STRATEGIES OF
STAKEHOLDER ENGAGEMENT

MAPPING AND ANALYSIS OF APPROACHES AND STRATEGIES WITHIN THE SEA-EU ALLIANCE
The consortium
The brochure presents the analysis of a mapping by the six universities of the project reSEArch EU (European University of the SEA, SEA-EU): University of Cádiz (Spain), University of Western Brittany in Brest (France), University of Kiel (Germany), University of Gdánsk (Poland), University of Split (Croatia), University of Malta (Malta).

The SEA-EU Alliance, launched in 2019, brings together six coastal universities, sharing a common vision of education as a key catalyst for the future. SEA-EU aims to strengthen the links between teaching, research, innovation and knowledge transfer. To further stimulate the development and the international dynamic of its research ecosystem, the six universities have successfully proposed the project reSEArch-EU.1

The work of reSEArch-EU is funded by the European Commission Horizon2020 call “Science with and for Society” (SwafS), which aims to build effective cooperation between science and society. Responsible research and innovation is the cornerstone of SwafS, allowing all societal actors to work together during the whole research and innovation process to better align both the process and its outcomes with the values, needs and expectations of society.

As the European Commission states, there is “a heightened policy interest in engaging society. The SwafS Work Programme 2018-2020 was developed to reflect and support the evolution of science and society and the increased emphasis on their interplay at national and EU levels. There is recognition that co-design with citizens, stakeholders and end-users needs to be promoted in all policy instruments, including in Horizon 2020.”2

In support of this goal, the main objective of the reSEArch-EU project is to build a pan-European institution that can openly connect knowledge, expertise and resources from different units and research areas, across different countries, in a cost-effective way to solve societal and environmental challenges.

reSEArch-EU focuses on the key principles of research and innovation policy indicated by the European Commission in 2020. These are:3

- co-creation, working and acting together for a better society;
- diffusion, sharing knowledge across society, territories and people;
- uptake, turning research into sustainable solutions with social and economic value;
- transformation, changing the way we consume and produce; and
- directionality, with R&I leading the way.

https://researcheu.sea-eu.org

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1reinforce Sustainable Actions, resilience, cooperation and harmonisation across and by the SEA-EU Alliance
3 Science, research and innovation performance of the EU 2020’ (SRIP 2020)
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Involving stakeholders

How do European universities engage citizens, non-governmental organisations, public authorities and other societal actors in their research? This brochure gives first answers and an overview of the individual experience of the six European universities involved. It is the first step in finding a common understanding of why the involvement of stakeholders may be beneficial for both the science community and society, and not a mere burden.

What is a stakeholder?
Stakeholders can systematically be categorised. Which categories depends on the project, the challenge or other practical considerations. Two examples of categorization could be:

- Citizens (as individuals)
- Civil society (in the sense of organized citizens). This includes non-governmental organizations or professional groups (e.g. fisher, farmers)
- Local communities, representing the local political and administrative level
- Public authorities like governments, ministries or armed forces (e.g. Navy)

Another possibility is to categorize stakeholders on a geographical level:

- Local stakeholders (e.g. City of Kiel)
- Regional stakeholders (e.g. Northern region of Germany)
- National stakeholders (e.g. Germany)
- International stakeholders (Baltic Sea, European Union, ...)

What about commercial stakeholders?
Companies and commercial stakeholders are important players in our society, and research at universities contribute to new products or technologies. In the one hand, companies may benefit from academic research by, for example, research cooperation. On the other hand, there is huge political support to facilitate business development from academic working groups by, for example, supporting spin-off companies.

For the cooperation of universities with commercial stakeholders, there is, in general, not always a clear distinction between dialogue, cooperation and technology transfer. In the reSEArch-EU project, the focus of the work packages is defined quite clearly. Work package 4 “Co-Designing, co-creation and co-delivering for knowledge democratization” has a focus on non-commercial activities, while work package 3 “Bridging the gap with the innovation ecosystem” has a focus on exploring innovation and entrepreneurial potential. In brief, the aim of this brochure is to present case studies with non-commercial stakeholders and will exclude examples of technology transfer with the means of selling or licensing a result or product to a company. The workshop participants discussions only include commercial entities as stakeholders, if co-design or cooperation is a key characteristic of the project, if the goal is to run a research project, and if the goal is to solve concrete problems in society.
Stakeholder engagement is important

There is a long-lasting endeavour of analyzing the relation of science and society, and it deals with two fundamental questions: What is knowledge (ontology), and how is knowledge created (epistemology)? These theoretical questions become concrete in a situation where academic partners work together with experts from outside universities. We can call this transdisciplinary research, and Pohl et al. (2017) give two key elements of transdisciplinary research:¹

1. Plurality of information. Information on a problem can come from different sources, and there can be different perspectives on the same problem.
2. Science contributes to solving real-world problems.

From this point of view, science seeks “to grasp the relevant complexity of problems, taking into account the diversity of both everyday and academic perception of problems”.

Finding common ground
Within this project, it was essential for the SEA-EU consortium partners to get a common understanding of stakeholder engagement. Even if the scientific debate, as mentioned above, tries to understand the complexity of stakeholder dialogue, this debate needs to be linked to the own experience of the individuals in this project.

During the workshops leading to this publication, the partners identified key arguments for involving stakeholders in universities' scientific work (see box). Some arguments are in favor of strengthening the relation of science and society, like science leaving the ivory tower. Second, science can get a lot of support from outside - like new ideas or new perspectives. Third, cooperation with practitioners enables the application of new knowledge.

How this brochure was developed
The work package titled “Co-Designing, co-creation and co-delivering for knowledge democratization” (WP4) within the reSEArch-EU project was designed to build bridges between researchers and non-academic stakeholders and citizens, to make them active actors in SEA-EU research and innovation strategy. In 2021, scientists and administrative staff from all partner universities met for a series of three online workshops. The participants developed a common understanding of the following questions why stakeholder engagement is important, which stakeholder groups might be valuable and which dialogue formats can be used.

The next step was a status quo analysis: What experience with stakeholder engagement do we have at SEA-EU universities? An online survey was developed and tested during one workshop, to ensure it could be comprehended by those filling out the survey. 23 surveys were completed, giving compiled information on the stakeholder engagement of each participating university.

Finally, the university representatives were asked to collect case studies for stakeholder engagement. In total, 36 case studies were submitted, showcasing participatory activities ranging from contribution to co-creation (where stakeholders are equally involved in designing the project). The brochure presents an inspiring selection of 12 case studies and is the result of a collective editing process. Experts from six European universities compiled their experiences, reflected critically successes, challenges and means to overcome obstacles.

Different levels of participation

The interaction of individuals and groups can take place in very different ways. It makes a difference if a stakeholder is just contributing some data or if the stakeholder is already involved in designing the project. In case of contribution, the stakeholder will have little influence on the outcome, while, in case of co-design, their influence will be very high. The level of participation defines the role of the different participants and their relation to each other. To get a better understanding of the consequences, it is helpful to distinguish several levels of participation and describe their function.

**Contract:** In this case, there is little involvement of the stakeholder with the research project. The research is commissioned by stakeholders, then the scientific research is done by the university, and finally, the university informs on the scientific results by scientific publication or other kinds of reporting. This is the classic way of financing academic research through public funding, for example, by a ministry or a public authority. Of course, there might be communication before the project - funding schemes and agenda-setting for research priorities are a matter of intense public debates and universities are actively part of such debates. When it comes to the specific projects, the interaction between the funder and scientist is very small and there is no active participation of the funder in the research itself. Therefore, this low level of participation is not considered further in this brochure.

Interaction between scientists (left) and stakeholders (right) can happen on different levels. The highest level of participation is co-creation, where the project is developed together by scientists and stakeholders.

Why involve stakeholders?

Strengthen the relation of science and society
- Bridge the gap between academia, science, and economy ("leaving the ivory tower")
- Democratize universities
- Stakeholder empowerment
- Building trust and mutual understanding

Support scientific work
- Integration of different perspectives allows strengthening the impact of science
- Better understanding of informal institutions (e.g. social norms, traditions)
- New ideas for research

Support the application of new knowledge
- Assure innovation and transformation by involving practitioners

Contribution: The project is planned, run, and evaluated by scientists. Stakeholders contribute for example data or information, but they are not involved in the conceptual steps of the project. One typical example for stakeholder contribution is "Citizen Science", like in the case study "Plastic Pirates" (page 16), which was completely developed by scientists. The stakeholders - in this case, young students - collect many data for plastic waste along rivers. They upload their data on a database and scientists analyze the findings. In this way, the students contribute valuable voluntary work to the creation of scientific knowledge.

Collaboration: The project is planned by scientists, and stakeholders are involved in research and/or further analysis. One example is the project ESPOmar at the University of Cádiz (page 26). The University of Cádiz, together with the Universities of Huelva and the Algarve, take the lead, but stakeholders, like the Andalusian Ports Agency, collaborate during the project. Even if the stakeholders did not have a direct influence on the project concept, they are in intense interaction with the project partners during the project and, therefore, have a much higher influence on the outcome.

