Community Learning for Local Change

ADVANCING SOCIAL INNOVATION THROUGH HIGHER EDUCATION

Contents

Welcome

This document summarizes the main findings of the ERASMUS+ Strategic Partnership 'Community Learning for Local Change (CLLC)'. The CLLC project has been running from September 2018 to August 2021. The project was a cooperation of four universities, three NGOs and various local community partners.

The EU's renewed higher education agenda suggests *countering the growing polarisation of our societies and distrust of democratic institutions (and) calls on everyone - including higher education staff and students - to engage more actively with the communities around...* and further: *higher education institutions are not ivory towers, but civic-minded learning communities' connected to their environment.* (EU, 2017)

Our Community Learning for Local Change ERASMUS project has been designed to address these challenges. Our consortium presents new approach to promote creativity, entrepreneurial thinking and skills for designing innovation in close cooperation with the communities in which our universities are embedded.

Community Innovation Labs provide a transdisciplinary framework for students, teachers and the community to collaborate on issues that really matter locally. Our labs allow for a multi-faceted understanding of what the local challenges are and provide students with a realistic analysis of the change potential. Social innovation is the guiding principle here, aiming at merging social, environmental and economic sustainability. All of this is embedded in a transnational and collaborative blended course concept.

Involving the community as equal partners in both our online and face-to-face learning activities has contributed to breaking up the ivory tower of academia. Our focus on developing entrepreneurial approaches with civil society partners supports another important topic of the EU's renewed HE agenda: *People's capacities to be entrepreneurial, manage complex information, think autonomously and creatively, use resources, including digital ones, smartly, communicate effectively and be resilient are more crucial than ever.* (EU, 2017) Our aim is to foster these competences not only among our staff and students, but to transfer these skills to the civil society that surrounds us.

The European Union says it is urgent that Higher Education Institutions (HEI) take responsibility by transferring their competence to the direct local context and stimulate sustainable development this way. However, there is often insufficient knowledge within the HEIs on how to partner successfully with civil society. Some of the universities in this consortium have gained experience in this field, but this knowledge has never been documented in a systematic way. We hope that this report helps in closing this gap. The gap addressed has in fact four different dimensions:

(1) The methodical and pedagogical gap: What is the methodical framework of community learning? What are the roles of academic staff, students and society partners? Which methods do we need for achieving our goals?

(2) The organisational gap: As stated again by the EU: *there is not sufficient competence on how to build sustainable, mutually reinforcing partnerships between HEI's and their community environment.* (EU, 2027) Partners and relevant topics need to be identified, trust to be built, expectations to be managed and communication to be transparent and at eye level. A lot needs to be learnt in this field by all HEI's involved, even if they have different starting positions.

(3) The strategic gap: HEI's usually do not have an agenda for capitalising on the local knowledge that surrounds them. Therefore, our activities have also addressed the institutional development to envision an open and inclusive university at strategic level.

(4) The European gap: *There are even bigger disparities across Europe which is why European Universities need to learn from each other through ERASMUS+.* (EU, 2027)

With this report, we want to build and exchange knowledge about how to address local sustainability challenges between different European regions. All of them share some similarities while their local context is very specific. Our collaboration links rural Estonia to the Carpathian Mountains, the metropolitan area of Bucharest to the urban regions of Arnhem and Stuttgart in a shared and mutually reinforcing learning process that is still going on.

DAAD Deutscher Akademischer Austauschdienst
German Academic Exchange Service

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Our partnership

from 09/2018 - 08/2021

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Centre for University Didactics

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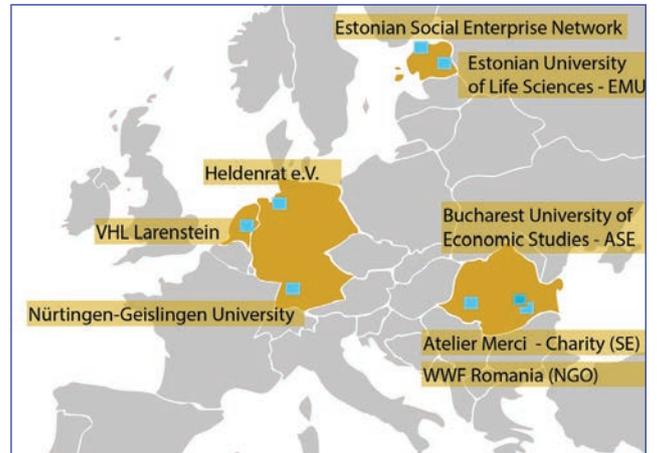
localchange.eu

Our CLLC ERASMUS consortium at the second international project meeting hosted by ASE Bucharest in February 2019.

Community Learning
the wider context

This report documents and reflects the experience of four European universities and three NGO partners in transforming their educational practices with local living labs. This approach builds on our prior experience with establishing a joint blended learning programme in the field of social innovation and entrepreneurship. In order to understand the wider framework of these innovative practices, it is necessary to broaden the horizon from the European to the global scale.

Community Learning for Local Change is an attempt towards innovation in higher education. Our goal is to work on eye level with community partners on local sustainability challenges with the shared power of an international network.

Community learning in action during the intensive study programme on the Bison Hillock in Armenis, Romania, hosted by WWF Romania and ASE Bucharest in May 2019.

The global dimension of community learning

Two pillars: Sustainable Development Goals (SDGs) and Education for Sustainable Development (ESD)

At a global scale, two important trends seem relevant at the moment: First, the 2030 Agenda of the United Nations with its 17 Sustainable Development Goals (SDGs) and second, Education for Sustainable Development (ESD) as one of the key facilitators of global sustainability. The most relevant link between both approaches is through SDG 4, Quality Education, calling us *to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (UN, 2015).*

In particular target number 4.7 calls for mainstreaming education for sustainable development at all educational levels: *By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development (UN, 2015).*

What does Education for Sustainable Development comprise?

Education for Sustainable Development (ESD) is a lifelong process. It should ensure that people of all ages acquire knowledge and skills in order to be able to live and act in the interests of sustainability. This includes understanding the consequences of your own actions and making responsible decisions yourself.

It is also about actively shaping the future. ESD promotes the ability for dialogue and orientation, creative and critical thinking as well as holistic learning that takes religious and cultural values into account. It aims at the willingness to take responsibility for one's own actions, to deal with uncertainties and contradictions, to solve problems and to participate in the creation of a democratic and culturally diverse society.

