



reSEARCH-EU



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INVOLVING STAKEHOLDERS

A GOOD PRACTICE GUIDE
FOR TRANSDISCIPLINARITY



reSEArch-EU



Contents

The consortium

The brochure presents the outcome of several pilot activities undertaken by six universities involved in the project reSEArch-EU: University of Cádiz (Spain), University of Western Brittany (UBO) in Brest (France), University of Kiel (Germany), University of Gdańsk (Poland), University of Split (Croatia) and University of Malta (Malta).

The European university alliance "Universities of the Seas" (SEA-EU) launched in 2019 with six universities, now counts nine coastal universities, sharing a common vision on 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 international dynamic of their research ecosystem, the six universities have implemented the project reSEArch-EU.¹

The work of reSEArch-EU is funded by the European Commission Horizon 2020 call "Science with and for Society" (SwafS), which aims to build effective cooperation between science and society. The cornerstone of SwafS is responsible research and innovation targeting 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 with society. The SwafS Work Programme 2018-2020 was developed to reflect and support the evolution of science and society with an increased emphasis on their interplay at national and EU levels. There is an increasing 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 alliance that can openly connect knowledge, expertise, and resources from different units and research areas, across different countries, in a cost-effective manner 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 research and innovation leading the way.



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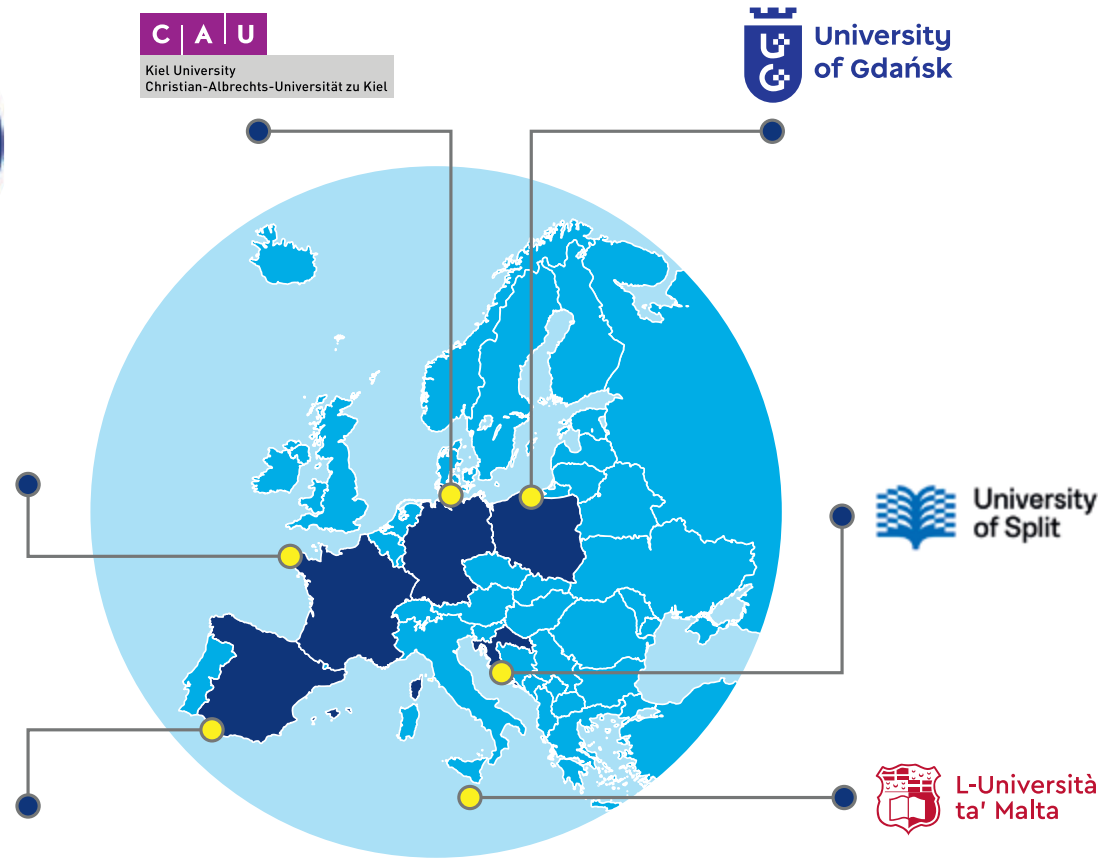
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¹ reSEArch-EU = reinforce Sustainable Actions, resilience, cooperation and harmonisation across and by the SEA-EU Alliance
² Horizon 2020 Work Programme 2018-2020: 16. Science with and for Society. European Commission Decision C(2019)4575 of 2 July 2019. (p.16)
³ Science, research and innovation performance of the EU 2020' (SRIP 2020)
<https://ec.europa.eu/assets/rtd/srip/index.html>;
https://ec.europa.eu/info/sites/default/files/srip/2020/ec_rtd_srip-2020-report.pdf



Introduction

Why a good practice guide for transdisciplinarity and stakeholder engagement?

Involving different actors from society in scientific projects is beneficial for both researchers and stakeholders. Such stakeholders can be citizens, non-governmental organizations or public authorities. Stakeholders can contribute their knowledge to research, scientists can better implement their research, and working together to jointly propose solutions to societal problems and issues. This participatory approach in science is called transdisciplinary research, based on the principle of co-creation. This publication "Involving stakeholders: A good practice guide for transdisciplinarity" aims to offer guidance for scientists, students and universities to carry out transdisciplinary projects, where academia and societal stakeholders work together:

- The reader will learn about the requirements for a successful stakeholder cooperation, and become aware of potential pitfalls,
- Scientists will find recommendations for the engagement of stakeholders,
- Universities will find recommendations for the support of scientists in their stakeholder activities.

