



Canada International Conference on Education

22-24 JUNE 2021 VIRTUAL CONFERENCE MISSISSAUGA CANADA



Opportunities & Education in Networked Innovation for New Graduates with PhDs using Open Online Resources



This project has received funding from the European Union's 2020 science with & for society programme under grant agreement No 101006514



Project Partners & SFI Research Centre for Data Analytics OS



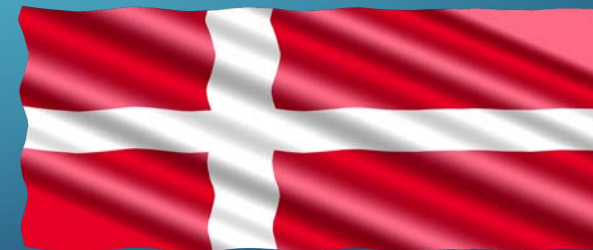
**UCD Lead
NUIMAYNOOTH**

IRELAND



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**NATIONAL TRAINING
FUND/NVF**

CZECH REP



Overall Purpose

Co-design an online interdisciplinary, intersectoral & international educational course on open science and innovation for PhD graduates

Aimed to Shape more innovative, socially aware, integrative and employable PhD & Postdoctoral researchers

Open Science & Open Innovation Paradigms



Definitions

Bangs et al. 2018
Open science, as a common good, opens possibilities for the development of nations, through innovations and collaborative constructions, which help to democratize knowledge



OS

Open science refers to an array of practices that promote openness, integrity, and reproducibility in research; the merits of which are being vigorously debated and developed across academic journals, conference sessions, and professional associations.

OI

Internal & External open co-construction & exchange of knowledge for innovation in the organizations and in science itself Ramírez & García-Peñalvo 2018 p. 10

Responsible Research & Innovation



European Community (2014). The Rome Declaration of Responsible Research and Innovation in Europe

“The benefits of RRI go beyond alignment with society: it ensures that research and innovation deliver on the promise of smart, inclusive and sustainable solutions to our societal challenges; it engages new perspectives, new innovators and new talent from across our diverse European society, allowing to identify solutions which would otherwise go unnoticed; it builds trust between citizens, and public and private institutions in supporting research and innovation; and it reassures society about embracing innovative products and services; it assesses the risks and the way these risks should be managed”

Under this conceptual understanding, RRI entails 4 dimensions of the process of research:

- Heterogeneity and inclusion/expansion**
 - Openness and transparency**
 - Anticipation and reflection**
- Responsiveness and adaptive change**

RRI for Researchers: An Introduction
(2018)

Isabel Ruiz-Mallén (coordinator)

Nadja Gmelch (coordinator)

Eduard Aibar

Mireia Bes

Ellie Cripps Maria Heras

Tools !

" Filters !

<https://cordis.europa.eu/search>

Search terms

#

Edit query

2669 results for 'open' AND 'science' AND 'open' AND 'innovation'

Collection:

Programme:

\$ Clear all filters

! Last update % & Title %

THE OIS RESEARCH FRAMEWORK



OIS IS EMBEDDED IN THE WIDER CONTEXT OF SCIENCE, INCLUDING PROBLEMS, ANTECEDENTS AND BOUNDARY CONDITIONS, AND SCIENTIFIC AND SOCIETAL IMPACTS

OIS APPROACHES SCIENTIFIC KNOWLEDGE PRODUCTION AND DISSEMINATION AS AN ITERATIVE PROCESS, MEANING THAT SCIENTIFIC AND SOCIETAL IMPACTS FEED BACK INTO PROBLEMS AS WELL AS ANTECEDENTS AND BOUNDARY CONDITIONS