Co-creation: The project is developed together by scientists and stakeholders. This is the most participative approach, as the stakeholders are enabled to join from the beginning by choosing the topic, defining the research question, and developing the methodology. On this level of participation, they are considered as equal partners within the project. One example illustrating this approach is the "Center for Service Learning" at UNIST (page 36). Several civil society organizations elaborated a service-learning program, together with the Faculty of Economics, Business and Tourism. With this program, they intend to jointly solve social problems in the community and build young people as active and socially-aware citizens.
University statements on interaction with society

All SEA-EU universities consider, at least in some way, engagement or cooperation with stakeholders. Very obvious is the emphasis on business cooperation: All universities have specific activities in technology transfer and clear regulations for business cooperation, and this commercially oriented cooperation (“valorization of science”) is supported either by own institutions or as part of a regional network (e.g. UBO SATT technological Transfer networks). Although technology transfer is not the subject of this brochure, the following paragraphs will quote all references to any kind of stakeholder relationship - including technology transfer.

Stakeholders, other than business stakeholders, are not particularly highlighted in any Mission and Vision strategy/position papers, except for general ethical regulations. For example, Malta’s ethics guidelines\(^1\) mention some general principles (no harm, respect the integrity and dignity of persons), and similar regulations are in place at each university.

Lack of support on the national level

All SEA-EU universities share a common premise: There are no national regulations on stakeholder engagement concerning cooperation with non-commercial partners, such as citizens or NGOs, while cooperation with commercial partners or companies - in the sense of technology transfer and other business-related activities - are regulated in all countries. No regulation can be seen as a maximum of flexibility, however, it may also lead to a lack of support. Some European countries have national networks supporting such engagement, such as Ireland and the United Kingdom.

\(^1\)https://www.um.edu.mt/research/ethics (accessed 25.9.2021)
University of Brest

Currently, there is a national incentive by French law to build strong relationships with several types of external stakeholders: e.g. citizens, NGOs, or local communities. This goal is supported by the strategic plan as much as by the university’s statutes and the objectives defined by the national regulator. As a result, the goals are varied and include economic development, social inclusion, gender equality, employment for people with disabilities, support of the local language, and reduction of the carbon footprint.

UBO is evaluated every five years by the HCERES (High Council for Evaluation of Research and Higher Education). This evaluation assesses various criteria regarding external stakeholders. The HCERES aims to assess all the higher education institutions and research units, doctoral schools in French universities, research inputs, and programs of the Bachelor/Master/Doctorate system.

For example, nowadays taking into account the health context, scientific, technical, and industrial culture literacy (CSTI) is a major issue. CSTI aims to increase awareness and disseminate knowledge across society. For example, the “fête de la science” is a festival held every year at the national level for researchers to demonstrate and display research results to the general public with an educational objective.

Furthermore, the UBO Foundation aims to create relationships and interactions with the university’s ecosystem and local communities by funding projects carried out by students and staff. The general objective is to create positive externalities on the territory for the benefit of society as a whole.

A last example: “Our mission: to connect companies and universities. We do our utmost to inform you and enable you to establish lasting and effective relationships with the right people at the UBO. As an interface between the socio-economic players and the various components and laboratories of the Université de Bretagne Occidentale, the mission of the „Corporate and Partner Relations“ department is to facilitate your collaborative efforts in all of the university’s areas of expertise: training your teams, recruiting your future collaborators, developing a research-innovation partnership, and supporting our actions.”

Institutional Support in UK and Ireland

**Campus Engage in Ireland:** “Based within the Irish Universities Association, Campus Engage is dedicated to supporting Irish higher education institutions to embed, scale and promote civic and community engagement across staff and student teaching, learning and research.”

**REF in United Kingdom:** “The REF is the UK’s system for assessing the quality of research in UK higher education institutions.” Universities are evaluated how well they perform in cooperating with non-academic partners: “An underpinning principle ... is that all types of research and all forms of research output shall be assessed on a fair and equal basis, including interdisciplinary and collaborative research.” To the criteria belong “wider contributions to the economy and society, including evidence of the wider activities and impact of research carried out.”
Kiel University

Currently, Kiel University does not have a Mission statement, apart from general statements on the university website.

The university transfer concept is focusing on three areas: business & technology, education & science, and politics & partners:

“A university is not an island. ... [CAU] advocates the university’s active role in society and aims to work closely together with the community to be the driving force behind regional, national and international development by looking for and finding pioneering solutions for our most pressing issues. This is the reason why the CAU maintains a variety of active connections with its partners in science, industry, politics and society.”

For business & technology, the emphasis is on commercial cooperation:

“Business & technology: Ideas and inventions developed at the CAU contribute towards technological and social progress. The Technology Transfer department at Kiel University supports and connects players from industry, the authorities and science. Researchers receive support if they have questions about patents, licences or collaboration with companies.”

“Politics & partners: Kiel University addresses the complex challenges that we are currently facing and strategically invests in interdisciplinary cooperation which goes well beyond faculty and institutional borders, thus making the CAU a valuable consultative partner for politics, institutes, society, the industry and educational facilities. These groups require independent, critical advice and support in increasingly complex political, economic or social contexts - a role which the CAU has taken on.”

University of Cádiz

The statutes of the University of Cádiz are the regulations where the nature, principles, and structures of the University are established. The latest version is from 2017. The main objectives of the University (article 2) are defined by the general principle of service to society: all activities of the University of Cádiz will be approached from the paradigm of its utility for the society and the environment that surrounds the University.

The knowledge created at UCA is due to be integrated into the intellectual and scientific heritage (article 2, paragraph 1), applied with a focus on improving social development and welfare (article 2, paragraph 4), and disseminated in a lifelong cycle (article 2, paragraph 5).

Strategic Plan of the University: The Strategic Plan is the document that contains the vision, mission, and values of the University of Cádiz. It establishes the strategic objectives of the University for the coming years. The Second Strategic Plan has been in force since 2015 and reflects in explicit terms the importance given by the University to stakeholder engagement: The Mission of the University of Cádiz “designates it as a public institution committed to its environment.” According to its Vision, “the University of Cádiz plays an essential role in the region’s socioeconomic development by driving entrepreneurial culture, innovation and internationalization.”
Among its Objectives, the Strategic Plan sets the identification and analysis of the impact to interest groups (namely, its stakeholders), and three lines of actions are opened concerning them:

- The identification and engagement with their needs.
- The improvement of the interactions between UCA and them.
- The perfection of communication and participation channels with them.

University of Gdańsk

The University of Gdańsk in 2019 adopted its “Strategy of the University of Gdańsk for 2020 – 2025”. This document includes statements on mission and vision:

“The mission of the University of Gdańsk is to provide the highest level of education, conduct highest quality research, shape civic attitudes, participate in social development and contribute to building the innovation-based economy.”

The vision mentions its openness to stakeholders: “The University of Gdańsk is open to all those who are willing to engage, creatively commit and share their knowledge to strengthen its rank, contribute to the prosperity of the academic community and the common good.” In addition, research and innovation should contribute to solving societal challenges by “strengthen[ing] the participation of scientists of our University in solving significant socio-economic problems on a national and international basis”.

One strategic objective is “extending studies focus on cooperation with the socio-economic environment: 1) Increasing the number and scope of application-focused research; 2) Support for the transfer of scientific research effects to business and economy, patenting and commercialization of findings; 3) Implementation of joint research ventures with social institutions and business units.”

Another guiding principle is “Openness, social responsibility and commitment of the university”: “The University of Gdańsk aspires to be an open, socially responsible and engaged university. These ambitions will be implemented through creating and strengthening the relationship between the University and society via new forms of cooperation”.

The University of Malta developed a Strategic Plan 2020-2025 (published in English and Maltese). The strategy itself was developed with the participation of stakeholders. The University’s external key stakeholder groups are listed:

- Administrative Technical and Industrial Stakeholders
- Government Stakeholders
- Civil Society Stakeholders
- Commerce, Industry, and Enterprise Stakeholders
- Pre-University Education Providers Stakeholders

Amongst others, two thematic fields of the Strategic Plan concern stakeholder activities. Strategic Theme 2: Research and Knowledge Transfer aims to expand corporate research and knowledge transfer. Again, here is an emphasis on commercial collaboration:

- “Expand the potential of Intellectual Property
- Strengthen research consultancy offering
- Strengthen the Corporate Research and Knowledge Transfer Office (CR&KTO) [which] focuses on the discovery, protection, and commercialization of intellectual property, industry-academia collaboration, and contracted research.
- Promote knowledge transfer partnerships and industry collaboration
- Increase proof-of-concept and start-up funding for researchers”

This topic is also found in Strategic Theme 4: Enterprise and Industry Impact:

“The University of Malta is investing to increase its capacity for collaborative activity with small and medium-sized enterprise (SMEs), industry, and other social and economic stakeholders. Enterprise and innovation are the strategic foundations of the ongoing development of knowledge and research programmes as vehicles to achieve a positive impact on society and the economy. We will endeavour to move forward with priorities concerning work-based learning, outreach and education programmes for life-long learning and economic development.”