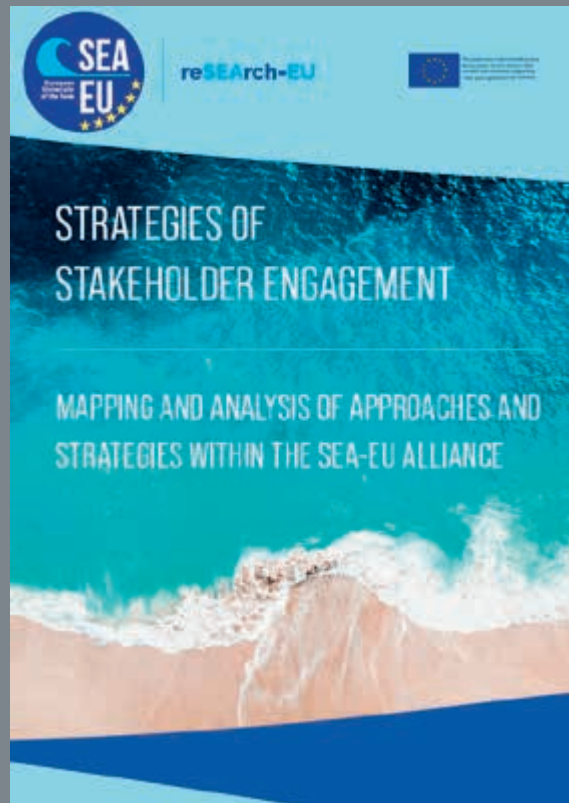
These recommendations are the result of the reSEArch-EU project, a three-year collaboration between researchers from six European universities. They discussed with each other, tested new things, reflected, planned and carried out joint activities. The activities are described in detail in the following pages.

- The universities of Western Brittany (UBO) and Kiel organized two „Transformation labs“ (see page 10) describing the interaction between researchers and civil society. The aim was to develop methods to improve the resilience of coastal areas.
- The University of Gdańsk established a „Science Shop“ (see page 12) describing a network to carry out scientific research on behalf of citizens and local civil society.
- The universities of Kiel and Gdańsk jointly organized the

- „Kiel-Gdańsk Market Place“ (see page 14) describing an event that brings together science and business on a topic of common interest, namely smart shipping in this case.
- The university of Cádiz set up a „Citizen Science“ project (see page 16) where students were asked to produce short videos on social challenges in collaboration with citizens.
- The University of Split organized a hackathon-like event „SEA-EU Makeathon“ (see page 18) for students to apply the UN Sustainable Development Goals to their campus.

With this brochure, we aim to provide an easily accessible and clear guide that can support your own projects. On the one hand, the publication marks the end of a successful project. On the other hand, it is not limited to a summary of the results of the above mentioned projects.

It brings together the entire professional experience of many scientists from the reSEArch-EU consortium who have been working with participatory methods for many years. They know the value as well as the challenges when working with different societal stakeholder groups. We hope to give you good inspiration and motivation to start your own participatory projects. You will find support and new insights as you begin to involve society in your work.



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Basic concepts of stakeholder involvement

Compiling the reSEARCH-EU experience

In this chapter we describe the genesis of this guide, define the key terms and lay the foundations for understanding the recommendations given at the end of this publication. In several workshops held in 2021, the reSEARCH-EU project partners developed a common understanding of why it is important to involve stakeholders in their own work. This showed the importance of working on the same terms. Furthermore,

the conditions and prerequisites for transdisciplinary work at the individual universities were examined. Last but not least, 37 case studies from our own work were collected, showing a very extensive experience with a variety of transdisciplinary and participatory methods. The results were published in 2021 in the reSEARCH-EU brochure entitled „Strategies of Stakeholder Engagement“.

Joint definition of the term „stakeholder“

A stakeholder has been defined as an individual or a group that is either influenced by an activity (or a scientific project) or can influence an activity (or a scientific project). We focus on non-commercial activities and stakeholders outside academia, such as individual citizens, non-governmental organizations, local communities or public authorities.

