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INTREPID FUTURES INITIATIVES

The future of Academia and trans-disciplinary knowledge production in the urban field

Giulio Verdini, Olivia Bina & Ana Sabina Cioboata

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CONTENTS

Introduction

Background of this workshop

This Workshop is organized as part of a EU-funded Network (COST Action): INTREPID – whose objective is to inspire change in how we understand knowledge and build leadership for interdisciplinarity http://www.intrepid-cost.eu/. INTREPID addresses 3 challenges:

• Challenge 1 – Understand Change: Reflecting and Learning
• Challenge 2 – Critical Mass: Building Networks and Cooperation
• Challenge 3 – Enable Change: Enabling interdisciplinarity and transdisciplinarity.

It has been exploring the discourse and practice of interdisciplinarity and transdisciplinarity (ID and TD) in research policy, programming and funding in the EU and its member states, and has been looking specifically into the obstacles to, and enablers of, ID and TD in urban related research.

This Network is funded for four years. We are now in the second and the final phase and, one of current tasks is to reflect on "The Future of Academia and Universities: as if ID and TD mattered" (INTREPID Futures Initiative). The idea is to make a contribution towards shaping the space and terms of knowledge production in a way that enables more sustainable urban futures. This idea has been linked to the development of an **urban curriculum of the future**, as put forward during the first INTREPID Training School on 'Inter and Transdisciplinary Urban Research', held in Barcelona Centre of Contemporary Culture of Barcelona (CCCB), between the 13-17 February 2017.

Further advancements in the **agenda** of "Universities and Knowledge for Sustainable Urban Futures: as if ID and TD mattered" were made in the follow up workshop held in London at the University of Westminster, on the 24th March 2017. See: http://www.intrepid-cost.eu/wp-content/uploads/2017/05/4th-INTREPID-Report-4th-Action-Workshop-London-1.pdf

The London Workshop and its outcomes

During the one-day gathering a group of academic scholars and practitioner involved in urban-related disciplines or practice focused on discussing the following questions:

- **What** knowledge and learning is needed to create more just and sustainable futures?

- **How/Where** will knowledge be generated, distributed, owned and used?

- **Who** will generate, distribute, own and use this knowledge?

The expected outcomes of the workshop were:

- A list of priority themes for discussion and inquiry over the next two years (till 2019);

- Identification of possible synergies between INTREPID and participants' own initiatives;

- Ideas about how best to use INTREPID's funds in order to contribute to advance this inquiry: workshops, training, publications, conference etc.

The London workshop has been instrumental to introduce the idea of the '**Future-of-U**', by contemplating a series of concerns and uncertainties, particularly related to **the role of Universities in society**. The diagnosis of current problems in knowledge production, accessibility and significance has determined the need to **intervene** to **innovate** via **tactical interventions**, as well as to explore and promote a **comprehensive strategy of change**.

The nexus between **University and city** has led to discuss issues of reciprocity, openness and connectedness for the reproduction of common goods and for sharing, co-designing and co-creating urban futures with the civil society.

The 'open question'

One of the main questions that seemed to arise from the 'status quo' was: 'how open or porous should the future university be? And: Open or porous to what? To whom? The notion of **transdisciplinarity** was central: basically referring to the embracing of multiple and diverse forms, sources and agents of knowledge, when shaping problems, solutions and the understanding of reality. The future university would be increasingly **open to such multiplicity and diversity**, emphasizing the need to mix forms, sources and agents of knowledge. This should open up structures and University curricula to innovation and change, shaping the space and place of multiple knowledge, enriching the opportunities of employability, envisioning new market realities.

Therefore, the ultimate question is about **engagement.** Are universities willing, and capable of wider, deeper engagement with the outside world? Will there still be a notion of an '**outside**' in the **Future-of-U**?