The strategy names several specific activities, for example:

- Engage industry in curriculum development
- Embed industry Knowledge in the learning experience
- Enhance learning through enterprise projects
- Provide expertise to industry: “The University will increase its engagement with enterprise and industry associations as external stakeholders and social partners. Our objective is to nurture an environment of dialogue and knowledge sharing with this important group of employers which makes up the majority of the graduate population.”
- Organize enterprise and industry colloquia: “The University of Malta’s Strategy Forum for Enterprise, Government and Social Partners, which attracted a wide audience at the beginning of 2019, is proposed to become an ongoing event to be held at least every two years. The University will host colloquia for industry sectors that are the highest contributors to the Maltese economy. We will organise seminars on emerging areas of public interest and contemporary topics to disseminate new knowledge within the University community”

University of Split

In 2021, the UNIST approved its “University of Split strategy 2021-2025” containing mission, vision, and strategic goals. The mission statement relates to the inclusion of the wider community: “As a public institution, the University of Split treasures the knowledge as a public good, which is to be generated and enhanced continuously through research and innovation, embedding it into the local and wider community, especially into the economy through knowledge and technology transfer.”

The vision emphasizes the importance of knowledge transfer for the economy: “The University is the leader in the transfer of knowledge and research results in the economy of the region, driving the economic growth, smart specialization and environmentally friendly and sustainable development of society.”

Universities also play a role in strengthening the cooperation with citizens, companies, the public, and the non-profit sector, and enabling its scientists and artists to direct their research and creativity towards the most important challenges we face. The strategic goals are to describe the relationship to society more precise:

Strategic goal: Contribute to the development of society through creativity, innovation, and entrepreneurship

The results of scientific and professional activities of the University of Split represent a potential for the development of society and economy, which is still not sufficiently used.

Task: Encourage the research community to commit to the transfer of knowledge and technology to the economy and social entrepreneurship.

Task: Encourage cooperation with entrepreneurs and the establishment of knowledge-based enterprises.

- Establish a Fund for the Promotion of Scientific Research and Innovation Projects, and a Fund for the Management of Intellectual Property to encourage the cooperation and establishment of knowledge-based enterprises. Furthermore, to actively participate in the Enterprise Europe Network.

Task: Actively create new professional projects with public administration to develop the region as a whole.

- Identify public administration needs and potential for joint projects through regular work meetings. Provide support to public administration in the implementation of strategic goals and projects. Through the Bluedih project, UNIST will establish services and pilot projects for the digital transformation of public administration.

Task: Actively manage scientific research equipment to commercialize services, knowledge and technology.

- Establish a public database of available equipment and encourage the development of commercial services based on available equipment.

Strategic goal: Open science and digital transformation

Task: Encourage co-creation activities in a heterogeneous environment of small and large companies, public administration and public entities, civil society and associations, scientists and researchers, and students.

Strategic goal: Develop an entrepreneurial culture and cooperation with the economy.

Task: Improve communication with entrepreneurs and supporting institutions.

- Establish appropriate communication channels and practice the regular exchange of ideas with companies and policymakers in economic life.


https://www.um.edu.mt/about/strategy/strategicgoals4enterpriseandindustryimpact#colloquia
Are there incentives from universities to interact with stakeholders?

In our SEA-EU survey, most universities answered this question with a clear no. With the exemption of technology transfer and support for spin-off companies, there are no specific financial incentives to push stakeholder involvement. All SEA-EU universities have structures dedicated to the exchange with society. As already shown, support for business cooperation is embedded either in own departments or in regional networks. For the exchange with non-business stakeholders, the structures are not always as clear. While science communication and science outreach can be seen as a uni-directional communication that is transporting knowledge from university to society, the same activity can sometimes also be seen as bi-directional communication where universities get new input from stakeholders which influences future research. One example is the Malta University Radio Program, which not only reports on science but does scientific research itself by involving stakeholders in developing debates on specific topics (see case study page 34 this brochure).

The overview given here will show a broad spectrum of stakeholder dialogue support, with a variable degree of stakeholder participation in research.

**Kiel University**

The **University Department for Transfer** is responsible for three specific institutions: the technology transfer unit is coordinating business cooperation; the Center for Entrepreneurship (Zentrum für Entrepreneurship, ZfE) is supporting start-up companies; the Wissenschaftszentrum WiZe is promoting cooperation of science with business and politics.

The **Kiel Science Outreach Campus KISOC** was funded from 2016-2020 to offer a network in which scientists from various disciplines work together with communication practitioners on new formats. Young scientists received suggestions and support for their science communication and education projects. KISOC mainly focused on Science Communication, but in some projects stakeholders themselves also contribute to the creation of knowledge.

The **Center for Ocean and Society CeOS** was established in 2019 as part of the priority research area Kiel Marine Science. The position of coordinator for transdisciplinary research was introduced to support the involvement of non-university stakeholders in marine research projects. All CeOS projects use participatory tools (e.g. living labs, focus groups).

The **Kiel Science Factory** (Kieler Forschungswerkstatt) is a joint institution of Kiel University (CAU) and the Leibniz-Institute for Science and Mathematics Education (IPN). In the thematic laboratories, pupils, teachers, and student teachers deal with scientific questions from the marine to nano-sciences. They learn more about the social aspects of energy, gain access to current topics from human medicine and biological research, or learn why soil is more than just dirt. The humanities offer programs in the field of language and art as well as on historical-political and theological topics. The offers include citizen science projects like the Plastic Pirates (page 16).

**University of Brest**

Business cooperation is supported by the DRIVe, the Department dedicated to Research, Innovation and economic Valorisation, and technology transfer is organized at a regional level through the SATT Ouest Valorisation (a subsidiary mandated by multiple universities of the Brittany region).

There are many initiatives around the science and technology culture dedicated to spreading scientific information to the society as a whole: the university’s libraries are open to the general public, local authorities often fund projects such as conferences, exhibitions, economic studies, etc. concerning the local area.

**University of Gdansk**

University of Gdansk has a well-established cooperation with business through the Technology Transfer Office and the Office for Liaison with Business and Community. University closely collaborates with the City Council and Pomeranian Region and encourages bottom-up initiatives of different Faculties, scientific staff and students dedicated to the dialogue with the public. Examples of those might be Sustainable Development Day, Biology Night, open lectures, public debates and charity actions.
University of Malta

The UM publishes the magazine THINK which issues articles about researchers’ work.28 The University radio station Campus FM is involving stakeholders in developing its program (see case study page 34 this brochure).29

Science in the City is an annual event, since 2012, at Malta’s Sciences and Arts Festival.30 It aims to provide a platform for citizens to engage with scientists, researchers, artists, and performers. The festival takes place in the streets of Valetta and different theatres. In 2021, the theme is “Sowing Seeds”, emphasizing how important knowledge, research, and the arts are in everyday life, and in active, responsible citizenship. Especially in a world that is undergoing monumental changes.

The Cottonera Community Centre31 was set up to act as a bridge between the communities in the inner harbor area and the University of Malta (see case study page 32 this brochure).

University of Split

UNIST does not have any specific person or office strictly dedicated to stakeholder dialogue. However, some of the offices have activities for the promotion of stakeholder dialogue and engagement.

The Technology Transfer Office is implementing the Enterprise Europe Network project. It is in constant communication with SMEs from the region and is working a lot on establishing and improving cooperation between the scientific and business community.

The Office for Research and Development is coordinating the management of scientific equipment and the implementation of a system of cooperation on collaborative research and projects with the economy and scientific research centers in Croatia and abroad.

The Science Office is engaged in activities like the Researchers Night and the Festival of Science.
Case Study: Plastic Pirates – Go Europe!

Kiel Science Factory / Kiel University and IPN - Leibniz Institute for Science and Mathematics Education

In a nutshell

“Plastic Pirates – Go Europe!” is an international citizen science campaign launched by the German, Portuguese and Slovenian ministries of education, science and research, which is taking place during their Trio Presidency of the Council of the European Union until 2022. The goal is to raise awareness of the importance of protecting our rivers as natural resources and to highlight the value added by international research collaboration.

Category: contribution
Involved stakeholders: Citizen science (school classes, NGOs, sport clubs)
Contact: Katrin Knickmeier (Kiel Science Factory at IPN), kknickmeier@uv.uni-kiel.de
https://www.plastic-pirates.eu
Start as national campaign
The activity started as a national campaign in Germany (Plastikpiraten, 2016-2020), scientifically coordinated by Kiel Science Factory, IPN - Leibniz Institute for Science and Mathematics Education, with funding from the German Federal Ministry of Education and Research (BMBF) and with support from the Berlin Ecologic Institute since 2018. The European ‘Plastic Pirates – Go Europe!’ campaign (2020-2022) is funded by BMBF. (Total funding: 192,000 Euro)

By collecting plastic waste and uploading data on the amount of waste found, school classes or extracurricular youth groups help conduct research on the pollution of rivers and lakes. Groups of young people run their own research projects, gaining an understanding of how science works while assisting scientists in determining the sources of plastic waste. Under the headline ‘rivers – where the sea starts’, they learn more about the global water transport systems while helping to protect the world’s seas.

Activities
Each participating group collects waste along a river and classifies items according to different categories of material, e.g. plastic food packaging, textiles, or cigarette butts.