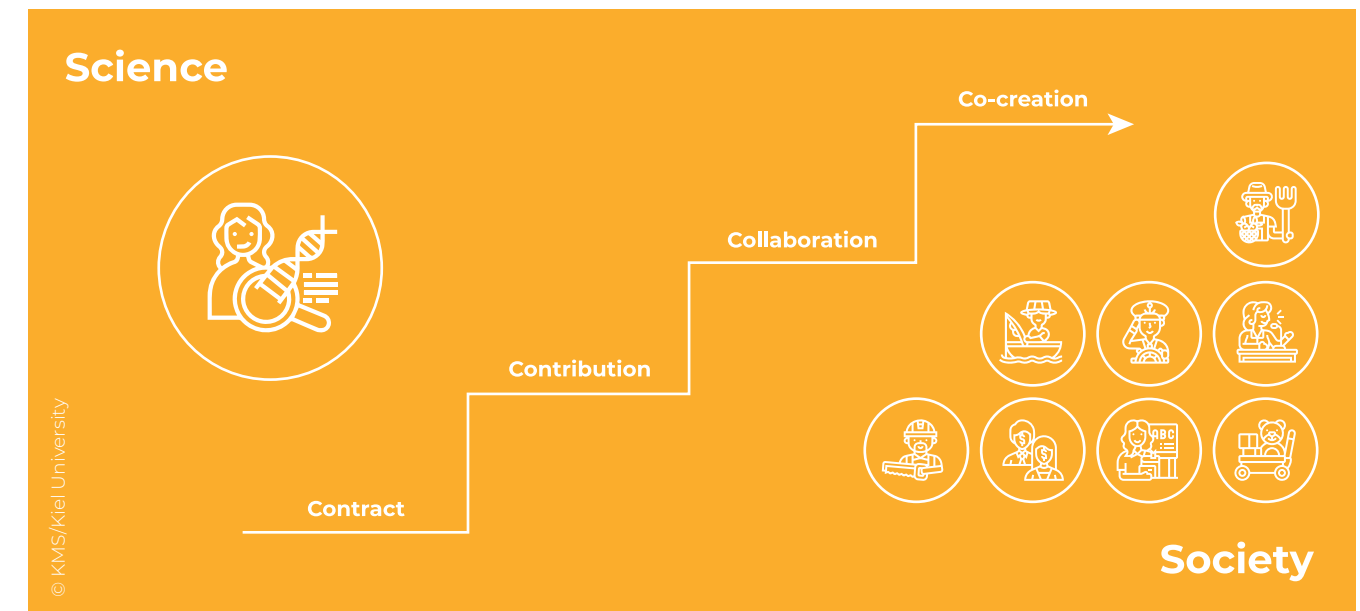


Why is stakeholder engagement important?

The brochure further summarises the current state of knowledge and provides arguments on the importance of stakeholder engagement.

These are:

- (i) Stakeholder engagement strengthens the relation between science and society. It bridges the gap between academia, science, and economy (“leaving the ivory tower”). It brings in new perspectives and new experiences, and supports the democratization of science. The stakeholders themselves experience empowerment by taking their engagement seriously. For all participants the cooperation builds trust and mutual understanding.
- (ii) Stakeholder engagement supports the quality of scientific work. The integration of different perspectives strengthens the impact of science, and it helps to better understand informal institutions (e.g., social norms, traditions). And not to forget: the exchange will generate new ideas for research and enable co-design!
- (iii) Stakeholders support the application of new knowledge. Involving practitioners will make sure that academic inventions are targeting practical needs, and that the research can contribute to transformation, i.e. tackling societal challenges together.



Categorization of stakeholder engagement

Interaction between science and society can occur at different levels of participation (see graphic). A contract is the most basic level of involvement: the research is commissioned by the stakeholders, and the research is completed by the scientific working group without further interaction. A contribution encompasses the provision of information or data by the stakeholder, but without further involvement in

conceptualization or analysis. The project is planned, carried out and evaluated by scientists. Stakeholders contribute information and data, but are not further involved in conceptualization or analysis. Collaboration involves stakeholders also in research or analysis. Co-creation means that the project is jointly developed and carried out by scientists and stakeholders together. In this case all partners are considered on equal terms.



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Commitment by universities to stakeholder engagement

Do universities support their scientists in carrying out participatory projects? To find out, a survey was conducted among the six universities in the reSEArch-EU project. Both academics and administrative staff were asked for information. Official documents and policy papers of the universities were collected, evaluated and discussed with the project partners. Surprisingly, it became obvious that the conditions at the different universities are very similar in essential points:

- All universities emphasize the importance of stakeholder engagement in mission statements or strategy papers.
- All universities have some incentives for interaction with stakeholders.
- All universities focus on commercial stakeholders, in the sense of promoting technology transfer and commercialization of research results. Cooperation with other stakeholder categories, e.g., individual citizens, non-governmental organizations or administration, is not supported systematically at any university within the SEA-EU consortium.
- Finally, there is further no national support (e.g., funding mechanisms) in the SEA-EU countries.

Best practices and case studies

All the SEA-EU universities contributed with case studies from their own experience. In total, information on 37 projects was collected, of which 12 representative examples were selected for the brochure "Strategies of Stakeholder Engagement" (reSEArch-EU 2021).

In evaluating this extensive experience, it became clear that participatory projects depend first and foremost on a strong personal commitment of individuals. The projects could only be conceived and implemented if someone had cared intensively about them, and was willing to take on the extra burden. Since participatory projects are by definition carried out with non-university partners, one has to deal with diverging interests and demands. This requires additional time and effort, above all social skills (see chapter „recommendations“, page 20).

The case studies further showed a wide variety of activities, with all categories of participatory research represented: contribution, collaboration, co-design and co-creation. To give a few examples: Plastic Pirates as a citizen science project (Kiel), a creative marathon (Brest), the establishment of a maritime-fluvial transport system (Cádiz), a theatre play-based research project (Gdańsk), and a community-based learning and social support centre (Malta).





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Transformation Labs Brest & Kiel

University of Western Brittany (UBO) – Zone atelier Brest-Iroise (ZABrI); Kiel University – Kiel Marine Science

The aim of the activity described below was to foster the interaction between researchers and civil society and to develop ideas for improving coastal resilience. The Transformation Lab dialogue is based on the concept of Living Labs. Locations for these pilot activities are part of the European Network LTER (Long-Term Ecosystem Research in Europe): LTER Zone Atelier Brest-Iroise (ZABrI, France) and LTER-D Boknis Eck Time Series Station, Eckernförde Bay (Baltic Sea, Germany).