Two possible ways forward

In the attempt to respond to the 'open question' the London Workshop has concluded with two possible ways forward:

- To envisioning the Future-of-U revisiting the idea of future scenarios, during a series of co-creation activities held by various Universities involved in INTREPID (exploratory workshops – tactical interventions);

- To design an urban curriculum of the future, retrieving the 'civic design' tradition of urban planning schools (comprehensive strategy of change);

Aim of the Gagliato Workshop

Towards the Future-of-U

The idea of hosting the 5th INTREPID Action Workshop in Gagliato, Calabria (Italy), between the 20th - 27th July 2017, raised during the London Workshop with the deliberate intention to embed one of the INTREPID research explorations within on-going initiatives of some of the Universities involved in the INTREPID COST action: in particular a **participatory design workshop** on Creative Towns, coordinated by the University of Westminster, with the participation of Newcastle University. Other non-cost members involved are: ILAUD, The International Laboratory of Architecture and Urban Design, the London School of Economics, the Universita' degli Studi Mediterranea di Reggio Calabria, the Università della Calabria and a local NGO, the Academy of the Nano-science of Gagliato. The participatory workshop has been funded by the Academy of the Nano-science of Gagliato and it has been fruitfully coupled with an INTREPID Workshop.

CREATIVE TOWNS WORKSHOP

The main aim of the participatory design workshop was to explore alternative scenarios for the sustainable local development of Gagliato, a small town located in a relative marginal area of the South of Italy, engaging various local stakeholders in the scenario exercise. This co-creation activity has been partially institutionalized, due to active engagement of the municipal local authority of Gagliato and the Regional Authority of Calabria. However, due to its nature of extra-curricular academic activity, it remained an explorative exercise with the involvement of academic scholars and students (undergraduate, graduate and postgraduate), from different disciplines. For

this reason, it has provided suitable conditions for reflecting on a non-ordinary University ID/TD activity, with the potential of feeding the INTREPID Agenda.

The participatory design workshop of Gagliato is relevant for the INTREPID action for the following reasons:

- It explicitly addresses one of the two ways forward pointed out in the London Workshop (March 2017), in particular to envision the **Future-of-U** revisiting the idea of scenarios, during a series of co-creation activities;

- It provides an opportunity to reflect in real time during an **action-research** activity where **academic scholars** (senior and junior staff) and **students** are asked to engage with the local civil society to co-create knowledge (future scenarios);

Overall, it tackles:

- Challenge 1) to envision 'the Future-of-U as one driven by the goals of sustainability, wisdom and character building – thus exploring the qualities, shape, and dynamics of universities imagined as a place that enables human capabilities for a sustainable future, from both the perspective of scholars and students involved; and:

- Challenge 2) to define what a university is and how it does, could and should relate to society and contribute to knowledge production, from both the perspective of scholars and students involved;

Therefore, academic scholars and students engagement was monitored during the one-week workshop and was object of multiple surveys in order to shed light on the possible **ethos** of the **Future-of-U.**

Several dimensions of the F-o-U, as discussed in the London workshop, have been taken into account, during the preparation of the workshop for example:

• Care (of Self, others, the whole, World);
• Just and sustainable worlds;
• Conviviality;
• Imagination;
• Life long learning;

In this respect the ultimate goal of the INTREPID Action Workshop of Gagliato was to further define the **ethos**, the **purpose** and the **desirable qualities** of the Future-of-U.

Gagliato Living Lab: co-creation of knowledge and scenario building

Between the 20th and 26th of July 2017, a group of students and scholars from various schools and disciplines (architecture, urban planning, urban design, local economic development) gathered in Gagliato for an intensive week-long residential design charrette. The format of the charrette is a traditional action-research where students, working in groups under the supervision of a tutor, develop joint solutions with local people. The charrette was comprised of the following main phases:

- Understanding the context and getting information from local people/stakeholders (the first 2/3 days). Method: direct observation; theme group discussion, informal interviews;

- Organizing a session (engagement workshop) where each group prepared materials to interact with local people. Method: mapping/interactive tables, structured interviews, questionnaires. People involved: 40 to 50;

- Processing information and visualizing in posters and presentation to the local community. Method: graphic visualization, oral presentation and Q&A session;

A working topic, previously agreed with the local authority of Gagliato and the local NGO, the Academy of Nano-science of Gagliato (the funder), was assigned to each group as shown in the following table. Each group had the task to develop a vision for future development taking into account various stakeholders (engagement) and different dimensions of sustainability (territorial/governance, economic, ethical/social, tools, risks/threats.

