

# Presentation of WP4

## *Impact Assessment of the educational participatory process*

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# WP4 Objectives

*Monitor and assess the effectiveness of the educational process:*

- 4.1. To identify and investigate **individual, contextual and methodological factors** contributing to or detracting from the learning and engagement impacts of the participatory process*
- 4.2. To evaluate the quality and quantity of **social-media-based impacts** on students' feelings, perceptions and attitudes towards science and scientific careers*
- 4.3 To assess the impact of the participatory process in promoting students' acquisition of **transversal competences and skills***
- 4.4. To assess the role of the participatory process in embedding **the values of the RRI approach***

# WP4 Tasks

▪ **Task 4.1.** *Development of an innovative and participatory impact assessment research methodology (led by UAB)*

a) Generation of **assessment indicators & evaluation criteria**, based on:

▪ **Literature review** on transdisciplinary assessment frameworks → expert-based indicators

▪ **Students' in-put** → participatory workshop

b) **Design of data collection instruments** to qualitatively and quantitatively analyze the impact of PERFORM activities on students' motivations and appeal for scientific careers.



# WP4 Tasks

▪ **Task 4.3.** *Evaluation of the acquisition of transversal competences by students during the educational process (led by UAB)*

- *Combination of **systematic observation, interviews and deliberative focus groups** → analysis of participants' perceptions and skills*

- *Formal data recorded in **video and audio formats** → comparisons over time and tracking of processes within*

- ***Triangulation of data sources:** interviews to teachers and early career researchers involved in the process*

- *Data on individual and contextual factors*

*Assessment of framing/medium/ facilitator effects*

# WP4 Tasks

## ▪ **Task 4.4.** *Assessment of the Responsible Research and Innovation values (led by UAB)*

### *Focus:*

- *Capacity of the participatory educational process to transmit the RRI values through the resultant science performances*
- *Impact of the project's RRI approach in students' attitudes and pro-scientific behaviours and learning*

### *Design:*

- *Methods triangulation, including pre- and post- surveys*
- *Assessment of framing/medium/ facilitator effects and data on individual and contextual factors*

# WP4 Tasks

- **Task 4.2.** Evaluation of the social media-based impacts of the performance events on young people's engagement in science (led by UoW)
- The UoW team will develop an automated social media analysis tool calibrated to discourse about science performances.
  - This will be used to quantify social media responses
- A small-scale, exploratory, online ethnography case study will be conducted through online interactions/content creation, interviews and content analysis of related material, led by a multi-lingual set of researchers.
  - This will provide a qualitative assessment of social media impacts



# WP4 Deliverables and Milestones

Deliverables and Milestones	Deadline (M)
D.4.1 Research report: Methodological aspects of science education assessment (UAB)	May 2016 (M7)
D.4.2 Report on social media responses to science performances (UoW)	September 2018 (M35)
D.4.3 Policy brief: Effective science and arts-based education approach (UAB)	October 2018 (M36)
MS4 ICT development of an automated tool to enable social media analysis (UoW)	October 2017 (M24)



# Connection of WP with RRI

The Responsible Research & Innovation approach will be integrated in WP4, both through:

- *Assessment design – inclusion of students*
- *Assessment focus - inclusion and transmission of RRI values*



# What does WP leader expect from partners?

- *Support from case study coordinators and AJA to develop the participatory workshop in each case study (Task 4.1) to include assessment criteria and indicators considered important by students.*
- *Support from case study coordinators to ensure proper implementation and data collection in each case study: sharing workshops design and planning, feedback on assessment design, access to workshops and participants.*
- *Support from case study coordinators and AJA in the development of policy guidelines*
- *Smooth communication and exchange*

# What might other partners expect from WP leader?

- *Clear guidelines in the development of the assessment workshop with students*
- *Manageable assessment tools and clear guidelines in the case of shared implementation / assessment co-implementation*
- *Smooth communication and exchange*
- *Anticipation in the design of assessment tools affecting the workshops*

# WP4 Preliminary schedule

Tasks	Activity	Deliverable/Milestone	Timing
4.1	<i>Systematic literature review and identification of evaluation criteria/indicators (including design of and support to the students participatory workshop: Bristol, Paris, BCN)</i>	<i>D4.1. Research report</i>	Nov. 2015 – May 2016 (M1-M7)
4.1	<i>Design of an assessment strategy and data collection instruments for the case studies</i>	---	June- Aug. (M8-M10)
4.2	<i>D.4.2 Report on social media responses to science performances</i>	<i>D.4.2</i>	Sept. 2016 – Oct. 2018 (M36)
4.2	Development of an automated tool to enable social media analysis	<i>MS4.2</i>	July 2016 – Oct. 2017
4.3, 4.4	<i>Implementation of assessment tools in coordination with case study leaders: focus groups facilitation, interviews and surveys, observation</i>	---	During workshops, and pre/post ws. Sept 2016-June 2018 (M11-M32)
4.3, 4.4	<i>Data Analysis</i>	<i>D.4.3</i>	Sep 2016- Aug. 2018 (M11-M34)
4.2-4.4	<i>Writing of policy guidelines</i>	<i>D.4.3</i>	June – Oct. 2018 (M32-M36)