Workshops on transdisciplinarity cooperation for socio-ecosystem resilience

In April 2022, the first Transformation Lab workshop was organized by the University of Western Brittany (UBO) (France), followed by a second workshop 2023 organized by Kiel University (Germany). Both workshops brought together scientists and stakeholders, for example, fishers, local authorities, tourism managers and non-governmental organizations from the environmental sector. The meetings were used for brainstorming on problems typical for the specific location, and for developing ideas to tackle these challenges by experiencing case studies and visiting field sites of running projects.

Transformation Lab Brest April 2022

The Transformation Lab in Brest (France) offered the opportunity for reSEArch-EU partners to share research topics and work, and to discover the field as well as stakeholders of the ZABrI. It enabled brainstorming on socio-ecological problems typical of the land-sea interface and developing ideas for tackling these challenges.

They had the opportunity to make several on-site visits. At the Réserve Géologique de Crozon, they learned about coastal erosion in Finistère. At the farm „Le Parc“, they discovered the work carried out in collaboration with researchers, managers of the Aulne watershed, and several farmers to reduce the impact of farming practices on coastal water pollution. At the Tinduff hatchery, they learned how a maritime cooperative for the production and commercialization of *Pecten maximus* and *Chlamys varia* works closely with the other fisheries committees to re-implant scallop spat in the Bay of Brest. Visiting the Iroise Marine Natural Park by boat, they discovered the high marine biodiversity of the Iroise Sea and the several actions carried out between the Park and scientists to better understand its biodiversity and to define the appropriate management strategies. One of the main objectives is to reconcile the exploitation of resources (fishing and seaweed collection) and conservation objectives.

One of the key elements of success in this transdisciplinarity perspective is the involvement of each actor in the cooperation and discussion process, and to ensure their mutual confidence.

Transformation Lab Kiel April 2023

The Transformation Lab in Kiel (Germany) was divided into three parts, all covering different aspects of transdisciplinary research. Besides the intense theoretical session on the first day, the program included two site visits and the presentation of implemented projects. The first day of the workshop took place in Kiel, and was used to get a first idea about the transdisciplinary projects of all reSEArch-EU partners.

The second day was dedicated to the visits on transdisciplinary projects, conducted at and related to the North Sea. At the FTZ Büsum (Research and Technology Centre), Kiel University cooperates with the National Park Administration to translate scientific work into strategies for sustainable coastal management. In St. Peter-Ording, the participants visited the project “Sand Coast”, led by the Schutzstation Wattenmeer, a non-governmental organization and the WWF in cooperation with Kiel University. The aim is to restore a unique dune landscape in order to adapt to the consequences of climate change.

On the third day, the field visits concentrated on projects located at the Baltic coast. At the soft-rock cliffs near Stohl, research on the erosion process is used to develop adapted strategies for coastal management.

In the city of Eckernförde, all participants visited the Baltic Sea Information Center (Ostsee Info-Center OIC). They learned about a voluntary agreement for the protection of harbour porpoises and diving ducks between the Fisheries Association and the government of the federal state of Schleswig-Holstein.

During the workshop, there were lively discussions about the differences and similarities of the conflicts in the represented countries. Two evaluation workshops took place and a questionnaire was used to collect feedback. The results were used to develop the recommendations listed in this brochure on page 20 - 23. We identified common challenges: stakeholders and scientists have different requirements, needs, and possibilities – and it is a challenge to balance and compromise conflicting interests.



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In a nutshell

Transformation labs Brest & Kiel: Researchers and civil society developing ideas to improve resilience of coastal areas.

Aim of this activity was to foster the interaction between researchers and civil society and to develop ideas for improving coastal resilience. The Transformation Lab dialogue is based on the concept of Living Labs. During two meetings in Brest and Kiel, participants visited field sites to meet stakeholders and compare their project activities. They identified common challenges and collected recommendations for future activities.

Involved stakeholders:

NGOs, farmers, fishers, business, administration

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Innovations Marina: The Marine Science Shop



University of Gdańsk

The University of Gdańsk (UG) has developed, tested and run the Science Shop model. A science shop carries out scientific research on behalf of citizens and non-governmental organizations (NGOs) and is free of charge. It brings students, researchers, and civil society together with the aim to tackle actual issues at the local and regional levels. The Marine Science Shop provides an inclusive and safe space for participatory dialogue.

Motivation

The Marine Science Shop promotes social inclusion and sustainability due to the nature of the activities which can link social groups and foster social cohesion. Aside from positively impacting the co-creation of solutions to real world problems, the process of societal engagement strengthens both the research process and its outcomes, thereby contributing to research excellence and acceptability of innovation outcomes.

Implementation

The University of Gdańsk held a series of one-to-one meetings with representatives of two selected NGOs: "Good Deal" and "WAGA". These face-to-face discussions took place both at the University and at the premises of the individual NGOs, enabling a better understanding of the specifics of each NGO's operation. The joint discussions allowed the cooperation model to be adapted to the individual needs of each organization, increasing the chances of their effective and long-term involvement in the project.

The UG organizing team offered its assistance to NGOs for their cooperation with students, who were supervised by mentors and experts and proposed solutions to the selected challenges submitted by organisations or local communities. This has given the students an opportunity to verify their knowledge in practice, and to acquire new competence and skills.

Cooperation with Good Deal

From March to June 2023, a team from the Department of Marketing at the Faculty of Management cooperated with representatives of the RC Foundation and members of "Good Deal" initiative. The mission of the "Good Deal" is to promote the idea of socially responsible purchasing and increasing awareness that every zloty spent can go to such entities that will make the most of this impact. This is the first stationary store in Gdańsk selling products from social economy entities, but also one of the few projects aimed at supporting the marketing of these entities. The first need presented to the Marine Science Shop concerned marketing and advertising. The response was to create the Mystery Charity Box, a cardboard box with the logo of the NGO. Coherent visual identification is essential because the box is used not only for transport purposes. It has primarily a communication function and allows the brand to be associated with a wide range of buyers and friends of the entire movement.