Gagliato Creative Towns Workshop 2017
Living Lab: co-creation of knowledge and scenario building

GROUP	VISION/ FUTURES	TOPICS	ENGAGEMENT	DIMENSIONS				
				Territorial/ Governance	Economic	Ethical/ social	Tools	Risks/ threats
A	The Town of Nanotech	NanoBorgo regeneration; smart village, insiders/outsiders.	Citizens; Academy of Gagliato stakeholders	Gagliato	Cultural and event economics	Knowledge spreading, nurturing science	Master Plan, strategic visioning	Temporariness
B	The Town of kids	Creative Public space; education: schools and informal STEM learning spaces, walkability.	Nanopiccola (kids)	Gagliato and surrounding municipalities	Investing in future generations	Nurturing and inspiring young generations, giving voice to vulnerable groups.	Guidelines, pilot projects	Brain drain
C	The Town of Wellbeing	Public Health, elderly, environmental friendly town, community-based health care.	Citizens; general practitioner; pharmacist; nanogagliato public health scholars.	Gagliato and its municipal territory.	Health economics	Solidarity, healthy society, reciprocity.	Guidelines, pilot projects	Pollution, environmental damages, lack of prevention
D	The town of Skills and Creativity	Creative industry, rural development, tourism, local and migrants.	Industry and SMEs; local authority.	Gagliato and the municipalities of 'Valle dell'Ancinale'	Local development, balanced regional economics	Innovation, social inclusion	Local development plan, strategic visioning	Lack of Infrastructures, Corruption
E	The Town of Science and Art	Nanoborgo regeneration; public art and open science	Citizens; Academy of Gagliato stakeholders	Gagliato and its municipal territory	Cultural and event economics	Knowledge spreading, nurturing creativity	Strategic visioning, pilot projects, guidelines	Temporariness

The Agenda of the Gagliato Workshop

THU   20st July   Arrival of the participants in Gagliato.
                        INTRODUCTION, 6 pm
                        Dinner in Gagliato

FRI   21st July   **FIELDTRIP**. Gagliato and Valley of Ancinale, 9.30 am
                        Aperitivo on the beach - Dinner in Soverato

SAT   22nd July   Residential Charrette in the village
                        1st Students' Presentation - 3 pm

                        SEMINAR, 5 pm
                        Creative Settlements
                        Dinner in Gagliato

SUN   23rd July   Residential Charrette in the village
                        ENGAGEMENT WORKSHOPS, 10 am
                        Meeting local community

                        OPEN HOUSE, 6 pm
                        Strategies for Inner Areas
                        Dinner with the local community

MON   24thJuly   Residential Charrette in the village
                        2st Students' Presentation, 12 am

                        COFFEE BREAK IN PALAZZO ROMITI, 2.00 pm
                        Meeting Nanotech scholars and other stakeholders

                        OPEN HOUSE (Soverato), 6 pm
                        Quality of life.
                        Dinner in Soverato

TUE   25th July   Residential Charrette in the village
                        3st Students' Presentation, 4 pm

                        INTREPID WORKSHOP, 6 pm
                        The future of U.

                        SERATA IN PIAZZA , 9 pm

WED   26th July   Presentation of the result to the community, 11 am

                        ROUND TABLE (Catanzaro)
                        Discussion of the result with the regional authority, 3 pm
                        Aperitivo on the beach – Closing Dinner in Soverato

THU   27th July   Leaving the village

Why a small settlements as a co-creation setting

The reflection on 'the future of Academia and trans-disciplinary knowledge production in the urban field', promoted by the 5th Action Workshop INTREPID, has been nicely embedded into a research on 'Creative Small settlements' carried out in 2015-2017 by several Institutes across the world to feed the UNESCO Global Report 'Culture: Urban Futures, presented at the UN-HABITAT III Conference in Quito (2016). This is part of a wider commitment of UNESCO to contribute to the UN 2030 Agenda for Sustainable Development by promoting the role of culture and education in achieving the UN SDGs (Sustainable Development Goals).

> *'Small settlements can show an extraordinary local capability to invent and develop innovative and creative economies out of their own scarce resources'.*

This is the message of the Research Report 'Creative Small settlements, Culture-based solutions for sustainable local development' (Verdini & Ceccarelli, 2017), where small settlements are analyzed as laboratories of experimentation where to test innovative educational programs. The reason why small settlements are important from the point of view of the pedagogical outcomes in the field of urban studies is partially related to their size and it is paradoxically related to their fragility and flexibility. Smallness, which is normally associated to weakness in current urban agglomeration processes, is a suitable condition to engage, in a relatively easy fashion, different disciplines (scholars) with local communities in finding practical solutions for real life problems.

