



Deliverable No. D6.3

Report on Outreach Activities, including the Final Conference

Project acronym:

PERFORM

Project Title:

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Performance**

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SUMMARY

This report describes the outreach activities of the PERFORM project within the timeframe November 2015 to October 2018. It includes a detailed report from the PERFORM Final Conference held in Paris in June 2018.

The PERFORM project explored, analyzed and applied innovative science education methodologies fostering young peoples' engagement with STEM. In a transdisciplinary community of practice, the PERFORM partners explored creative, participatory educational processes reflecting interactions between science and society. Together they developed innovative ways of integrating RRI processes into teaching and academic practices.

Over the project's timeline, the PERFORM consortium collectively developed extensive online and offline communication activities, based upon the dissemination plan described in the DOA. The communication activities reached out nationally and internationally, addressing relevant stakeholders in all involved member states.

This Deliverable summarizes the communication and dissemination activities generated over the project's timeline in Work Package 6. This Work Package was coordinated by the European Science Engagement Association, EUSEA. Input and strategy were generated by all partners in the PERFORM Consortium.

1. PERFORM Dissemination and Outreach

1.1 Summary of WP 6 Progress

As leader of WP 6 the European Science Engagement Association, EUSEA, initiated and coordinated a co-creative process to disseminate and communicate the project's finding and results. A broad range of online- and offline communication activities was developed, aiming to enhance the impact of the messages, recommendations and tools generated by the PERFORM project.

Pursuing a collaborative and co-creative dissemination approach, actively involving all consortium members in the process of generating and sharing results, the PERFORM project developed a **broad range of training toolkits and videos** to widely spread innovative methodologies for teachers, students and researchers via the project's website www.perform-research.eu and via the social media channels [Facebook](#), [Twitter](#) and [YouTube](#).

In order to achieve the largest impact these communities the dissemination strategy focused on spreading the project's results during thematically relevant conference and stakeholder meetings across Europe and practice-oriented online-materials to be shared and used after the project's timeline.

To ensure an uptake of the project's results among stakeholders across Europe, PERFORM participated and/or organised **74 national, European and international conferences, meetings and activities on STEM education, RRI and/or science communication**. This involvement ensured a widespread communication of the project results in different communities of practice and among relevant stakeholders and policy makers across Europe.

42 PERFORM videos were produced and shared via social media, the website and the project's Youtube Channel to reflect the project's findings and results. Among these videos were 3 project summaries to reflect the overall project results, based on 22 interviews conducted by EUSEA with project partners, stakeholders, external experts and students who participated in the activities.

A **Final PERFORM Conference** was organised at UNESCO, welcoming 350 participants, among them 150 students and 50 UNESCO delegates.

Social media was actively used to promote the project results: The numbers of Twitter, Facebook and Instagram followers increased considerably over the project's timeline (see detailed overview below).

In addition to the planned dissemination activities, a **PERFORM Policy Workshop** was organized in September 2018, inviting representatives from the PERFORM Consortium and the European Science Engagement Association, EUSEA. The workshop reflected the project results within the context of the upcoming HORIZON EUROPE Framework.

A printed and online **PERFORM Poster** with a graphic visualisation of the project's results will allow the uptake of the project's recommendations and tools beyond the project's timeline.

The **PERFORM Website** will be hosted beyond the project's timeline, while consortium members will take up relevant training toolkits, videos and other material into their own institutional websites.

1.2 Communication Plan and Tools

Based on the target audiences identified in the PERFORM communication plan, a set of actions was developed to spread the outcomes of the Work Packages and increase the impact of the project throughout the three years of the project. The production of specific communication materials was promoted together with a collaborative use of PERFORM social media (namely Twitter and Facebook), which led to the following results:

Tool	What	Accessibility and Impact
<p>Video: <i>Playing like a Scientist</i> https://www.youtube.com/watch?v=VdVycen9qPw</p> <p>Video: <i>Creative Teachers and Researchers Part 1</i> https://www.youtube.com/watch?v=V6fU9kgwgXA</p> <p>Video: <i>Creative Teachers and Researchers Part 2</i> https://www.youtube.com/watch?v=YDGT6-LFj0s&t=6s</p>	<p>EUSEA developed these videos to summarize and present the project's approach and success, including individual feedback from students, performers, teachers and researchers. For these videos the following steps were taken:</p> <p>Preparation of structured interviews with teachers, students, performers, policy makers and early career researchers that were involved in the PERFORM project to be realized during the final PERFORM Conference in Paris. The aim of this plan was to collect a wide set of feelings and comments on the relevance of performing arts for STEM education and for research communication.</p> <p>Finalization and discussion of two scripts for the production of videos addressed to teachers and early career researches and to secondary school students. The</p>	<p>The videos can be shared in among teachers, students, researchers and stakeholders. They are openly accessible via the PERFORM Youtube Channel and on the PERFORM Homepage.</p>

	storyboard was developed to carry out videos that could give teachers and early career researchers an overview on the PERFORM results. The strategy was developed and discussed with the EUSEA team for post-production.	
39 thematic videos available on PERFORM YouTube channel Languages: Spanish, Catalan, English, French, depending on the people participating in the videos. Subtitles: English	Description of the project's main features and some of its preliminary results. The videos each have a specific focus on a selected topic	The videos can be shared in among teachers, students, researchers and stakeholders. They are openly accessible via the PERFORM Youtube Channel and on the PERFORM Homepage .
PERFORM Twitter and Facebook	Content curated by EUSEA , who also promoted a collective use by the consortium members developing and distributing guidelines for social media use. Contents related to: PERFORM conference, RRI, STEM (amongst others the STEM Discovery Week held in April 2018) and Science Communication at large.	Number of Followers on Twitter: 551 Number of Followers on Facebook: 706 (as at 22 October) Followers and activities increased around the period of the final conference in May 2018, see chapter 1.4.
PERFORM Instagram	TBVT promoted the use of Perform-Instagram in order to catch the attention of the younger audiences and to make them available the results and activities of Perform project.	TBVT published 30 posts reaching 104 followers (as at 22 October)
PERFORM Newsletter #1 March 2017 (Month 17)	EUSEA developed editorial actions defining the structure and topics of the newsletter jointly with UOC . EUSEA assigned articles to TBVT, SMS, Traces, AJA, UAB, UoB, UOC,	Dissemination through web-platform: www.perform-research.eu/newslett

	UoW and UNESCO . All mentioned partners took part in the writing process of the newsletter focusing on specific topics related to their role and tasks within the project. EUSEA edited the articles before publication.	ers/ . The newsletter was shared through the standard PERFORM project mailing list and with the support of the EUSEA network mailing list.
PERFORM Newsletter #2 in January 2018 (Month 27)	EUSEA developed editorial actions and prepared 6 articles taking into account the information collected by all the partners and the data presented both in the internal report and in the deliverables.	See above
PERFORM Newsletter #3 August 2018 (Month 34)	EUSEA developed editorial actions and prepared 4 articles. Contents: Reflections on the teachers' training methods developed by the University of Bristol, results of the PERFORM final conference and the reflection on the use of creativity to innovate STEM education. It also included a publication related to gender issues and STEM education produced by the project that had recently been published on Scientix.	See above
PERFORM Newsletter #4 October 2018 (Month 36)	EUSEA developed editorial actions and prepared 4 articles. Contents: Update of PERFORM website offering all project results beyond the project's timeline, report on Policy Workshop in Brussels, description of White Board Animation and new Project Poster	See above
Links with Scientix	PERFORM project is included in Scientix webpage and in Scientix newsletter February 2018 (Month 28): Contents connected to Discussion by the PERFORM team (UNESCO and UOC) during a networking event organised by	

	Scientix in December 2017 about gender and innovation in STE(A)M education, in collaboration with the EU-funded GEDII projects.	
Feature in EUSEA Newsletter December 2017 (Month 26) and March 2018 (Month 29)	The two EUSEA articles focused on the main results of the project and on the announcement of the PERFORM Conference respectively.	The newsletters are available on the EUSEA website: www.eusea.info/news/
Whiteboard animation	Striving to encourage an uptake of PERFORM resources beyond the project timeline, EUSEA developed a short Whiteboard animation which briefly explains the aims of the project and focuses on the toolkits, especially the products created in Work Package 2 and Work package 3. The animation targets different publics: teachers, early career researches, science and museum facilitators and policy makers, providing a quick guide on the tools and resources for each of these publics.	The animation is available and can be shared openly via the project's website: www.perform-research.eu
Poster/ Infographic	Together with the animation, an infographic printed as a poster will explain the values of the PERFORM resources to different potential toolkit users. <ul style="list-style-type: none"> - an early career researcher can find there the material to spark discussions among her/his peers about wellbeing for post-doctoral students; - a teacher may find easy-to-use guidelines on how to motivate her/his students and make them curious about sciences by enacting 	The animation is available and can be shared openly via the project's website: www.perform-research.eu

	<p>monologues, or via clown techniques, helping them break stereotypes and use these exercises as powerful self-development tools</p> <ul style="list-style-type: none"> - The infographic will also contain contact information of each of the PERFORM partners. A version will also be available. 	
UNESCO Position Paper	<p>Two policy briefs were written by Perform partner UNESCO, to help reaching different policy-making spheres. These two documents were merged into one, being simplified and turned into a PERFORM position paper, where UNESCO encourages new and old allies, in the policy and decision making spaces, to support what PERFORM, via research and praxis, confirmed: there is an urgent and real need for providing training, enabling networks and expand curricula.</p>	

1.3 Building Community Relations and Outreach

Along the 3 years of project, PERFORM created a strong network of experts: PERFORM Consortium members participated in 74 relevant national and international outreach events - conferences, panels, working groups - in order to reach a large range of target audiences and stakeholders from the fields of science education and communication. A full list of the events is in the annex chapter 4.6 and

published on the PERFORM website events section www.perform-research.eu/project-events.

PERFORM Policy Workshop, Brussels

As an addition to the dissemination and communication tasks planned in the DOA, the EUSEA Executive Board together with the PERFORM Management agreed to conduct a PERFORM Policy Workshop in Brussels in order to maximise the policy impact of the PERFORM project in the challenging times of transition between the funding frameworks HORIZON 2020 and HORIZON Europe (invitation of the Workshop see annex chapter 4.5).

EUSEA conceptualized and organized the workshop which was held in Brussels, Belgium, on September 24, 2018. The PERFORM Policy Workshop brought together 13 experts from the PERFORM Consortium and the European Science Engagement Association, EUSEA. During the workshop the participants:

- reflected the project outcomes of the PERFORM project in the context of recent developments in the fields of Public Engagement, Open Science, Science Education and Science Communication;
- developed contents for a visualized PERFORM Project Summary addressing stakeholders from schools, academic institutions and policy makers on EU and national levels;
- discussed the taking-up and distribution of results beyond the project's timeline.

The day after the workshop offered all participants an opportunity to join the "Science is wonderful"-event at the Brussels Parliamentarium, showcasing the European Researchers Night 2018 – a good opportunity to get in touch with stakeholders from the European Commission.

Over the three years of the project an increase was observed in all the online communication channels.