Students have not only created the whole concept, but also have planned a business and marketing strategy that would help "Good Deal" to reach more clients and thus to help small social enterprises to sell their products.

Cooperation with WAGA Association

From March to May 2023, a team from the Institute of Psychology, Faculty of Social Sciences and The Centre for Sustainable Development (CZRUG) collaborated with representatives of the WAGA Association. "WAGA" stated that they would appreciate some help during the organisation of the career day for refugees from Ukraine. Finding a job is a key part of building immigrants' independence. The event aimed to help the refugees improve their position in the Polish job market, e.g., by meeting HR specialists, underlining their strengths and professional experiences, and learning how to effectively create their vita. A psychology student developed and implemented

the content of a tailored workshop that covered such topics as non-verbal communication, the role of self-esteem in auto presentation, job interview performance, or creating personal image in social media.

Capacity Building

With the aim to share the concept of a Science Shop with the reSEArch-EU partners, UG organized a series of webinars entitled "Community Driven Participatory Research and Education". The lectures covered topics like Science Shop in practice; cooperation and co-creation; crowdmapping as a tool for integrating society into climate change adaptation and mitigation plans; and community engaged research and learning portfolio. Speakers from several European universities contributed their experience.

Good communication first: During the course of the project, we realized that it is crucial to tell captivating stories that inspire and engage. Professional storytelling tools and the involvement of communication specialists could be a good solution.

Students first: We would invite students to participate in all meetings from the very beginning. They turned out to be an extremely important element in creating concepts and strategies.

Listening first: We would make no presumptions on possible needs of the organisation and be more elastic in thinking about those needs. The main goal of the project was to support the organisation in the area they select, thus it is possible it would not relate to research – although immersed in science and education.

In a nutshell

Marine Science Shops: Marine Science Shops are not "shops" in the traditional sense of the word. They are small entities that carry out scientific research in a wide range of disciplines on behalf of citizens and local civil society and are free of charge. The fact that Science Shops respond to civil society's needs for expertise and knowledge is a key element that distinguishes them from other knowledge transfer mechanisms. University of Gdańsk has developed, tested and run this model under the name Marine Science Shop. The vision was to develop the cooperation scheme between various units of the Pomerania Region and the University. Its main objective is a search for solutions to the local challenges through this model, which is an action scheme facilitating and ensuring an accomplishment of joint projects directed at the needs of social organisations which usually have a difficult access to scientific research.

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Marketplace Kiel-Gdańsk: An event for matching science and business

Kiel University and University of Gdańsk in cooperation with Baltic Sea & Space Cluster (Poland), Maritime Cluster Northern Germany and the nucleus

The Kiel-Gdańsk Market Place entitled „Smart Shipping“ took place in May 2022 and brought together scientists and business partners from the maritime sector. Both cities, Kiel and Gdańsk, are actively promoting future concepts for sustainable shipping: smart shipping in a smart port, including autonomous shipping, modern energy systems and port logistics. Both cities also have excellent scientific research and an innovative maritime industry. Therefore, the event promoted the exchange of scientific knowledge, supported networking and provided contacts for future cooperation and commercialization of inventions.

Upscaling a conventional event to a new dimension

The International Marketplace is based on the experience of the Kiel Marketplace. This event format has been established as a local event in Kiel for more than ten years and is jointly organised by Kiel University, the Maritime Cluster Northern Germany and the nucleus (Wissenschaftszentrum). The aim is to create networks that support future collaborations and enable

the commercialization of inventions in the maritime sector.

Thus, the idea was born to test whether this exchange format also works in an international context within the framework of the reSEArch-EU project. A joint working group from Kiel University and Gdańsk University began to identify a suitable selection of topics based on two criteria: scientific competence should be present and an obvious business interest. Once the topic Smart Shipping had been selected, the Baltic Sea & Space Cluster could be won as a further supporter. Suitable speakers were identified and an exciting programme was designed.

Presentation of case studies

The nucleus (Wissenschaftszentrum) presented the “Clean Autonomous Public Transport Network (CAPTN)”, a project aiming to establish an integrated inner-city mobility chain of autonomous, clean modes of transport on water and on land. Scientists from Kiel University and the University of Applied

Science Kiel presented their research on autonomous processes and shipping. Addix, an involved private company in the CAPTN project, presented the challenges of establishing a local 5G net for logistics, transport and support. Scientists from the University of Gdańsk introduced the Smart Port concept, while the Baltic Sea & Space Cluster BSSC gave an overview of BSSC’s work on smart shipping. All participants discussed possibilities for future activities.

In the afternoon, the excursion program highlighted some local research initiatives. The Port of Kiel offers groundbreaking activities such as the Onshore Power Terminal, which enables the supply of energy to cruise ships during their stay in the Port of Kiel. The University of Applied Science Kiel presented their work on „Camera and lidar data collection“ using a liner ferry operating in the Kiel Fjord. The program concluded with an enlightening visit to the ship design facility at the University of Applied Science, where models were presented in a water channel.

Challenges faced

Although the topic was highly relevant and there was a great deal of expertise among both the organisers and the target groups, the number of participants fell short of expectations. Personal communication indicated that some local experts

were unable to attend due to the assumption of a full day event and no option of joining for part of the programme. Participants outside Gdańsk were less than expected, resulting in mainly a national exchange.

