Una Europa Summer School 2024: Sustainability in communication and education

Spreading the word | Creating awareness

1-5 July 2024

Alma Mater Studiorum - Università di Bologna
University of Bologna, Dept. of Education

Book of Abstracts

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Una Europa Summer School 2024

Sustainability in communication and education

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Alma Mater Studiorum - Università di Bologna
University of Bologna, Dept. of Education Studies, Aula Magna
Via Filippo Re 6, Bologna, Italy

June 11th, 2024

14.00-17.00 On line preliminary event on MS Teams. Coordinated by Janina Taigel, Freie Universität Berlin and Elena Toth, Alma Mater Studiorum - Università di Bologna
On line Lecture by Enda Murphy, UC Dublin and Tim Smits, KU Leuven

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July 1st, 2024

9.00-11.00 Welcome speeches.
Organization, activities and aims of the summer school
11.00-13.00 **Lecture + discussion: The GreenComp (the European Sustainability Competence Framework): a tool to reflect on social and environmental issues from an interdisciplinary perspective**
Marta Ilardo, Marta Salinaro, Alma Mater Studiorum - Università di Bologna
Light lunch
14.30-18.30 **Workshop: Transformative education via Service-Learning and Design for Change**
Gonzalo Jover, Juan Peña-Martínez, Patricia Martín-Puig, Universidad Complutense de Madrid

Welcoming event (optional)

July 2nd, 2024

9.00-13.00 **Workshop:Let's talk about sustainability: strategies to manage debates and feedbacks**
Luca Ferrari, Elena Pacetti, Alessandro Soriani, Alma Mater Studiorum - Università di Bologna
Light Lunch
14.30-18.30 **Workshop: What communication strategies to face of climate change? Narrative strategies and tools for building a transformative narrative on sustainability and climate change**
Jesús Sanz Abad, Isabel González Enríquez, Universidad Complutense de Madrid

July 3rd, 2024

9.00-13.00 **Workshop: European transnational projects in sustainability. Exploring synergies across disciplines (part 1)**
Francesco Girotti, Elena Luppi, Alma Mater Studiorum - Università di Bologna
Light Lunch
14.30-16.00 **Workshop: European transnational projects in sustainability. Exploring synergies across disciplines (part 2)**
Francesco Girotti, Elena Luppi, Alma Mater Studiorum - Università di Bologna
16.30-18.30 **Lecture + discussion: Be and Seem: How Organizations Communicate and Build a Sustainable Image & Legitimacy and the Emerging Phenomenon of Greenwashing-Brownwashing**
Gregorio Martín-de Castro, Universidad Complutense de Madrid

Una Europa Summer School 2024

Sustainability in communication and education

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Alma Mater Studiorum - Università di Bologna
University of Bologna, Dept. of Education Studies, Aula Magna
Via Filippo Re 6, Bologna, Italy

July 4th, 2024

One day field trip in a protected area in the neighbourhood of Bologna
Regional Park of the Gessi Bolognesi, Messinian Gypsum karst area, World Heritage UNESCO

*The day of the field trip, hiking boots or shoes with a good grip are highly recommended. Long pants, warmer sweater to wear (our group will be guided inside a Gypsum cave) and sportive/outdoor clothing are also suggested. Sunscreen and some insect repellent could be useful as well. Lunch won't be provided on the day of the field trip: therefore students need to bring their lunch.

July 5th, 2024

9.00-13.00 **Workshop: Should academics fly? Scientific mobility and sustainability – an ethical challeng**e
Annett Wienmeister, Freie Universität Berlin
Light Lunch
14.30-16.30 **Lecture + discussion: Smart ways to communicate sustainability in food**
Silvia Gaiani, University of Helsinki
16.30- 17.15 **Informal discussion among the PhDs: How and why to keep in contact, PhDs networks, etc.**
17.15-18.00 **Closing ceremony, final remarks, ideas & suggestions for future summer schools in the framework of UnaEuropa - Sustainability**

Annarita Ferrante[1], Stefano Piastra[2], Elena Toth[3]

[1] University of Bologna, Dept. of Architecture
annarita.ferrante@unibo.it

[2] University of Bologna, Dept. of Education
stefano.piastra@unibo.it

[3] University of Bologna, Dept. of Civil, Chemical, Environmental, and Materials Engineering
elena.toth@unibo.it

The Summer School 'Sustainability in communication and education. Spreading the word, creating awareness'.
An introduction

Established between 2022 and 2023 in the framework of UnaEuropa University Alliance, UnaFutura project, the Self-Steering Committee in Sustainability (SSC-S) decided to have, among its main priorities, the building of networks for student exchange at the Master thesis and PhD levels, with a focus on: (i) providing early-career options in research addressing sustainability issues; (ii) building up cooperations between research groups at UnaUniversities. Since the first meetings, there was a common convergence on the organization of summer schools for PhDs: the advanced level of the participants and the flexible format of this kind of didactic activity were considered solid fundaments for the beginning of the cooperation among the members of the SSC in this field. On the basis of the mixed background of the participants of the SSC (scientific, technical, humanities, social sciences, economics, etc.), the group took the decision to start with a summer school whose learning outcomes had connections with trans-disciplinarity, soft skills, applied use of research data, public engagement and dissemination in sustainability, open to PhDs with any scientific background related to the SSC-S.

The University of Bologna announced, through its members in the SSC-S (Annarita Ferrante, Stefano Piastra, Elena Toth), the availability to host the summer school at the Department of Education; the title was later conceived as 'Sustainability in communication and education. Spreading the word, Creating awareness', with a special emphasis on Sustainability communication and education.

Funds for the activities and the mobility were provided thanks to the successful application to a Erasmus+ Blended Intensive Program (BIP), with the leadership of the University of Bologna (Stefano Piastra, Dept. of Education, as Director) and the involvement of Universidad Complutense de Madrid, Freie Universität Berlin, University of Helsinki, KU Leuven, UC Dublin as partners.

The teaching staff of the summer school belongs to the universities part of the BIP program.

An on-line preliminary event (June 11th, 2024), including ice-breaking activities among the participants, was instrumental to introduce themes, methodologies, aims of the summer school.

The schedule was intensively organized over five days (July 1st-5th, 2024), with lectures and workshops, giving space, at the end of every activity, to a group discussion; themes and goals aimed at improving skills and capacities of the PhDs students.

One-day field trip was focused to the guided visit of the Gessi Bolognesi Regional Park, a suburban protected area conserving Messinian Gypsum outcrops, recently awarded as a serial site of UNESCO World Heritage *Evaporitic Karst and Caves of the Northern Apennines* (https://whc.unesco.org/en/list/1692).

A final session aimed at the building, among the PhDs, of an informal network, in order to promote peer-to-peer future cooperation in the next years of their PhD programme.

The intention of SSC-S is to consider the summer school in Bologna, here highlighted through the abstracts of the didactic activities, as a pilot-experience for future UnaEuropa summer schools for PhDs, to be held with different themes, year by year, in the universities of the alliance.

