

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

**Cécile Swiatek**, Deputy Director, Université Paris II Panthéon-Assas academic library; co-chair LIBER Digital Skills working group

Vasso Kalaitzi, LIBER, Head of International Projects

Open Science Conference, Berlin, March 11<sup>th</sup>, 2020

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









TALLINN UNIVERSITY

Aalborg University Denmark, coordinator aau.dk

Tallinn University Estonia tlu.ee

Web2Learn

UNIVERSITY OF OULU

BORDEAUX

ſ

Web2Learn Greece

web2learn.eu

University of Oulu Finland oulu.fi

LIBER The Netherlands

libereurope.eu

University of Bordeaux France u-bordeaux.com





#### Associated partners

- University of Geneva, Switserland
- 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

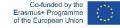
• February 2021 – August 2022 (O6) Trigger policy change by raising awareness on societal impact from OS (and CS) inside and outside HEIs





### Follow our Results here:

→ C	<sup>1</sup> inos-project.eu/project-activities/					
inos					HOME THE PROJECT CONSORTIUM ASSOCIATED PARTNERS RESULTS NEWS 🗹 😭 💈	
( LP	(X)	~(pr	9 <sup>izr</sup>	<u>pv m</u>		
	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.



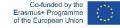


### Implemented (c)

#### 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!

vasso.kalaitzi@kb.nl

#### **Project duration:**

01.09.2019 - 31.08.2022

<b>9</b>	twitter.com/INOSproject
f	facebook.com/INOSproject
z	www.zatero.org/ <b>groups/2349660/inos</b>
M	inos.project.eu@gmail.com
	NEWSLETTER SIGNUP FORM