For example, offering registration options for individual program blocks (morning, noon, evening) could make it possible to participate in individual parts of the event. Also, an extended involvement of external experts as host and a more proactive initiation of possibly good fitting contacts between all participants might increase the participation of international guests.

Outcome

This event contributed to strengthening business-academia partnerships, which is one of the key priorities of the reSEArch-EU project, aiming at maximizing local, regional and global competitiveness. Using the example of the CAPTN initiative on autonomous shipping, Kiel demonstrated the importance of place-based innovation ecosystems to enable Kiel University, industry and the small and medium-sized enterprises in reaching their full potential. CAPTN is an excellent example of a strong regional cooperation that could be presented to the visitors from Gdańsk.

Kiel-Gdańsk Market Place „Smart Shipping“ (May 2022)

The Kiel-Gdańsk Market Place titled „Smart Shipping“ took place in May 2022 and brought together scientists and business partners from the maritime sector. Both cities are active in promoting future concepts for sustainable shipping. Such international activities for matching science and business can create a high benefit for all stakeholders.

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De Cádiz al Mundo: A Citizen Science research challenge

University of Cádiz

The University of Cádiz (UCA) in 2023 developed a citizen science project, bringing together science and society, implemented through a video competition. Students in Cádiz were motivated to produce videos giving responses to three challenges of our society: absence of employment opportunities, contamination and tourism pressure. Three questions should be discussed:

- If you could manage the money of your city, how would you invest it so that there would be more wealth and more jobs?
- How would you manage packaging to reduce waste and plastics in the sea?
- What actions would you take so that tourists do not stress people who live in the city?

Finally, the videos were evaluated by a committee of experts and the winners received a prize consisting of various technical tools: headphones to listen to music, tablets to develop communication about the sea and its environment, and material related to the project (merchandising) and internationalization.

Motivation: Creating synergies between academia and society

The project was carried out to promote citizen science in creating synergies between different population groups that have the same problem and want to solve it. The organizers also wanted to increase the impact and dissemination of the research and knowledge transfer carried out at the University of Cádiz. Furthermore, the organizing team wanted to promote the generation and dissemination of knowledge in innovative and creative formats and critical thinking, encouraging public participation and the feeling of belonging of the population that faces local problems with global effects.

Video platform implementation

For running the competition, the virtual platform <https://citizenscience.uca.es/> was developed, which included the rules of the competition as well as the links to get registered, upload the videos and vote.

To participate in the competition, all that was required was to form a pair between a student of the University of Cádiz, (Bachelor, Master, PhD) and a person who is not studying in the field and has more life experience (grandparents, fathers, mothers). Participants could register within a defined period of time.

Once registered in the competition, participants received an email confirming their registration and instructions on how to participate in the video challenges. Participants were asked to upload three 1-min videos with respective answers to the three proposed challenges. When the video submission period opened, the couples uploaded the videos to the platform. Then the voting phase was open for a few days. The UCA community and society could vote virtually on the videos. The videos were evaluated on originality, innovation of the video proposal and technical. The percentages for evaluation of the contributions were: 30% votes from the University of Cádiz, 30% votes from the society and 40% the vote of the Experts Committee.

Subsequently, an interesting award ceremony took place, with repercussions in the university media and social networks. In this, the University of Cádiz, through the reSEArch-EU project, has awarded the prizes for the 'Retos de Cádiz al Mundo' contest at the International Welcome Center. The winners of this first edition are: Ana Amelia Franco del Pino (Challenge 1), Miguel de Jesús Cuesta Rodríguez (Challenge 2) and José Antonio López Marín (Challenge 3 and Creativity and Efficiency Award).

Challenges

The dissemination of the project should have been more comprehensive and taken more time. It is an activity that can be done by hundreds of people and in many countries and should be used.

The creativity and quality of the videos can be further improved by giving examples so that participants understand what we are trying to achieve. There could also be more emphasis on the part of the conclusions that concerns both the solution to the challenges and the participatory and co-creative spirit that can emerge here. More emphasis should be given to the reflection that follows in order to be able to further develop future implementations.

Outcome

This pilot activity might constitute an example of good practices in order to link society with academia. It would be an in-

teresting task to perform the competition at the same time at other universities so that common challenges can be identified and responses can be given from different points of view and cultural contexts.

In a nutshell

De Cádiz al Mundo: The citizen science project "From Cádiz to the World" in 2023 at the University of Cádiz created synergies between science and society via video competition. Identifying possible responses to the challenges like the absence of employment opportunities, contamination and tourism pressure. The answers were evaluated and the video competitions were scored on a winner.

Involved stakeholders: citizens

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Empowering Campus Sustainability: The SEA-EU Makeathon Event

University of Split

Makeathon was an event in 2021/2022 run in all SEA-EU universities. Under the title „Apply the Sustainable Development Goals to your Campus“, students, researchers, NGO representatives and startups were asked to develop their own activities. The concept combines “making” and “marathon”. The main idea was to develop local solutions to problems related to certain United Nations Sustainable Development Goals (SDGs). The participants should find a common ground to transfer ideas and results to other universities. It was a one-month-long SEA-EU initiative with locally organized events and joint touch points such as mentoring webinars.

Embarking on the SEA-EU Makeathon journey

The SEA-EU Makeathon event was driven by the collective vision of multiple universities aimed to nurture local solutions to address SDGs while fostering a platform for the exchange of ideas across institutions. To facilitate this, the event harnessed the power of locally organized activities for development of their solutions complemented by shared resources like mentoring webinars conducted by experts from SEA-EU universities. Throughout the event, participants gained access to a number of resources, including on-campus makerspaces, app labs, workshops, and a consortium of innovation experts from the SEA-EU network.