CIL students in Nürtingen, Germany, prototyping their new networking platform. 'Embrace a Friend' aims at linking young people with refugee background to university students, June 2019.

" A Community Innovation Lab is like a christmas cake recipe: there are many different ingredients and if they work together it is a success.

Key Competences for Sustainable Development

In recent years, various educational scientists (de Haan, 2002; Wiek et al, 2011 and 2016) have dealt with a definition of skills and competencies that could serve as a target framework for training in this context. Since the models do not substantially differ, which a very recent Delphi Study has also reconfirmed (Brundiers et al, 2021), we will focus in the following on the key competences for sustainability as presented by Wiek et al (2016).

These five key sustainability competences are:

1. **Systems thinking competence:** The ability to analyse sustainability problems cutting across different domains (or sectors) and scales

2. **Futures thinking (or anticipatory) competence:** The ability to anticipate how sustainability problems might evolve or occur over time (scenarios) as well as create and craft sustainable and desirable future visions.

3. **Values thinking (or normative) competence:** The ability to specify, compare, apply, reconcile and negotiate sustainability values, principles, goals and targets, informed by concepts of justice, fairness, responsibility, etc., including visioning, assessment and evaluation

4. **Strategic thinking (or action-oriented) competence:** The ability to develop and test systemic interventions, transformational actions and transition strategies toward sustainability. The ability to develop plans that leverage assets, mobilise resources, and coordinate stakeholders to overcome systemic inertia and other barriers.

5. **Collaboration (or interpersonal) competence:** The ability to initiate, facilitate and support different types of collaboration, including teamwork and stakeholder engagement, in sustainability efforts.
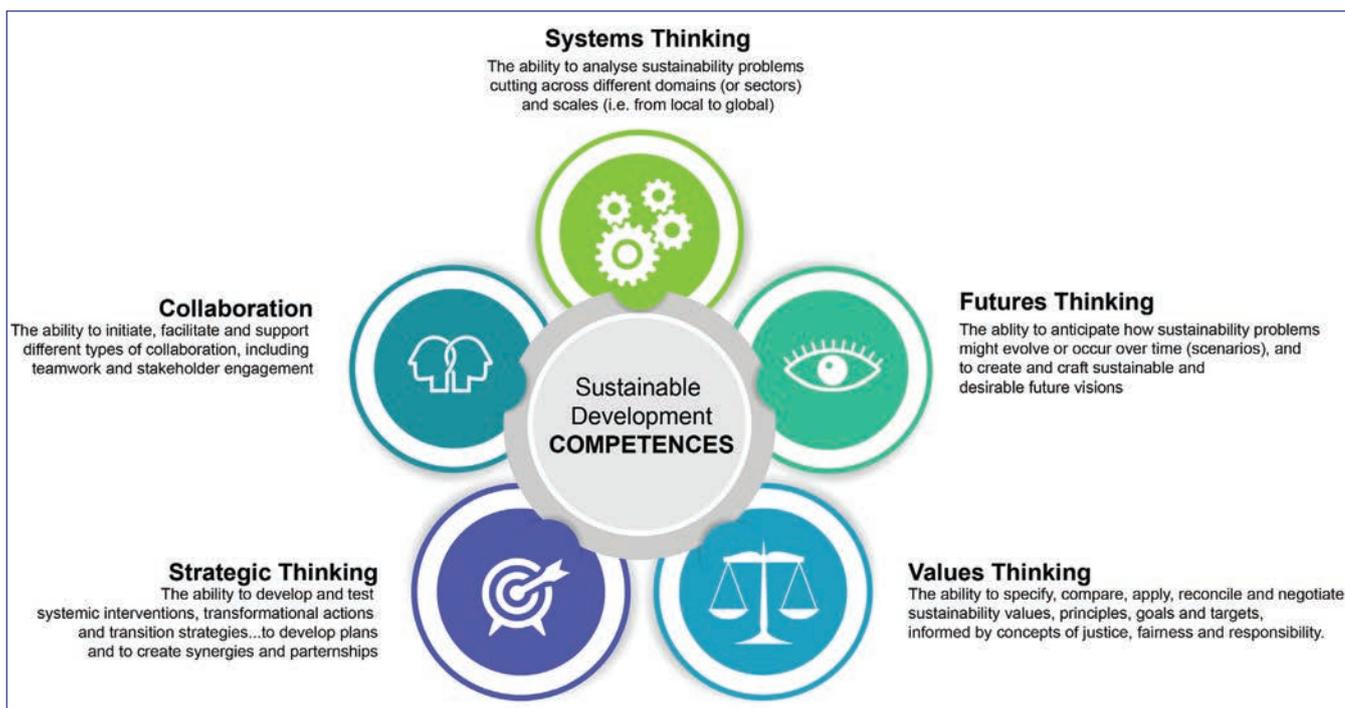
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Challenges of Higher Education on this long and windy road

The key competences for sustainable development generate a challenging transformation agenda for higher education in Europe, which is why the EU's ERASMUS+ programme is increasingly addressing the demand for innovation in higher education teaching and learning. This CLLC project is only one of many attempts across all domains of education for advancing the necessary changes in the way we teach and learn.

What are the challenges?

Systems thinking: The development of this key competence is hampered by two factors: (1) university learning is primarily designed for efficient delivery of disciplinary knowledge, skills and methods. This is framed by subject-specific study programmes following the exploitation logic of traditional economics. (2) University learning mostly takes place within a protected environment of people with similar values and backgrounds. Critical discourse is of course at the heart of higher education, but even that discourse is primarily done among people who are very similar to each other, from a sociological point of view.

Futures Thinking: Higher education is still very much dominated by a positivist view of the world and of science. Research goals at large built around the idea of understanding how the world is, no matter which discipline. Consequently, teaching follows these ideas and aims at educating methodical expertise. Education for sustainable development wants us to think further. If the world continues to work as it does know: How will the future look like? Is this the future we want? Which alternative future would be preferable, more fair, more inclusive, more respectful for our shared and limited resources?

Values Thinking: Learning within the above-mentioned specific disciplinary contexts forces teachers and students into epistemological value frames. For example: nature conservation evaluates based on the normative goal of securing biodiversity, business administration evaluates within the frame of profitability, the arts evaluate according to complex aesthetic criteria. Higher education students hardly get exposed to situations in which they would need to relativize their norms against principles of other disciplines. And more importantly: exposure to non-academic value schemes such as justice, democracy, dignity and inclusiveness is even more rare because students hardly engage or collaborate with people from outside the university.

