-M10 | M10 | A learning design framework for improving the learning potential of OS activities by means of active learning approaches |
| 03 | A1 | M6-M10 | M10 | Guidelines on designing, implementing and evaluating open knowledge activities |
| 03 | A2 | M11- | M19 | Compilation of use cases of open knowledge activities to be addressed |

Implemented (a)

Academia permeating society through Citizen Science: Use cases of engagement in Higher Education

Under Activity: Field analysis: Positioning HEIs in open and citizen science for open knowledge and innovation

This study helps to identify how HEIs currently perform in citizen science activities, which is the untapped potential therein, and the ways in which the HEIs can cater to the needs for citizen participation in science for society. It also addresses open innovation and new forms of participatory science

Implemented (b)

Typology matrix

Under Activity: **Field analysis: Positioning HEIs in open and citizen science for open knowledge and innovation**

The tool that INOS team uses to analyse the 20 selected open and citizen science cases that were identified at activity O1A1.

The initial typology matrix foreseen in the project proposal has been enriched by 2 new dimensions, the Open Innovation dimension and the FAIR dimension.

Implemented (c)

Academia permeating society through Citizen Science: Recommendations for Higher Education Institutions

Under Activity **Field analysis: Positioning HEIs in open and citizen science for open knowledge and innovation**

Contains actionable guidelines with the aim to raise awareness in open and citizen science inside and outside HEIs and thus develop practices and routines for implementing and sustaining open and citizen science, and through this mechanism better connect to society

Implemented (d)

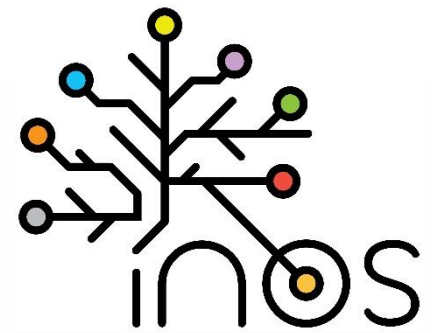
State-of-the-art analysis of the pedagogical underpinnings of open science, citizen science and open innovation activities

Under Activity: A state-of-the-art of the pedagogical value of OS (and CS)

This state-of-the art analysis elaborates on the current state of knowledge on learning design in open science, citizen science, and innovation activities, in order to improve their pedagogical value. This includes reporting on the different types of activities, the learning design of these activities, and the learning outcomes of these activities.

Top Reasons to Follow INOS

- Learn about the **social impact of Universities** as knowledge creation, sharing and (re-) use ecosystems in the digital economy
- Find out about or **guide for designing open and citizen science activities** in a pedagogically sound way
- Join one of our **12 Open Knowledge events**
- **Innovate** with us!
- **Upgrade your University's curriculum** – We will support you!



Thank you!

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Project duration:

01.09.2019 – 31.08.2022

A vertical blue banner containing contact information for the INOS project. It features social media icons for Twitter, Facebook, and Zotero, an email icon, and a hamburger menu icon. At the bottom, there is a QR code and the INOS logo with the website URL.

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