The stakeholder diversity

The main actors were students from participating universities who formed teams with members from different institutions. The SEA-EU Makeathon event involved a wide range of stakeholders: industry partners, companies, NGOs, and other stakeholders who contributed to the solution development.

From inception to culmination

The SEA-EU Makeathon event followed a carefully orchestrated timeline. The call for project ideas was unveiled in mid-July

2021, with the selection process wrapping up by the end of September. October was reserved for a series of joint online webinars, fostering a sense of shared learning among participants. The topics included Business Model Canvas, Pitching Training, Evidence-based Pitching and Intellectual PROPERTY. At the local level, Makeathon events unfolded from late October to mid-November while the grand showcase event was held in Split in March 2022 where the students pitched their ideas to the jury representatives from each of the participating universities.

Navigating the methodology

The event's methodology was crafted to allow flexibility while maintaining high standards. Each participating university retained the autonomy to tailor events according to their local ecosystem. However, certain joint criteria and tools were established to ensure consistency and collaboration:

- Joint online webinar sessions via Zoom facilitated knowledge exchange among participants.
- A unified application form streamlined the process, ensuring uniformity across the event.
- Evaluation criteria were established for project selection, encouraging alignment with SDGs, contributions to campus life, diversity in team composition, demonstrated impact, and potential for wider application.

Lessons learned and beyond

In a concerted effort to implement the United Nations SDGs across the SEA-EU alliance campuses, the SEA-EU Makeathon event emerged as a beacon of collaborative innovation. Initiative drew inspiration from mission-based hackathons, seeking to bridge the gap between the aspirations of the SDGs and tangible outcomes. The event embarked on a journey of multidisciplinary collaboration, stakeholder engagement, and valuable lessons.



Valuable takeaways from collaborative co-creation events have illuminated a path towards refining and fortifying future Makeathon events. These insights, garnered through reflective discussions and expert evaluations, have spotlighted two pivotal dimensions for development: the Event Format and Dissemination Strategies.

In the pursuit of elevating the Makeathon experience, participants and organizers alike have recognized the significance of a phased approach. Thus, a consensus has emerged to structure future events across three distinct phases: Ideation, where novel concepts take root; Experimentation, a phase of refining prototypes; and finally, Implementation, the stage where solutions materialize into impactful actions. A unifying thematic focus aimed at enhancing campus life resonates as a guiding principle for ideation.

Timely planning aligning with academic calendars is crucial. Strong media presence, internal communication, brand coherence, and showcasing past projects enhance dissemination. Integration with greener initiatives, lifelong learning, and collaboration amplify impact. Experts endorse transdisciplinary collaboration as the way forward.

In a nutshell

The SEA-EU Makeathon event (University of Split): born from collective efforts, aimed to integrate United Nations Sustainable Development Goals (SDGs) into SEA-EU alliance campuses. Drawing inspiration from mission-based hackathons, it sought to bridge SDG aspirations with tangible outcomes, fostering multidisciplinary collaboration and multiple stakeholder engagement.

Involved stakeholders: industry and NGO

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Recommendations for transdisciplinary research

Requirements

The following recommendations are based on the experience gained during the pilot activities of the reSEArch-EU project, and are intended to support your own research. This includes the many years of experience of the authors and project partners. On this basis, we have summarised what we consider to be the prerequisites for running a participatory project, highlighting some typical pitfalls to avoid, and suggesting some recommendations specifically for individual researchers, but also for universities in general. Finally, we refer to some excellent toolboxes available online and free of charge.

What do you need to run a participatory project?

A successful participatory project can be achieved if a number of preconditions are implemented. There are three main preconditions. First, some soft skills of the individual scientists are essential for establishing contact with other actors and developing mutual understandings (and interpersonal conflicts can be reduced by well-developed social skills). Second, institutional conditions at university level can support the planning and realization of participatory projects. And finally, you need to be aware that involving stakeholders in your project will take much more time than running an academic project alone. This might create the need for additional staff and should be allocated in your budget.

Social competence

- **Sensitivity to different needs:** Be aware that stakeholders and scientists have different needs and different interests. All of these should be taken seriously.
- **Be inclusive:** You should be open to collaborate with various stakeholders, regardless of their profession, level of education, and influence. Focus on the sharing of knowledge and information, so that everyone has the opportunity to learn from each other. So, be courageous and take a step back to give others space to engage. Be sure your stakeholders feel needed.

- **Ability to perceive your counterpart:** You should be able to listen in order to grasp the different points of view and resolve conflicts. You should be able to identify each stakeholder's drivers in order to motivate them to participate, taking into account their personal capabilities. Keep reflecting on this.

Support by university structure

- **Vision and Mission:** An essential prerequisite for participatory research at universities and academic institutions is the very basic and general acceptance of this approach. This can (and ideally should) be integrated into their strategic documents.

Time and money

- **Time and money:** Participatory projects with stakeholder engagement need more time and money than traditional scientific projects. This fact should be recognized and taken into account in both human resource planning and budget.



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Pitfalls

Pitfalls will occur naturally. They can be an obstacle or key to success. Be aware of pitfalls, prevent them and respond appropriately when they occur. The most common pitfalls in participative projects from our experience are described below, and can be divided into two main categories: lack of soft skills and lack of structured approach.