Twitter, as anticipated, highlighted a constant trend to increase the number of followers reaching **the number of 551** (22nd October). The following figure describe the trend of the Twitter Account

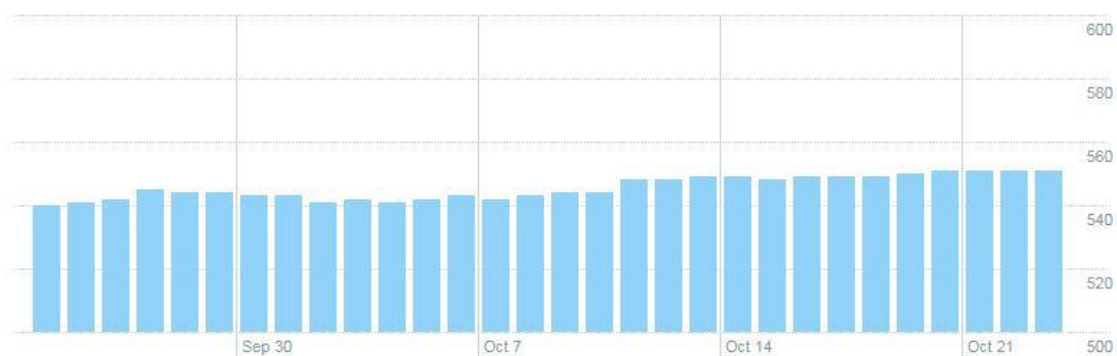


Figure 1. Number of Twitter Followers at the end of PERFORM project (month 36).

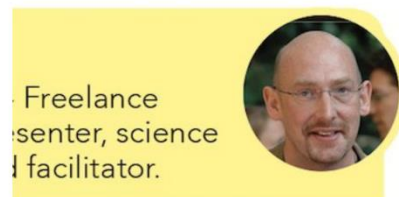
From May to July 2018 an increase was observed in all the online communication channels. The Twitter account figures before and during the conferences show a positive trend. Here we show some data related to June and May.

Jun 2018 • 30 days

TWEET HIGHLIGHTS

Top Tweet earned 22.4K impressions

-1 **#PERFORMConference** super host for tomorrow morning **@Qwerty** will moderate, trigger conversations, facilitate interactions, involve you all in the wonderful trip to discover **@STEM** from a different angle **@stemalliance_eu** **@scientix_eu** **@EUSciencelnnov** **@EuseaEvents**
pic.twitter.com/vyvM29TFFj



Top mention earned 2,955 engagements



Raquel VH

@Raquel_VillarH • Jun 14

"We have to close the gap between what scientists know and the general public do"
@dirtybiology **@performstem**
@BigVanCiencia **#PERFORMconference**
#science **#scienceisfun** **#performingarts**
pic.twitter.com/QfnsEE1EG9



JUN 2018 SUMMARY

Tweets
71

Profile visits
676

New followers
42

Tweet impressions
109K

Mentions
102

May 2018 • 31 days

TWEET HIGHLIGHTS

Top Tweet earned 2,131 impressions

Ready to start a workshop about PERFORM at the **#EUSEA18** with the friends of **@BigVanCiencia**
pic.twitter.com/4ap8nTHEBn



1 7

[View Tweet activity](#)

[View all Tweet activity](#)

Top mention earned 74 engagements



HEIRRI

@HEIRRI_ • May 25

Our spring 2018 HEIRRI newsletter is out! 🎓💡 Featuring the highlights of the 2nd **#HEIRRIConf**, the HEIRRI training programmes and more news on RRI and Higher Education with **@CIDUI_congress**, **@performstem** and **@RRITools** among others. Don't miss out!
📧 mailchi.mp/acup/f93t0y986...
pic.twitter.com/PrmZrDEtCI



Highlights of the 2nd HEIRRI Conference:

MAY 2018 SUMMARY

Tweets
64

Profile visits
308

New followers
22

Tweet impressions
28.5K

Mentions
39

Facebook

PERFORM **Facebook** likes also reflect an increase in followers of the Facebook page of the project that reached **706 likes** on 22nd October 2018.



Figure 1. General trend of “likes”-number on the PERFORM Facebook page M12-36.

In May 2017 (Month 19) there was an increase of “likes” during the period around the European Researchers’ Night Coordinators day and the EU Institution Open Day. Another increase of likes occurred **in October 2017 (Month 24)** after the publication of the videos related to the teachers and early career researchers’ toolkit.

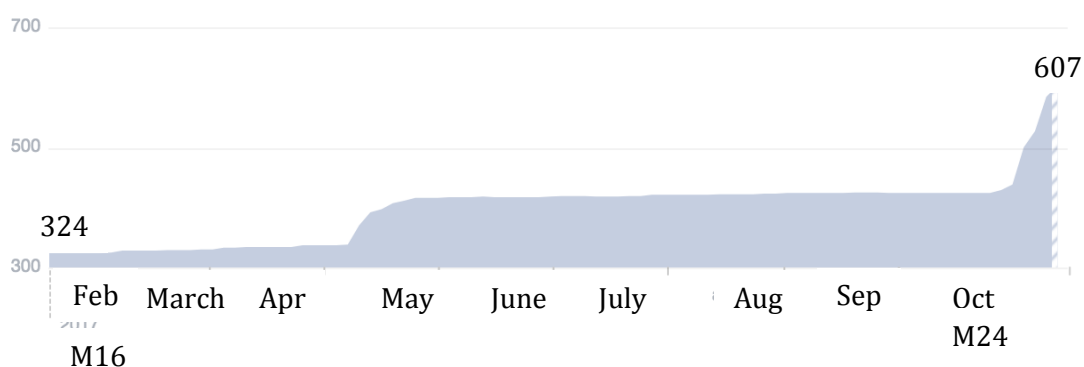


Figure 2. General trend of like number on the PERFORM Facebook page M16-24.

The increase of “likes” in **January 2018 (Month 27)** might be due to the launch of the second PERFORM newsletter.

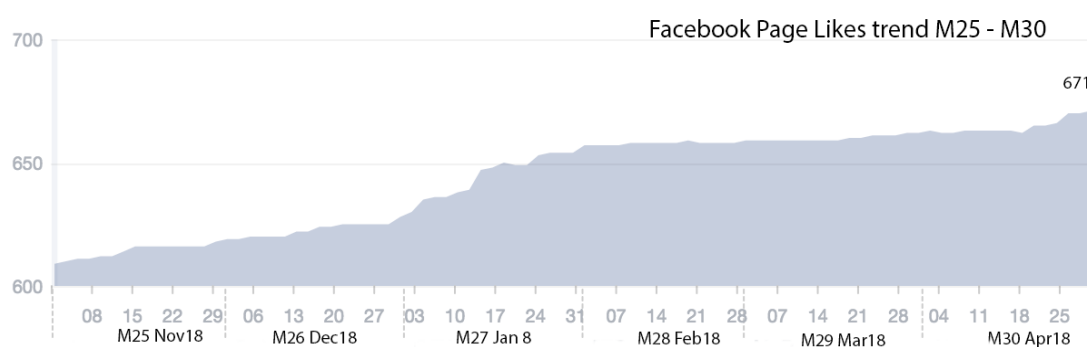


Figure 3. General trend of “likes”-numbers on the PERFORM Facebook page M25 – M30

Website

Website data show that between November 2015 and October 2018 (Months 1 to 36) **9.762 users** were actively consulting the information published, corresponding to **15.838 sessions**.

The number of users shows its peak in the month of the final conference with **1.051 users** accessing the website during the month of June.

Among the visitors accessing the website throughout the project over **two third** were **new visitors** (Figure 5). The average duration per session was **2:35 Minutes**. (Data as at October 24, 2018)



Figure 4. Trend of the users of the website throughout the project (November 2015-October 2018).



Figure 5. New visitors and returning visitors on the PERFORM website throughout the project.

2. PERFORM Final Conference Report

2.1 Introduction

The final PERFORM project conference was held from 14-15 June 2018 in Paris at the UNESCO Headquarters. Among the 350 participants from 24 countries were 150 students from secondary schools and 50 UNESCO delegates.

In cooperation with the consortium members, UNESCO and EUSEA prepared the conference from November 2016 (M13) until May 2018 (M31). In November 2017 (Month 25) the conference webpage was launched on the PERFORM website. Next, a series of actions were implemented to start promoting the conference in the context of the national and international meetings listed above and thorough the online media considered in the communication plan. In parallel, starting in December 2017 (Month 26) a series of meetings both, in person and via Skype were constantly held with the PERFORM Steering Committee (UOC, TBVT, UAB, UoB, UNESCO, EUSEA) to define the contents of the sessions and the role of the PERFORM stakeholders participating. Further meetings were also organised with UOC to follow up the process. In February 2018 (Month 28) the registration process to the conference began. The actions to involve different stakeholder communities were developed by identifying and inviting other European Funded projects to join the PERFORM conference and developing specific actions to maximize the effectiveness of presentations during the conference.

2.2 Conference Preparation Process

Start month M13 (November 2016) – End month M31 (May 2018)

The process to plan the PERFORM final conference started during the consortium meeting held in Paris at the UNESCO headquarters in November 2016 (M13).

During the meeting, EUSEA and UNESCO representatives and other partners held a parallel session to discuss the main features of the final conference organization. The main features discussed concerned the dates for the conference and two hypotheses to be further discussed within the consortium in order to develop further actions: spring/summer 2018 September/October 2018. These two options were based both on the overall schedule of the project and the intention to involve secondary school students from the Paris area (national and international schools). During the meeting, it was also established that these features should be further discussed between the two organizing partners, EUSEA and UNESCO, starting from January 2017 on.

Based on these decisions Skype meetings were held among EUSEA and UNESCO in January and February 2017 to first focus on the date and a series of pros and cons were listed for one or the other period to be further discussed with the rest of the consortium.

In April, (M18) EUSEA prepared a draft structure for the conference to be proposed to the rest of the consortium.

The rationale for this structure was based on two main aspects:

- (a) Combining the typical aspects of a conference: workshops, round tables, plenary talks with one of the main features of the PERFORM project, i.e. the use of performances to communicate.
- (b) Providing opportunities for the general public (specifically students from secondary schools) to be motivated to join the conference and for stakeholders. This reflection results in the aim to provide not only a session for experts interested in the project results.

EUSEA developed the idea to propose a ConFest, meaning a combination of conference and science festival characterized by shows and performances.

Based on this approach EUSEA developed a tentative programme to be discussed with the other consortium members during the consortium meeting and to be amended accordingly. During the consortium meeting held in Bristol on 10th-12th of April 2017 (M18) a session was entirely devoted to discuss the preliminary programme structure proposed by EUSEA representatives. The programme structure presented at the consortium meeting can be found attached in the annex chapter 4.1.

In October 2017 (M24) a process was developed to start the communication announcements of the conference and the development both of the schedule and contents. After the elaboration of the first communication material to be used during the World Science Forum in Jordan in November 2017 (M25), the material was also used to prepare the Website on the final conference. On 1st November 2017, the website was launched and presented at the World Science Forum.

A flyer was produced in hard copies to be distributed by the different partners and online via online communication channels to announce the conference (see annex chapter 4.2). It was also used as a banner on partners e-mails to advertise for the conference within their communities.