The size of waste ranges from large plastic bottles (collected by hand) to microplastic particles (>1mm), which are collected with special sampling nets. Everything needs to be documented carefully, ranging from calculating the size of the study area to measuring the flow speed of the river. Photos are also taken before the data is finally uploaded for further examination by scientists. The microplastic is then sent to the Kiel Science Factory for further analysis.

Uniform experimental guidelines and working steps for all teams which participate ensure that the data collected is comparable throughout Europe, and will become progressively visible on an online map.32

Supporting material
Promotional material was prepared to support the educational activities: A project booklet for young participants describes step by step what to do, while additional teaching material enables teachers to include the project in their curriculum, and online videos explain how to sample micro plastic.

Outcome
Since 2016, more than 15,000 young people from around 850 schools and organisations (NCOs, sport clubs etc.) across Germany have participated in eight sampling campaigns. The results are available online33, and a first analysis was published in the journal ‘Environmental Pollution’34. Recently, a second analysis was published in the journal ‘Science of The Total Environment’.35

Challenges
After a successful start for the German project, the incoming new European partners faced short funding periods and delayed funding. Activities for finding additional funding sources are ongoing.

They also had low participation numbers for the sampling campaigns in Spring and Autumn 2020 due to the Corona crisis. This influenced the planned exchange with partner institutes in Slovenia and Portugal, but videoconferences helped to keep in touch. Finally, at the beginning of 2021, school classes from Portugal and Slovenia have uploaded their first data sets on the results map.

32https://www.plastic-pirates.eu/en/results/map
33https://www.plastic-pirates.eu/en/results/analysis
34https://doi.org/10.1016/j.envpol.2018.11.025
35https://doi.org/10.1016/j.scitotenv.2021.147849
Case Study:
EVOKED
Enhancing the value of climate-related data

Institute of Geography, Kiel University

Description of the project
In the context of a Living Lab, the organisers initiated a feedback loop which includes: 1) a co-design process between users, climate knowledge providers and translators; 2) the co-development of products such as visualisation tools and climate- and socio-economic change scenarios; 3) field trials to co-validate the operational products and their potential to initiate climate adaptation measures; 4) the re-assessment of risk and uncertainty to evaluate the user experience.

The project team implemented Living Labs in Norway, Sweden, the Netherlands and Germany at established case study areas. EVOKED at Kiel University, in cooperation with the city of Flensburg, focused on the vulnerable sectors of water management, disaster risk reduction and coastal management. The project is part of ERA4CS, an ERA-NET initiated by JPI Climate, and funded by RCN (NO), FORMAS (SE), NWO (NL), and BMBF (DE), with co-funding by European Union (Grant 690462) from 2017 to 2020.

Activities
As its major outcome, the project aimed to support the local adaptation process with the development of climate services. Adaptation decisions need to be based on local knowledge and small-scale data analysis. As a first step, the project team modelled future flood risk under varying sea-level rise scenarios. City administration representatives were involved in the process from the beginning in anticipation of high levels of acceptance of the development process of climate services.

Further stakeholder groups (State administration, infrastructure representatives, education sector, companies, NGOs, citizens) were involved in three main workshops in 2018 to 2020 – with two taking place in Flensburg and one held as a hybrid workshop – and also through interviews. The project team developed the workshop concepts and coordinated and implemented the events.

In the first workshop, the scientists presented first drafts of climate services in the form of maps and socioeconomic scenarios based on impact modelling analysis, which were then evaluated by the participants in a co-development and co-validation process. The second workshop dealt with adaptation to sea-level rise, with a variety of options discussed and prioritised by the stakeholders. The third workshop dealt with adaptation pathways. Potential pathways were presented to the stakeholders, which were further discussed in a public panel discussion involving representatives from local and State governments, as well as scientists. This also included re-assessment of previously developed products. All workshops were evaluated and the results will be published.

Outcome
The main outcomes of the project were: flood maps integrating potential sea-level rise based on the model results; socioeconomic scenarios of potential future developments and states of the city of Flensburg; a story map as an interactive online tool that informs about flood risk; generic sea-level rise and adaptation pathways considering future sea-level rise and flood risk.

All these climate services have been developed in an iterative process with the involvement of a variety of stakeholders. During the project, the process has been continually coordinated and communicated together with stakeholders.

Story Map Flensburg: http://meeresspiegelanstieg-in-flensburg.info
Challenges and solutions
Interdisciplinarity can be seen as both a challenge and an opportunity. With its broad interdisciplinary and transdisciplinary perspective, the project frame gave researchers the freedom to test methodological possibilities. Furthermore, the close cooperation with stakeholders was an extremely valuable part of these processes, contributing a bottom-up perspective to a project that had an original research scope of further enhancing the value of climate-related data. Furthermore, there could be limitations in finding study participants, as has been the case in similar projects. The project partners could also meet this potential challenge through collaboration with stakeholders. They used quantitative survey instruments in order to analyse individual attitudes and perspectives on flood risk and adaptation measures. The comparatively high willingness to participate in the surveys and large sample sizes in the case study may hint at the level of acceptance and awareness of the topic.

In a nutshell
The objective of EVOKED was to re-frame the risk and uncertainty associated with climate data into knowledge products which are understandable and useful for end-users concerned with risk mitigation and adaptation. This enhances the value of data the scientific community produces for end-users and for decisions related to adaptation planning. The project engaged end-users in a Living Labs approach and encouraged them to evoke their perceptions of risk and uncertainty, to identify which kind of data or presentation best supports action towards climate adaptation.

Category: contribution
Involved stakeholders: City administration, State administration, infrastructure representatives, education sector, companies, NGOs, citizens
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EVOKED: https://www.crslr.uni-kiel.de/en/projects/evoked.html
Case Study: Creative Marathons

Université de Bretagne Occidentale Brest

The Goal
Beyond trying to find technical solutions that are not yet offered by the market or not financially accessible for the beneficiary, the project is interested in developing services and products for people who are not eligible for a healthcare reimbursement or who have very specific needs. It focuses on creativity, creating a community around a technical aid project and finally the technical side by making prototypes.

The Format
The Creative Marathon is a two-day event, where everything will be done, both on a technical and human level, to advance a technical aid project. One day is dedicated to project understanding (issues, needs, objectives, problems, risks, opportunities), team building (project community, collective intelligence) and Marathon community (fabLab, open-source, sustainable goals). The second day is dedicated to the solution and project strategy after the marathon. Five teams have participated in the Marathon, collaborating on five projects. Two projects have already been validated: a cane adapted for longevity and a finger prosthesis. The other projects are currently subject to ongoing analysis (advanced prototyping).

Who participates?
The Creative Marathons are open to all and are organised with the support of NGOs, as well as other fabLabs across the world. They are broadly organised as follows: each group (composed of members with varied profiles) decide on what project they wish to work on. Once these projects are identified, researchers are invited to provide their expertise during conferences organised as part of the Marathon, without necessarily participating directly as members of a team.
Who can benefit?
Organising such an activity with various stakeholders allows them to confront their visions of a subject as societal challenges are introduced through a scientific perspective and vice-versa: researchers get to learn more about the local impact of a subject, while stakeholders from outside the university gain information to substantiate their representation of the subject.

Data collected in the field during these events may lead to the identification of previously unknown local challenges, thus allowing researchers to apply their skills to overcome them. It may also have a positive effect on the reputation of the university through openness to society, and improves general knowledge about scientific research itself as it allows researchers to show the practical value of their activities. Economic actors may also see the potential of the university, and how its students and researchers may satisfy their requirements. The university can thus gain valuable support.

Interaction between different groups helps to reduce bias, as connecting members of various groups and structures generates new practices, methods and partnerships that develop around initially distinct projects and structures. Participants engage fully with these scientific mediation projects: indeed, a prototype developed during a Marathon may have impact beyond what was originally anticipated. Individuals who were initially participants have become the organisers of other Creative Marathons, demonstrating the success of participative methods, which facilitates organisational innovation.

Challenges
When it came to communication, participant’s postures were not always in coherence with this type of event. Indeed, some acted as consumers and not as contributors, and thus did not necessarily pay sufficient attention to the importance of human cooperation. It is also important to specify what happens after the Creative Marathon, and to clearly mention what participants may gain from it, otherwise it may generate frustration. In this case, some participants expected to be further supported in the development of their project, which was not part of the plan.

Furthermore, it can be challenging to define an economic model which makes the Creative Marathons financially viable and lasting. Finally, the organisers found that the impact of the Creative Marathons was sometimes less than expected.

The organizers adjusted the communication in order to favour quality over quantity when it came to participants. This increased the quality of the projects, which in turn increased chances of finding other sources of funding and support for the next step in the development of said projects, thus providing participants with some of the support they were hoping for, albeit outside of the fabLab. In addition to dedicating more time to finding financial resources to fund the Creative Marathons, the organisers also try to organise them so that each has a specific theme, which allows to adapt the economic model to their specificities.

UBO is improving the method in order to ensure more impact from the next activities, and to obtain results. One solution is to highlight the long-term impact of these activities, as something that will be repeated over time. The creation of a network and agile model allows to diversify the organisational models and also reduce the cost of some Creative Marathons.