Small settlements can be small scale incubators of real and innovative social, cultural and economic practices, if appropriately nurtured. Innovation can be linked to new ideas, mobilizing new resources and tapping into the specificity of local conditions (local resources, social capital, cultural meanings and so on). The nexus between people, places and practices is still quite recognizable and the actors involved in this process are still relatively visible. On the other hand, this nexus can be weakened by various forms of decline (economic, demographic and also cultural). It is normally one of the goals of workshops to envision sustainable development scenarios, given such conditions.

In terms of pedagogy, students and scholars are invited to study simultaneously theoretical solutions and ways to implementing it in a feasible way. The continuous exposure to local community determine the conditions for wider accountability of academic proposals and thoughts. This can be related to Hannah Arendt's theory of social action, which attempts to reconcile the contemplative and active live (Arendt, 1958). It promotes an idea of knowledge by making, within the dimension of public space, as precondition for achieving meaningful social outcomes. Many architecture and urban design workshops claim to produce knowledge by making (or inquiry by design) but it's uncommon to embed them into real participatory processes. It is a legacy of the experimental educational activities of ILAUD (International Laboratory of Architecture and Urban Design) which has been often materialized in pioneer experiences of local participations (De Carlo, 1973).

References
- Arendt, H. (1958), The human condition, Chicago: University of Chicago Press
- De Carlo, G. (1973), L'Architettura della partecipazione, Macerata: Quodlibet.
- UNESCO (2016), Culture Urban Future. Global Report Culture for Sustainable Urban Development, Paris: UNESCO.
- Verdini, G., Ceccarelli, P. (2017), Creative Small Settlements. Culture-based solutions for local sustainable development, London: University of Westminster.

UNESCO EDS (Education for Sustainable Development) and Gagliato 2017

Education for Sustainable Development (ESD) is one of the key instruments for contributing to achieving the UN Sustainable Development Goals (SDGs), through understanding and implementing them, as well as engaging informed citizens in understanding necessary transformation. In this sense, the Gagliato Workshop aimed to align itself with the aspirations of the ESD Agenda as evidenced by guiding documents (UNESCO, 2017, Education for Sustainable Development: Learning Objectives, Paris).

Discussions on ESD encompass the idea that education plays a key role in global development, contributing to new visions and having the responsibility of being tailored to 21st century challenges and aspirations, through the development of cross-cutting teaching and learning strategies.

In the context of achieving the SDGs, ESD entails the development of cross-cutting competencies and learning outcomes (cognitive, socio-emotional and behavioural) crucial for:
- Dealing with complex sustainability challenges;
- Enabling individuals to reflect onto their actions, taking into account their current and future impacts, from a local and global perspective;
- Enabling individuals to act in complex situations in an innovative and sustainable manner, participating in socio-political processes;
- Promoting sustainable development and lifestyles.

This is achieved not only by integrating topics directly or indirectly linked to the domain of 'sustainability' into teaching curriculums, but also by facilitating innovative, interactive, learner-centred educational settings.

The workshop format followed the three key pedagogical approaches of ESD:

1. **Learner-centred approach**: the development of knowledge took place during an active process guided in collaboration with students, who utilized their prior knowledge and experience; the scholars and team leaders were facilitators of the learning process instead of mere transmitters of information;

2. **Action-oriented learning**: the learners were engaged in action and observed and reflected on their experiences in terms of the learning process, forming abstract concepts and applying them in new situations;

3. **Transformative learning**: the workshop aimed to empower learners and participants to question and change the ways in which they see and think about a specific situation in order to deepen their understanding of it and to participate in the co-creation of new knowledge.

Workshop results

Students expectations and motivations

There were a total of 14 students participating in the workshop, both male and female, aged between 19 and 32. There were 6 participants at Undergraduate level, and 8 at Graduate level. The students had mixed disciplinary backgrounds, ranging primarily from architecture, urban design, local economic development and urban planning, as well as landscape architecture and business administration.

1. Expectations from the university experience

When asked what their primary expectations when deciding to apply for a university degree were, students primarily identified that these was linked to:

In a proportion of approximately 85%:
- Learning to think more critically about the world
- Gaining skills for the job they liked
- Learning about sustainable development and sustainable cities
- Contributing to shape a better future for humanity
- Applying their knowledge in finding practical solutions to complex problems.

In a proportion of approximately 80%:
- Improving knowledge in their disciplinary area
- Learning how to collaborate with a wide and diverse range of people, inside and outside academia
- Acquiring competences that would help contribute to society and collective well-being
- Applying knowledge in developing theoretical tools to solve complex problems.