EUSEA periodical newsletter was also used to announce the PERFORM conference. During October/November 2017 (M24/M25), a process to hire a person to be involved in the conference organisation and enlarge the EUSEA team specifically responsible for the conference development started. As part of the process, a call was issued and a set of interviews were held between the end of November 2017 and beginning of December 2017 (M26). A person with relevant experience at international level both in the field of science communication and event organization

began to collaborate with the EUSEA team from 1 January 2018 (M27).

During December 2017 (M26) a meeting was held in Paris between EUSEA and UNESCO to finalize the Conference structure discussed during the previous months and the following decision were taken:

- The duration of 1 day and half on the 14th and 15th of June, as well as an internal meeting that will be held on the 13th of June. During the 13th of June, the advisory board meeting was also planned, among other purposes, to introduce the advisory board to the conference main features.
- The development of the ConFest and messages to stakeholders and secondary school students. The idea of alternating short messages on the content and results of the project with some performance or show was also implemented.

During the process, a new version of the conference structure was developed, that was discussed with the project coordinator, accepted in January 2018 (M27) and implemented in the following months.

At the end of January 2018 (M27) the second Project Newsletter was launched with the presentation of the Perform conference outlines and distributed throughout the networks of the difference consortium member.

<http://www.perform-research.eu/newsletter-2/meet-the-perform-innovators-in-paris/>.

Based on this structure on the beginning of February 2018 (M28) a webpage with the preliminary project programme was launched on the project website www.perform-research.eu. The website offered the possibility to register to the conference and receive information about the content and logistical aspects <http://www.perform-research.eu/registration-and-practical-information/>.

From January 2018 (M27) to May 2018 (M31) at least two meetings per week were held within the Conference Preparation team of EUSEA periodically involving the Coordination Team (UOC) and other PERFORM partners to define all the details of

the conference. In order to define the contents details of the invited guests performances or talks, the organization team developed a constant dialogue with special guests and invited speakers. Briefing material was prepared to introduce them to the project context and contents.

In order to focus on the main messages to be conveyed and to develop effective communication strategies to be used, a constant dialogue was carried out with the consortium members involved in the session and workshops preparation. Moreover, a cross dissemination and involvement actions were carried out to involve other European funded projects. That resulted in the session with 9 speakers from other European Projects and representatives of the Marie Curie Actions (see conference programme, annex chapter 4.3). Other European funded projects also participated in the conference through a **poster session** for which the organizing team launched a call through the project webpage and social media (<http://www.perform-research.eu/perform-poster-session/>)

All the logistical and budget aspects were constantly discussed, updated and checked with the UNESCO team composed by 2 senior members plus 3 members developing their internship at UNESCO and who were temporarily assigned to the organization of the conference. During January and beginning of February 2018 all the aspects of the conference budget that the UNESCO and EUSEA team had been defining over the previous months were clarified and fixed. The definition of rooms and spaces was also set.

To implement the communication and dissemination actions during the preparation period, from November 2017 (M25) until June 2018 (M32) a constant dissemination of information regarding the conference was carried out towards stakeholders in the fields of education, science communication, policy makers at European level and European Network of science communication and education. This contained online

communication through newsletters, project website, direct communication via emails and offline communication. The participation to all the dissemination actions (28 among national and international meetings attended by the different consortium members – see the dissemination actions events list on the website <http://www.perform-research.eu/project-events/>).

The actions were also carried out using the PERFORM social medias Facebook and Twitter to reach the different target audiences. In order to broaden the interpretation tools available for the conference contents it was decided to involve a designer to realize a graphic storytelling on the opening morning of the conference. It was also decided to develop a wide repository of comments on the project main topics, and to conduct a set of interviews during the days of the conference with guests, teachers, students and early career researchers taking part of the project and in the conference. In order to reach this goal the questions and structure of the interviews were defined and the list of interviewees were set during May (M31). The repository was created based on the interviews realized during the first day of the conference composed by 22 interviews lasting from 3 to five minutes.



2.3 Conference Development

Overview of the PERFORM Project Conference 2018

NAME	PERFORM Project Conference 2018
EDITION	I
DATE	June 14 and 15 2018
ORGANISERS	EUSEA – UNESCO
PARTNERS	Universitat Oberta de Catalunya, Big Van Science, Science made simple, TRACES, University of Bristol, University of Warwick, L'atelier des jours à venir.
VENUE	UNESCO headquarters, Paris
SPACES	Room 2,
LANGUES	English, French, Spanish
PARTICIPANTS	<ul style="list-style-type: none"> - Attendees 350 - Main speakers 5 - Panel participants 27 - Poster session Presenters 10
COUNTRIES	24, plus 50 UNESCO delegations
SOCIAL EVENTS	1

2.3.1 Background

PERFORM is a science communication project that aims to improve student engagement with STEM by exploring innovative communication tools in the performing arts. Having begun in 2015, the project is in its third year now, and will conclude in October of this year, 2018. The project held its final conference at UNESCO headquarters on 14-15 June.

In the current European socio-economic and political context, motivational and structural barriers constrain the interest of the citizens, and particularly young people and their active involvement in science and technology. The PERFORM project aims to respond to this challenge with student engagement with STEM by using the performing arts to create a direct interaction between young people and researchers. As a result, science learning becomes participatory and trans-disciplinary, and contextualized within students' personal environments. This style of communication also 'humanises' science, emphasizing the human stories and personal experiences of scientists. By pursuing these communication techniques, the project aims to improve students' motivations to pursue science in educational and professional contexts. PERFORM has made use of three particular tools in the perform arts to communicate science: stand-up comedy, busking and clown-based activities.

The PERFORM conference also takes place in the context of discussions taking place among multiple partners to expand the project beyond Europe and implement the project in developing countries, under the new name 'myPERFORM'.

2.3.2 Objectives

The PERFORM final conference aimed to:

- Showcase the project, its work and its results.
- Showcase PERFORM ‘in action’, allowing audiences to enjoy its communication techniques first-hand, bringing the project to life, and revealing how science learning can be made engaging and participatory.
- Showcase the specialist techniques used by performers in the project, to be of interest to those working in the areas of communication and science communication.
- Introduce the project to new audiences and new students.
- Generate further interest in expanding the PERFORM project under the new concept ‘myPERFORM’.
- Showcase the project to the 50 UNESCO delegations in attendance, which include the delegations from China, Canada, France, Spain, UK, India, Argentina, Egypt, Saudi Arabia and Kenya.

2.3.3 Organization

The PERFORM consortium is made up of ten partners, including the Open University of Catalonia (UOC) as the project coordinator, and UNESCO, Big Van Theory, the European Science Events Association (EUSEA), the Autonomous University of Barcelona (UAB), Science Made Simple, TRACES, L’Atelier des Jours A Venir, the University of Warwick and the University of Bristol. All these partners collaborate and had a role in the implementation of the final conference under the coordination of the UNESCO and EUSEA teams.

2.3.4 Program

The main objective in the design of the program was to demonstrate the power of science communication through performing arts, and to share with the attendees the main results of the project so far.

That is why we chose to engage well-recognised representatives of science communication from the three participating countries, giving to the event the spirit of the message that we wanted to convey. The program was divided in four different blocks:

- The 14th June morning: it was the moment to show the power of good science communication. Quentin Cooper, Robin Ince, Léo Grasset and Ana Peiró, were chosen because of their background in science communication in their countries, giving also the possibility of listen the three languages used during the project, and showing how strong this approach could be to convey strong messages; and given the main results of the survey, this objective was accomplished. Between their interventions, Maria Heras from UAB and the PERFORM Project, gave the main ideas that raised from the reflections on the results of the research project.
- The 14th end of the morning, and the beginning of afternoon: Some of the main participants of the project gave their insights of their experiences and reflections. For many of the participants, this was a key moment of the Conference. It allowed to see how far this approach can take students, teachers and the early career researchers (ECRs) involved in science learning.
- The end of the 14th afternoon: A moment to share and compare how different European projects were leading to the same goals, and to ask ourselves how to combine tools to go further.
- The 15th June: Everybody had to perform: from the poster presenters, to the attendees that participated in the workshops, everyone was involved in a

little performance, and the results and reflections on that were shared in the final session.

The detailed program can be consulted at: <http://www.perform-research.eu/programme/> and it is reported below in a sample of the folder produced to be distributed during the conference and published online. A copy of the programme is also enclosed to this report in the annex chapter 4.3.

Speakers

42 persons took part as speakers with different roles during the PERFORM Project Conference sessions: Teachers, students, early career researchers, professional performers and experts both from the project context and members and from the international context of science communication and STEM education. The morning session of the first day focused on messages addressed both to stakeholders, students and the general public. To make this session as effective as possible both in terms of content shared and communication styles, a professional journalist was appointed as host of the conference:

Quentin Cooper (UK)



Quentin Cooper is a science journalist and facilitator, known as the presenter of BBC Radio 4's Material World. He speaks at science festivals and lectures, and works regularly with science and educational organisations such as the Royal Society and the British Council.

In order to reinforce the connection of the project with the international context of science communication, namely of public speaking and professional performers, the following guests were invited to deliver plenary speeches during the first morning:

Robin Ince



Robin Ince is widely recognised as one of the UK's most accomplished, versatile comedians with a string of awards and media appearances to his name. He is predominantly known as a science populariser and he presents the Sony Award winning *Infinite Monkey Cage* on BBC Radio 4 with Brian Cox. His other regular radio appearances include: The News Quiz, Just a Minute and as a music profiler on Steve Lamacq's show for BBC 6 Music. His numerous TV appearances on panel and stand up shows include The Review Show and The TV Book Club as well as a documentaries presenter including Schrodinger's Cat and Vinyl Culture. Robin's science tour, *Uncaged Monkeys*, with Brian Cox, Simon Singh and Ben Goldacre was a sell-out including two nights at Hammersmith Apollo. He is currently on tour with *Pragmatic Insanity*, his first new stand up show in three years is a clash of two cultures, a joyous romp through his favorite artists and strangest scientific ideas.

Ana Peiró



Ana Peiró holds a PhD in Medicine and a Degree in Anthropology, Associate Professor of Pharmacology at the Miguel Hernández University, Medical doctor at the Pain Unit and Coordinator of the research group of "Neuropharmacology applied to pain and functional diversity" at the General Hospital of Alicante. She received grants from the

Alicia Koplowitz Foundation, La Caixa, and, recently, the Alcaliber Award from the Royal National Academy of Pharmacy. Moreover, she has a career as scientific communicator through FISABIO Foundation and several Spanish universities, receiving the 2nd prize of the 2017 Famelab-Spain Competition organized by the FECYT and the British Council. She is passionate about the theater, developing her professional career as an actress in several stable companies. This year she has directed a play related with the Spanish Civil War memory and is writing another one about the work of women at the beginning of the 20th century through the Gil Albert Foundation. She believes that gender is a role-play that must unite us.

Léo Grasset



Holder of a degree in biology of organisms and ecosystems, a master's degree in evolutionary biology and a post-graduate diploma (DESU) in Montreal and Zimbabwe, Léo Grasset taught biology for a few months before devote to science communication. In June 2014, he created DirtyBiology, his YouTube channel, where he presents biology in an offbeat and humorous way. In 2016 he published *How the zebra got its stripes*. In October 2017, when his channel exceeded 500,000 subscribers, the comic book *The great adventure of sex* created with his brother Colas Grasset was released by Delcourt Editions.