Enda Murphy

University College Dublin
enda.murphy@ucd.ie

Understanding Progress on Education for Sustainable Development across the OECD

Achieving sustainable development in the future will require significant transformations across all sectors of society. Education, in particular, is one of the sectors that is synergistic with all four pillars of sustainability – social, economic, environmental and governance. This paper assesses the existing framework of education for sustainable development by providing a conceptual outline of the link between investment in education and social returns across the globe as well as noting the significant disparities between rich and poor nations. In addition, the paper outlines current progress on Education for Sustainable Development (ESD) across 10 targets and four goals of the SDGs including providing a detailed outline of progress in OECD nations. Thereafter, the paper provides a discursive analysis of the role of education for societal transformation towards sustainable development including the requirement for shifts in education systems so that they can be reoriented towards societal needs including through formal and informal education systems. The implication is that future education for sustainable development may need to deal with significant ruptures in the labour market including through large scale labour market upskilling as well as via other avenues such as flexible education and lifelong learning.

Keywords: Sustainability, Education for Sustainable Development, Upskilling, ESD Reporting, SDGs.

Tim Smits

Leuven University, Institute for Media Studies
tim.smits@kuleuven.be

The role of communication in sustainability

Effective communication plays a crucial role in advancing sustainability efforts and it requires understanding cognitive processes, selecting appropriate strategies, and addressing biases. Daniel Kahneman's dual-system theory provides valuable insights into human decision-making processes ("Thinking, Fast and Slow"). System 1 thinking operates automatically, intuitively, and with little effort. It relies on instincts and past experiences. In contrast, System 2 thinking is slower, conscious, and logical. It requires deliberate effort and is used for more complex problem-solving. We examine how these two systems influence communication. System 1 thinking often leads to quick, emotional judgments, while System 2 engages in deliberate evaluation. Understanding this interplay helps us recognize biases and make informed choices in sustainability communication.

A next step is to understand the two main types of messages we can use in persuading and informing with regard to sustainable behavior and decisions. The first type of messages is arguments based (with cues). Argument-based communication appeals to reason, facts, and logic (cf. central route in the Elaboration Likelihood Model). Cue-based communication relies on peripheral cues, such as endorsements or visual elements (e.g., celebrity endorsements or attractive packaging). While argument-based communication may be effective for informed audiences, cue-based approaches can engage broader audiences by leveraging emotional cues. The second message type concerns narratives (cf storytelling). Narratives are powerful tools for conveying complex information. They engage emotions, create empathy, and enhance memory retention. Sustainability narratives can inspire action by connecting people to real-world issues. Narratives can foster behavior change and promote sustainable practices.

A final step is to recognize a number of biases that message receivers might have to some extent and that hinder effective behavior change if they are not accounted for. At the same time, a proper understanding of these biases can make the communication more effective.

A couple of such biases are discussed. First, hyperbolic discounting refers to a cognitive bias where individuals tend to prefer smaller, immediate rewards over larger, delayed rewards, even if the latter would be more beneficial in the long term. This is due to the fact that, psychologically, the same amount of money seems to be worth (much) more now than in months or years from now. Of course, with sustainability, the return on our investment in money, effort or time often seems very vague and distant, as such posing a real challenge. In sustainability communication, hyperbolic discounting can hinder efforts to address long-term environmental challenges. People may prioritize short-term gains (e.g., convenience, cost savings) over sustainable choices (e.g., energy-efficient products, waste reduction). For instance, consumers might choose disposable plastic bags at the grocery store because they are immediately convenient, despite the long-term environmental impact. Knowing this, one can take this into account and try to mitigate the bias. One way to do so is to focus on the investment side. One can increase the cost of the unwanted behavior (e.g. a tax on plastic bags) or decrease the cost of the wanted behavior (e.g. financial support for green energy initiatives), but one can also delay the investment in the sustainable action a bit. Indeed, it is easier to have people (also policymakers) decide now that they will make a sustainable investment within a year. On the return side, we can also try to mitigate the bias. One way is to make the returns more tangible (e.g. a measurement of how clean the air is will be a better feedback mechanism than our own perceptions). We can also encourage sustainable behaviors by framing choices in a way that highlights long-term benefits. For example, emphasize the environmental impact of single-use plastics. Or we can directly raise awareness about the consequences of hyperbolic discounting and promote a forward-thinking mindset.

Second, the attention bias occurs when our perception is influenced by selective attention to certain information while ignoring other relevant details. Attention bias can lead people to focus on immediate, salient issues (e.g., daily routines, personal concerns) rather than broader, long-term sustainability challenges. But, attention bias can also impact the communication processing itself. Messages typically have a hard time getting through, amongst others because there is so much communication that it is difficult to stand out. Climate change, for instance, often receives less attention than short-term weather events or personal matters. But even if our message gets noticed, it is not guaranteed that the message gets processed like the sender intended it to be. The attention bias on the side of the receiver might result in message processing of different aspects of the message (e.g. a focus on the cost). One way to try to mitigate this is to present sustainability messages in a way that captures attention. Highlight real-world consequences and make them personally relevant. One can also use visual aids (e.g., infographics, videos) to convey complex information effectively and engage viewers. Narratives can overcome attention bias by creating emotional connections and sustaining interest over time.

Third, confirmation bias is a common cognitive bias that significantly impacts decision-making and information processing. Confirmation bias refers to our tendency to select, interpret, focus on, and remember information in a way that confirms our preconceptions, views, and expectations. When faced with new information, we unconsciously pay more attention to data that supports what we already thin and we interpret ambiguous information in a way that confirms our existing views. Imagine someone who strongly believes that organic food is healthier. They might actively seek out studies supporting this view while dismissing research suggesting otherwise. In the context of sustainability, confirmation bias can hinder progress. Individuals may selectively attend to information that confirms their stance on climate change (whether pro or skeptical), reinforcing their position. Or consumers might ignore evidence about the environmental impact of certain products if it contradicts their existing preferences. Policymakers may favor solutions that align with their preconceived notions, even if more effective alternatives exist. It is difficult to mitigate this bias, but we can encourage exposure to diverse viewpoints.

Keywords: Sustainability, Communication, Persuasion, Cognitive processing.

Marta Ilardo[1], Marta Salinaro[2]

[1] University of Bologna, Dept. of Education
marta.ilardo@unibo.it

[2] University of Bologna, Dept. of Education
marta.salinaro2@unibo.it

The GreenComp (the European Sustainability Competence Framework): a tool to reflect on social and environmental issues from an interdisciplinary perspective

In academic discourse, the concepts of sustainability and competence take on multiple facets and interpretations. Today's global challenges, characterized by a complex network of interconnections, require an approach to research that is not only holistic but also ecological. This involves knowledge management that transcends traditional disciplinary boundaries and integrates diverse thematic areas to effectively address critical environmental, social and economic issues. This multidisciplinary approach allows not only to better understand the interdependent dynamics of our times, but also to formulate more effective and inclusive strategies for solving global problems. Starting from this assumption, this session aims to reflect on GreenComp, the European framework for sustainability competences (2022). This document represents a first attempt to engage education professionals within a common reference framework towards a shared definition of sustainability as a competence. In this line, this session aims to deepen the understanding of GreenComp (2022) as a tool to promote an integrated vision of knowledge and a reorganization of disciplines and knowledge in an interdisciplinary perspective.