Strategic thinking: This competence is highly dependent on the previous ones: if we are able to deeply understand a system from various perspectives, if we are able to envision an alternative future and to evaluate it inclusively: then it is about becoming strategic and designing all the steps that will bring about change. Unfortunately, higher education often stops before students are in the position to become strategic, often with the argument of this not being the task of higher education and that it might happen some time later in practice.

Collaboration: This competence field has already a good standing in higher education, given the increasing presence of group work and project-based learning across different domains. However, students only learn to collaborate with likeminded people, typically from the same subject domain. The true transformative power of collaboration requires synergies between fields that traditionally do not cooperate. Initiating, sustaining and managing such innovative partnerships needs much more capacity-building in society at large and universities are not yet fully exploiting their potential.

These obvious gaps between the competence goals for sustainable development and the experienced reality of higher education is a wicked problem in its own right. Wicked problems are difficult to resolve because of their interconnected nature with other problems. However, our goal for this project was to get at least one small step further.

"

Bringing students into a real-life situation where they had to be entrepeneurial was great.

Community Learning: Our Theory of Change

Our project has tried to bring about innovation in higher education at various levels. In the following, we will briefly sum up the main areas of intervention and the expected impact:

Capacity-building for higher education teachers

Linking a university to its local community environment with multiple actors and a complex set of expectations and needs is not business-as-usual for most higher education teachers. Any long-term sustainability of this approach is highly dependent on supporting the ambitions and competences of the educators.

A major goal of this project was therefore to expose the teachers to this challenge at a very early stage of the process. This allowed for first-hand experience and a continuous joint reflection in the project team.

Developing local partnerships with community innovation labs

As we advanced in the process, we realised that each of the local community labs would take a different structure and thematic emphasis. The most challenging aspect is probably that higher education teachers need to adapt to new roles in this exposed setting. The most important aspect being the ability to build trust with the community, which requires communication at eye-level, good listening, expectation management and continuity.

Like any new practice, this takes more time and energy than traditional classroom settings. But we also observed the effect that continuity makes many processes more efficient over time. This also applied to the communities themselves, as everyone becomes part of a new collaboration culture and learns how to operate within it. It seems vital that this effect is achieved after the initial investment of establishing the community network.

Creating interdisciplinary curriculum windows for social innovation

This measure aims at addressing the lack of opportunities for students to collaborate across disciplines. The solution space for this problem allowed for different answers. While Nürtingen-Geislingen University has opened a new group of cross-faculty modules, other partners achieved interdisciplinarity by offering the course jointly with their European partners from different disciplines. All university partners do have a curriculum window that allows for both, collaboration on social innovation in local living labs and with their ERASMUS partners within the social innovation online course. All partners are willing to continue with this hybrid model.

" It is good that we are so mixed and so different. Because we learn how to speak with other types of people...to make a connection between all the fields and to get something good in the middle by combining every element.

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Community
& Communities

Rural, urban, peri-urban, virtual, hybrid?
Trying to understand the setting of our actions.

The CLLC team reflecting the process after the first community-based intensive study programme in Bucharest (May 2019).

Community is so easy to say. The word itself connects us with each other. It describes an experience so common that we never really take time to explain it. It seems so simple, so natural, and so human. In the social sector, we often add it to the names of social innovations as a symbol of good intention. For example: community mental health, community policing, community-based philanthropy, community economic development.

But the meaning of community is complex. And, unfortunately, insufficient understanding of what a community is and its role in the lives of people in diverse societies has led to the downfall of many well-intended *community* efforts.

Communities come together to share unique experiences or solve common problems. An example might be a local environmental group that comes together to raise awareness and money, take care of local open spaces and enjoy those open spaces. Within that community, there might be diverse interests and experiences.

Some people participate primarily by enjoying the open spaces and occasionally contributing money and others with an intense interest in the health of trees or trails who participate more substantively in those areas.

All successful communities have events that gather community members for discussion, celebration or joint activities. Typically, communities are big enough that not everyone knows each other but small enough that everyone feels some personal responsibility to contribute. Adding precision to our understanding of community can help funders and evaluators identify, understand, and strengthen the communities they work with. It's about people: first and foremost, community is not a place, a building, or an organization; nor is it an exchange of information over the internet. Community is both a feeling and a set of relationships among people. People form and maintain communities to meet common needs.

Members of a community have a sense of trust, belonging, safety, and caring for each other. They have an individual and collective sense that they can, as part of that community, influence their environments and each other. That treasured feeling of community comes from shared expe-

riences and a sense of - not necessarily the actual experience of - shared history. As a result, people know who is and who is not part of their community. This feeling is fundamental to human existence. Neighbourhoods, companies, schools, and places of faith are context and environments for these communities, but they are not communities themselves. People also simultaneously live in multiple communities.

Since meeting common needs is the driving force behind the formation of communities, most people identify and participate in several of them, often based on neighbourhood or geography, nation, faith, politics, race or ethnicity, age, gender, hobby, or sexual orientation.

Most of us participate in multiple communities throughout the day. The residential neighbourhood remains especially important for single parents, families living in poverty, and the elderly because their sense of community and relationships to people living near them are the basis for the support they need. But for many, community lies beyond this. Technology and transportation have made community possible in ways that were unimaginable just a few decades ago. Communities are usually nested with-

in each other: communities often sit within other communities. For example, in a local area - community in and of itself - there might be ethnic or racial communities, communities based on people of different ages and with different needs, and communities based on common economic, leisure/recreational and social interests.

Alison Gilchrist sums up a list of different motives for establishing a community (Gilchrist, A. (2019), p. 14):

- communities of identity (to share cultural activities and experiences);
- communities of interest or passion (to pursue or resist shared fates);
- communities of purpose (to achieve a common goal);
- communities of practice (to exchange experience and learning);
- communities of inquiry (to collectively investigate an issue);
- communities of support (to provide mutual aid and encouragement);
- communities of circumstance (to deal with temporary, sometimes unplanned, situations).

Within this educational project, we have primarily dealt with communities of purpose and practice.

Communities can be defined by sharing a landscape: a village, a city, a neighborhood or a region

When looking at a neighbourhood, you can often struggle with its boundaries, as if streets could bind social relationships. Often, we see a neighbourhood as the community, when, in fact, many communities are likely to exist within it, and each likely extends well beyond the physical boundaries of the local area.

Communities often form institutions - what we usually think of as large organisations and systems such as schools, government, faith, law enforcement, or the NGO/not for profit sector - to more effectively fulfil their needs.