Comments on the importance of acquiring public speaking techniques to communicate science and research were collected from the three speakers.

Conference formats

Following the rationale discussed within the conference organizing the programme described in the folder above was developed containing four kinds of formats: performances, panel discussion/talk show, posters and workshops

A. Performances and Project key messages in between and the graphic facilitation

The three invited speakers and performers hosted by Quentin Cooper (Robin Ince, Ana Peiro and Leo Grasset) focused on three topics characterizing research processes in all disciplines: the curiosity and the desire to overcome the limits of the knowledge, the bias of our mind approaching complex topics and the issues related to gender in science and research at large. These three topics that aimed at stressing aspects of doing research were also discussed by students taking part in the project.



María Heras (picture on the left) Researcher – Institute of Environmental Science and Technology – ICTA, Autonomous University of Barcelona – (UAB, Spain) intervened during the morning on the first day with “information in pills” between one performance and another by stressing the key messages and results of the PERFORM project. These messages were previously discussed and prepared with the project coordinator and the EUSEA team dealing with the conference organization and the communication and dissemination actions of the project. The main messages developed and presented can be summarized as follows:

Pill 1: Fostering students' acquisition of knowledge and skills

- Through an inquiry-based learning approach and by using different artistic techniques, the busks, monologues and improvisational theatre, PERFORM has enabled students to learn about STEM and engage with science in a different manner than the one traditionally practised in the class setting. We have seen that PERFORM has provided a platform for students to feel comfortable in getting involved and participating actively in workshop activities to produce their scientific performances. This was possible through the trust setting developed by the science communicators and early career researchers with the students, who felt their work recognised. In this sense, PERFORM's inclusive and collaborative approach can shift student's own perceptions of their capabilities and minimise potential conflicts in challenging groups at school settings.
- The PERFORM approach has particularly contributed to foster students' learning autonomy and organisational skills, which has been positively received by participant teachers. Theatrical exercises and reflection activities have allowed students to work in a collaborative way, in a context where students have been invited not to judge others' ideas and propositions, but rather to share ideas within their working groups and the researchers, help each other and show respect towards others' ideas and work.
- Despite students' insecurity to perform in front of an audience has been a common challenge across schools and countries, we have noticed that once students were performing, they became very engaged, which in turn engaged the audience. While performing, students have been able to work against their communication fears and work for their self-esteem, both in terms of performing capacity but also of scientific communication. We see a potential

here for schools to carry on with the communication skills developed by performing arts.

- Last but not least, students in general improved their learning on the scientific topics when creating and performing their busks thanks to their interaction with the early career researchers. Students selected the scientific topics for the performances influenced by the researchers' personal stories, which help them be better equipped in terms of cognitive capacities to engage further with the monologues, busks and theatrical sketches and push forward their scientific knowledge, deepening what they had already covered in class.

Pill 2: Changing students' portrayal of common stereotypes about science and scientists

- Before PERFORM workshops, students from participant schools hold a stereotyped image of scientists. Both girls and boys imagined scientists as people wearing white lab coat and eyeglasses and doing experiments in a laboratory. They also referred to unappealing traits of scientists' personality like crazy, boring, and nerdy while only few of them identified scientists as ordinary people. When reflecting about where this image comes from, students associated it with the one showed by the media. After PERFORM this image turned into a less stereotyped one. Students who engaged in workshops described scientists by using non-stereotyped attributes such as creative and persistent that replaced lab coat and experimenting whereas those who did not participate in PERFORM workshops kept mentioning stereotypes such as laboratory and lab coat as the main attributes of scientists.

We think this change is a result of the interaction with the researchers who created a sense of proximity with students through opening communication channels for discussion and reflection about science and scientific topics, which has been highly valued by the students themselves. That's why, from the experience of PERFORM, we encourage secondary schools, universities and research centres to find out suitable strategies to bring scientists to the classroom beyond punctual visits or presentation formats to change students' simplified beliefs about them.

- Beyond changing students' views of scientists, PERFORM workshops also have reinforced positive trends regarding students' acknowledgement about the different dimensions and fields of science, and their perceptions of the unexpected impacts of research in society, the possibility of failure within science and the nature of scientific knowledge, which are totally in line with the values of the RRI approach. Also, students who did not like science at all learned to be able to build a bit a rapport with science as a process instead of as a given. This has been a result of the work done by science communicators through discussions and also of the interaction with researchers who supported students in filling in their performances with scientific content through dialogue and reflection.
- In sum, the active involvement of the early career researchers through the different workshops in PERFORM has been key to change students' stereotyped perceptions of scientists and of how science works, which has been also highly appreciated by the teachers. This is important because the way researchers show themselves as individuals and talk about their daily routine in the scientific field with the students could be the 'new' image pupils can use to replace their existing beliefs and build their interests in science. Also, for researchers, PERFORM has given them the opportunity to

share their scientific research with young people and challenged them to improve communication skills, listening skills, capacity to synthesize and summarize, among others.

Pill 3: Promoting motivation for science and STEM careers

- Many students participating in PERFORM were already eager to develop their scientific knowledge, but for others who were less interested in the curricular scientific lessons, PERFORM put the idea of studying science on the table. The project contributed to increase their interest in science in a previously unexplored way. Through the use of performing arts within science education, PERFORM enabled students to see other methods of learning science and interacting with scientific content and in this sense, students showed excitement and got more involved with the project because of its innovative approach towards interaction and science education.
- Anyway many students who were not motivated for pursuing scientific careers remained like this after PERFORM. Our experience suggests that such interaction with scientists at school was not enough to influence students' attitudes towards STEM careers positively, which probably requires more time and more training to support researchers' communication and engagement skills.
- Nevertheless, it also shows the capacity of drama-based techniques, and particularly improvisational theatre as an embodied approach, to foster the emotional dimension of science learning, which can create new rapports of students with science. Science learning activities embedding these artistic techniques in a more holistic way than simply employing an artistic approach

to communicate scientific content seem to have the potential to foster students' interest in science and related careers.

- PERFORM did not completely reduce the science education gender gap. After attending the workshops, girls felt much more comfortable when doing science education activities than before, but boys were still more willing to study a STEM career than girls in more disadvantage settings.
- We encourage future research to shed new light on how different performing arts can pedagogically nurture science teaching and learning to reinforce motivational outcomes in inquiry-based learning as well as to bring students closer to the research reality, considering gender and class factors.

Graphic Facilitation

To summarize all the interventions of the morning, a graphic facilitation was conducted during the conference. The drawings on the following page were realized by **Antonio Meza** (www.antoons.net), an illustrator, cartoon artist, and graphic facilitator with experience in visual story-telling. His visualisations illustrated the main concepts and key messages presented by speakers and participants during the first day of the conference.



A. Panel discussions

Four panel discussions were organized during the conference: two of them aimed at giving voices to all the actors who took part into the project to present its main results, namely students, teachers, performers and researchers focusing respectively on new learning methods, training actions developed for early career researchers and teachers, combination of performing arts and STEM education. The fourth panel discussion that closed the first conference day was focusing on a set of European project that are related to the education systems as those presented by the Scientix representative and on involving researchers and research institutions into public engagement process.

B. Poster Session

The people who presented posters were also involved in projects promoting the engagement of students in science through innovative strategies. The organizing team invited them to experience a new way of poster presentation. Each presenter made her/his LIVE poster. There were cardboards and some basic materials provided for their intervention. Some of them took a prepared structure, a draft, several ideas, and the very different results contained diagrams, keywords, arrows, drawings, clippings, photographs, objects etc. They marketed their project, in order to attract the people. For this, they prepared some key messages to communicate in their Poster. No special artistic skills were needed. It was about communicating ideas live, in dialogue with the audience.

The session involved 11 participants from 10 projects coming from Europe and Colombia.

C. Workshops

The 4 workshops held during the morning of the second day aimed at directly involving students from international schools in Paris in the experience of a PERFORM activity developed directly by the members of the consortium who are experts in different fields from science busking and stand-up comedy to improvisation theatre and teachers trainings. The workshops were attended by 100 participants. At the end of the workshops, a plenary session was held to summarize the main observation and experiences conducted in order to inform the other participants about the different topics. The main concepts highlighted were:

- (a) The use of objects to start a reflection on the science and technology through busking activities: www.youtube.com/watch?v=jHwmufejuFs
- (b) The practice of storytelling and use of humor to reinforce reflection and messages about science and technology: www.youtube.com/watch?v=G-enLa6cYYM&t=2s
- (c) The use of artistic drawings about science and technology topics to start philosophical conversation with students and teachers. The approach is broadly described in the following article (<http://www.perform-research.eu/?page%20id=6491>) published in the third project newsletter issued on the 3 of August 2018 (M34)

The workshops are summarized in the following sections through pictures and short description used to introduce them. In order to facilitate the active participation of the different international schools the workshops were delivered in English, French and Spanish.

1. Science made simple*: Room II

What does not kill us can only make us stronger!

(Science Busking, an insiders guide to taking science out onto the streets)

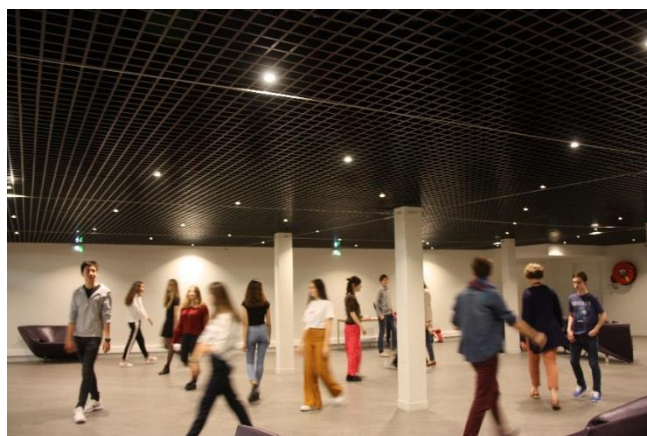
Ever found yourself watching a street performer strut their amazing stuff? Maybe you liked them so much you even put some money in their hat? Well come along to this completely hands on session and find out how PERFORM seeks to loose the street juggling, and loose the street magic, and replace them with street science!

*Workshop delivered in English.



2. TRACES*: Improve your science!

Through games and drama exercises, we will gradually bring you to improvise around the research themes of young doctoral students, their daily lives as researchers and scientific research. Your vision of science will be confronted to that of researchers to give matter to exchange, debate and play! *Workshop delivered in French.



3. The Big Van Theory*: Room Miró 2 - Stand-Up Comedy to laugh with science

Stand-Up Comedy has had a tremendous success because it connects with audience's emotions and daily life using humor... and we can use it as a powerful tool to communicate science. During this session, we will convert a scientific piece of news on a piece of Scientific Stand-Up Comedy. During the process, we will reflect on how science can be connected with emotions and daily life. Even more, we will enjoy a Scientific Stand Up Comedy show delivered by secondary school students to identify the key elements that should be included in a show to connect with young audiences.