In a nutshell
The UBO Open Factory and the Ildys Foundation have been working together since 2019 to develop innovative services and products, and are particularly interested in the creation of technical aids. They are developing co-creation methods to involve the beneficiary, caregivers, health professionals and any other person interested in contributing, such as students as part of their training.

Category: Co-Design
Involved stakeholders: NGOs; open to everyone
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The project
Within the framework of the OSIRISC observatory of coastal risks in Brittany, standardised and simple field protocols for measuring hazards were developed jointly with coastal managers. This included measurement of water levels or distance between reference markers and the coastline. These protocols are applicable for all types of coasts - dunes, beaches, and cliffs.

CoastAppli makes these protocols available in the format of a smartphone application, in order to facilitate reliable, simple and rapid measurements in the field with common tools. A person can record measurements by simply using their fingers, their own body size or measuring tape, but may also use equipment such as a laser distance meter. A qualitative survey is provided with photographs. As a second goal, CoastAppli involves a large public in coastal hazard monitoring. The collected data will contribute to a better knowledge of the evolution of erosion and marine flooding hazards, in order to address the related coastal management challenges and raise awareness on coastal dynamics among the general public.

This app is co-funded by the ISblue (Interdisciplinary Graduate School for the Blue Planet), SEA-EU and Interreg AGEO projects.

Stakeholder engagement
The application is currently being tested for 6 months in the municipality of Guissény (Brittany, France) by grade-school students, coastal managers and citizens. This test phase will quantify the reliability of measurements and assess whether the application is understandable and meets the expectations of coastal managers by reducing the time they must dedicate to collecting data in the field. Therefore, the organisers will collect feedback on the quality, understanding and usefulness of data for end-users. The current phase of testing is essential to validate the application before future deployment, which is intended for Finistère and throughout Brittany – then France and beyond. The next step is to explore if citizen engagement is maintained over the medium term, meaning several years.

In a nutshell
CoastAppli is a citizen science smartphone application aiming to monitor and better understand coastal hazards (erosion and marine flooding), ultimately to support coastal management. CoastAppli is intended for all users, whether or not they have experience in coastal monitoring.

Category: co-creation with scientists and stakeholders
Involved stakeholders: public authorities (coastal managers), citizens, grade school (junior-high) students, local communities
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https://www.risques-cotiers.fr/connaitre-les-risques-cotiers/connaitre-les-aleas/coastappli
Cette application de sciences citoyennes a pour objectif de suivre et de mieux comprendre les aléas côtiers (érosion côtière et submersion marine) pour accompagner la gestion des littoraux.

Application produite par

OSIRISC
Iuem
WBO
CNRS
ISblue
LETI

Financée par

ISblue
Interreg

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Case Study: STIMEY - Science Technology Innovation Mathematics Engineering for the Young

University of Cádiz

In a nutshell

STIMEY aims to “bridge the gap between education, research & innovation in the commercial sphere, and improve communication between the teaching and research world, the business world and the wider economy”. STIMEY offers a Framework Programme for Research and Innovation. It is developed by five universities, a multimedia company, a radio broadcasting company and a gender sensitive organisation. The diverse geographical locations of the partners (Spain, Germany, Belarus, Greece, and Finland) provide an opportunity for STIMEY to engage with different social, economic and cultural backgrounds and approaches towards STEM teaching and learning.

Category: co-creation
Involved stakeholders: students, business, politicians, public authorities
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www.stimey.eu
The Goal
«STIMEY is creativity and motivation, and the will to learn».
The online Learning Environment (LE) hybrid platform acts as an entry point for teachers to use state-of-the-art tools to create captivating Missions (courses) for young people to explore, through a gamified environment in which they can share, like, personalise and comment on content. STEM-oriented businesses and laboratories are given direct contact with teachers through the STIMEY LE platform, to organise field trips and virtual discussions that enlighten young people through real-time experiences. Parents can also use the resource to get involved and discover new adventures, programmes and events, and to interact with their children and teachers at their convenience.

How does it work?
STIMEY has succeeded in developing and establishing a hybrid learning environment, STIMEY LE. The components and services of the learning environment were tested and piloted in the home country of each consortium partner with the collaboration of special target groups and key stakeholders (students, teachers, parents, enterprises and businesses). Based on feedback and co-design sessions, the design of the STIMEY LE has been tailored to meet the needs of end-users through a process of research and redesign.

STIMEY has also established a pedagogical framework and design principles for developing STEM learning environments. The framework is based on state-of-the-art theoretical and empirical understanding of efficient teaching and learning methods, including task and activity types, and the teaching and learning contents of STEM subjects. Besides the ways and contents of teaching and learning, attention is also paid to cross-curricular key competences for lifelong learning, and the use of ICT-enhanced teaching and learning for the targeted age groups. By offering principles, recommendations and guidelines, the framework's purpose is to support the general design of STEM-related learning environments.

Project results
The pedagogical framework and principles developed by STIMEY are now widely used, exploiting the full potential of social media for STEM education in both formal and informal contexts. In addition, pedagogical recommendations and guidelines have been created. The major target groups and stakeholders actively participated in the design of STIMEY LE as well as its development and implementation. The life-long revolutionary sustainable STEM-based open-source, social media, sharing, gaming, training, learning, personalized e-profile platform has been created. As part of the project, each participating student is issued with a record of their STEM experience, including diplomas certified and guaranteed by STIMEY, available through an electronic portfolio. Performance evaluation has been undertaken on the project and its reception by the target audience. The project also created socially-assistive robots, which were used as learning artefacts to encourage pupils' emotional engagement. They also provided a platform for efficient learning and motivation. Entrepreneurial tools have also been designed and developed to engage school students in the innovation process and stimulate their creative thinking. Additionally, a 24-hour radio broadcast has been created to inform, communicate and interact with young people aged 10-18 on issues related to STEM.

Challenges?
The most significant challenge was the lack of robots, which would have made it possible for all students to take their robots home and thus more deeply involve their families in the co-creation process. Additionally, more robots would have allowed for an even greater level of dissemination and exploitation of results. Creativity was the basis to find solutions to these challenges. A flexible approach was adopted, which focused not on an extensive use of robots, but on improving accuracy in their use, thus improving their contribution to the knowledge acquired by the students in their interactions.

https://www.stimey.eu

University of Cádiz

Need for new transport solutions
The project focuses on a very special area: the littoral zone of the Gulf of Cádiz and the Guadiana River. The physical features of the Gulf, which include the Doñana Natural Park – one of the most important wetlands in Europe – make the road connections much longer than the potential maritime connections. The maritime distance between Cadiz (Spain) and Faro (Portugal) is 156 kilometres shorter than the distance by road. In addition, the distance between Cadiz and Huelva by sea would be 105 kilometres shorter than by road.

Sea passenger transport has provided service in a traditional way in different areas of the Gulf of Cadiz and on both sides of the border between Spain and Portugal, but the connections are not fulfilling demand. Additionally, the regions of Cadiz and Huelva, two bordering provinces with no direct road contact and separated by the Guadalquivir River and the National Park, have called for a direct route between their capitals for decades.

Society demands that transport systems are more respectful to the environment, more efficient and socially sustainable. The ESPOmar project, as a working hypothesis, considered three possible navigation routes to connect the three bordering regions of Algarve, Huelva and Cadiz. Different alternatives such as ports, direct and multimodal transport for each connection are also being analysed.

Shipping routes
The maritime transport network discussed would include three maritime lines, where the longest distance to navigate does not exceed 160 km. In order to determine the best ports, passenger capacity, number and service speed of ships, 10 maritime lines and 8 ports are being analysed and compared in terms of both environmental and economic impact. Determinants for successful route operation are:

- Good layout (peculiarity of each route or area, surveys, stakeholders, etc.);
- Government assistance (initial period);
- Vessels used (sustainable, comfortable, fast, etc.);
- Port infrastructure and interfaces (standardisation, efficiency, facilities, etc.);
- Promotion (routes, service, area, culture, etc.).

The vessel design
The main handicap posed by the design of the vessels is direct competition with already established land transport vehicles (train, coaches and cars). The starting point is determined by transit times between populations. One of the main challenges is adaptation of the vessels to demand characteristics such as the number of passengers along the route and the total service times (including boarding and disembarkation of the passage). On the other hand, conditions of navigation in open waters must also be kept in mind, which include the sea state, maximum wave height, balance periods, vibrations, noises, etc. The main axis of the design would be defined by the environmental impact of the vessels, while a second axis of reference would be formed by the particular characteristics that define the comfort and safety of the passengers.
The economic study
The economic block of the project contemplates a detailed study of the economic feasibility of exploitation of the proposed maritime lines, along with the construction costs of vessels, personnel cost, operating costs, industrial benefit, and determining the ticket price. In the economic impact section, the jobs directly and indirectly created by the activity will be evaluated in depth, among other factors such as the economic impact derived from communications; the economic impact derived from the tourist attraction; and the social benefits of transport.

ESPOmar is a transport system that supposes a tourist attraction through which to take advantage of the natural and cultural potential of the area, thus contributing to greater and more sustainable economic development. The project creates an integrated passenger transport network, which would provide various benefits to the population, such as reducing traffic congestion, reducing costs and saving time for travellers on these routes, along with benefits for the natural environment.