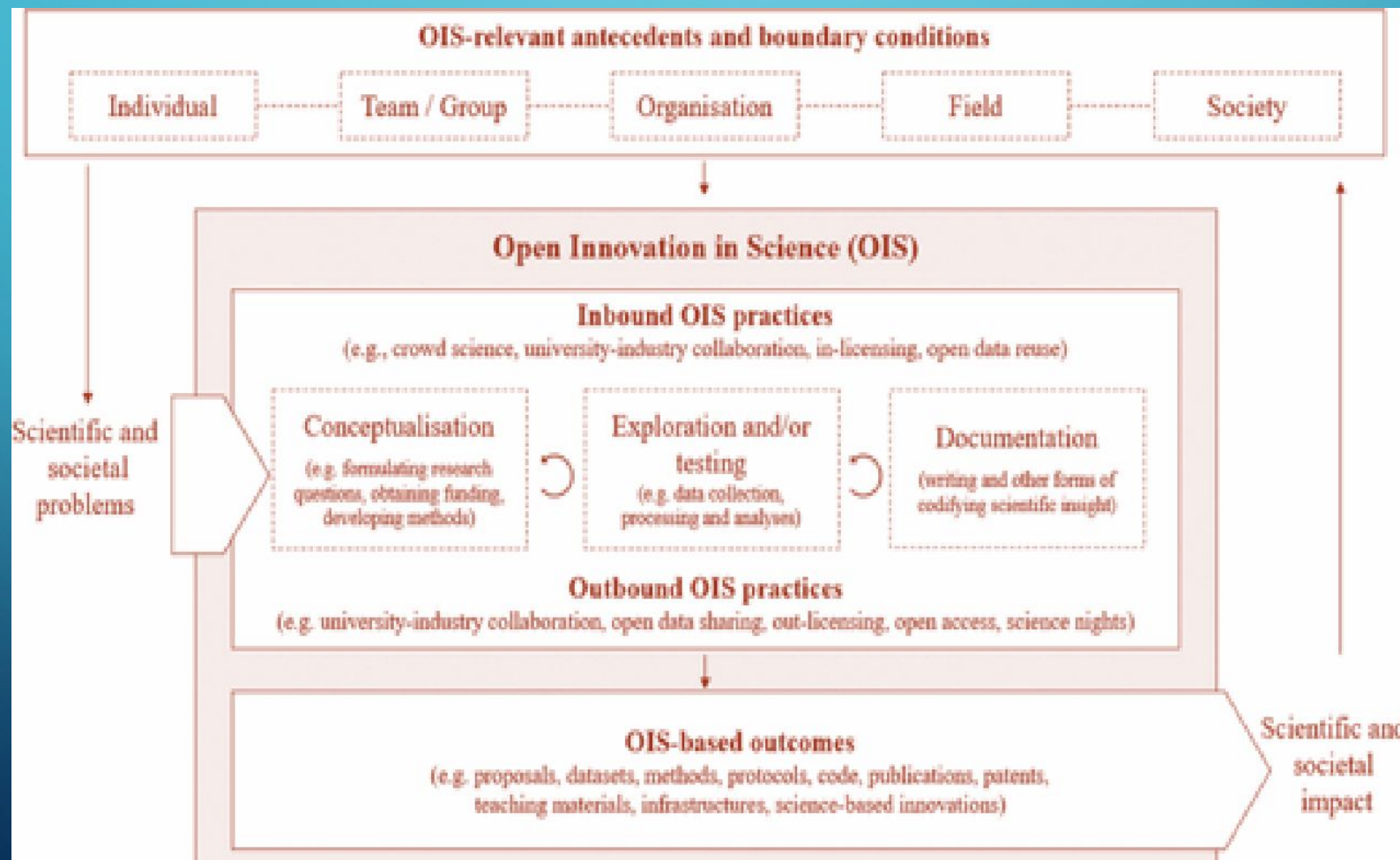


Figure 1
Beck et al. 2020 p.
6

Primary Objectives

Identify graduate skills valued in OS/OI systems through interviews with employers, PhD graduates & educators

Co-design an open online educational course for PhD & postdoctoral researchers with industry, government, community, university stakeholders including PhD students