*Workshop delivered in Spanish.



4. University of Bristol*: Room III

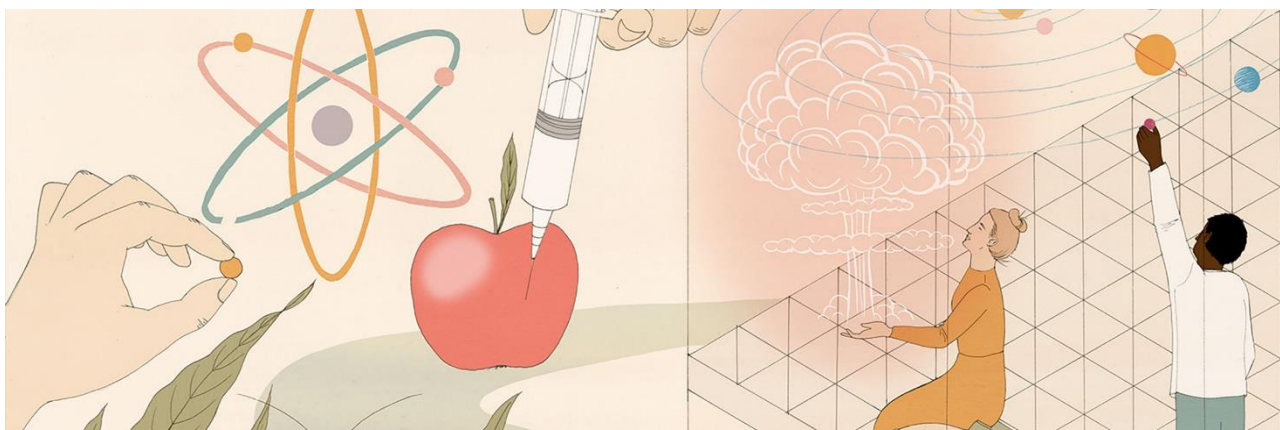
Teacher training interactive workshop

Perform: Bringing philosophy and performance into your science classroom



In our 'post truth' world, philosophical dialogue can provide much needed opportunities for school students to critically engage with science both in and outside of the classroom. This session will share best practice from teacher training programmes that were developed for Perform, which used performance activities to provoke philosophical thinking and to encourage critical discussion in the science classroom. We will collectively reflect on how to incorporate performance methods and activities into science lessons. The session was based on a set of Perform teaching resources, which are made available to all teachers at the end of the project.

*Workshop delivered in English.



This image is an example of the drawings used by the University of Bristol to trigger philosophical conversation among teachers. The author of the Drawing is ©Harriet Lee-Merrion. See all drawings in the annex chapter 4.4.

2.4 Conference Evaluation Results

An online survey was launched immediately after the conference among all the participants and an average of 25% answered the following data summarize the questions asked and the answered obtained for each question. The following tag cloud summarizes the more frequent words used to describe the experience in the conference, among the other comments collected asking what participants would have improved in the conference the main answer was “the interactive approach”. Altogether the data collected and summarized in the tables below show a relevant success of the conference according to the respondents to the online survey.



How it was your experience at the PERFORM Project Conference?

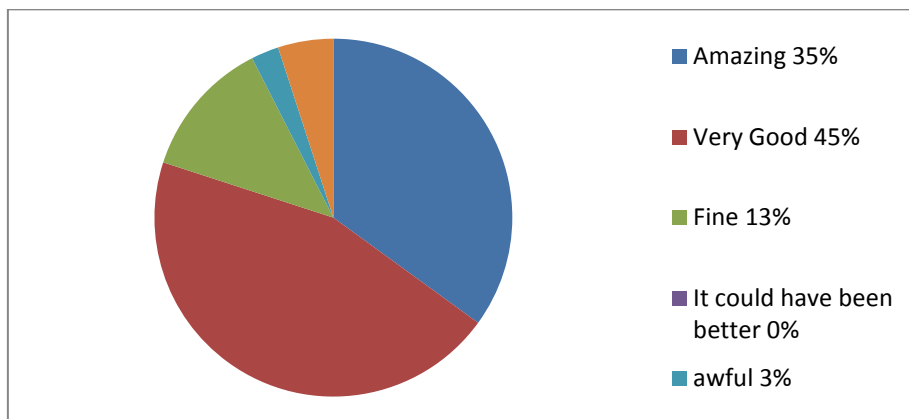


table	3.1
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How was the information previous to the Conference?

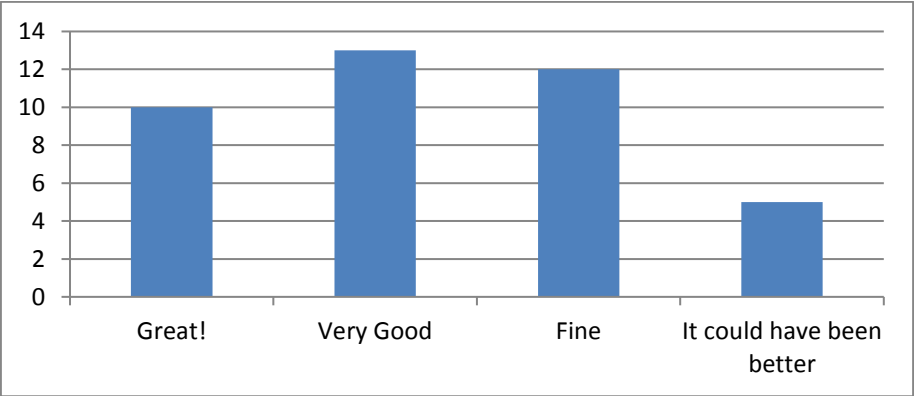


table 3.2

How was the registration process?

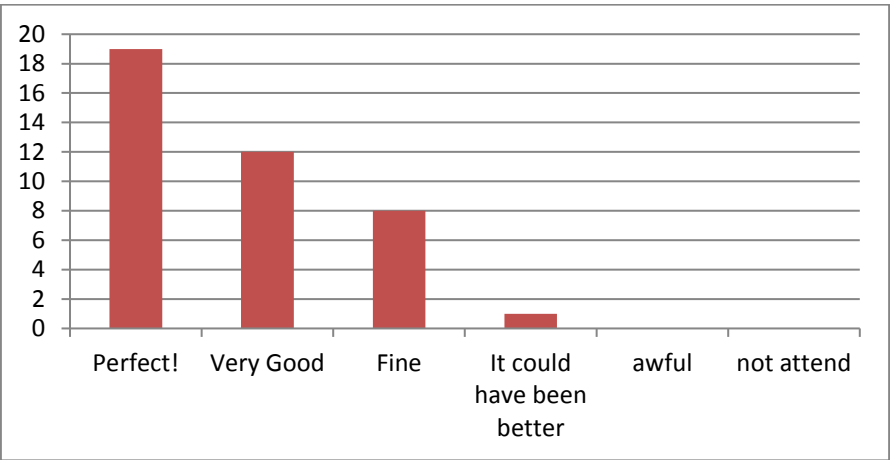


table 3.3

How would you rate the keynote speakers?

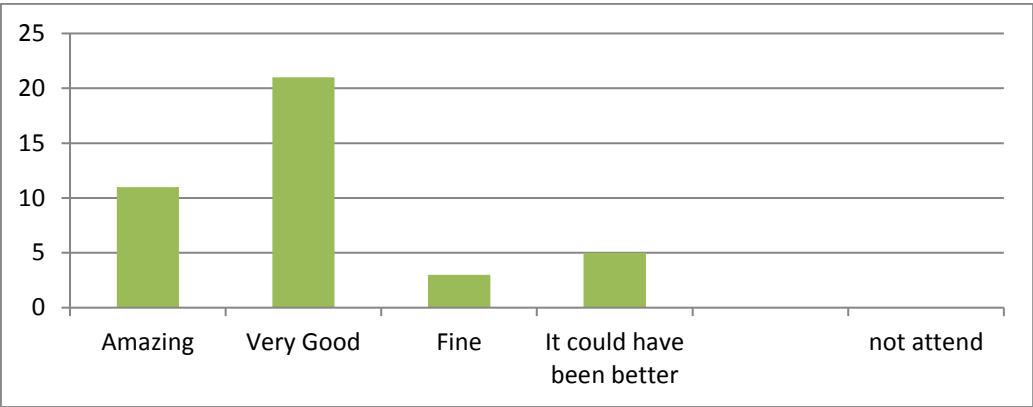


table 3.4

What did you think of the graphical facilitation? (Five stars: What a wonderful idea! One star: The man can't even draw!)

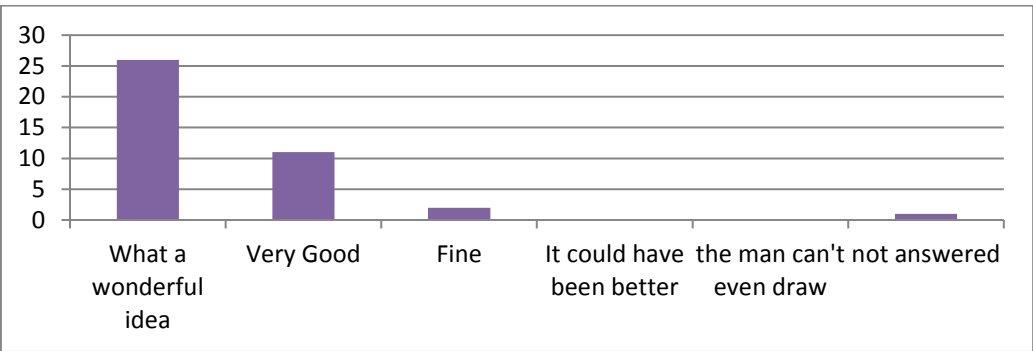


table 3.5

Which speaker or panel have you found the most informative so far?