In a nutshell
ESPOmar establishes a network to collaborate on the design of a sustainable and cross-border maritime-fluvial transport system in the Gulf of Cadiz. This will help to improve cross-border connectivity between Spain and Portugal, the management of natural resources, and the conservation, protection, promotion and development of natural and cultural heritage. It will also contribute to increase the offering to tourists, and therefore to the economic and sustainable growth of the fluvial maritime-coastal area between Cadiz and Faro. The maritime connections could reduce the land distance between Cadiz and Faro by 156 km and between Cadiz and Huelva by 105 km, which could lead to a significant reduction in the emission of polluting gases.

Category: contribution
Involved stakeholders: business, public authorities, politicians, professional groups, citizens and non-governmental organizations.
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Case Study: Open Economic Lectures

University of Gdańsk

Open Economic Lectures series
Effective cooperation between academia and society is very important to build trust in economic decisions and to empower people to be more confident in their own economic choices and a better understanding of the financial world and economic relations.

Open Economic Lectures are conducted by experienced academic lecturers who often combine their scientific and didactic work at the Faculty of Economics with economic practice and involvement in various institutions and events related to the promotion of economic knowledge. The project effects were disseminated due to cooperation with the Centre of Teachers’ Education in Gdańsk, the network of schools throughout the Pomeranian voivodship. The project was supported by the Faculty of Economics, University of Gdańsk. The first edition was in February 2019, the following editions were organised in 2020 and 2021, and the plans go further ahead to 2022.
The project brought together students, teachers, graduates, young and elderly people, whose involvement was important in designing the course. The original concept was related to the possibility of knowledge sharing by lecturers from the Faculty of Economics in the field of specific economic problems occurring in various subject competitions. For this purpose, substantive cooperation has been established with the representatives of the Polish Economic Society (the project's substantive manager is among the members of the PES). Gradually, the project expanded and gained popularity among different age groups. The choice of topics is influenced by participants in the lectures. After each lecture cycle, surveys are conducted on the preferred topics for the next edition.

Multiple benefits
The lectures turned out to be a great opportunity for high school teachers who wanted to improve their competencies in teaching entrepreneurship. Young people suggested that the Open Economic Lectures can be a source of inspiration in searching for their future career path, based on reliable knowledge about the world around us and the socio-economic system in which we live. Participants are now more aware of economic relations and the causes of phenomena in the surrounding environment. For example, topics such as the anatomy of inflation, interventionism in economic policy after the crisis, currency volatility or the problems of interpreting the meaning of GDP were discussed. Climate and migration issues were reflected as consistent global problems. Participants also learned about the game theory, investment and savings and the effects of volatility of demand, supply, and prices in various market conditions.

Unexpected push increases participants
During the pandemic, lectures naturally began to take place remotely. Accessibility without barriers related to location or transport turned out to be the reason for the great popularity of the lectures. While approximately 100 people took part in in-person lectures in 2019-2020, the number of regular participants in online lectures exceeded 550 in the period from October 2020-May 2021.

Disseminating the Open Economic Lectures involved sending graphic materials such as posters and detailed programs to institutions and schools. Information on the Open Economic Lectures is also disclosed regularly on the website of the Faculty of Economics. The fact which may prove the supra-local scope of the project is that the poster of the second edition of the project was included in a publication prepared by the Prolog publishing house from Krakow in southern Poland. Its use was related to the preparation of a Polish language textbook for foreigners. This book is addressed to foreigners who are learning Polish as a foreign language at various language levels. Planned title: „I speak Polish. Exercises for foreigners”, with a circulation of 2000 copies. What an unexpected promotion!

In a nutshell
Since 2019, regular public lectures with economists are intended to deepen knowledge in the field of economics and various problems that are described and solved in the framework of economic sciences. Lectures focus on macro- and microeconomic issues, economic policy, financial markets, corporate finance, entrepreneurship, and management, as well as general socio-economic problems of the contemporary world. A wider dissemination results from cooperation with the Centre of Teachers’ Education in Gdańsk and the network of high schools throughout the Pomeranian voivodship with more than 50 schools.

Category: collaboration
Involved stakeholders: Centre of Teachers’ Education in Gdańsk, Polish Economic Society Branch Gdańsk, citizens, students, school classes, teachers
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Case Study:
The Gdańsk Shakespeare Theatre as International, National and Local Art Incubator

University of Gdańsk

Staging Shakespeare
The partnership of the University of Gdańsk and the Gdańsk Shakespeare Theatre influences the programme of the annual Gdańsk Shakespeare Festival, an international meeting platform for artists and audiences, aimed at popularising Shakespeare and increasing the tourist attractiveness of the region. The rich body of festival productions, whose choice largely reflects our research interests, is subjected to scholarly reflection and discussed in our publications. The academic study of Shakespeare at the UG was also a significant source of inspiration for the GST’s co-productions with the Gdańsk Wybrzeże Theatre (Shakespeare in Love; As You Like It; Merry Wives of Windsor), leading up to the GST’s first independent production, The Tempest (2021).

Bridging the Gap Between Theory and Practice
The strong conviction that theatre can encourage dialogue between various art disciplines, social groups and cultures further the GST’s cooperation with national and foreign artists, cultural institutions and local government, as well as stimulating its numerous international, national and local projects in the fields of cultural, artistic and social education. Our research both influences and is influenced by the GST’s artistic activities in urban space, often involving the local community, such as The Actors Are Come Hither (dir. A. Wajda, 2009), when almost 100 actors performed scenes from Shakespeare’s plays on the perrons on the Gdańsk burgher houses, In Love With Shakespeare: In(ter)ventions in the City (2017), or art workshops resulting in the production of Shakespearean murals in the Gdańsk city space. Close ties between the UG and the GST also show in the field of academic teaching: the GST staff run many courses for our Arts Management students, who view the GST as a highly desired internship option. Students are invited to co-create various artistic events organised by the GST (e.g., the Shakespeare 400 happening, celebrating the quatercentenary of the Bard’s death); they also help coordinate the Theatres of Europe and the World festival cycle.

A Wealth of Activities
Workshops: Intended for specific groups (e.g., schoolchildren, teachers, seniors, or people living with disabilities), the GST’s workshops, some of them conducted by UG doctoral students, familiarise the participants with the workings of theatre, enhance creativity and teamwork skills, and encourage the use of art to overcome generation gaps and intercultural barriers (Chemistry of Theatre, Laboratory of Competence, Theatre and Education, Theatre Solitaire, Summer Shakespeare Academy). The project Otherness-Togetherness-Aesthetics aims to implement the aesthetic methods developed on the basis of Shakespearean drama in teaching practice at Polish universities (UG, UW, AMU, WSE) with the support of the Norwegian Universitetet i Sørøst-Norge.

Lectures: The GST hosts numerous lectures introducing the general public to the secrets of theatre and art, some of them authored by UG academics and doctoral students (Jerzy Limon’s Shakespeare: 7 Deadly Sins lecture series, lectures on contemporary art or ones accompanying the Shakespeare Cinema project).

International and National Cooperation: One of the GST’s international projects was Shaking the Walls (2019-20), a series of meetings of theatre theorists and practitioners, involving partners from the UK, Ireland, Czech Republic and Iceland. The aim of the project was artistic interpretation of physical and metaphorical partitions between individuals, social groups and nations. As part of the project, Gdańsk theatre professionals joined with the UG students to create a multimedia performance De-Walling Freedom on the walls of the GST building.

The GST is also a member of the European Shakespeare Festivals Network, one of whose founders was Professor Limon. The founding motto of the ESFN, “Shakespeare as a bridge,” results directly from the profile of our research at the UG, where theatre is viewed as an inherently inclusive medium. The ESFN’s activities are thus informed by our belief that Shakespeare’s oeuvre can help redefine the common cultural heritage of the nascent New Europe.
Artistic Ties
The UG-based research on the intersections of art and theatre has also inspired the GST’s cooperation with representatives of other art disciplines. In accordance with its role as an art incubator, the GST enables novice artists to display their work (e.g., 10 Installations for the 10th Anniversary of the GST by students of the Academy of Fine Arts in Gdańsk).

Challenges
One of the greatest challenges we faced was how to meet the needs arising from the condition of art in the lockdown. The GST responded with the SzekspirOn//line platform, offering lectures on the Bard, records of theatrical/digital experiments by young artists, and scenario outlines of various workshops. Mobilising academics, artists and educators, the platform is a perfect example of how various groups of collaborators can be engaged to disseminate knowledge about Shakespeare in a form appealing to young people; the UG students can use the platform’s contents in their academic activities.

In a nutshell
The research on William Shakespeare and theatre theory, history and practice conducted at the University of Gdańsk by Professor Jerzy Limon resulted in the foundation of the Gdańsk Shakespeare Theatre (GST) in 2008, with Professor Limon as the Director. Since then, our scholarly activities at the UG have helped shape the GST’s artistic offering, educational programmes and international cooperation, and our academics and students actively participate in a plethora of initiatives taken up by the GST.