Equally important, however, are the informal institutions within communities, such as the social or cultural networks of volunteers, helpers and leaders. For example: council of elders, peer-to-peer credit and savings associations, clubs like gardening, sports, fitness & health, parent & baby etc.

Lower-income and immigrant communities, in particular, rely heavily on these informal institutions to help them make decisions, save money, solve family or intra-community problems, and link to more formal institutions.

" **Every community is organised to meet its members' needs, but they operate differently based on the cultures, religions, and other experiences of their members.**

How are communities organised?

Every community is organised to meet its members' needs, but they operate differently based on the cultures, religions, and other experiences of their members.

Global migration has led to an assortment of communities based on people's needs and desire for that sense of trust, belonging, safety, and caring for each other. For example, one group of new immigrants may form a community around its need to advocate for better treatment by law enforcement. Another group may form a community around its need for spiritual guidance. While a third might form a community to improve their local environment. The first may not look like a community, as we imagine them, but the latter two most likely will do.

The meaning of community requires more thoughtfulness and deliberation than we typically give it. Researchers, practitioners, and policymakers are starting to embrace this complexity - including the crucial impact communities have on health and well-being - as they strive to understand and create social change.

A community of purpose and interest: How might Nürtingen become carbon-neutral? Group discussion at the Nürtingen CIL kick-off meeting in October 2018

What is a rural community?

The answer varies, depending on who - or what exactly - is being asked.

The existence of multiple rural definitions reflects the reality that rural and urban are multidimensional concepts. Sometimes population density is the defining concern, in other cases, it is geographic isolation. Small population size typically characterizes a rural place, but how small is rural? Population thresholds used to differentiate rural and urban communities range from 2,500 up to 50,000, depending on the definition.

In fact, many rural communities are clustered in the vicinity of urban areas, which has historically been the case as rural populations resided on farms producing food and other goods for nearby urban centres or resided in small market and mill towns serving the needs of both surrounding rural populations as well as residents of nearby cities.

In recent years large socioeconomic forces have shaped demographic changes in rural communities and spurred population shifts, some ex-perts and policymakers have called for a more sophisticated calculation than only the population size that takes more factors into account since there is not a one-size-fits-all approach to rural communities and their development.

What is a rural area?

The nature of the term 'rural' varies from place to place. It often refers to areas in the country concerned which are less densely populated. There are different types of rural areas, depending on how accessible they are from urban areas. These range from the rural urban fringe, to the extreme (remote) rural areas. Rural areas change over time. These changes are caused by:

- economic factors: tourism income, farming profitability, primary sector jobs
- environmental factors: land use, pollution, conservation
- social factors: population change and migration, leisure time, retirement population

Rural areas can also be classified according to how accessible they are to the urban areas.

Pressures in rural areas

Decline in primary employment
Key economic activities in rural areas are agriculture and forestry. The number of workers has reduced, in part due to increased mechanisation. In many European countries, food and timber are now increasingly imported from the world market, reducing the potential for local job creation. Employment in the tourism and recreation sector has risen in many rural areas and alongside this there is an increase in demand for local food and handicraft products and services. This has partially offset the decline in primary industries but is highly seasonal and employs a different segment of the labour market.

Rural communities have greatly changed as a result of these changes and many have migrated to urban areas seeking work and losing interest in working in the primary sector. Many farms have amalgamated to achieve efficiencies in mechanised farming and forestry services are increasingly provided by large companies external to the community thus jobs are no longer available for local workers.

Changes in the rural population

Commuting areas: Increasingly across Europe people have moved out of urban areas to benefit from cheaper rural housing and more green space but continue to commute to urban workspaces or work from home. Improvements in transport and internet services have allowed this to happen. This puts pressure on rural areas that have good links with nearby urban areas.

Retirement homes: Similarly, in these countries many people move home when they retire, since they no longer need to live close to work and they may downsize into a smaller home, or move to a quieter environment in a rural area. Second homes: In many attractive rural landscape areas, wealthy urban residents may buy a second home to use in their leisure time. All the above puts pressure on housing supply which in turn pushes up the price of homes in the area and also means fewer homes available for the local residents.

Digital nomads as a new phenomenon

In some rural areas a new lifestyle has appeared. Groups of digital nomads flock together in villages, promoted by the availability of fast internet and cheap housing. They use co-working spaces for their digital work and seek each other's presence for leisure and relaxation. The village could benefit economically from these highly trained professionals, especially if this group is sharing some of its knowledge to the locals.

An interesting example of this new rural typology is Bansko in Bulgaria: https://coworkingbansko.com

Experiencing local food was an important element of the Bison Hillock ERASMUS workshop in Armenis, May 2019

Do urban communities exist?

The urban perspective on communities can be started with the question: Do urban citizens feel part of a community at all? Is it not a common notion (or even a stereotype) that people in a city can feel more independent from social pressure and lead a more anonymous life, compared to those living in a rural village? This notion certainly exists, but in our project we have come across many examples of lively communities in an urban setting.

Most of these communities are practice- or purpose driven. For example, they want to protect a green plot against development by starting a community garden or orchard. Or they want to take part in a recycling project. These projects contribute to specific Sustainable Development Goals, in particular Sustainable Cities and Communities (11), Responsible Production and Consumption (12), Climate Action (13) and Life on Land (15). It was remarkable that students from all universities involved worked on greening projects in The Netherlands, Germany, Romania and even Lebanon, identifying many similarities and shared challenges. It seems that these planet-oriented subjects are very motivating for local communities. The final outcome could be a Food Forest, a community garden, or simply a new green spot in a busy city centre. These results are all in the citizen domain and a community takes responsibility to make it a success. There were also urban initiatives that had a more people-oriented focus on involving as many groups as possible. The SDGs that fit most are: No Poverty (1) and Quality Education (4).

How to involve urban communities?
To give an example: The Netherlands have introduced a new legislation on the *Management of the Environment*. In this legislation it is mandatory for a city council to consult with the appropriate communities or stakeholder groups, that are close to a new initiative or project. This participatory process is aimed at collecting better local information and to get less juridical complaints in the further process. It is hoped that by a proper participatory process the project under way might become more speedy and smooth. There is even a new job in the making: the job of the *Environmental manager.* This public officer or private consultant is preparing the participation process with a team and scanning all the communication concerning the project at hand.