Environmental and social issues are complex and involve multiple aspects ranging from economics to biology, from pedagogy and sociology to technology. For example, climate change is not just a matter of environmental science; it also concerns economic policies, social behaviors, epistemic belief, and technological innovations. For this reason, an interdisciplinary and intersectional approach can help formulate more effective and comprehensive solutions that would not be possible through a single field of study.

Some lines of research (Branchetti, Fantini, Levrini, 2019) and projects already recognize the need to intersect different disciplines to effectively address social and environmental issues and stimulate innovative solutions in dealing with complex issues. Also, studies in the field of education highlight the need for researchers and practitioners to attend to epistemic belief noting that opportunities to reflexively examine epistemic cognition on sustainability and ecology may be a necessary step in translating research about learning and instruction into classroom practices (Rowan, Singh, 2020).

The emergence of new fields such as ecopedagogy, climatology, artificial intelligence and digital humanities and of new approaches in scientific research and its dissemination (including multiple actors, interdisciplinarity, multidisciplinarity, transdisciplinarity and open science) represent new challenges for the current ways of organizing and disseminating knowledge.

For example, the EU-funded FEDORA project (2020-2023), through the collaboration of Universities and partners from several European countries, aims to develop "a future-oriented model to enable creative thinking, foresight and active hope as skills needed in formal and informal science education".

One of the goals of these lines of research is to develop new curricula and teaching methodologies and prepare students to think critically and operate in a world where environmental issues are increasingly central. This will stimulate not only theoretical reflection, but also practical implications for integrating sustainability into various sectors of society.

Using the GreenComp as a reference, educational institutions can take a decisive role in guiding society towards more sustainable behavior. It is essential to train professionals who not only understand the interdisciplinary complexities of environmental and social issues, but who are also capable of actively contributing to building a more sustainable future.

In this way, a social reorganization is encouraged that not only promotes real global citizenship (Tarozzi & Mallon, 2019), but which also aims to reduce the ecological footprint, thus actively contributing to the creation of a more sustainable and responsible society and social and climate justice (Borgerding et al., 2023; Calvano, 2023).

Keywords: Sustainability, Sustainability Education, GreenComp, Interdisciplinarity.

Juan Peña-Martínez[1], Patricia Martín-Puig[1], Gonzalo Jover[2]

Complutense University of Madrid,
[1] Dept. of Didactics of Experimental Sciences, Social Sciences, and Mathematics
[2] Dept. of Educational Studies
jpe01@ucm.es

Transformative education via Service-Learning and Design For Change

Abstract
Transformative education is an approach to learning that aims to empower learners to take informed decisions and actions at the individual, community, and global levels. According to UNESCO, transformative education involves teaching and learning that motivates and empowers learners to act for the betterment of all people and the planet. It emphasises the interdependence of social, ecological, and economic systems and the need for a sustainable future. In the light of this, Service-Learning is an appropriate teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities. Another methodology based on design thinking is Design For Change that is addressed to help students learn to think for themselves, develop empathy towards the needs of others, and become protagonists of their own stories by creating solutions to problems and challenges that arise in their environment. This approach can be easily adapted to different pedagogical models in both formal and non-formal education settings. The process allows you to design solutions to specific challenges and develop competencies such as empathy, creativity, teamwork, critical thinking, and communication. Moreover, Service-Learning and Design For Change can be combined to facilitate the design and implementation of successful transformative projects.

Keywords: Sustainability, Education for Sustainability, Transformative Education, Service-Learning, Design For Change, Pre-service teachers Training.

Introduction

If we aim for education to be the key to shaping citizens who help ensure a viable and prosperous future for society (Leal, 2009), it must provide realism and utility in preparing individuals to overcome personal, socio-community, intellectual, affective, and other difficulties (Colom, 2000). These premises favor a pedagogical approach based on the methodology of Service-Learning, achieving a more direct relationship between what is learned and how it is learned, and what is done and how it is done, in this case, for the benefit of students but also the community.

While universities can play a crucial role in generating knowledge through research, their greatest impact is seen in the students they nurture (Aramburuzabala et al., 2015). In this regard, the Service-Learning methodology has proven to be an ideal strategy in the university context for the implementation of teaching and learning practices that not only prepare students for their future professions but also encourage them to assume an active and socially responsible role in the community (Francisco and Miravet, 2010; Martínez, 2008).

Furthermore, within a Service-Learning framework, the connection between thinking, reflecting, evaluating, decision-making, and acting is enriched by the inclusion of emotions such as empathy and compassion (Sleurs, 2008). By engaging in their community service projects, students can put themselves in others' shoes, understand their needs and feelings, and develop greater empathy towards their communities. This emotional connection feeds their reflection and evaluation of social situations, prompting them to make informed decisions committed to the well-being of others. Therefore, Service-Learning not only promotes the academic and social development of students but also shows them the way to become agents of change, capable of positively transforming their surroundings.

Service-Learning and Design For Change
The Service-Learning methodology is a learning pathway that involves students in experiences outside the classroom that are related to the learning objectives of the course/subject and are usually developed with nonprofit community organizations and/or associations. Service-Learning programs vary according to institutional culture, relationship with the surrounding community, discipline, and the responsible professor, but most of them are structured in the form of tasks or projects (Myers, 2020). That is the goal of Design For Change (DFC). Why Service-Learning and DFC? Because in order to design and properly carry out the service, it has been found that the implementation of the DFC methodology, based on design thinking, helps students maintain the thread of their projects in the different phases of planning, execution, reflection, and dissemination, but the final goals are set by the Service-Learning context (Peña and Rosales, 2022). It is worth noting that DFC methodology has been studied at Complutense University of Madrid (Spain) as a tool that facilitates the empowerment of children and youth (Alonso, 2020) and it has also been analysed by universities such as Harvard and Stanford (DFC, n.d.).

All in all, Service-Learning + Design For Change allows to enhance students to think about problem solving in an empathetic way that gets them out into the community. Debate, decisions, and student-student interaction are required and are a natural progression through the aforementioned approach. The pupils feel heard and important; they feel the responsibility of working in groups in order to achieve their goals. The same applies to the extended community that gets involved. This method enables students to be more empowered and take decisions that affects them or their communities' lives. In other words, the result drives a change of mindset from the most skeptical stakeholders. In addition, the students realize how important they are to make their school, their faculty, their city, their country, namely Europe as a better place to live and to grow.