Category: contribution, collaboration, co-creation
Involved stakeholders: The Gdańsk Shakespeare Theatre, European Shakespeare Festivals Network, NGOs, theatregoers, theatrical ensembles, artists, students, educators, citizens of Gdańsk
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https://teatrszekspirowski.pl
In a nutshell

The University of Malta Cottonera Resource Centre (CRC) is a multidisciplinary, community-based lifelong learning and social support centre, which adopts a systematic and multi-targeted approach to promote lifelong education in the Cottonera and Kalkara area, a socially deprived area in the south of Malta. The main objective of the CRC is to help facilitate and develop inter-generational involvement in lifelong learning involving families, peer groups, the community, schools and the university. Secondary objectives include helping to promote leadership, self-awareness and active citizenship, while highlighting the tangible and intangible heritage in the area.

Category: contribution, collaboration, co-creation

Involved stakeholders: students, service providers, NGOs, policy makers, different entities within the University of Malta, state and private entities

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How it began

The Centre was set up to explore the possibility of developing socially and culturally sensitive community engagement in 2012. Before opening, a needs assessment survey was carried out in 2009-2010, and interviews were conducted with stakeholders living and service providers working with people in the area. In the first months when the Centre was in operation, a tent was set up in the main squares of the Three Cities (Senglea, Bormla and Birgu) and academics organised activities to find out what different groups of people expected of the Centre. This dialogue proved crucial on a number of bases – it introduced the Centre to the different communities and underlined the fact that a range of activities and services needed to be provided to address the needs of the various social groups. Other outreach activities included concerts, plays, film screening sessions, and lectures on topics which were of interest to the different groups living in the area. The most successful were the lectures held on famous personalities as well as those on the tangible and intangible heritage found in the area, followed by film screening sessions. This attracted the adults, and once they were there the organisers started a dialogue on the best way forward to help them and the younger generation.
Activities
From the outset, the Centre was in constant communication with the principal of St Margaret’s College as well as the heads of the different schools in the area to design services which would help students become more interested in furthering their education beyond the compulsory years. This ongoing dialogue with the schools in the area led the CRC to create revision classes to help prepare 14 to 16 year old students for the 16+ examinations while providing them with informal vocational counselling so that they would feel more prepared to move on to post-secondary education, and eventually university.

The initial revision classes and talks were conducted by volunteers. The University of Malta started allocating the Centre a budget for the revision classes and summer school in 2015. This budget was augmented with income derived from activities organised by the Centre and educational material donated by private companies. Funds also derive from Xjenzamania and other activities held at the Centre. Xjenzamania consists of a summer school for students aged between 8 to 12, as well as short courses designed to promote STEAM related skills among young people. The objective behind the STEAM-related courses and projects is not limited to promoting STEAM among community residents. It helps attract people from all around Malta, ensuring that local students have the opportunity to mix with those from outside the area, therefore helping shatter pejorative connotations attached to people deriving from Cottonera.

The administrative board of the CRC realised at an early stage that it could not help promote further education in the area without addressing the educational needs of adults living there as well. To do this the organisers sought the help of the Lifelong Learning Directorate, which started providing educational programmes at the Centre in 2014. For the older generation, a branch of the University of the Third Age was established in 2013. Apart from these, a number of courses or talks are designed every year for adults after consultation with the leaders or service providers working with different groups living within and surrounding the area. For example, a course on Easter related traditions - which are popular in the Cottonera area - was created and a publication ensued from this endeavour. A number of lectures are also held on social issues which affect the area, including sexually transmitted diseases, budgeting, rent, etc., depending on demand. These talks, which are held in the form of a forum – where the speaker introduces the sessions and a discussion ensues – have on a number of occasions made academics aware of which issues are affecting different vulnerable groups within the area. Academics then work with NGOs in the area to raise this issue with policy makers and push for social justice.

The constant dialogue between the Centre, service providers, and stakeholders living and working in the area helps the Centre be more responsive to the needs of individuals, social groups and communities. When the Centre cannot do anything on its own to solve an issue, it resorts to academic experts. For example, the Legal Clinic and Counselling sessions started operating at the Centre in 2014 when demand for these services were flagged by service providers. These services provide university students with clients, while clients have access to free legal advice and counselling. The outreach initiatives in the community also help provide academics and university students with opportunities to develop socially and culturally sensitive academic, research, teaching and community projects.

Award-winning
In 2016 the CRC was awarded the EPALE award for ‘Outstanding community learning initiative’.

Challenges
Constant dialogue and cross-agency cooperation are essential when it comes to facilitating access and retention of non-traditional learners in lifelong education, and to ensure their wellbeing to enable them to do so. All services have to be constantly promoted using various means, including traditional media, social media, NGOs, service providers, parishes, stakeholders, and community outreach events. Word of mouth is crucial when a new service is made available. This outreach has to be undertaken by people who are sensitive to the people of the area and are familiar with how they think. The efficacy of such outreach of course depends on the personnel at hand and their level of motivation when it comes to engaging the population in question. Sometimes it is difficult to reach the people who would benefit most from a service since this population might be hard to contact and/or do not trust people in authority. This is where the help of NGOs and religious leaders can prove useful. Working with NGOs, service providers and community stakeholders in the area is crucial for the success of this project.
Case Study: Democratizing Political Science - From radio to publication

University of Malta

Goal of the project
The project supports the democratisation of knowledge and learning in political science by reaching out to various stakeholders on- and off-campus. It adopts a transdisciplinary approach to restore both the idealpolitik and realpolitik and goes beyond the academic community since it interacts with a broader audience. The project induces fun into learning – infotainment – and builds bridges with on and off campus stakeholders for further cross collaboration in the future.

Method
The project was segmented into two phases: (i) the production of radio programmes on Campus FM, and (ii) the production of a book. The series was co-produced both by Dr Mario Thomas Vassallo as an academic specialising in Public Policy and Governance, as well as the Institute for Public Services, which is the Training and Research entity of the Government of Malta. Hence, both the University of Malta and the Public Administration collaborated in this joint venture to promote the principles and values of Good and Effective Governance, as well as discuss the relationship between economic development and political stewardship.

The modus operandi of the radio phase was as follows: Two radio series in 2019 and 2020 aired on the university radio station. Each series comprised 17 programs, each spread over 58 minutes. The first series featured the relationship between the Economy and Politics, while the second series treated the Past, Present and Future of the Public Service in Malta. Overall, 33 hours of air-time were produced with a high degree of investment of time, research and networking. Thirty guests were invited to the recording studios, including academics, practitioners, Church representatives and civil society groups.

The second phase of the project encapsulates the book production by the Malta University Publishing Ltd. The modus operandi of the book phase was as follows: after transcribing radio recordings, it needed editing, rewriting and inclusion of recommendations for further reading. The book is written in the Maltese language, thus reaching out to non-academic readers and democratising knowledge. The various chapters cover a wide range of topics regarding Politics and Governance, Politics and Religion, Politics and the Economy, Politics and the Public Administration. The book launch was held in 2022, and was attended by the President of Malta.

Partners
Several stakeholders were on-campus partners, including the Faculty of Economics, Management and Accountancy, Faculty for Social Wellbeing, International Institute of Baroque Studies, Institute of European Studies, Islands and Small States Institute, Campus FM and Malta University Publishing Ltd.

Others were off-campus partners, including:
- The Office of the President of the Republic of Malta
- Head of the Public Service
- Government Ministries and Departments
- The Institute of Public Services
- The Foundation for Social Welfare Services
- Civil society groups
- The Catholic Archbishop
- The Muslim Imam

Outcomes
Two radio series, entitled Il-Politika u l-Ekonomija (Politics and the Economy) and Is-Servizz Pubbliku: Ilbieraħ, Illum u Għada (The Public Service: Yesterday, Today and Tomorrow) are available as webcasts and stored on the Open Access Repository of the University Library. The Programs are available via the portal of the University’s radio station.xx

The book Kollox Politika: Governanza, Reliġjon, Ekonomija u Amministrazzjoni Pubblika (Everything is Politics: Governance, Religion, Economy and Public Administration) was produced and published in December 2021.

Department of Public Policy website: https://www.um.edu.mt/fema/publicpolicy
Campus FM website: https://www.um.edu.mt/services/campusfm
Malta University Publishing website: https://muhc.com.mt/malta-university-publishing
xxRadio Series website: https://www.um.edu.mt/services/campusfm/ondemand/thearchivesl
Challenges and solutions
The academic inspiring this innovative stakeholder engagement project needs to be self-inspired and adopt a Do-It-Yourself approach. Institutional support does exist but marshalling the project from inception to outcomes depends on self-motivation. One key factor for success is constant communication with the various stakeholders and a commitment to recognise and thank them for their input. The academic pioneering this project needs to believe in his/her work and, above all, place such an engagement within the bigger picture which comprises the commitment of the University of Malta to be of service to the national economy and Maltese society.

In a nutshell
Quality radio programmes were produced via the University of Malta’s radio station, Campus FM. Under the title “The Public Service: Yesterday, Today and Tomorrow” (Servizz Pubbliku: ilbieraħ, illum u ghada) different themes related to the Maltese Public Administration were discussed with the participation of academics and practitioners. Based on these programmes, a cross-disciplinary book was eventually published with an appeal not only to researchers and students but also to the general public.