But in this new legislation there is a big central question: *How do you know that you are reaching the right stakeholders and who should you involve in the process?* Do you want to reach people that really take an interest in the subject, or should you inform the whole neighbourhood and see who will respond? Since there are limits to the number of people involved in a meaningful participatory process, these projects tend to restrict themselves to a core group of representatives of interest groups. In Belgium and The Netherlands there are experiments with a new form of democracy, by inviting 1000 civilians to deliberate and vote on planning issues.

We see that a wider audience is informed with newsletters, but they play no real part in the discussions. This new Dutch legislation on public participation is mandatory for all mat-

ters that concern new spatial plans or projects that will change the environmental quality. Especially in urban settings there are a lot of ongoing spatial changes and it can be expected that this new legislative demand will put a stress on the willingness of people to be involved in yet another participatory process.

To facilitate the information gathering of a large group of people's opinions on a spatial planning issue, we see the launch of tools such as Maptionnaire from Finland. This is a web-based survey tool with the possibility to ask place-based questions. In this way you can consult with a broad local audience on questions of public interest, such as city centre development, recreation areas, favourite routes.

Urban community projects

Within this CLLC project we have encountered the strength of urban communities in organising themselves for a good cause: In Nürtingen, Germany, we have the example of a community garden on an empty plot near the river. In the relatively short time of one year a highly dedicated group of involved amateur gardeners have organised themselves with all sorts of communication channels (newsletter, posters in several languages, Instagram, website, meetings). They have designed a garden layout, did the groundwork of making flower beds, produced the first harvest, made facilities for social gatherings from waste material and were successful in negotiating with the municipality on permits and funds. This group had

a foundation of local university students, but it was able to attract a lot of other stakeholder groups from the nearby neighbourhood. These groups consisted of organisations that help refugees, church groups and people with lower income status. The biggest achievement of this community was to do their job in times of Covid-19.

For more information:
http://buntebeete.net
https://maptionnaire.com
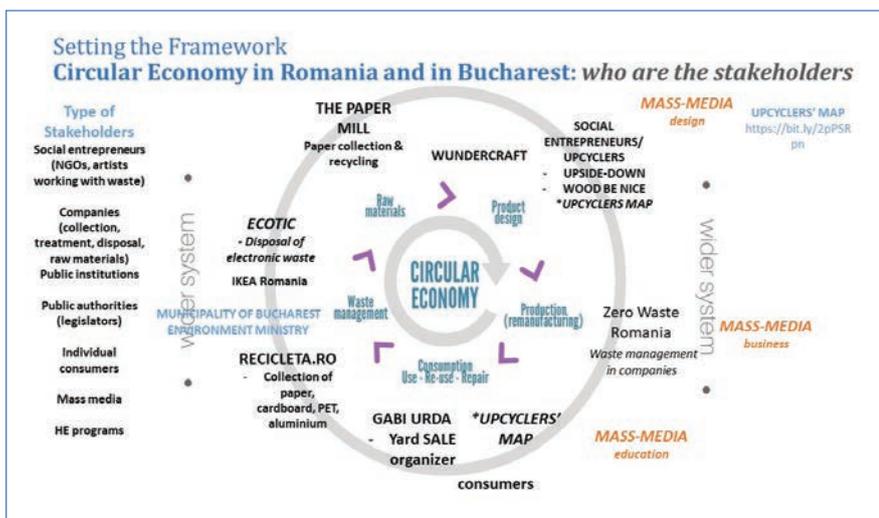
Conceptual community mapping for the recycling sector in Bucharest for the CLLC Intensive Study Programme in May 2019

Citizens protest in Arnhem (NL) against a municipality initiative to occupy a green plot with building activities, June 2020

Urban Gardening project in Nürtingen (DE) initiated by students with local community groups, June 2020

Community-Based Learning

Theoretical foundations, methods, processes and outcomes

Our reference frameworks: Transformative Science and Action Based Research

Community-Based Learning (CBL) is part of an overall conceptual framework called *transformative science.* The main idea of this approach is to not only observe and describe societal transformation processes, but to initiate and catalyze them. The focus lies on a systematic understanding of the transformative impact of science in and on society. It is therefore essential to engage in an active dialogue with societal stakeholders.

As the figure to the right shows, the close connection between research and teaching is of particular importance for transformative science. Transformative research and transformative education together are responsible for initiating social change. In addition, there is a focus on institutional change in the science system as a central sub-system within modern societies (Schneidewind et al., 2016, p. 6-7).

From a methodical point of view, Schneidewind refers to earlier approaches on the experimental turn in the social sciences, such as transdisciplinary case studies, intervention research or Participatory Action Research (PAR). Participatory Action Research explicitly involves civil society actors and calls for a community-based teaching and research process. The goal is to critically reflect and actively influence the social, political and organizational contexts in which it is embedded. (Unger, 2014, S.3)

The active involvement of communities in research has often been criticized: If the boundaries of classical science are called into question, this could encourage a tendency towards economisation and lead to a loss of autonomy. The resources and freedom of scientists would be affected. Dealing with fundamental questions and adopting critical perspectives could become more difficult and research could be reduced to a service function for social interests.

On the other hand, new forms of knowledge production evolve. Reception and relevance of this new knowledge extends beyond the science system. As a result, positive social developments can be promoted (along the lines of Unger, 2014, p. 6-9). We therefore believe that it is reasonalbe and constructive to include transformative science and participatory action research in the diverse canon of science. This applies in particular to research-oriented learning focused on gaining a deeper understanding of specific sustainability problems (Schneidewind, 2016; p.13). This is highly relevant in the context of the educational approach presented in this documentation.

We refer here again to the key competences for sustainable development which we have presented already at the beginning of this report. All these key competencies can be addressed in community-based projects under the paradigm of tranformative science:

- Systems thinking
- Futures thinking
- Values thinking
- Strategic thinking
- Collaboration

Community-based learning: characteristics and typical processes

Research-oriented learning focuses on gaining a deeper understanding of a phenomenon and its context. The aim is to generate knowledge with regard to a specific sustainability problem. Ideally, the process of knowledge generation is embedded in a transdisciplinary or transformative research design. Students are confronted with a complex sustainability problem and will then be supported by teachers in carrying out a small research project, including the development of a research question, selection of suitable methods, evaluating and presenting results (Schneidewind et al., 2016, p.13).

The following aspects describe the central characteristics of a community-based research and learning process (along the lines of Coghlan/Miller, 2014, p. 500 – 503).

Cooperation: researchers, practitioners and clients work closely together in an egalitarian mode with open communication and feedback.