In a proportion of approximately 60%:
- Gaining skills for a well-paid job
- Improving knowledge outside their discipline.

In a proportion of approximately 45%:
- Learning more about the problems and challenges of the city in which they would be studying
- Learning about themselves and who they are.

2. Improving the university experience

When asked what they would change about their current university experience, students listed a number of issues:

Curriculum:
- More practical experience as opposed to theoretical, supported by an obligatory placement
- Obtaining more feedback
- More interdisciplinary collaboration, especially with related faculties
- Having more time and opportunities to attend open lectures
- More case study examples

Assessment:
- Better explanations of the marking criteria and scoring system
- More time to talk through the portfolio
- More variety of learning styles
- Better integration of the technology component into the project, instead of considering it separately
- More group works
- More specific design feedback.

Learning experience:
- More flexibility, i.e. having two reading weeks, instead of one
- Ensuring that all lectures are recorded and filmed
- Policy-oriented laboratory or studios
- More seminars, less lectures, as they provide a better learning experience, but also ensuring that students receive more feedback in seminars
- More field trips
- More emphasis on mental health and keeping a good balance between the workload and one's personal life

Learning resources:
- More e-books and a better access to them
- More design software
- A more comprehensive library

The physical space:
- Quieter and larger studios, with more computers and desk facilities
- More storage facilities in the studios, especially for storing models for current projects
- Better equipped laboratories
- A larger library and more study rooms
- More space for relaxation, socialization and eating, both indoors and outdoors
- More green spaces on campus.

Social experience, sense of community:
- More course and department-specific events
- Supporting cultural differences (i.e. planning lessons that reflect the diversity of the classroom).

3. Motivation for participating in the workshop

When asked what motivated students to participate in the workshop, besides a general curiosity to discover more about Gagliato, students identified that this was linked to:

In a proportion of approximately 85%:
- Having a particular interest in strategic planning and learning how creativity can leverage development processes
- Considering this as an opportunity to learn by travelling.

In a proportion of approximately 80%:
- Trusting their teacher/supervisor that this would be a meaningful experience
- Having a particular interest in rural areas and solving problems of marginality
- Having a particular interest in community participation and learning how to engage communities effectively in development processes

- Wanting to work with students from different disciplinary backgrounds

In a proportion of approximately 55%:
- Wanting to work with students from other schools
- Wanting to discover the South of Italy.

4. Expectations from the workshop

When asked what their expectations before the start of the workshop were, students identified that these were linked to:

In a proportion of approximately 85%:
- Improving team-work, communication and community engagement skills
- Improving strategic and problem-solving thinking
- Improving analytic skills in the urban field
- Obtaining a better understanding of local community needs
- Experiencing conviviality and sharing a meaningful life experience with others
- Improving critical thinking.

In a proportion of approximately 80%:
- Obtaining a better understanding of how to achieve a just and sustainable world
- Improving imagination and creative thinking
- Becoming more confident in one's work
- Improving employability skills.

In a proportion of approximately 60%:
- Improving design skills.

Other:
- Taking part in a changing world
- Temporarily living and working with a different culture.

Self-Evaluation of UNESCO ESD

Focusing on the learning process of the students present, the interactive, collaborative workshop contributed to capacity building for sustainability both for the participants as well as the local community involved, and it generated a platform for local initiatives and community empowerment. Additionally, the workshop provided an opportunity for collaboration amongst diverse, different cultures and academic / professional backgrounds, encouraging those involved to reflect onto their roles as teachers, students, practitioners, researchers, civil society, local authority etc., and therefore on the impact of their actions at local and global scale. The partnership resulted in benefits for all stakeholders engaged: the students had the opportunity to learn from real-world challenges and benefit from the local community's experience, and the local community benefited from the participants' expertise and was empowered to become agents of change.