Objectives
The general objective to introduce the Service-Learning methodology in a practical way to Education and Pedagogy students at the Faculty of Education - Teacher Training Center (CFP) of the Complutense University of Madrid (UCM) is allowed these learners to project real actions in a context consistent with the academic and professional needs demanded by their profiles. In this sense, it is expected a priori that there would be a curricular enrichment, as students were going to be offered a framework for professional development regarding the care of specific groups, e.g., students with cognitive diversity. Specifically, they have been provided with a meeting space with these students to subsequently collaborate with an association for a social benefit, which is none other than contributing to the education of students with intellectual disabilities to facilitate their full and effective integration into society.

Methodology
The students' projects are aimed at providing service to different nonprofit community organizations or associations. One such association is Achalay (https://www.achalay.es/), which collaborates with UCM to develop the LICEO Diploma at the Faculty of Education - CFP. This initiative aims to support the education of young people with intellectual disabilities and combats educational, social, and economic exclusion. Through this specific two-year program, young people are provided with a training diploma that enables individuals with cognitive diversity to fully develop their human potential, sense of dignity, self-esteem, and reinforces respect for human rights, as well as promoting the maximum development of personality, mental and physical abilities, and effective participation in a free society. Not only does it promote the value of inclusion in the university environment, but it also contributes to destroying stereotypes, promoting values such as solidarity, openness, and flexibility (Izuzquiza, 2012). Specifically, the framework for Education and Pedagogy students' work is to support the above-mentioned association in adapting materials and resources for students with intellectual disabilities. In this context, the development of activities, it usually began with a seminar on the main characteristics of Service-

Learning and DFC. For the latter methodology, the seminar outlines the various stages necessary to successfully carry out a project based on design thinking, which comprises five phases: Feel, Imagine, Act, Evolve, and Share (Cantón and Ojeda, 2017).

In summary, as an example, the results of the Service-Learning and DFC approach in collaboration with the Achalay association, which supports students with intellectual disabilities, are described as follows: During the "Feel" phase, aimed at generating empathy with students with intellectual disabilities, a representative of the Achalay association introduced the main characteristics of the LICEO Diploma and highlighted the needs to be addressed. Additionally, a session was organized for interaction between both groups of students to inspire active participation. Students were also given the opportunity to visit their classmates' classes with disabilities to better understand their needs and adapt their solutions more effectively. Once the challenge was identified and the action area defined, students selected the type of solution they preferred to work on. They then developed a prototype and designed an action plan ("Imagine"), which they subsequently implemented ("Act"). An evaluation and reflection on the process and the achieved product were conducted to make improvements ("Evolve"). Finally, in the "Share" phase, each team presented a video summary of the project to the entire class, lasting approximately 5 minutes. Each team received feedback from the teacher, and there was an opportunity for all students to ask questions and delve deeper into the developed products.

In contrast to the typical linear and logical problem-solving approach, projects based on design thinking focus on intuition and emotional interpretation (Cantón and Ojeda, 2017). Students gain empathy with their environment (in our case, students with cognitive diversity sharing spaces in their own faculty), generate ideas as a group, materialize them, and reflect on the process. There are alternating moments of divergent thinking to broaden options and convergent thinking to select the best ones. This combination provides a broad perspective, although it sometimes involves uncertainty, but this is normal. The teacher must promote confidence in the process, and eventually, step by step, this uncertainty dissipates.

Regarding the evaluation system, in general, students are required to prepare a digital portfolio documenting the project's development. Attendance at sessions and the portfolio together account for 40% of the final grade for the course.

Results and critical students' reflections

Through the construction of a digital portfolio, students reflected on their learning experiences in order to improve and evolve their projects. From these reflections, a very positive evaluation of the work done has been noted, as well as its impact on their professional development. Continuing with the example of service for students with intellectual disabilities, some students' reflections include:

> *"From the project, we take away real experiences that have made us learn not only curriculum content but also life experiences, emotions, and learnings that we will always carry in our backpacks."*

They have learned to organize themselves and rework their ideas when they encounter difficulties.

> *"In the Imagine phase... the group had certain complications regarding brainstorming, as we were not clear about what we wanted to do or how we would do it. We also couldn't come up with resources or activities; we were mentally blocked. But with patience, speaking frankly, we analyzed very well what each member of the group thought. Finally, we were able to organize and make the necessary connections to find and visualize the activity and the resource."*

Likewise, they have strengthened their collaboration skills, learning to depend on each other, assuming the corresponding responsibilities to achieve the success of their project.

> *"Working in a team has been another highlight of our academic process. Constant collaboration and organization present in the subject have strengthened our ability to face challenges together and enhance the individual strengths*

of each team member. This collaborative approach has not only enriched our learning experiences but has also modeled the importance of collectivity in the educational field."

Finally, a notable change in attitude towards inclusion is evident. Adapting materials for students with intellectual disabilities has not only presented an educational challenge but also fostered empathy and humanity among the students. They have internalized the importance of inclusion and accessibility in education.

"We have learned to see differences as opportunities to learn. By working with the kids from Achalay, we have realized that people with intellectual disabilities are often undervalued or infantilized and actually have other abilities and potentials."

And to a large extent, the students' motivation towards learning has improved due to the integration of the Service-Learning and DFC methodologies.

"The Service-Learning project has seemed very interesting to us. The best way to learn is by carrying out what you learn, and that's exactly what we have done with this project. We always talk about diversity, curriculum adaptations, flexibility, inclusion, etc., but from a theoretical standpoint. In contrast, this time, we have been able to experience these aspects firsthand."

Conclusions

The present work is part of a series of experiences that have been implemented in recent academic years with students from the Faculty of Education-CFP of the UCM. They focus on the development and implementation of active methodologies with the purpose of promoting empathy, creativity, teamwork, and critical thinking among the learners. Additionally, they seek to empower students and offer them the opportunity to express and put into practice their own ideas to contribute to the improvement of the system, specifically in their social commitment to the care of more vulnerable groups.

According to the reflections shared in their digital portfolios, a highly positive impact has been observed in their attitude towards, for instance, students with cognitive diversity, describing the experience as enriching. They describe their work as an opportunity to apply their knowledge and skills beyond the conventional academic sphere, becoming a truly meaningful experience. Indeed, the use of the DFC methodology, despite initial uncertainties, has promoted essential aspects such as active listening, the exchange of personal interests to discover similarities and differences, the expression of emotions, and the promotion of values such as respect and empathy. All these social and emotional skills are relevant both for personal growth and for the professional development of future teachers and educators. In addition, to apply and spread a methodology such as Service-Learning + Design For Change will help to create future active citizen frameworks necessary to transform our society in line with a sustainable development. The five stages of DFC were fundamental in guiding the development of the Service-Learning projects, from identifying an initial challenge to reflection and projection for the future. The role of the teacher was limited to being a facilitator of learning situations.

These results can serve as an example for other teachers interested in the Service-Learning methodology, as it not only strengthens academic training but also prepares students to face the present and future challenges of 21st-century society, thus forming truly committed and capable professionals.