Problem solving process: The learning process aims at examining and solving social and organisational issues.

Value based: democratic, humanistic and pluralistic.

Context based: behaviour needs to be evaluated in the right context (the entire situation or life space) with all relevant forces that influence it.

Constructivism: reality should be explained in terms that exist for a person at a given time.

Dynamic approach: Reality is perceived as an ever-changing process of achieving equilibrium which is continuously disrupted by the field of forces.

Process-oriented: ongoing learning process with reflective cycles
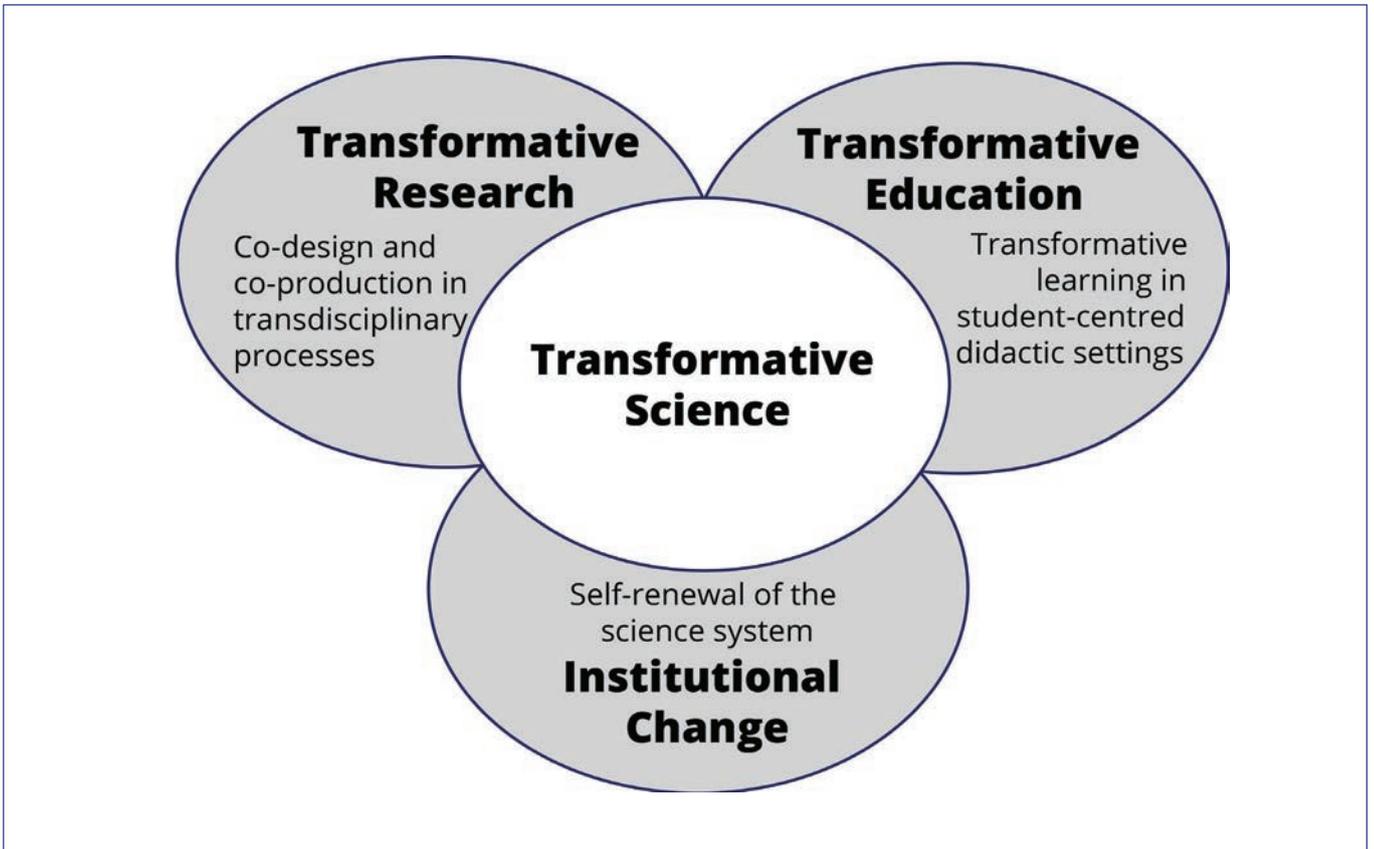
Transformative Science operates at the interface of research, education and institutional change (Schneidewind et al., 2016, p.7)

The goals and effects of community-based learning might be different. This depends on the focus: community centered or university centered.


community centered → community-based learning → university centered

community centered	community-based learning	university centered
community needs are addressed	empowerment of all people involved	students education in real life situations
creating a pattform to communicate and cooperate	measurable stainable change in the system	identifying specific reseach and learning fields
creating services for the community	creating 'best practices'	

with reference to: https://www.marshall.edu/ctl/community-engagement/what-is-service-learning

The benefits of Community-Based Learning are illustrated in the graphic on the previous page. Which of these benefits can be realised in individual cases depends on whether and to what extent the interests of the community or those of the university are addressed.

Balancing these interests is only possible within the framework of a carefully elaborated learning process. This also requires a certain level of experience with such formats on behalf of the teachers and trainers.

In comparison to classical research and teaching, the role of the researcher/teacher changes: researchers endeavor to experience and critically examine the common-sense constructs of those being researched. On the other hand, those being researched learn to relate the researchers' theoretical constructs to their practice and to derive practical consequences for action from them (Heinze, 1987, p 31).

This is a balancing act that needs to be maintained for two reasons: (1) It is precisely the social role and awareness of the social researcher that should bring with it the possibility of gaining knowledge and taking action that would not have come about without contact with the researcher. (2) A certain distance is necessary if the resaercher does not want to run the risk of getting lost in particular interests. (Kramer et al. 1979, S. 31).

Being responsible for community-based projects, as we have described them here, is a special challenge because multiple roles have to be taken on in parallel, such as lecturer, researcher, educator, organizer, commissioner, networker, facilitator, advocate, mediator, provocateur, translator, witness or accompanist. For a deeper understanding, we recommend the Rubrick of Regional Learning to measure your own achievement, based on the role you play, in a Regional Learning Arrangement. (Wesselink, R.; Gulikers, J.T.M.; Dubbeldam, Ria, (2016), in Dutch)

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Our course model

Teaching and learning social innovation: community-based, digital and international. How did this work?