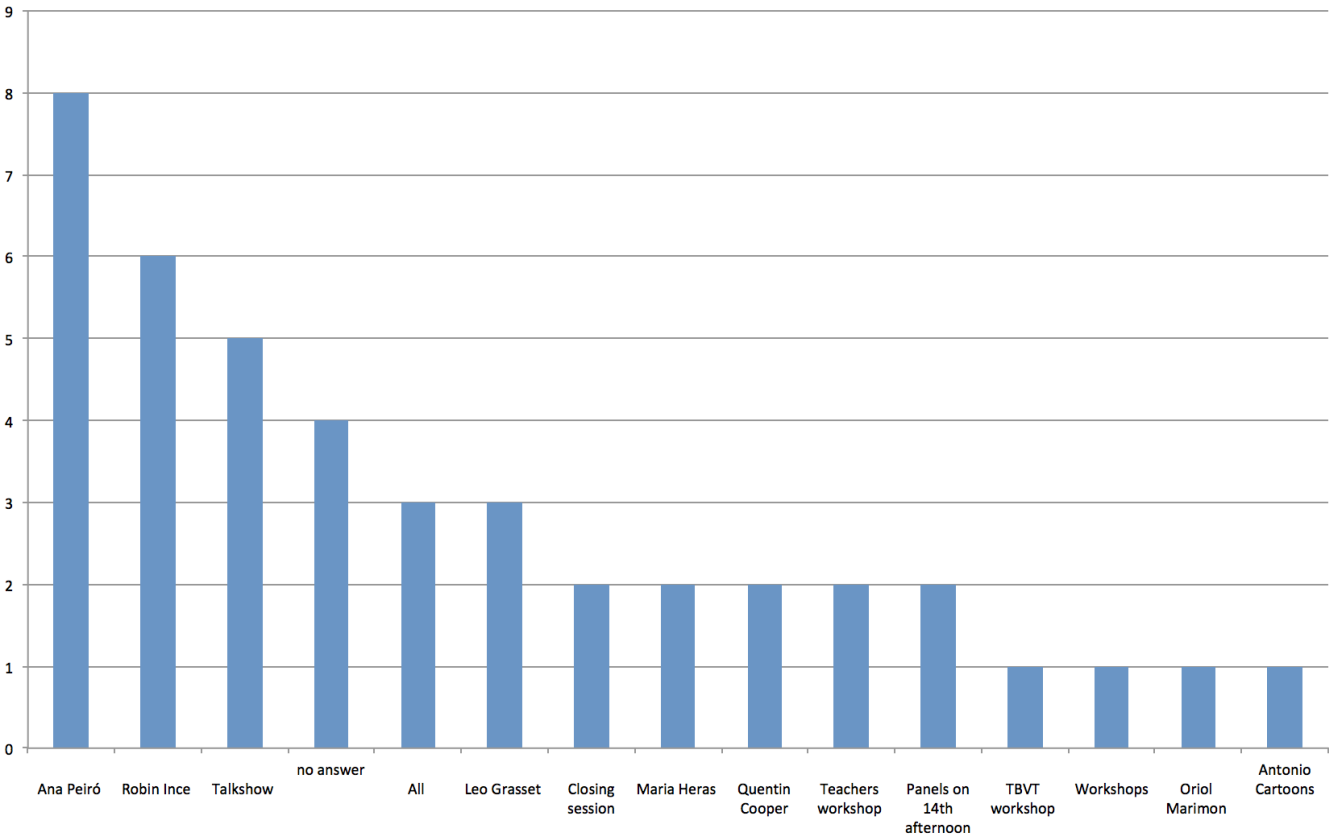


table 3.6

3. Final Remarks

Over the project's 3-year timeline the PERFORM partners worked closely together to develop and spread the project's recommendations and outcomes. Collectively, they developed a large set of diverse communication and training materials which can be applied widely by teachers and students, stakeholders and policy makers from science education, communication and research across Europe.

The messages, recommendations and tools generated by the PERFORM project are well documented and openly accessible via the project's website and YouTube-channels, they will be integrated into the project partners' websites and social media channels. Videos, toolkits, posters and visualisations will support the implementation of the PERFORM results beyond the project's timeline.

During the PERFORM Final Conference at UNESCO in Paris in June 2018, the "spirit" of the PERFORM project came alive in lively interactive workshops, panels and debates involving students as well as researchers, teachers and international stakeholders. May this PERFORM spirit survive in a large number of schools and universities across Europe – to make the PERFORM project sustainable beyond the times of funding!

4. Annex

4. 1 Perform Final Conference – Structure

Perform Final Conference 1st Structure

Concept

The Perform final conference will be structure as a CONFEST, a combination of a conference-like event and of a festival mainly characterized by performances both delivered by the Consortium members and by other selected performers.

Duration

1 and a half day

Options

(A) first day for the event and second day half a day for internal meeting; Option

(B) The other way round

Structure

First day

The first half day will be used for internal meetings among consortium members to present the project results and discuss strategies included in the sustainability plan.

Second day

2 plenary sessions one in the morning one in the afternoon with international speakers exploring deeper the link between performing arts and the communication of science

Tentative list of speakers to be contacted

- Alan Alda actor and founder of the Science Communication School at Stony Brook University - <http://www.centerforcommunicatingscience.org/>
- Roberto Benigni - Oscar winner actor and performer
- Sir Kevin Robinson - teacher, writer, researcher, adviser and speaker
<http://sirkenrobinson.com/about/>
- Nigel Townsend - Executive produce of Theatre of Debate -
www.theatreofdebate.co.uk
- Maria Acaso - <http://www.mariaacaso.es/>

5 shows

3 shows presented by The Big Van Theory, Science Made Simple and TRACES/Atomes Crochus (one each)

2 shows selected after a EUSEA call among its members to propose a show about the following topics “Science and Responsibility”. After the call issued by EUSEA the committee will select the three shows and the performers involved will have the expenses to come to Paris covered by the project.

1 talk show on RRI hosted by Quentin Cooper

Invited speakers to be selected amongst representatives from European Commission, Show business world (Actors, performers selected by the Conference committee)

2 sessions parallel to three shows to present toolkits and other project results relevant too

Conference tentative programme of the Event day

Time	Room A	Room B	Type of session
9.30	Official welcome		

10.30 - 11.15	1 st Show	Workshoop 1 Toolkit presentation	The Show reflects and present the process developed during the project and is addressed to students while the workshop is addressed to teachers or other stakeholders
11.30 – 12.00	Plenary talk		The Education through Performances/ The importance of being creative while teaching Stems
12.15 – 13.00	2 nd Show	Workshop 2 Toolkit presentation	The Show reflects and present the process developed during the project and is addressed to students while the workshop is addressed to teachers or other stakeholders
13.00 – 14.30	Lunch		
14.30	3 rd Show		The show selected through the EUSEA call will be addressed to schools while the talk show will actively involve stakeholders
15.30	4 th Show	Talk show about Science Performances and Responsibility	The show selected through the EUSEA call
16.30	Plenary talk		The importance of theatre for
17.45	5 th Show		Grand final/ By the consortium member or by external experts

Conference tentative programme of the Internal communication day

Time	Room A	Contents	Notes
13.00 – 14.30	Lunch		
14.30	Session A	Overall presentation on projects results	
15.30	Session B	Toolkits presentation in-depth	
16.30	Session C	Early career researchers training	
17.30	Session D	Future and sustainability	

As a result of the discussion the following decision were taken as described from the minute of the meeting:

- Date: two possible dates would be checked with participant schools by CSC (previous inputs by UNESCO and EUSEA): June 14th-15th, 2018 and June 21th-22th, 2018
- Ideally the presence of teachers, students, and ECR from UK and Spain at the final conference was required. UNESCO and EUSEA would check their budget availability and requirements by end of April 2017. In the case UNESCO and EUSEA don't have enough budget, all partners would explore their own budget availability to cover these expenses.
- Preliminary results of the toolkits for teachers and researchers would be presented.

During the meeting in Bristol, the option of combining the EUSEA annual Conference with the PERFORM conference came out. Moreover, the following tentative schedules were elaborated as a result of the amendment of the previous ones proposed by EUSEA (see 1st draft). Together with the amendment the consortium proposed to piggyback the EUSEA annual conference 2018 in order to reinforce each

other in terms of attendances. To verify the feasibility of this action a process immediately started that culminated during the EUSEA annual conference 2017. After a check with the EUSEA Executive Director that took place between April 2017 and May 2017, considering risks and benefits of the different choices, it was decided not to pursue the combination of the two conferences but to choose other methods to encourage the participation into the PERFORM conference. Two draft schedules represented the two options of the structure proposed for the conference.

Perform Final Conference 2st Draft structure

Option A of the Final Conference Programme (made by the Bristol Working Group 10-12 April 2017)

9:00-10:00	Registration and Coffee
10:00-10:20	Welcome words: UNESCO and Isabel
10:20-11:00	Show of 2 partners + Videos about Students
11:00-11:30	Keynote Speaker 1
11:30-12:00	Coffee Break
12:00-12:20	Show
12:20-13:00	Keynote Speaker 2
13:00-14:30	L U N C H
14:30-15:30	Perseias Presentation
15:30-15:50	Open questions
15:50-16:20	Coffee Break
16:20-17:00	Toolkit presentation: Researchers and Teachers
17:00-17:30	Wrapping up and Farewell words

Option B of the Final Conference Programme (made by the Bristol Working Group 10-12 April 2017)

9:00-10:00	Registration and Coffee
10:00-10:20	Welcome words: UNESCO and Isabel
10:20-10:50	Keynote Speaker 1
10:50-11:20	Radio Show: Videos of Perseias and Partners
11:20-11:50	Coffee Break
11:50-12:30	Radio Show: Interviews
12:30-13:00	Keynote Speaker 2
13:00-14:30	L U N C H
14:30-15:30	Perseias Presentation
15:30-15:50	Open questions
15:50-16:20	Coffee Break
16:20-17:00	Toolkit presentation: Researchers and Teachers
17:00-17:30	Wrapping up and Farewell words

Perform Final Conference 3rd and final Structure

time	DAY 1 - Thursday 14th June - Venue Salle I or II	DAY 2 - Friday 15th June
	The first day is aiming at sharing with Stakeholder such as teachers, early career researchers, professional science communicators and policy makers the innovative approach of performing arts applied to STEM education. It will be a mix of shows, plenary speeches and workshops to go deep into the Project contents and results through concrete examples. These examples also help to describe the challenges of this approach and future development. Although the main target groups are those of stakeholder's, students will also be invited to join the morning session and some of the students who took part into the project will also be protagonists in the sessions(shows and discussion sessions).	During the second day the Conference will open to students from secondary schools. This second day will have a structure more likely a sctructure of a performance festival during which plenary shows and parallel performance in 3 languages (French, Spanish and English) will be presented.

10.00	Welcome	Three parallel sessions for stakeholders and students. One for each language with Perseias performed by the three teams of PERFORMers
	A PERFORM key concept in 30 seconds - info in pills - one key concept presented in few seconds by one of the PERFORM performers	
10.30	Stand up comedian from Spain (tentative topic GENDER)	
	A PERFORM key concept in 30 seconds - info in pills - one key concept presented in few seconds by one of the PERFORM performers	
11.00	Robin Ince on Climate Change/scientists stereotypes (STEREOTYPES)	
	A PERFORM key concept in 30 seconds - info in pills - one key concept presented in few seconds by one of the PERFORM performers	coffee break
11.30	Third French stand-up comedian (SOCIAL ISSUE) Climate Change	
	A PERFORM key concept in 30 seconds - info in pills - one key concept presented in few seconds by one of the PERFORM performers	
12.00	Talk show-like session with students and early career researchers who took part into the project. Topic to be defined and is related to hot topics	Discussion session with students
LUNCH break		
14.30	Interactive seminar on Perseias+toolkits	Closing Session for stakeholders
15.30		
15.45	Interactive seminar on training - toolkits	
16.45		
17.00	Other EU funded project + Marie Curie Actions possible presentation and possible collaboration with PERFORM	
18.00		