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Alessandro Soriani[1], Elena Pacetti[2], Luca Ferrari[3]

[1] University of Bologna, Dept. of Education
alessandro.soriani@unibo.it

[2] University of Bologna, Dept. of Education
elena.pacetti@unibo.it

[3] University of Bologna, Dept. of Education
l.ferrari@unibo.it

Let's talk about Sustainability: strategies to manage debates and feedbacks

The seminar aims to:
- present pedagogical approaches and communication strategies for managing debates and participant interaction;
- share innovative methods and techniques for fostering respectful and productive discourse;
- provide practical insights through structured group activities and reflective discussions.

By participating in this seminar, attendees will:
- develop skills in collaborative problem-solving, critical thinking, and effective communication;
- learn innovative strategies for fostering respectful and productive discourse both online and offline;
- experience hands-on application of pedagogical approaches and communication strategies in a simulated environment.

In the face of growing environmental concerns and the pressing need for sustainable practices, the role of social media and face-to-face events in communicating important projects and actions cannot be overstated. However, effectively managing online debates and feedback is a complex task that requires careful consideration of pedagogical approaches, communication strategies, and community building. This panel, titled "Let's talk about sustainability: strategies to manage debates and feedback" aims to provide a reflective space to explore innovative strategies for fostering respectful, meaningful, and productive discourse on sustainability within participatory processes. Referring to Bruner's (1990) theories on learning as a social process, the most effective and meaningful knowledge emerges from a process of social construction, from shared goals, practices and collective identity. Bruner emphasizes that learning is a constructive process based on processing information, applying strategies and testing hypotheses in a context that requires collaboration between participants. Collaborative learning methods improve problem-solving strategies as learners are exposed to different interpretations and perspectives of a situation. Learning is no longer understood as the acquisition of knowledge (learning about), but as a process that modifies behaviour based on experiences and the meaning attributed to one's actions in the social context of reference (learning to be). Learning by doing, but also learning by thinking, is at the basis of active learning: and as Marta Nussbaum (2010) points out, this idea of learning is consistent with the idea of a complex and interdependent world, in which it is necessary to be activated and to understand how this world works in order to be able to orient oneself consciously and to act as a global citizen.
Sustainability has become a crucial focus globally, driven by the urgent need to address climate change, environmental degradation, and resource depletion. Effective communication is key to promoting sustainable practices and engaging communities in meaningful ways. This is why the focus of the proposal revolves around the technique of the "debate": a tool that provides opportunities for deeper, more personal interactions, fostering stronger community bonds and more nuanced discussions by balancing online and offline approaches. These attitudes and values are part of citizenship competence: "Citizenship competence is the ability to act as responsible citizens and to fully participate in civic and

social life, based on understanding of social, economic, legal and political concepts and structures, as well as global developments and sustainability" (EU Council Recommendation of 22 May 2018 on key competences for lifelong learning). Citizenship education in today's society must therefore pursue educational objectives such as approaching problems as members of a global society, assuming responsibility, understanding cultural differences, critical thinking, being prepared to resolve conflicts in a non-violent manner, changing one's lifestyle to protect the environment, being sensitive to the protection of human rights, and political participation at local, national and international level (Cogan, Derricott, 1998).

The "Let's talk about sustainability: strategies to manage debates and feedbacks" panel seeks to address the critical need for effective communication in promoting sustainable practices. By combining theoretical discussions with practical group activities, the panel provides a comprehensive approach to managing debates and feedback. Participants will leave with enhanced skills and strategies that they can apply in their own efforts to engage communities and promote sustainability. Cooperative learning structures and strategies for managing interaction during face-to-face discussions using digital tools will be tested (Kagan, 2013).

As the world continues to grapple with environmental challenges, the importance of effective communication and community engagement cannot be overstated. This panel not only addresses current needs but also sets the stage for future innovations in participatory processes. The insights and skills gained from this session will be valuable for practitioners, educators, and community leaders dedicated to fostering a sustainable future. "The ability and willingness to engage in public discourse about matters of public policy, and to question authority… are perhaps the most distinctive aspects of citizenship in a liberal democracy, since they are precisely what distinguish 'citizens' within a democracy from the 'subjects' of an authoritarian regime" (Kymlicka, 1999, p. 82).

By integrating pedagogical approaches, and fostering community building, we can create a more informed, engaged, and proactive populace ready to tackle the pressing environmental issues of our time. This panel represents a step forward in that journey, equipping participants with the tools and knowledge to make a meaningful impact.

Keywords: Debate, Feedback, Debriefing, Cooperative learning, Active participation.

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Jesús Sanz Abad[1], Isabel González Enríquez[2]

[1] Complutense University of Madrid, Dept. of Social Anthropology and Social Psychology
jesusanz@cps.ucm.es

[2] Complutense University of Madrid, Dept. of Social Anthropology and Social Psychology
isgonz12@ucm.es

Communication strategies to face climate change.
Narrative strategies and tools for building a transformative narrative on sustainability and climate change

This course aims to reflect on the existing narratives on climate change and to analyse what aspects should be taken into account in order to promote greater change, as well as to encourage greater awareness and action in the face of ecosocial crisis.

The workshop is organised in two parts. In the first part, starting from Environmental Anthropology, a more theoretical analysis will be made of how our view of the environment has been configured.

For this purpose, the workshop will focus on Western view of nature since Modernity, focusing on two aspects:

a) The strongly anthropocentric configuration that emerges as a result of Modernity in the West with a strong division between human and nature, unlike existing worldviews in other contexts.

b) An analysis of the role of the configuration of modern science and its scientific principles on our view of nature.

On the basis of this theoretical analysis, we propose to unpack dominant narratives on climate change and to reflect on the repercussions that these narratives have on our view and approach to the environment. The analytical focus will be on addressing some of the reactions triggered by these narratives, such as denialism, fatalism, the role given to science, to technology or to other forms of knowledge in relation to climate change, etc.

In the second part, in a practical level, the workshop will consist of the following components:

1) As an initial activity, we will comment some news related to the environment in order to analyse the categories with which we think about nature and our relation towards it. as a result, the aim is to reflect on the important role that science and the economy play in our view of the environment.

2) In small groups, we will work on the following activities:

- We will work on which communication strategies could be more effective in communicating the effects and repercussions of climate change. Practical work will be carried out with students with the aim of imagining and/or building alternative narratives that could be more appealing to the general public.

- We will think of some concrete actions that will help to develop some of these alternatives. The groups will share them, and propose specific contexts in which to put them into practice.

Keywords: Narratives, Climate change, Nature, Science, Anthropology.

Francesco Girotti[1], Elena Luppi[2]

[1] University of Bologna. Una.Futura Senior local lead
francesco.girotti@unibo.it

[2] University of Bologna, Dept. of Education
elena.luppi@unibo.it

European transnational projects in sustainability.
Exploring synergies across disciplines

PhD students are increasingly being asked to develop advanced project design skills to effectively respond to international competitive calls. These calls are essential for securing funding and sustaining their research projects and innovative ideas. The ability to design and present compelling project proposals is crucial in the highly competitive landscape of academic and scientific research. One of the core priorities in this context is sustainability, which is a key focus that cuts across nearly all European programs. This emphasis on sustainability ensures that research projects contribute to long-term environmental, social, and economic goals, aligning with broader global challenges and objectives.