In the following, we briefly describe how we implemented our course as a blended learning model. Many elements of our approach stem from our preceding ERASMUS project 'Social Entrepreneurship for Local Change (2015-2018)'. You may also visit the course documentation from that project for further information on some of the methods used. Detailed course assignments and lecture materials are available from your course website.

The model presented here includes important new developments in order to better integrate the community aspect into our academic programme. We implemented the course three times within the framework of this ERASMUS project. Each time, around 80 students fully completed it plus another 20-30 attending as listen-only participants. Next to staff and students from the consortium members, we also had participants from other partner universities, especially from the Middle East, who joined the platform with their teachers and students, based on their own local community topics.

As a general principle, the ERASMUS consortium divided the theory inputs and group tutoring equally between the partners, under the overall management of the course coordinator Dr. Ellen Fetzer from Nürtingen-Geislingen University in Germany. The plenary met weekly on Tuesdays for 90 minutes in an online session. These plenaries included theoretical and methodical inputs, as well as group presentation events. The second half of the plenaries was usually dedicated to digital community involvement, especially during the second lockdown in spring 2021. All working teams met for a second time each week to follow up the process and the work on the assignments with their tutors.

Taking all the learnings from the piloting into account, our course eventually the included the following three phases:

Phase A: Identifying the community

As we went on with gathering our community experiences in the living labs, we realised that this first phase needs a significant time resource within the overall learning process. We finally scheduled six weeks for it.

General structure of the transnational online programme. The work on site in the different CILs is largely synchronized with this process.
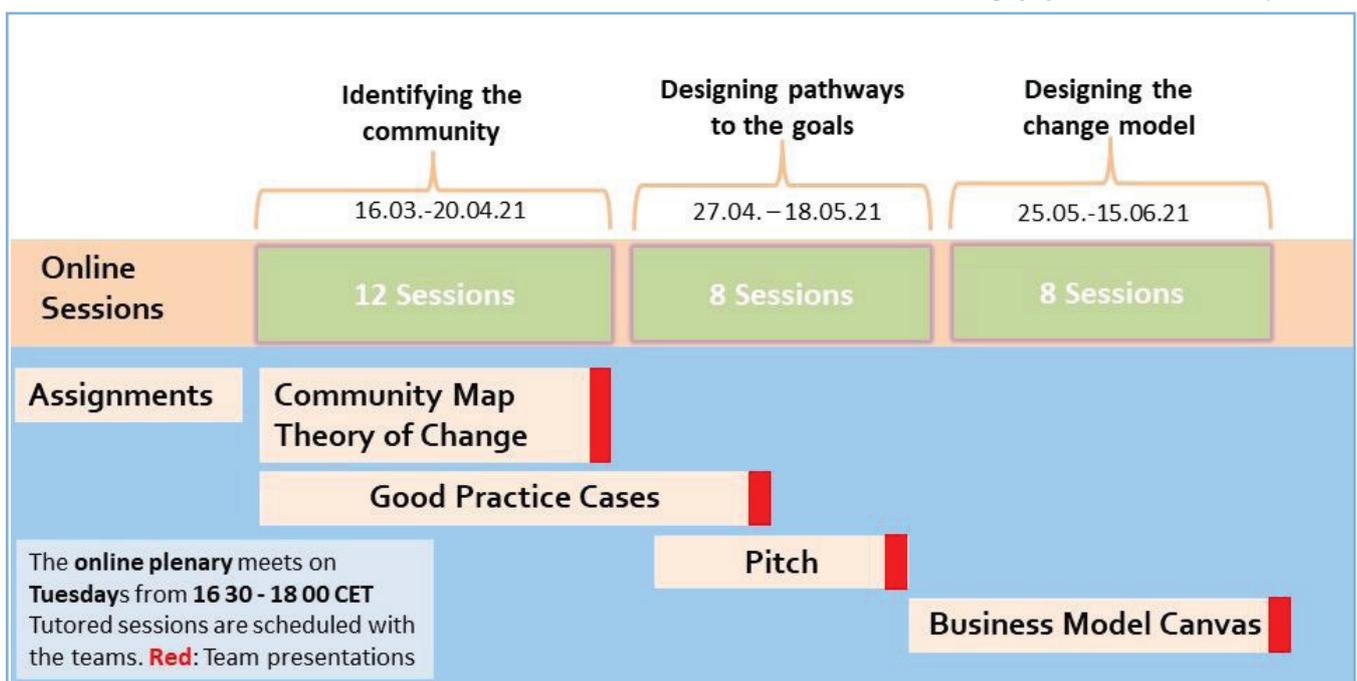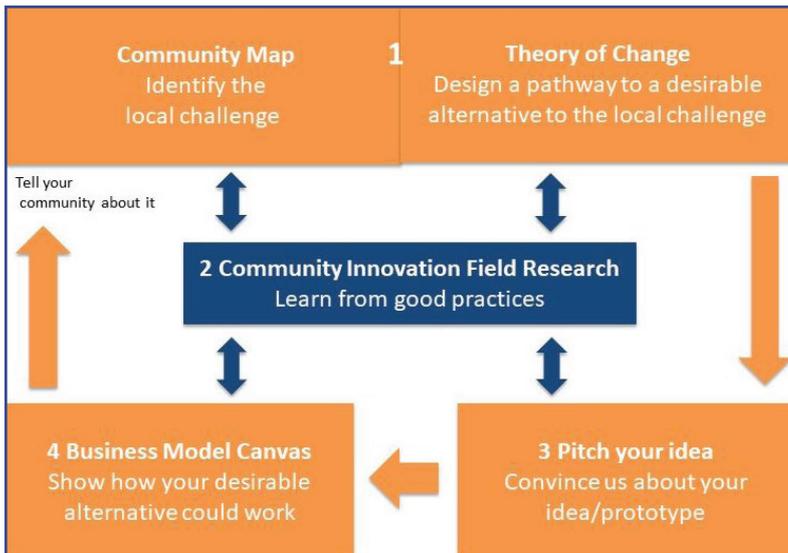
Graphical overview of the four assignments around which the course process of the summer terms is built: Community Mapping & Theory of Change are an integrated exercise. This leads to the pitching process and the final Business Model Canvas. The Social Innovation Field Research is a cross-cutting assignment. Students are researching good practice examples of social innovation. This way, they learn to transfer and exemplify key elements of social innovation, community involvement, as well as the mainstays of the business model canvas.