4.2 Perform Final Conference – Flyer



The flyer is a promotional poster for the PERFORM project conference. It features a large background image of the Eiffel Tower in Paris, partially obscured by a large, stylized, multi-colored circular graphic. The PERFORM logo is in the top left, with the tagline 'The Art of Science Learning'. The event details are in the top right: 'UNESCO, Paris', '7 Place de Fontenoy', and '14 -15 June 2018'. The main title 'PERFORM project CONFERENCE' is in large, bold letters, followed by the subtitle 'Innovation in Science Education Through Performing Arts'. A paragraph describes the conference theme: 'Discover how stand-up comedy, science busking and clowning innovate STEM education whilst embedding Responsible Research and Innovation values'. Social media links and the project website are listed below. A European Union flag logo is accompanied by text stating funding from the Horizon 2020 programme. The bottom section is divided into four colored boxes, each detailing a theme: #ARTS AND STEM, #SCIENCE ENGAGEMENT, #RRI, and #INNOVATION IN EDUCATION AND COMMUNICATION. To the left of these boxes, a large '4.3.2.1' is displayed, followed by 'FOUR, THREE, TWO, ONE' and a list of statistics: '3,000 students and more than 30 schools in 3 countries (Spain, France and UK) working with 4 Universities, 3 Science Performance teams, 2 International networks, 1 Social enterprise'. At the bottom, a row of logos for partner organizations is shown.

perform
The Art of Science Learning

UNESCO, Paris
7 Place de Fontenoy
14 -15 June 2018

PERFORM project CONFERENCE
Innovation in Science Education Through Performing Arts
Discover how stand-up comedy, science busking and clowning innovate STEM education whilst embedding Responsible Research and Innovation values

www.perform-research.eu - @performstem - @performproject

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 665826

UNESCO, Paris - 14-15 June 2018

MEET THE INNOVATORS at the PERFORM CONFERENCE
Shows, seminars and round tables

#ARTS AND STEM
Can you combine performing arts and STEM education in an innovative way? Discover the research findings and meet performers and communicators from all over Europe

#SCIENCE ENGAGEMENT
How can we create new methods of engagement with Science and Technology? Explore the way PERFORM created new shows jointly designed by students, communicators, teachers and researchers


#RRI
What happens when societal challenges, ethical issues and responsible research and innovation values meet STEM education practice? Meet teachers, researchers and students who took part in the project

#INNOVATION IN EDUCATION AND COMMUNICATION
How can dialogue with teenagers shape the way we teach Science and Technology? Discuss with teachers who experienced PERFORM in their schools

4.3.2.1
FOUR, THREE, TWO, ONE
3,000 students and more than 30 schools in 3 countries (Spain, France and UK) working with
4 Universities
3 Science Performance teams
2 International networks
1 Social enterprise

Logos: UOC, EUSSEA, UMB, L'Atelier des Jours à Venir, Science Inside School, TRACES, University of Bristol, WARWICK

4.3 PERFORM Final Conference Programme



PERFORM project CONFERENCE
Innovation in Science Education Through Performing Arts
Discover how stand-up comedy, science busking and clowning innovate STEM education whilst embedding Responsible Research and Innovation values

www.perform-research.eu

PERFORM project CONFERENCE program
UNESCO, 7 Place de Fontenoy, Paris. 14 - 15 June 2018

Thursday, 14th June 2018
Official language: all talks will be simultaneously translated in English, French and Spanish for the duration of the first day.

9.30 REGISTRATION - The registration desk will be open from 9.30 onwards.
Avenue du Jefferson Entrance hall

10.00 WELCOME
Room II will host all the presentations of the first day

Flavin Schlegel
Assistant Director-General for Natural Sciences - UNESCO

Isabel Ruiz Muller
Ramon y Cajal Research Fellow and PERFORM project coordinator - IRI3 - Open University of Catalonia - UOC

Marika Wellmer
President of the European Science Engagement Association - EUSEA

Claudio Vizzini
Expert at UNESCO

10.30 INTRODUCTION
Cassie Cooper
Freelance, journalist, BBC presenter, science communicator and facilitator

10.35 PERFORM IN FILLS 1: Fostering the acquisition of knowledge and skills in students
Maria Huma
Researcher - Institute of Environmental Science and Technology - ICTA, Autonomous University of Barcelona - UAB, Spain

10.40 COMMUNICATING SCIENCE THROUGH STAND UP COMEDY
What happens when curiosity and irony meet science and technology?
Robin Ince, Comedian and science populates, UK

11.00 PERFORM IN FILLS 2: Dispelling common stereotypes about science and scientists
Maria Huma
Researcher - Institute of Environmental Science and Technology - ICTA, Autonomous University of Barcelona - UAB, Spain

11.05 THE YOUTUBER TALK
The storytelling technique applied to social media can be a powerful tool to engage with students, researchers and new audiences.
Leo Ortolano, Blogger and YouTuber, France

11.25 PERFORM IN FILLS 3: Networking for science and STEM careers
Maria Huma
Researcher - Institute of Environmental Science and Technology - ICTA, Autonomous University of Barcelona - UAB, Spain

11.30 WORDS ON STAGE
Public speaking is an art that can be applied to communicating science and technology. When properly applied, public speaking creates stages that invites participants to engage in discussions about science and technology.
Ann Peck, Medical doctor and communicator, Spain

11.50 TALK SHOW: the PERFORM Experience
How can performing arts change the way we study, learn and teach STEM? Students, teachers, early career researchers who took part in the PERFORM project talk about their experiences.
Celia Martinova, program coordinator, TRACES Association, France; **David Carrillo Zapata**, researcher, University of Bristol, UK; **David Pires**, science communicator, Science Made Simple, UK; **Helena Ossalike**, science communication Big Van Science, Spain; **Kate O'Sullivan**, student, IES Mores Boggy, Spain; **Marta Paludo**, postdoctoral researcher IDBAPS, Spain; **Matilde Telieps**, teacher, Lycée professionnel Pierre-Mendès France, Paris; **Ms. Rachel Siddons**, teacher, Castle School, UK

12.00 LUNCH - Ground floor - Salle des pas perdus

14.00 - 15.00 INTERACTIVE SESSION: drama-based activities and vocations in STEM careers - Room II
David Pires, science communicator, Science Made Simple, UK; **Eva Cornejo**, teacher, IES Cornell de Cort, Spain; **Orcaz Matallana**, PhD Biochemistry, University of Bristol, UK; **Helena Ossalike** and **Orcaz Matallana**, researchers and science communication, Big Van Science, Spain; **Josey Mikasa**, student, IES Castellón, Spain; **Kelly Boyd**, teacher, Bristol Free School, UK; **Paul Bonfante**, science communication TRACES Association, France

15.00 - 16.00 PANEL DISCUSSION: building a reflexive understanding of research - Room II
Brian Bonham, PhD student, Department of Geography, Autonomous University of Barcelona - UAB, Spain; **David Carrillo Zapata**, researcher, University of Bristol, UK; **Edoardo Alber**, researcher, Open University of Catalonia - UOC, Spain; **Elis Hirt**, researcher, University of Bristol, UK; **Lea La Valle**, researcher, Université Pierre et Marie Curie - UPMC, France; **Marta Cruz**, coordinator PERFORM project, University of Bristol, UK

16.00 COFFEE BREAK

16.30 - 17.45 PANORAMA TALK: innovating STEM Education in Europe - Room II
Agueda Oria Velasco, Science Programme Manager - Scientia project

Alain Sarkis, Researcher at LATMOS / UVSQ / CNRS, Eds Actis

Annette Klackert, Project coordinator - NUCLEUS project

Joan Carmona, Educator and science communicator, Living Lab for Health at i+D+i, Xplore Health

Maria Agnès Berondu, Chargée de mission Universcience/IRIS, Chai des sciences - Hypatia project

Marta Cuytano, Communication Officer HERN project

Marie Trepoese, Former MSCA fellow, European Affairs Officer at Service Recherche Partenariale et Propriété Intellectuelle - SROP, Ecole Polytechnique, Paris

18.00 COCKTAIL - UNESCO cafeteria - 7th floor

Friday, 15th June 2018 Official language: during the second day the official language will be English. Each parallel Workshop (10.00 to 12.00) will be delivered in one language: French, Spanish or English.

9.30 - 10.00 POSTERS ALIVE! - Room III
Enjoy a coffee while perusing posters that showcase innovative projects within education!

Alain Sarkis - Eds Actis - EDU-ARTIC project explored

Adriana Pap and **Agueda Oria Velasco** - Scientia: The 2018 STEM Discovery Week

Frédérique Camaliet - Université de Montpellier, France: when researchers, students and pupils communicate science with their own animation videos

Özül Kuvendi - Korkmaz Yigit Atakolun High School, Turkey - COMBASS project: Creating Online Materials & Products At STEM Subjects

Joan Carmona - Xplore Health: Xplore Health, bridging the gap between RRI and STEM education

Helen Kramad - Korkmaz Yigit Atakolun High School, Turkey-ART: the innovative way of reaching science

Luis Alexander Ochoa - University of Antioquia, Colombia: Strategies for the generation of scientific vocations in basic and secondary students in Medellín-Colombia

Maria Agnès Berondu - Hypatia: Make science education more gender inclusive

Marta Cuytano - HERN: HERN project: teaching and learning Responsible Research and Innovation

Pierre Richard - Jet Propulsion Theatre: Sparking the love for science through theatre

10.00 - 12.00 LET'S PERFORM
Two hours of interactive seminars geared towards helping you set up a performance (parallel sessions in French, Spanish and English)

Stand Up Comedy to laugh with science
The Big Van Science (in Spanish)

Room III

What does not kill us can only make us stronger!
Science Busking: an insider's guide to taking science out onto the streets. Science Made Simple (in English)

Room II

Improve your research!
Groups: TRACES (in French)

Room III

Tucker training interactive workshop - Perform: bringing philosophy and performance into your science classroom

University of Bristol (in English)

Room II

12.00 LUNCH

13.00 - 13.45 YOUR VOICES - Room II
Share your workshop experience. Tell your peers how to develop performances about STEM that include RRI values

Participants in the morning workshops were encouraged to report their experience and highlight discoveries and challenges

Moderator: **Leonardo Añón** - EUSEA

14.00 - 15.00 IMPLEMENTING PERFORM - Room II
How to set up the PERFORM experiences in your classroom?

Claudio Vizzini, UNESCO and **Isabel Ruiz Muller**, Open University of Catalonia - UOC

Over 3000 students and more than 30 schools in 3 countries (Spain, France and UK) working with: 4 universities, 3 teams of science performers, 2 international networks, 1 social enterprise


Innovating STEM education through joint efforts in three countries

THE PARTICIPATORY EDUCATIONAL PROCESS
720 secondary school students
30 teachers
44 early career researchers
Jointly developed innovative scientific performances

THE YOUNG AUDIENCE
2400 secondary school students attended the performances delivered in Spain, France and UK during the all process

Discover the PERFORM outcomes

www.perform-research.eu




4.4 Drawings for Teacher Training

The images below are drawings used by the University of Bristol to trigger philosophical conversation among science teachers in interactive workshops. The author of the drawings, which were developed for the PERFORM project, is ©Harriet Lee-Merrion.



4.5 PERFORM Policy Workshop

Invitation Policy Workshop





Invitation to join the
PERFORM-Policy Workshop in Brussels
24 September 2018, 1-6 pm, Rue de Parme 25, 1060 Brussels


The PERFORM project cordially invites you to attend a Policy-Workshop in Brussels on 24 September 2018. The workshop will bring together experts from the PERFORM Consortium and the European Science Engagement Association, EUSEA. Together with invited stakeholders from the European Commission participants will:

- reflect the project outcomes of the PERFORM project in the context of recent developments in the fields of Public Engagement, Open Science, Science Education and Science Communication;
- develop contents for a PERFORM Policy Brief addressing political stakeholders on EU and national levels;
- give recommendations based on the project results concerning the upcoming funding framework HORIZON Europe
- discuss the taking-up and distribution of results beyond the project's timeline.