Sustainability represents an integrated approach that addresses the interconnectedness of various systems and promotes a balanced relationship between human activities and the natural environment. In academic research, this means designing projects that not only advance knowledge and technological innovation but also consider their impact on society and the planet. This holistic perspective is increasingly required by funding agencies, making it imperative for researchers to incorporate sustainable practices and objectives into their proposals.

To equip PhD students with the necessary skills, the seminar will begin with a brief analysis of various funding instruments available within the European context. This analysis will provide students with a foundational understanding of the different types of funding opportunities and the specific requirements and expectations associated with each. By examining real-world case studies of projects that focus on sustainability, students will gain insights into successful strategies and common pitfalls in project design. These case studies will serve as practical examples of how sustainability can be integrated into research projects effectively.

The seminar will delve into the critical aspects of writing, evaluating, and disseminating European projects. Students will learn the nuances of drafting high-quality project proposals that meet the stringent criteria of European calls. This includes understanding the distinctive features and specificities of these calls, such as eligibility requirements, thematic priorities, and evaluation processes. By mastering these elements, students can enhance their chances of securing funding and successfully executing their projects.

Specifically, the following topics will be addressed:

- **European calls: features and specificities**: This topic will cover the different types of European funding calls, their unique characteristics, and the specific criteria used in evaluating proposals. Students will learn how to navigate the application processes and tailor their proposals to meet the specific requirements of each call. Detailed attention will be given to understanding the strategic priorities of various funding programs, which often reflect the broader policy goals of the European Union.
- **Key concepts of European Project Design**: This includes an in-depth exploration of essential components such as partnership building, work program development, monitoring, evaluation, and dissemination. Students will understand the importance of building strong consortia, developing comprehensive work plans, and implementing effective evaluation strategies to measure the impact and success of their projects. Dissemination strategies will also be covered to ensure that project results reach a wide audience and have a lasting impact. Emphasis will be

placed on the practical aspects of project management, such as budgeting, timeline creation, and risk management, to ensure that projects are not only approved but also successfully implemented.

Throughout the seminar, students will be engaged through active learning and teaching proposals. This pedagogical approach ensures that students are not merely passive recipients of information but are actively involved in the learning process. Interactive sessions, group work, and hands-on activities will be incorporated to reinforce theoretical knowledge and develop practical skills. Students will have opportunities to practice writing project proposals, receive feedback, and revise their work based on constructive critique. This iterative process of feedback and revision will help students refine their proposals and develop a critical eye for detail and coherence.

The seminar will be held by experienced researchers and project managers who have successfully navigated the European funding landscape. These sessions will provide valuable insights and real-world perspectives, offering students a glimpse into the practical challenges and successes of project design and implementation. Networking opportunities with these experts will also be facilitated, helping students build connections that can support their future research endeavors.

By the end of the seminar, PhD students will be well-prepared to design, write, and manage successful European projects. They will have a thorough understanding of the intricacies of European funding mechanisms and will be equipped with the skills necessary to navigate the competitive landscape of research funding. This comprehensive training will not only enhance their individual research capabilities but also contribute to the advancement of sustainable and impactful research initiatives across Europe.

Moreover, the skills acquired through this seminar will be transferable to a wide range of professional contexts beyond academia. The ability to design, manage, and evaluate projects is highly valued in various sectors, including industry, government, and non-profit organizations. Thus, the training provided in this seminar will open up diverse career opportunities for PhD students, equipping them with a versatile skill set that is in high demand.

Gregorio Martín-de Castro

Complutense University of Madrid, Dept. of Management
gmartinc@ucm.es

Be and Seem: How Organizations Communicate and Build a Sustainable Image & Legitimacy and the Emerging Phenomenon of Greenwashing-Brownwashing

Under increasing institutional pressures coming from stakeholders and regulators organisations are faced with the double dilemma of what to do to tackle the environmental challenge and how to communicate their ecological stance to obtain social acceptance and support from their relevant audiences, such as customers, suppliers, employees, investors, public administrations and society in general, the media, etc. Because those audiences can't directly assess the environmental commitment of organisations, for all types of them, it is mandatory to understand the importance of and effective communication of sustainability to leverage the sustainable organisations' commitment and performance and for effective stakeholder engagement building a sustainable organisational image, legitimacy and reputation. In doing that, corporate environmental commitment presents different postures going from greenwashing to undue modesty or brownwashing and from environmental excellence to ecological inaction. In this sense, the incentives, dangers and implications of decoupled sustainability communication, greenwashing, and brownwashing, are shown. Due to the epidemic dimension of greenwashing strategy, with the aim of protect the EU citizenship, recent normatives by the European Parliament have arisen, such as "the right to repair" (April 2024), "the eco-design regulation" (April 2024), or the EU Directive 2024/825 (February 2024), amending Directives 2005/29/EC and 2011/83/EU with regard to the empowerment of consumers for ecological transition through better protection against unfair practices and through better information -avoiding greenwashing practices-.

Through critical learning in the classroom, the organisational dilemma "be and seem" is deconstructed through several sustainability communication strategies carried out by organisations. In this lecture, their causes and organisational implications are analysed, with a special emphasis on the greenwashing strategy and its effects on organisational environmental legitimacy, image, and reputation construction, as well organisational performance, based on original theoretical models developed by the instructor, as well as empirical evidence at European and North-American companies. To complement the concepts, models and tools introduced in the lecture, a real case and examples are shown to illustrate lecture contents.

Keywords: Greenwashing, Brownwashing, Green Corporate Image, Environmental Legitimacy, Sustainability Communication.

Stefano Piastra

University of Bologna, Dept. of Education
stefano.piastra@unibo.it

A field trip in the Gessi Bolognesi Regional Park.
Sustainability, education and communication issues in a protected area

The Gessi Bolognesi Regional Park (officially, 'Parco regionale dei Gessi Bolognesi e Calanchi dell'Abbadessa') is a protected area just in the suburbs of the urban area of Bologna, located mainly in the Municipality of S. Lazzaro di Savena. Instituted in 1988 and part of the network of the regional parks of the Emilia-Romagna Region Authority, since 2023 it has been acknowledged as a serial site of the UNESCO World Heritage *Evaporitic Karst and Caves of the Northern Apennines* (https://whc.unesco.org/en/list/1692), established under criterion VIII ("be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features").

The values of the zone consist of impressive outcrops of Messinian Gypsum, evidence of the Salinity Crisis which invested the Mediterranean basin between 5.9 and 5.6 Ma BP. The main mission of the Gessi Bolognesi Regional Park is focused on geological and karst features: conservation, research, educational and tourist use of caves, dolines and other karst landforms.

In the framework of the summer school, the participants will be guided on the trails along the border of the Spipola doline (one of the largest dolines in Gypsum at the European level) and inside the Spipola cave, a very large karst system in Gypsum, open to speleological tourism since the 1930s.