Guided by world café curriculum co-design event

Opening Doors Overall Research Data Management Plan Summary spans across

Skills Intelligence

Curriculum

Co-design
Online platform

course delivery &
evaluation

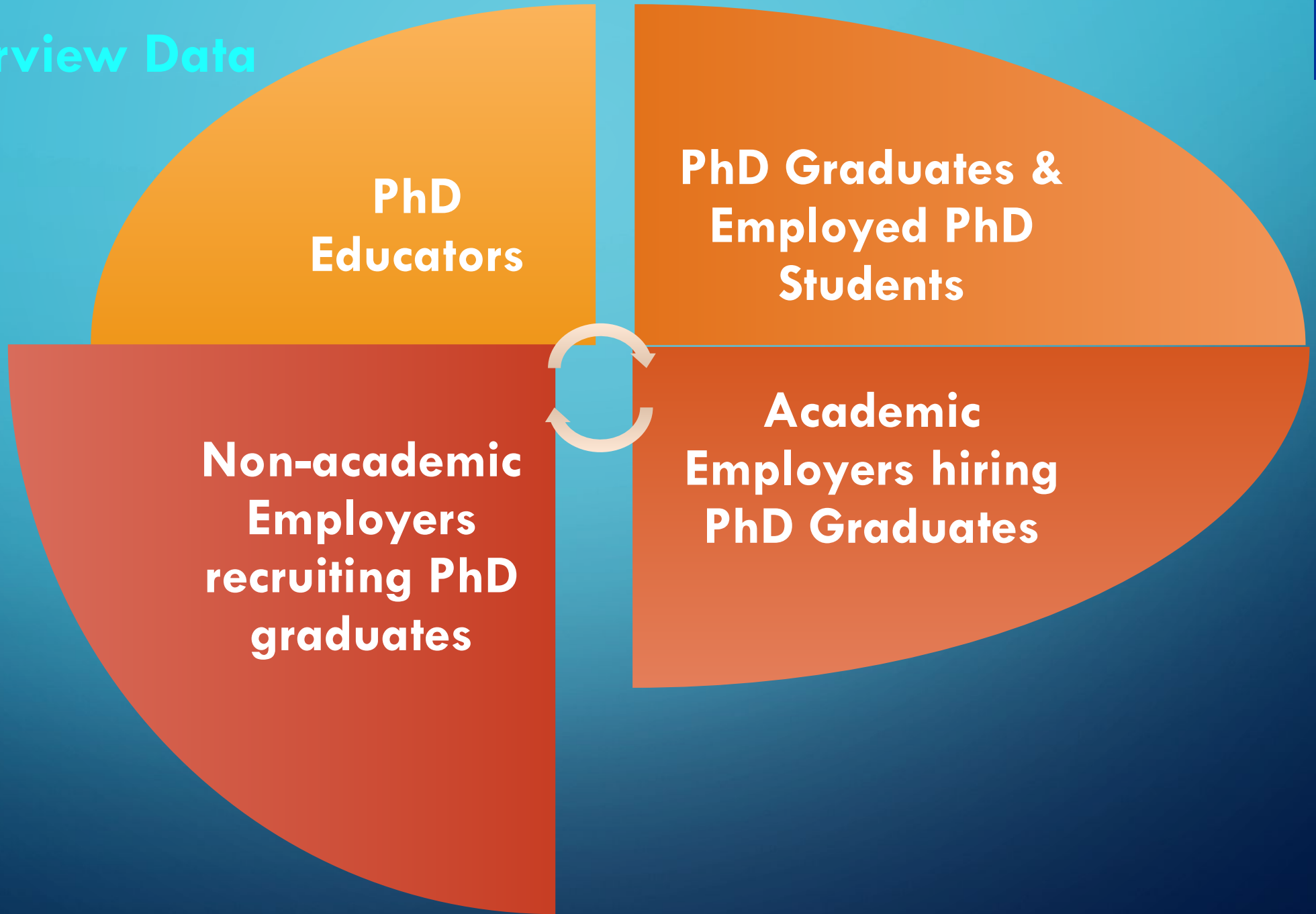
including Career

Tracking

Covering Qualitative & Quantitative Data
(Surveys, Interviews, World Cafe Event,
etc.)



Interview Data





Preliminary Feedback from Interviews in Ireland

Skills needed in OS/OI environments &


Attributes needed for innovative and interdisciplinary working environments



**Deployment of the
Opening Doors OS/OI
Course to PhD and
Post-Doctoral Fellows
across Europe**

**Online
Support Tool
for PhD
Supervisors
developed
by UCD**

**Continuation
Plan in
Ireland &
across
Europe**

Deliverable number	Deliverable title	WP number	Lead	Type	Dissemination level	Month due	
D1.1	Guidelines for Skills Analysis	WP 1	NTF	Report	Public	1	
D1.2	Profiles of PhD graduates to guide curriculum co-design	WP 1	NTF	Report	Public	4	
D1.3	Paper prepared for submission to open access peer reviewed journal on skills intelligence for open innovation	WP 1	NTF	Report	Public	12	
D2.1	Report describing the 1 st draft of course curriculum and proposed online delivery format	WP2	NUIM	Report	Public	6	
D2.2	Report describing the finalised course curriculum & proposed online delivery format	WP2	NUIM	Report	Public	7	
D2.3	Requirements gathering survey for PhD supervisors	WP2	NUIM	Report	Public	7	
D3.1	OPENING DOORS open, online course	WP3	AU	Demonstrator	Public	10	
D3.2	OPENING DOORS student evaluation report	WP3	AU	Report	Public	15	
D3.3	Report presenting the career development of students who completed the OPENING DOORS course	WP3	AU	Report	Public	15	
D4.1	OPENING DOORS Online Learning Resource	WP4	UCD	Demonstrator	Public	13	
D4.2	Support Tool for Supervisors	WP4	UCD	Demonstrator	Public	15	
D4.3	OPENING DOORS Continuation Plan	WP4	UCD	Report	Confidential (Consortium members)	15	
D4.4	Evidence of active online presence	WP4	UCD	Websites, patent filing etc.	Public	10	
D4.5	PEDCR	WP4	UCD	Report	Confidential	3	
D4.6	Policy brief	WP4	UCD	Report	Public	12	
D4.7	Updated plan for the exploitation, dissemination and communication of results	WP4	UCD	Report	Confidential	12	
D5.1	Kick off meeting summary	WP5	UCD	Report	Confidential	2	
D5.2	Data Management plan	WP5	UCD	Open research data pilot	Confidential	6	
D5.3	Progress report	WP5	UCD	Report	Confidential	12	
D5.4	Implementation of Risk Register Management Process and Report	WP5	UCD	Report	Confidential	6	

Opening Doors Project Deliverables



Month 15

Month 13

Month 12

Month 10

Month 7

Month 6

Month 4

Month 3

Month 2

Month 1

NTF:
D 1.1

UCD:
D5.1

UCD:
D4.5

NTF:
D1.2

NUIM:
D2.1

UCD:
D5.2
D5.4

NUIM
D2.2
D2.3

UCD:
D4.4

AU
D3.1

NTF:
D1.3

UCD
D4.6,
D4.7,
D5.3

UCD:
D4.1

AU
D3.2
D3.3

UCD:
D4.2,
D4.3



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