1) Key competencies for sustainability

Within the ESD framework, the 2017 workshop in Gagliato aimed to build, primarily for the participants, some of the key competencies generally seen as crucial to advance **sustainable development**:

1. **Systems thinking competencies**: Participants gained the ability to understand and analyze local dynamics in a context different to their own, to analyze complex systems; the local community had the opportunity of reflecting back onto local systems, complexities and relationships in order to drive change;

2. **Anticipatory competencies**: Participants collectively aimed to understand, evaluate and create new visions for the future for the town of Gagliato based on an analysis of risks, challenges and opportunities;

3. **Normative competencies**: Participants had the opportunity to reflect on the norms and values that underlie their actions as researchers, practitioners, educators and students, but also on those guiding and defining educational systems in general and universities in particular;

4. **Strategic competencies**: Participants developed abilities to collectively devise strategies and means of implementing them for achieving sustainability; strategic thinking was also encouraged;

5. **Collaboration competencies**: Through the inter-disciplinary and trans-disciplinary approach, participants developed the ability to learn from others and understand and respect their needs, perspectives and actions; additionally, the workshop format facilitated collaborative and participatory problem solving;

6. **Critical thinking competencies**: Participants explored their abilities to question the current realities of Gagliato, and to attempt to modify them in order to achieve sustainable development;

7. **Self-awareness competencies**: Participants reflected on their role they play in society as professionals in their field, both during the action-research programme as well as upon its completion;

8. **Integrated problem-solving competencies**: Participants gained the abilities to apply problem-solving frameworks to complex sustainability problems in Gagliato, developing a holistic and innovative set of solutions that promote its sustainable development.

2) Learning Competencies for the SDGs and the topics addressed in the workshop

The 2017 Workshop in Gagliato was primarily instrumental in translating principles of the UN New Urban Agenda into practice, in respect to areas such as local sustainability, civic engagement and urban innovation. In this sense, the topics addressed were aligned with numerous issues present in the SDG themes, ensuring that the workshop contributed directly and indirectly to attaining many of the learning objectives for the SDGs.

SDG3: Good Health and Well-Being
Ensure healthy lives and promote well-being for all

The workshop explored issues surrounding the topic of health and well-being in the town of Gagliato. Risks such as environmental threats, pollution and a lack of preventative infrastructural measures were evaluated, and initial solutions were discussed focusing on the improvement of public health, care for vulnerable groups, creating an environmentally friendly town and developing community-based healthcare.

SDG4: Quality Education
Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

As part of the "Future-of-U" INTREPID initiative, the workshop aimed to propose a teaching and learning setting framed by inclusivity, diversity, innovation, collaboration and dialogue, emphasizing the importance of trans-disciplinary and inter-disciplinary partnerships in education, as well as the importance of quality education in achieving sustainability. Additionally, one of the themes explored in the workshop centred on inspiring and investing in the younger generations by giving them a voice to imagine the future of Gagliato with improved educational facilities, improved creative public spaces, and improved formal and informal learning spaces.

SDG8: Decent Work and Economic Growth
Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

All themes and issues arising in the workshop were linked to the enhancement of the sustainable economic growth of Gagliato and the diversification of its economy and employment opportunities. In particular, one of the participant teams envisaged Gagliato as 'The Town of Skills and Creativity', a proposal which explored the development of creative industries, tourism, culture and innovation, leading to local development, a balanced regional economy, and a balance of rural-urban migration. Other discussions included agricultural innovation by new generations of young farmers producing organic food.

SDG9: Industry, Innovation and Infrastructure
Build infrastructure, promote inclusive and sustainable industrialization and foster innovation

Similarly, all predominant topics present as part of the workshop had as underlying guidance the improvement of Gagliato's infrastructure, the diversification of its industries and the importance of innovation. All ideas for the imagined future of Gagliato proposed design solutions for the regeneration, revitalization and enhancement of its infrastructure as a base for implementation. Proposals such as imagining Gagliato as 'The Town of Nanotech' or 'The Town of Science and Art'

explored the development of the town into a hub for innovation, science, technology and art, a place that is vibrant and engaged in numerous activities.

SDG11: Sustainable Cities and Communities
Make cities and human settlements inclusive, safe, resilient and sustainable

Throughout the workshop, participants constantly evaluated the sustainability of Gagliato, in terms of its urban planning, infrastructure and buildings, in terms of its governance mechanisms, its communities and its local dynamics. Proposals aimed to ensure that community needs are addressed and therefore that the town is developed into a more inclusive, safe, resilient and sustainable settlement, both through its built fabric as well as its socio-economic dynamics.

SDG12: Responsible Consumption and Production
Ensure sustainable consumption and production patterns

Through the encouragement of innovation and the diversification of industries such as tourism or agriculture in a sustainable manner, the workshop explored strategies and practices for sustainable consumption and production, proposed the facilitation of green economies and highlighted the importance of sustainable lifestyles.