The field trip will be developed through a double dimension: from one side, touring a park and UNESCO WH (and the presence and the surface of protected areas at the national level are, as it is known, indicators of Sustainability); from the other, focusing on the strategies and the activities of the park regarding communication and education.
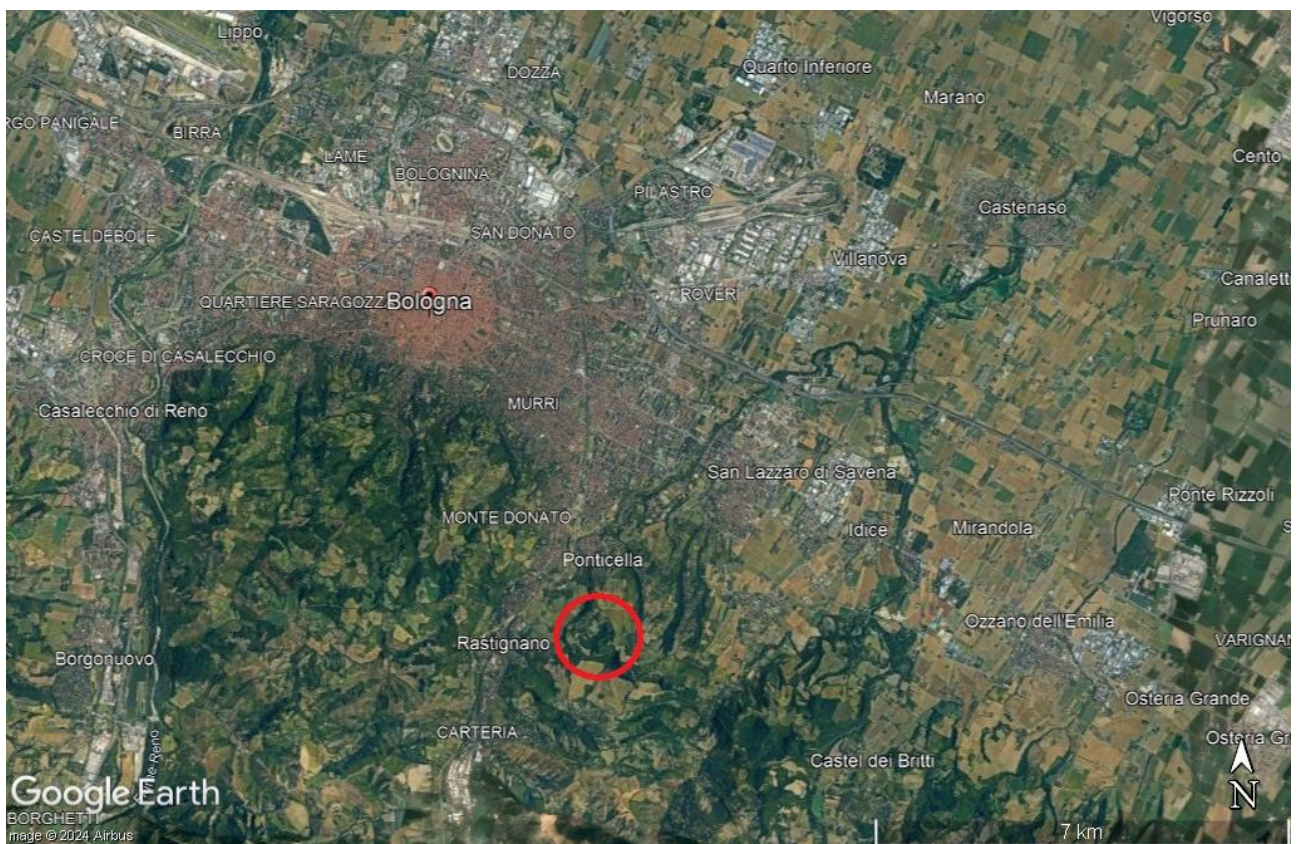
In particular, an informal interview with environmental educators of the protected area will take place on-site.

Some key issues to be discussed in this context are:
-   Opportunities, challenges and threats related to the fact that the park (now also WH site) is very close to a large urban area (Bologna), accessible even by urban bus;
-   The Gessi Bolognesi Regional Park focused on the involvement of the local community, and local schools in particular (from pre-school system to high school): in 2023, more than 2300 students and teachers, belonging to 56 school classes, were guided in the Spipola cave, in the Farneto cave (a second cavity open to the public) and in the Spipola doline; primary schools were the school level mainly represented in the figures. After decades of such an involvement of the young generation of the residents, which results in the perception and the knowledge of the protected area?
-   Several guided tours involve, here, caves: how to describe and make appealing, to the public audience, an environment usually inaccessible? How to deconstruct usual stereotypes and cliches, in the common opinion, about caves?
-   Today, the Gessi Bolognesi Regional Park looks, at a first sight, an area with a high level of wilderness. But comparing the present-day situation with old photos dating back to the early 20th century or with historical cartography dating back to the Modern Age, it is clear that the current wilderness of the zone is the result of a process of renaturation, inset by the depopulation of the area, caused, in turn, by the so-called 'Italian miracle' of the 1950s-1960s, the new prominence of industry and the symmetrical decline of agriculture. By contrast, in the recent past the degree of human presence here was high. How to make people aware of this process? More in general, how to deconstruct a wrong, but widespread, concept of the Italian nature as 'intact', while it is mainly