The day after the workshop will offer all participants an opportunity to join the "Science is wonderful"-event at Brussels Parliamentarium, showcasing the European Researchers Night 2018:
https://ec.europa.eu/research/mariecurieactions/science-is-wonderful_en

Travel and accommodation costs will be covered. Please let us know whether you are interested in joining this meeting by sending your reply to PERFORM Dissemination Officer annette.klinkert@eusea.info until August 24.

www.perform-research.eu -  @performstem -  @performproject

 This project has received funding from the European Union's Horizon 2020

Agenda Policy Workshop



AGENDA

PERFORM-Policy Workshop in Brussels
24 September 2018, 1-6 pm, Rue de Parme 25, 1060 Brussels

12.30-1.30 Welcome and Lunch

1.30 Introduction of Participants
Please prepare a short statement based on the following questions:

- What is my interest in the PERFORM project?
- What is my specific role in the PERFORM project, what is my role/interest in EUSEA?
- What do I expect from today's workshop? What can I bring in?

2.00-2.30 Introduction to the PERFORM Project
Goals and Approach, First Results and Recommendations,
Presenter *tbc*



2.30-3.00 Introduction to present and upcoming EU Policies
Focus: Public Engagement, Open Science, Science Education and Science Communication
Cissi Askwall, EUSEA Vice President


3.00-4.00 Open Reflection in 2 Groups:
What kind of Impact do we want to achieve with PERFORM?
Specific recommendations from the PERFORM Project related to current policy discussions

4.00-4.30 Coffee Break

4.30-5.00 PERFORM Policy Brief for EU-Stakeholders
Agreement on main content and structure. How can we disseminate the Policy Brief and its message? Can we develop recommendations for the upcoming funding framework HORIZON Europe?

5.00-6.00 pm How can we distribute the project's results beyond the project's timeline?
Brainstorming on how we can ensure a presentation and uptake of results beyond October 2018.
Focus: Development of Trainings, Dissemination of Resources among stakeholders?

6.00 pm End of the Policy Workshop
www.perform-research.eu -  @performstem -  @performproject

 This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 665826

Participants Policy Workshop

	PERFORM Policy Workshop	Participant's list				
	Role	First name	Last name	Institution	Country	Position
1	Moderator and workshop leader	Annette	Klinkert	European Science Engagement	Germany	Executive Director
2	Policy expert	Cissi	Askwall	Public & Science	Sweden	Secretary General
3	Policy expert	Enrico	Balli	Sissa Medialab	Italy	CEO Sissa Media Lab
4	Perform Workpackage leader	Rachel	Mason	Science Made Simple	UK	Associate Director
5	Arts & Education consultant	Edward	Duca	University of Malta	Malta	Lecturer of Science Communication Editor in Chief of Think Magazine, Organiser of the Festival "Science in the City"
6	Education expert	Agueda	Gras-Velazquez	European Schoolnet	Belgium	Head of the Science Education Department at European Schoolnet
7	Education expert	Adrienne	Pap	European Schoolnet	Belgium	Belgium Junior Project Officer
8	Education expert	Rebecca	Gilmore	Wellcome Genome Campus	UK	Exhibitions and Interpretation Coordinator
9	Education expert	Casimiro	Vizzini	UNESCO	France	Expert of the Section for Innovation and Capacity Building in Science and Engineering (ICB) in the Division of Science Policy and Capacity-Building
10	Perform Partner	Mateo	Mezzagora	Traces	France	Director of the Space for Sciences Pierre Gilles de Gennes
11	Perform Partner	Helena	González	The Big Van	Spain	CEO, Content coordinator
12	Perform Partner	Oriol	Marimón	The Big Van	Spain	Project Coordinator
13	EUSEA support	Andrea	Troncoso	EUSEA	Germany	Project Officer

4.6 List of International Events with PERFORM Involvement

Event	Date	Location
2015 (1 event)		
RRI-tools Workshop	2015, November 10	Milan (Italy)
2016 (17 events)		
SWAFS Info Day	2016, February 16	Madrid (Spain)
Welsh Government event to promote H2020	2016, March 17	Cardiff (UK)
1st HEIRRI Conference “Teaching Responsible Research and Innovation”	2016 March 18	Barcelona (Spain)
RRI-Tools workshop	2016, March 31	Barcelona (Spain)
TEMI Final Congress 2016: “Teaching the TEMI way” congress	2016, April 15-16	Leiden (Netherlands)
PSCT 2016 Public Communication of Science and Technology Conference: The Global Conference on Science Communication	2016, April 26-28	Istanbul (Turkey)
EUSEA Annual Conference 2016	2016, May 18-19	Tartu (Estonia)
SWAFS Info Day organised by the Spanish national contact point	2016, May 19	Barcelona (Spain)
ECSITE Annual Conference 2016	2016, June 9-11	Graz (Austria)
CREATIONS project Summer School in	2016, July 3-8	Attica (Greece)
RRI-Tools symposium “RRI in the UK: the post-BREXIT future”	2016, September 23	London (UK)
Nuit Européenne des Chercheurs	2016, September 29	Paris (France)
NUCLEUS project annual conference	2016, October 12-14	Lyon (France)
World Science Day 2016	2016, November 9-10	Paris (France)

SWAFS National Contact Points Network Sis.Net 'Opening Science to Society' reception,	2016, November 15	Brussels (Belgium)
RRI Tools Final Conference "Responsible Research and Innovation in Action"	2016, November 21-22	Brussels (Belgium)
"Responsible research and innovation: how to maximize the local impact of my research?"	2016, December 14	Barcelona (Spain)
2017 (27 events)		
Association for Science Communication (ASE) conference	2017, January 16	Reading (UK)
II Neuroeducation International Seminar	2017, April 23	Girona (Spain)
European Researchers' Night Coordinators' Day	2017, May 3	Brussels (Belgium)
European Commission Open Day	2017, May 5	Brussels (Belgium)
2nd Homo scientificus europaeus Meeting	2017, May 16	Barcelona (Spain)
EUSEA Annual Conference	2017, May 29-30	Leuven (Belgium)
UOC open day	2017, May 31	Barcelona (Spain)
PESO (Public Engagement with Science Online)	2017, June 27	Online
ECSITE Annual Conference	2017, June 16	Porto (Portugal)
V International meeting SRUK (Society of Spanish Researchers in the United Kingdom)	2017, July 8	London (UK)
International University Menéndez Pelayo, 'The challenge of science: a look at international assessments'	2017, July 11	La Coruña (Spain)
The Big Event	2017, July 19	Newcastle-Upon- Tyne (UK)

Shanghai International Popular Science Products Expo 2017	2017, August 25-28	Shanghai (China)
Barcelona Peptide Therapeutics Symposium 2017	2017, September 22	Barcelona (Spain)
Science is Wonderful,	2017, September 26-27 (Brussels) 29th September (Paris)	Brussels (Belgium) and Paris (France)
LabSchoolNetwork,	2017, October 2-4	Paris (France)
Training for science communicators in	2017, November 2-3	Belgrade (Serbia)
World Science Forum	2017, November 7-11	Dead Sea (Jordan)
1º Simpósio Internacional de Conservação Integrada	2017, November 8-10	Foz do Iguaçu (Brazil)
Beyond the Obvious Conference	2017, November 15-17	Rome (Italy)
Educere Network Meeting	2017, November 18-19	Oxford (UK)
Congreso de Comunicación Social de la Ciencia	2017 November 23-24	Cordoba (Spain)
II Jornadas #RSU: Un diseño universitario para la responsabilidad social	2017, November 29-30	Castelló (Spain)
12th Scientix Projects' Networking Event (SPNE12)	2017, December 5	Brussels (Belgium)
Engage Conference	2017, December 6-7	Bristol (UK)
SCI:COM conference	2017, December 7	Dublin (Ireland)
European Researchers' Night info day 2017	2017, December 13	Brussels (Belgium)
2018 (29 events)		
Accessible Learning and Evaluation at the Exploratorium workshop	2018 January 4	San Francisco (California)

Association of Science Education (ASE) National Conference	2018, January 4-5	Liverpool (UK)
Feria de proyectos de extensión y taller de evaluación de impacto at the Sede San Carlos at the	2018, January 22-24	Costa Rica Institute of Technology (Costa Rica)
Parque Explora science centre	2018, February 2	Medellin (Colombia)
Programa Argó Presentation Conference	2018, February 12	Barcelona (Spain)
Institut de Ciències de l'Educació de la Universitat Autònoma de Barcelona	2018, February 19	Barcelona (Spain)
Public Communication of Science and Technology Conference 2018 (PCST)	2018, April 4-6	Dunedin (New Zealand)
RRI practice Consortium meeting at the University of Bristol	2018, April 10	Bristol (UK)
La Caixa d'Eines de l'Educació Ambiental al CCCB	2018, April 12	Barcelona (Spain)
Swedish Research Council	2018, April 17	(Sweden)
Forum for science communication	2018, April 18	Gothenburg (Sweden)
European Researchers Night Swedish Organisers Meeting	2018, April 20	Gothenburg (Sweden)
Bristol Doctoral College and Centres for Doctoral training meeting	2018, April 25	Bristol (UK)
Get Inspired by STEAM education! Webinar organised by the European Schoolnet	2018, April 25	Online
Freudenthal Institute, University of Utrecht	2018, April 26th	Utrecht, Netherlands
Higher Education Institutions and Responsible Research and Innovation (HEIRRI) second conference	2018, April 27	Wien (Austria)

EUSEA – European Science Engagement Association Annual Conference	2018, May 17-18	Madrid (ES)
ICTA-UAB Spring Symposium.	2018, May 16-17	Barcelona (ES)
Netherlands Science Communication Student Conference	2018, June 1	Nijmegen (Netherland)
ECSITE – European Network of Science Centres and Museums annual conference	2018, June 6-9	Geneva (CH)
Barcelona Science Festival	2018, June 9	Barcelona (ES)
PERFORM final conference	2018, June 14-15	Paris (FR)
ESOF – Euroscience Open Forum 2018	July, 9-14	Toulouse (FR)
Final Conference of European project STEAM	2018, July 14	Valetta (Malta)
Campus Gutenberg International Congress held in Cosmo Caixa and organized by University of Pompeu Fabra	2018, September 18	Barcelona (Spain)
Physics Institute - Instituto de Física, Universidade de Sao Paulo	2018, August 14	Sao Paulo, Brazil
'Inclusive Innovation in Tourism' symposium funded by the British Council and co-hosted by the Thailand Chamber of Commerce University and Birmingham University	2018, August 14	Phuket, Thailand
Workshop at the Pompeu Fabra University	2018, 19 September	Barcelona (Spain)
Workshop by Foro Cilac	2018, October 22-24	Panama City (Panama)

4.7 PERFORM Toolkit-Poster