GENERAL FRAMEWORK	
UNESCO EDUCATION FOR SUSTAINABLE DEVELOPMENT (ESD) AGENDA	**INTREPID GAGLIATO WORKSHOP ACTIVITIES AND AIMS REFLECTING ESD AGENDA**
ESD can contribute to achieving the SDGs by: 1. Developing cross-cutting sustainability competencies that are needed to deal with many sustainability challenges 2. ESD can equip learners with cognitive, socio-emotional and behavioural learning outcomes that enable them to deal with the particular challenges of each SDG.	1. Openness, inclusivity, human capability enhancement, alternative ways of education to be devised in order to ensure that sustainable development is achieved 2. Topics addressed in the workshop are in line with a vast majority of the issues which are directly addressed by the SGDs
- Education plays a crucial role in global development, can contribute to a new vision; - Education has a responsibility to be in gear with 21st century challenges and aspirations.	Project under the umbrella of INTREPID: - Inspire change on how knowledge and learning are defined, generated, distributed and used; - Build networks and cooperation for education; - Enable inter-disciplinarity and trans-disciplinarity. Project derived from discussions at the London 2017 University of Westminster workshop: - "Future-of-U": role of universities in society, openness of universities

	(trans/inter-disciplinarity), university imagined as place that enables human capabilities for sustainability; - Aims to contribute to the development of an 'urban curriculum for the future'; - Envision "Future-of-U": alternative scenarios explored through co-creation activities and action research driven by sustainability.
ESD aims at developing competencies that empower individuals to reflect on their own actions, taking into account their current and future social, cultural, economic and environmental impacts, from a local and global perspective.	Working with, and in, another culture; interaction with local community; learning to work with others from different backgrounds; participants reflecting on their roles as students, educators, practitioners, and researchers.
Individuals should be empowered to act in complex situations in a sustainable manner – strike out in new directions, participate in socio-political processes.	Through the workshop, this was valid for both the participants as well as the local community: participatory workshop, local empowerment, capability-building for sustainability.
ESD does not only integrate contents such as climate change, poverty and sustainable consumption into curriculums, it also creates interactive, learner-centred settings.	The workshop was designed to be highly interactive and learner-centred.
Target 4.7 of SDGs: by 2030 ensure that all learners acquire knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, […]	Workshop focused on devising a sustainable development future for Gagliato, which involved and somehow constituted a learning experience also for its community.

Scholars ex-post evaluation

This is based on the response obtained by six scholars involved as tutor in the workshop.

1. ID: Advantages and difficulties of leading a group of students from different disciplinary backgrounds

Advantages:
- It encouraged participants to engage in mutual confrontation, understanding and mediation;
- It encouraged participants to switch perspective, consider different points of view, think outside the box, and go beyond the comfort zone of their discipline in order to broaden the scope from which problems are defined and formulated;
- Working with students is rewarding as they are always curious, open to other experiences, skills, points of view and backgrounds;
- Students have a rewarding learning experience when confronted with different approaches, as their individual perspectives are expanded;
- Disciplinary diversity increases the capability of analyzing different contexts and achieving a unique project: each student built the project concept from their disciplinary background;
- There is great satisfaction in coordinating an interdisciplinary group which eventually learns how to work together in order to deliver a project.

Difficulties:
- Finding a common language to communicate issues and project ideas effectively;
- Difficulty in working with groups where there is an unbalanced mix of skills, especially when time is short; in this sense, the workshop format outcomes disadvantaged participants lacking certain skills (such as graphic skills), resulting in a difficulty to negotiate ways in which the outcome would be delivered;
- Connecting the disciplinary diversity with the cultural diversity of students;
- The limited time in getting to know the other's disciplines could lead to little depth in discussions and therefore vague outcomes;
- Ensuring that all students are engaged and are not reluctant to share their ideas;
- Ensuring that if there is a difficulty with obtaining ideas and contributions from the students, the leaders' input is not too dominant.

2. TD: To what extent was the engagement workshop beneficial for the workshop outcomes and for what reason?

Benefits:
- It helped with setting a shared objective and created the occasion for a shared experience, shared spaces (real and virtual), resources and reflections;
- It contributed to building a relationship of trust between 'experts' and the local citizens;
- Aided 'experts' in identifying the exact needs and desires of the local community;

- The inspirational talks of the local community and site visits were a central part of the success of the workshop.