Category: Collaboration
Involved stakeholders: academics from different faculties, national public administration, Catholic and Muslim churches, civil society groups and the general public.
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Case Study: 
Center for Service Learning

Faculty of Economics, Business and Tourism, 
University of Split

Activities
The project was based on connecting the faculty with Civil Society Organisations (CSOs). The involvement of students in the service learning program helps them to acquire practical knowledge and skills to solve specific social problems. The Center offers volunteering opportunities with CSOs, so students can find out about opportunities to work in these organisations. The cooperation with CSOs supports the development of projects involving social innovation.

At the beginning of the project, a training programme was organised for the faculty and CSOs that were members in the project. The training was held by two professors from the US university Penn State Berks — Belen Rodriguez-Mourelo and Donna Chambers. Penn State Berks faculty have a great deal of experience with service learning, which integrates relevant and meaningful community service with enhanced academic learning, purposeful civic learning and reflection.
During their two-week-long residency, Chambers and Rodríguez-Mourelo shared expertise on the many different aspects of service learning, including best practices, risk management, and internal culture, as well as guiding the establishment of relationships with community organisations. They also facilitated interactive exercises where the group tackled real-world opportunities. During this workshop, the programme was created including the documentation for the implementation of this programme as a course.

The first year was conducted with just the project partners: five local NGOs and five professor-mentors. In this first year there were 20 students through course student practice which was most suitable for running the testing pilot programme. Students worked in teams with the mentors from both the faculty and CSOs. At the end of the first-year programme, the faculty organised student presentations on the projects they were working on with their NGOs. This was included as part of the course in order to better disseminate the project, and actually most of the NGOs that attended these events eventually participated in the project the following year.

For the next academic year, the course has been officially added as a part of the study programme. The service learning course has become an elective course at the Faculty of Economics, Business and Tourism, in which students can now enrol. The course is part of the summer semester of each academic year and is performed for a total duration of 180 hours. In the second year, 42 additional students joined the programme.

What worked well?
Some of the project activities were: Campaigns for international autism day, a study on how to make the city more accessible for residents and tourists living with disabilities, and different projects around the sustainability of NGOs.

Hack4Split, a social hackathon is one of the most recognised activities from this project. This hackathon was designed to find social solutions for the wellbeing of the local community. It is a two-day competition with a goal to solve social problems defined by the NGOs, and it connects individuals (particularly students) with the needs of the community. Some of the projects developed during Hack4Split were:

- Speech therapy game for children
- Creation of the database for the homeless
- A model of horse-riding ramp for children with disabilities
- Interaction map of Split showing all social and health services
- Databases developed for people with vision impairments
- Interactive floor games for children with disabilities
- Mental map app for kids with dyslexia

Through the project, a portal for student volunteering opportunities, internships and other means of involvement in CSOs was also created. NGOs can post an ad or they can contact the Center and with this two target groups are matched: students and NGOs.

Challenges and solutions
Unfortunately, the summer semester in 2020 was disrupted by the pandemic and all of the planned in-person activities were cancelled. Mentors adapted the course and changed all of the materials in order to enable them for online usage. This resulted in a total of 20 projects which were completed as a part of the course. These are some of the examples of activities that were done online:

- Campaigns for culinary children workshops,
- Creation and design of educational materials on how to help a blind person
- Activities for autism awareness month
- Hack4Split was also organised online in the second year of the project, in the form of Microsoft Teams platform.

In a nutshell
The project strengthened the cooperation between civil society organisations (CSOs) and the Faculty of Economics, Business and Tourism, University of Split in jointly solving social problems in the community and building young people as active and socially aware citizens. Target groups that the Center works with are students, faculty members and civil society organisations. The project duration was from September 2018 until September 2020.

Category: co-creation
Involved stakeholders: Heart – Association of persons with cerebral palsy; Our Children – Association of parents of children with special needs; Most – Association which works with homeless people, young people with behavioural problems and in general fights against poverty; Toms – Association of the physically disabled people.
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http://www.dku.efst.hr
Case Study: Social Sciences and Humanities in intersectoral OUTreach for better education and sustainable innovations – SHOUT

University of Split

Goals of the project
The project runs three innovative educational programmes (educational materials and webinars) in order to improve their knowledge, skills and competences in communication and responsiveness to SDGs challenges, entrepreneurship, sustainable innovation and research-oriented mind-set. A replicable research mission-based traineeship scheme with problem-focused learning approach is developed where students, professors, and practitioners will work together on joint solutions in the challenges of SDGs (i.e. through the professor-student-practitioner research traineeship schemes). SHOUT creates a self-sustaining SSH research and innovation hub where HEIs, SMEs and NGOs will be able to exchange knowledge, facilitate further cooperation and strengthen joint sustainable innovation solutions on the European level. This will improve visibility of SSH research and strengthen its impact on broader socio-economic environment, especially in the field of sustainable transformations/innovations. In addition, this will strengthen collaboration among different sectors, improve networking channels and bridge the gap between research and practice.

How it works
SHOUT will create new opportunities for Social Sciences and Humanities where students, recently graduates young professionals and researchers will work together with practitioners from SMEs and NGOs to develop solutions and generate value for civil society, public policy, business and service industries.

Partners: Vilnius University, Lithuania • LUM University, Italy • INOVA+, Portugal • The Croatian Institute for Corporate Social Responsibility (IDOP), Croatia • Oxfam Italia, Italy • KMOP – Social Action and Innovation Centre, Greece • Chouette Films, United Kingdom • Centre for Social Innovation (CSI), Cyprus • Global Impact Grid GbR, Germany • MB Homo Eminens (Xwhy), Lithuania • University of Split, Croatia • University of Ljubljana, Slovenia • I-maginary, Italy

SHOUT carried out national desk research and collected interviews and questionnaires (HEIs; SME and NGOs). The initial research was based on analysis of the relevant legislation, policy, and practices across eight European countries. This helped to provide an overview of statistical data concerning the SSH in the HEIs. Ultimately, the project has identified the needs of students and professors, job market trends and offered a description of the state of art: SSH Skills Ecosystem in relation to SDG-related jobs.

The organisers conducted research on the needs of stakeholders in the preparation and development of sustainable innovations. Based on the results, they prepare educational programs for all stakeholders. The project also plans for stakeholders (NGOs and SMEs) to include students of social sciences and humanities in their short-term business (one month) in order to make them aware, based on experience, of everything they need to improve their business and how their experts from the social sciences and humanities can help.

What worked well
In the initial phase of the research, the organisers collected valuable information based on the contributions of stakeholders (HEIs; SME and NGOs) through surveys and interviews. They have conducted 570 surveys and 48 interviews, presented by each of the settings under analysis (HEIs; SME and NGOs) and including an overall perspective. Based on the conducted research, they have created educational programs for all stakeholders (HEIs, NGOs, and SMEs) with the aim of preparing them for further cooperation in achieving common goals. They also have collected and described 10 practices focusing on relevant examples of SSH students, researchers and graduates involvement in sustainable innovations/transformation in industry or third sector settings. For each good practice, they conducted one interview to collect qualitative data, and have presented their experiences.
Challenges and Solutions
The COVID-19 pandemic has slowed project activities, especially with external partners. The most important part of the project is still waiting - mission-based traineeship programme model. The programme aims to match SSH students, SSH professionals and industry/third sector representatives. SSH students will be hosted in participating organisations, their networks and other mapped SMEs and NGOs, where they will be working on research projects around identified challenges by the host organisations.

The plan to organise local knowledge-sharing events had to be changed due to COVID-19, so the events were held online. For the Mission-Based Traineeship Programme model the organisers are still waiting for a better situation with COVID-19. They hope that in the last year of the project (2022), SHOUT is going to be able to realise that model because it is the most important part of the project.

In a nutshell
The SHOUT consortium aims to strengthen Social Sciences and Humanities students and professionals innovation capacity and transformational role of HEIs, SMEs and NGOs when dealing with complex problems presented in the Sustainable Development Goals. The aim is to develop innovative sustainable solutions through inter-sectoral cooperation models and enhanced sharing of knowledge between different stakeholders. This will consequently increase the employability of SSH graduates and researchers.

Category: contribution, collaboration
Involved stakeholders: Higher Education Institutions HEIs (teachers, students); Small and Medium Enterprises SME (managers/researchers/innovation managers/HR managers); Non-Governmental Organisations NGOs (managers/representatives)
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https://shout-project.eu
How do European universities engage citizens, non-governmental organisations, public authorities and other societal actors in their research? This brochure, developed within the framework of the reSEArch-EU project, as part of SEA-EU the European University alliance gives some answers to this question. These rely on the experiences and the practices of the six universities Brest, Cádiz, Gdańsk, Kiel, Malta and Split. The compilation furthermore points out the common understanding that involvement of stakeholders may not be just an additional burden for already overworked scientists, but brings benefit to both, to researchers and actors outside academia. To underline this approach, the 12 case studies of stakeholder involvement of the participating universities show a broad variety.

https://researcheu.sea-eu.org

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