'artificial' on the basis of centuries of human works and alteration of the biomes along the Italian peninsula?
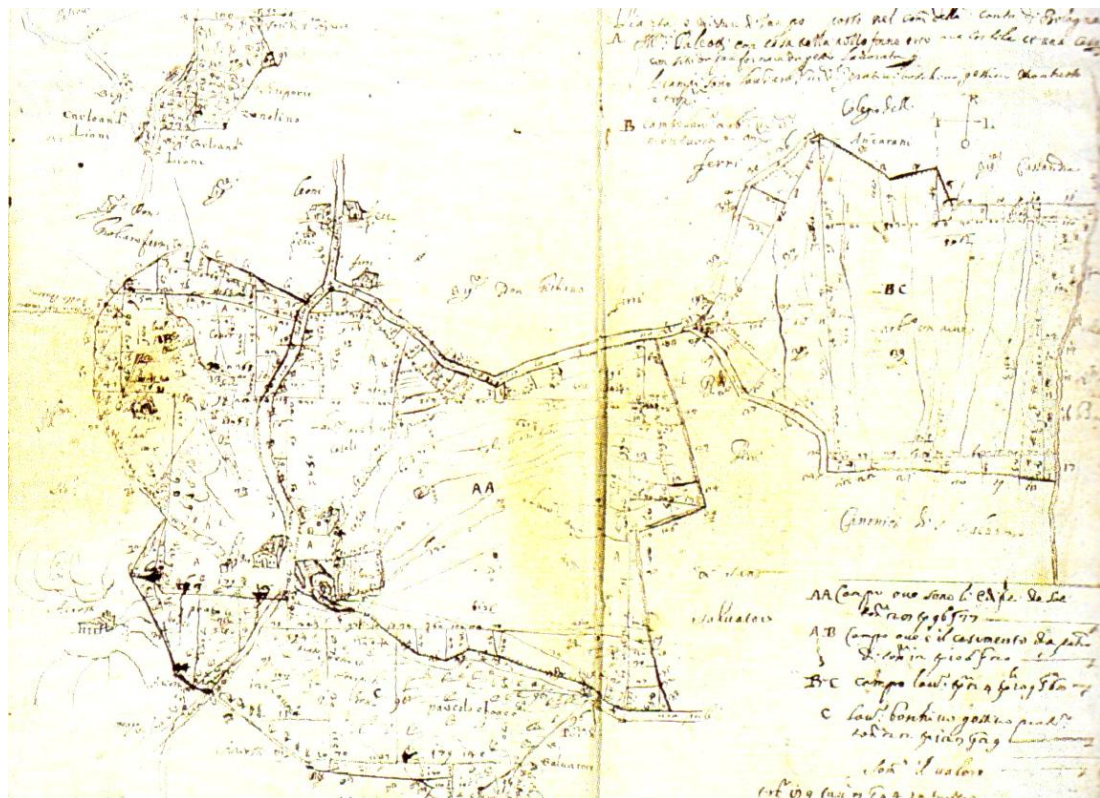
- During WWII, local population used the Spipola cave as shelter to avoid the bombing and the roundups. It is probable that some hundreds of people were hosted inside the cavity for months during the last year of the war, and even now some evidences of that occupation are still visible. Which importance, in the broader framework of civic education in Italian schools (instituted by ministerial decree no. 35, June 22nd, 2020), for such a peculiar human adaptation to the environment in a crisis period as a war? How to disseminate, for a broader audience, such an intersection between nature and culture?

Bologna area. The red circle indicates the area of the Spipola doline and cave (Gessi Bolognesi Regional Park) (source: GoogleEarth).

Gessi Bolognesi Regional Park
Spipola doline and Spipola cave developed in a Messinian Gypsum outcrop

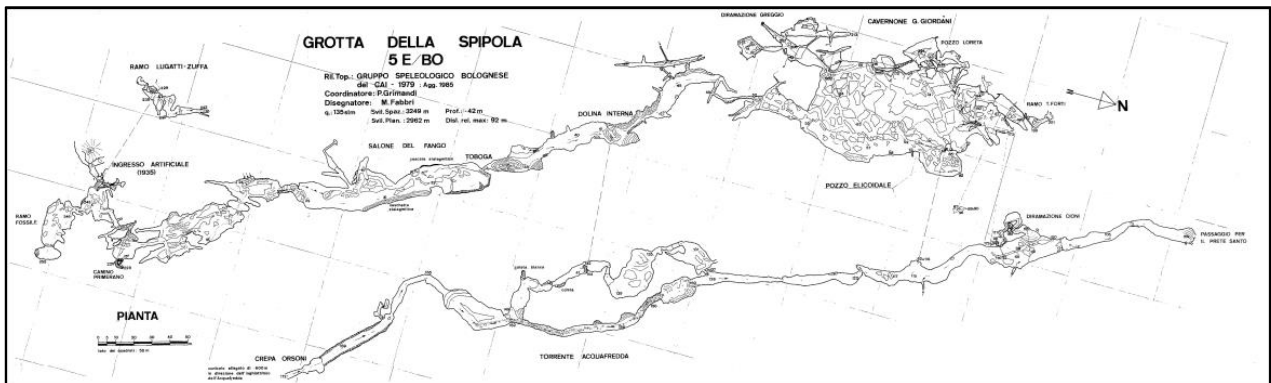Santa Rosa

Croara

Google Earth

700 m

Spipola doline (Gessi Bolognesi Regional Park), with the trail along its border. Large sectors of the bottom or the cliffs of the doline are currently covered by woods (source: GoogleEarth). The artificial entrance to the cave is located in the NW quadrant of the doline.

17th century map of the Spipola doline. At that time, large sectors of the karst landforms were exploited for agriculture or breeding (source: Centro Villa Ghigi (edited by), *Parco Regionale dei Gessi Bolognesi e Calanchi dell'Abbadessa*, Bologna, 1999).

Group visit inside the Spipola cave (courtesy of the Gessi Bolognesi Regional Park).

Survey of the Spipola cave (source: https://geo.regione.emilia-romagna.it/schede/speleo/index.jsp?id=41534).

Annett Wienmeister

Charité Berlin, Institute for the History of Medicine and Ethics in Medicine
annett.wienmeister@charite.de

Should academics fly?
Scientific mobility and sustainability – an ethical challenge

It is widely acknowledged that air travel has a negative impact on climate change. At the same time, work in the academic field often implies frequent long-distance travel for purposes such as attending conferences, teaching and networking in general. Growing awareness of climate impacts and the (felt) need to travel internationally might confront academics with the "flyers dilemma" – a growing tension between climate and career concerns. At the workshop, we will ask: Is it ethically tenable to use air travel for academic purposes? In order to discuss the question, we will employ moral reasoning skills as well as models of ethical decision-making. We will look at normative arguments for and against air travel reduction in the academic field and we will refer to different steps of ethical judgement formation. This will help us see the ethical problems more clearly, mind different perspectives about the issue, reflect on the moral values involved and think about possible solutions in an ethically responsible way.

Keywords: Sustainability, Scientific mobility, Flyers dilemma, Ethical decision-making, Moral reasoning.

Silvia Gaiani

University of Helsinki, Ruralia Institute
silvia.gaiani@helsinki.fi

Smart ways of communicating sustainability in food

According to the FAO, "to be sustainable, agriculture must meet the needs of present and future generations for its products and services, while ensuring profitability, environmental health and social and economic equity." Sustainable agriculture must guarantee global food security, at the same time, promote healthy ecosystems, and support sustainable management of land, water and natural resources. The stakeholders of the food chain are aware that sustainability is not only essential for the maintenance of its activity, but that it also becomes a differential value. Besides being able to extend productive activity over time, sustainability constitutes a competitive advantage for building reputation when the consumer recognizes that food is produced in a sustainable way.

When sustainability guides the behavior of the agents of the food chain production, and these are capable of communicating this adequately, it turns into a reputational building element. These are the set of shared beliefs in communities that contribute positively or negatively to a company's results. They are also capable of positively influencing the five variables that comprise reputation according to the Reputation Relevance model: contribution, integrity, transparency, credibility and image.

My presentation will focus on the following aspects: an analysis of the impact of different influential factors, such as norms/beliefs/cultural environments as well as medias and their way of communicating sustainability in the food system; an analysis of the status of consumer information expectations/needs (conscious and unconscious) related to sustainability in food and understand how sustainability related information expectations/needs can be drivers of change.

Keywords: Sustainability, Communication, Food supply chain, Food systems.