Difficulties:
- Misunderstandings may result from involving the local community through the simulation of a process which otherwise is long and un-linear: the community may believe that they will be given real solutions, and the working group can believe the inputs coming from a single meetings are enough to devise solid proposals;
- An outsider group with little insight and understanding of the local reality should propose ideas and not solutions, and should avoid projecting preconceived models;
- The workshop could have been more effective if the proposed alternative teaching methods – based on the context needs instead of a regular syllabus - would have been experimented with on ground;
- Felt the need to have additional skills for engaging with the particular group that certain projects focused on (for example, children);
- Felt the need for a longer time spent on carrying out the work in order to have a real impact;
- To some extent, the discussion with the adults was found to be rather limited and women were largely absent from the discussion.

3. Did the experience influence the way you think of your work as a teacher and researcher? How?
- It encouraged more focus on the importance of the students' knowledge process rather than on the design results;
- It encouraged thinking about diverse and flexible ways of teaching in order to cater to different students' needs and backgrounds: the same model can work well with one group of students but very badly with another;
- Highlighted the importance of discovering, as a tutor, each participants' skill in order to maximise the effectiveness of the group work, but also the importance of developing soft skills in terms of capturing ideas and developing them;
- As an urban planner, learned to consider the human capital and dynamics more;
- Confirmed that understanding is best born from small hypotheses tested and shared in a 'laboratory' rather than a class;
- Learned about disciplinary diversity and re-evaluated position as a teacher but also as a learner;
- Realized that sometimes a reciprocal relationship with your working group is difficult to achieve if you are perceived as the 'teacher' or 'expert'.

Conclusions

The workshop held in Gagliato in July 2017 and titled 'The future of Academia and trans-disciplinary knowledge production in the urban field' attempted to look at two interrelated challenges: the **quality(ies) of the Future-of-U** and how to foster **trans-disciplinary knowledge production in the urban field**.

In summary here some preliminary results:

Students and University

Students attending the Gagliato workshop (normally high motivated students given the volunteer and non-credit bearing nature of the activity) come with a high expectation that University should primarily:

- Help to learn to think more critically about the world, and to learn how to shape a more sustainable world;
- Equip to find practical solutions to complex real-world problems;

Students attending the Gagliato workshop come with a high expectation that the workshop, being a extra curricular activity should help them primarily to:

- Improve team-work, communication and community engagement skills, such as develop (critical) strategic and problem-solving thinking;

- Develop understanding of local community needs and experience conviviality (a meaningful life experience with others);

This is overall confirmed by their considerations on how they would want to change their academic experience. In particular, by the fact that they would want more practical experience as opposed to theoretical, more group works, more interdisciplinary collaborations, more flexibility, more policy-oriented studios or laboratories, more seminars and field trips as opposed to lectures.

The Gagliato Workshop and the UNESCO ESD

In general terms, based on the self-evaluation here provided, the Gagliato Workshop attempted to tackle the key competencies generally seen as crucial to advance sustainable development, according to the UNESCO ESD Report (2017); in particular:

1. Systems thinking competencies;

2. Anticipatory competencies;

3. Normative competencies;

4. Strategic competencies;

5. Collaboration competencies;

6. Critical thinking competencies;

7. Self-awareness competencies;

8. Integrated problem-solving competencies;

<u>Scholars on the inter-transdisciplinary experience in Gagliato</u>

Scholars gathered in Gagliato from various disciplines and a long-lasting commitment in participatory (urban) design and planning and civic engagement commented the experience highlighting pros and cons.

In summary they concur that intensive participatory workshop of this kind can help to:

- foster interdisciplinary understanding of real problems and develop a common language, although the limited timeframe can prevent effective knowledge production;

- to foster collaboration with local communities by sharing knowledge and spaces, although this might create misunderstanding and over expectation from local community;

Therefore, by jointly consider students and scholars' feedbacks, trans disciplinary knowledge production in the urban field, in the form experimented in Gagliato, can help to develop, among participants: Systems thinking competencies, Normative competencies, Strategic competencies, Critical thinking competencies, Self-awareness competencies. However, given the temporary nature of the experience and without a long-lasting commitment of work in the local context, such experiences could fail to properly address: Anticipatory competencies, Collaboration competencies, Integrated problem-solving competencies. In conclusion, it is recommended to study mechanisms by which relatively long-lasting feedback processes can be put in place between the academic and the local community, with particular attention on how to effectively improve and implement scenarios, forms of collaborations and finally integrated solutions.