Lack of soft skills:

- **Lack of trust:** Mutual trust between the partners is important for success. Lack of trust could hinder the approach and may even endanger the project.
- **Lack of communication:** Non-existent or poor communication can lead to unspoken problems and misunderstandings that can unnecessarily hinder project implementation.
- **Lack of shared values and agreed-upon goals:** Lack of clarity about shared values and agreed-upon goals can lead to conflicts of interest and inconsistent and ineffective collaboration.
- **Academic language:** Stakeholders bring different experience and have different backgrounds. It is important to agree on a language that can be understood by all.
- **Lack of participation:** Only through the same understanding of participation and inclusion of all stakeholders in a project can ensure the quality of cooperation and workflows in participatory projects.

Lack of structured approach:

- **Avoiding conflicts:** The easiest way is not always the right way. Sticking with a solution and being persistent is often better in the long run than taking the obvious and easy way. Even if it means avoiding potential conflict and effort.
- **Underestimating stakeholder interests:** It can be demotivating and ineffective to focus too much on your own research interests. Be aware that participatory projects have a different character than usual research projects. Developing the research question together (co-design) is more inclusive and motivates participation.
- **Lack of time:** A major time conflict can lead to a project not being completed. Agree on what time investment is necessary and plan carefully with a good time buffer.
- **Lack of feedback:** A lack of feedback means that needs cannot be addressed and structural faults may remain uncovered. Make sure that getting (and giving!) feedback is not neglected.



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Recommendations for scientists

Our recommendations are derived from the requirements, pitfalls, and experience gained during the reSEArch-EU project. We address scientists who aim to carry out participatory research. Furthermore, we have developed recommendations for universities and academic associated partners that want to support their scientists in participatory research by implementing specific institutional structures.

Recommendations for scientists

- **Keep it simple:** Simplicity is the key at the beginning and throughout the process. Try not to make things too complex and complicated so it could be hard to follow.
- **Use different communication formats:** Be aware of who you are talking to: the public, a scientist, a student or stakeholders from the economy? An institution, organization or administration? Be aware of the best way and mode to make yourself understood.
- **Evaluate your work:** Record the goals of the project at the beginning and return to them at the end. This reflection should be done together with the stakeholders. Be aware of which goals were achieved and which were not, and find out why. Can something be achieved later? Could another, more appropriate way be found? What lessons can you learn from the results for other projects?
- **Live equality:** Do not play the role as the only expert – all stakeholders with their knowledge and experience are equal to your knowledge.
- **Be patient:** Always have a high degree of patience when working with stakeholders. It pays off in the resulting accuracy on a working and interpersonal level.
- **Share knowledge and experience:** A successful project outcome depends, among other things, on the sharing of existing knowledge and experience. Encourage the process of sharing as much as possible and implement what you learn into the project.
- **Create a group identity:** Be respectful, flexible and adaptable to stakeholders. Foster a sense of belonging and involve everyone, this will strengthen the group.
- **Don't forget the big picture:** From time to time take a step back together with the stakeholders and promote understanding of the bigger picture. Try not to get lost in details.
- **Be realistic in your expectations:** Your project will not be able to solve all problems. Have an honest discussion with your stakeholders about the project's opportunities and limitations.
- **Accept failures:** Use failures as a learning section for continuous improvement.
- **Take your time:** Take enough time to communicate with your stakeholders in the project, they are the heart of a participative project.
- **Involve students:** Help students grow by supporting their talents within the project. Try to involve them as much as possible and let them take over at the right points. Maybe some parts of your project are suitable as semester work? If possible, adjust the activities to the academic year calendar.



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Recommendations for universities

- **Update the vision and mission:** The university can support the work of scientists by integrating participatory work into its vision & mission documents. This will help to integrate participatory projects more naturally into the university system and minimize formal problems.
- **Create a "place to go":** The university can support the establishment of a focal point for anyone wishing to undertake a transdisciplinary project - researchers and stakeholders, e.g., by providing facilities.

Recommendations for material collections and toolboxes

Td-net toolbox

The td-net – Network for Transdisciplinarity Research (powered by the Swiss Academies of Arts and Sciences) compiled many methods in the td-net toolbox. These methods and tools specifically focus on jointly developing projects, conducting research and exploring ways to impact in heterogeneous groups. They are intended to help shape collaboration between experts and stakeholders from science and practice in systematic and traceable ways.

ITD Working Group on Toolkits & Methods

The Global Alliance for Inter- and Transdisciplinarity (ITD Alliance) aims to strengthen and to promote the global capacity and the calibre of collaborative modes of boundary-crossing research and practice. The Working Group on Toolkits & Methods focuses on toolkits & methods to support interdisciplinary, transdisciplinary or cross-disciplinary processes in research, practice or education.



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naturalsciences.ch/co-producing-knowledge-explained/methods/td-net_toolbox



transdisciplinarity.ch/en



itd-alliance.org/working-groups/toolkits_methods

This brochure "Involving stakeholders: A good practice guide for transdisciplinarity" gives recommendations to European universities that involve citizens, non-governmental organizations, public authorities and other societal actors in their research. The recommendations were developed within the reSEArch-EU project as part of the European University Alliance SEA-EU, based on the experiences and practices of the six universities of Western Brittany, Cádiz, Gdańsk, Kiel, Malta and Split. Also the brochure contains the evaluated experiences of five case studies on stakeholder engagement: transformation lab, science shop, citizen science, market place and hackathon.

These recommendations are intended for researchers, students and universities who wish to improve their cooperation with stakeholders, adjust university structures to reduce barriers to implementation, and gain inspiration from other projects.



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