A detailed and recent description of each assignment can be found here:
https://localchangewiki.hfwu.de/index.php?title=Assignments_Social_Innovation_and_Entrepreneurship_Spring_2021

During this phase, we introduce the students to the course aims, the concept of communities and community-based social innovation and to their working teams. Students also started to work on an individual crosscutting assignment, the good practice case study. During the fieldwork phase, students get to know the community through onsite visits and interviews, or, alternatively, through digital meetings and videos, if the pandemic required this.

As their first output, the teams produce an important assignment, the so-called 'Community Map'. The Community Map is a creative and exploratory analysis of people, power structures, landscape/site conditions, local challenges and the system relationships between all of this. This assignment is done in close exchange with the communities themselves, for example through interviews and empathy mapping. The teams finally had to decide on one local sustainability challenge to focus on and developed a Theory of Change for this problem. Compared to the Design Thinking cycle, phase A corresponds to the 'Understanding' part.

Phase B: Designing a pathway towards the community's goals

Phase B moves on to the ideation part of Design Thinking: How might we address the social or environmental challenge we have identified? Phase B is very intensive for the students. They explore ideation and prototyping approaches in interactive online group sessions with their international peers. Ideally, these methods are then also applied locally with their communities, on site or digitally. In addition, they present their good practice case to each other and reflect on commonalities and differences between international approaches. Phase B finishes after four weeks with an ideas pitch, in which community members could also attend and give feedback. This feedback loop might lead to relevant revisions of their ideas.
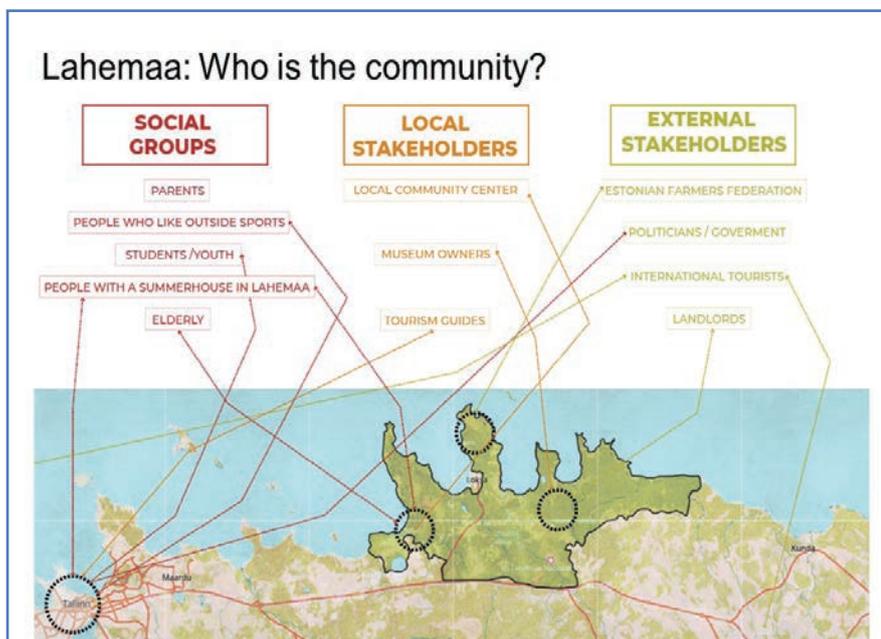
Map-based slide of the community mapping exercise depicting places and stakeholder groups of the Lahemaa National Park community context in Estonia. Authors: Christian Barrera, Dasith Fernando and Luca Jakobs.

The first assignment further included emphathy maps, a DPSIR-based system analysis and a Theory of Change template. DPSIR stands for: Drivers, pressures, states, impact, responses.

Completed business model canvas as part of the final presentation. This project envisions establishing an organisation for 'Circular Gardening' aiming primarily at innovative ways of greening school grounds. This has been done here on the example of a local gymnasium in Nürtingen.
Authors: Robaet Niloy, Md Ekbal Hossain, Mohit Sehrawat, Ali Elbanna, Rehan Wasi.

Phase C: Designing the change model

The last phase of the course aims at developing a business model canvas. In class, we discuss all essential elements of the canvas, such as value proposition, core activities, customers and beneficiaries, costs and revenue streams, key performance indicators, impact measurement and marketing. The students can directly apply this knowledge to their own social innovation cases and gradually specify their business model canvas.

The course finishes with a seminar presentation of this last assignment, followed by a final reflection round. In parallel, students present their ideas also locally or, during pandemic times, by inviting the community digitally. Our original plan was to also celebrate ideas with the community at the end of the course, but this important element was hampered by the pandemic. Social gathering and celebration of community achievements is however very important for building the identity of a Community Innovation Lab. We hope to introduce it in future versions of this programme.

From idea to implementation

At the end of the course, usually around mid of June, the student teams have an elaborated business model canvas at hand. They also have a concrete community context with actors, needs and opportunities. We therefore offered very team to join a follow-up programme in the upcoming fall semester. Within this project, we offered this course twice, 2020 and 2021, with regular 90-minute sessions on Monday late afternoons.

Students joined in with their ideas from the summer term course, or from other comparable courses. They could work on a stepwise refinement of their model and develop it into a serious business plan, which they could later present to supporters or co-financers. In difference to the previous programme, students were working more individually and self-dependent. Each session included a discussion part with the lecturer so they could clarify any open issues with regard to their own innovation idea.

As a general support scheme, they received a business plan template as a base. In order to receive recognition for the course, they had to complete and submit a fully developed business plan following the course template.

During the fall semesters, we offered the following advanced business modelling sessions:

Phase A: Designing an Organisational Form
- A.1: Introduction to the seminar: From Idea to Implementation - What does it imply?
- A.2: Understanding the start-up phase: Methodologies for supporting start-ups
- A.3: Ownership models and their legal environment
- A.4.: Cooperation models

Phase B: Product and Service Design
- B.1: Introduction to product and service design
- B.2: How to conduct a market research

Phase C: Developing the Financial Plan
- C.1: Financing the start-up phase
- C.2: How money works in business

Phase D: Promotion and Selling
- D.1: Distribution Channels
- D.2: Creative use of advertising and promotion

Phase E: Management
- E.1: Staffing and Leading
- E.2: Quality Management and Impact Evaluation
- E.3: Risk Management

For further information on learning materials, templates, assignments and evaluation forms, please visit our project website under:

http://www.localchange.eu

Lahemaa / Estonian Community Lab

Arnhem Community Lab

Nürtingen Community Lab

Bucharest Community Lab

Carpathian Community Lab
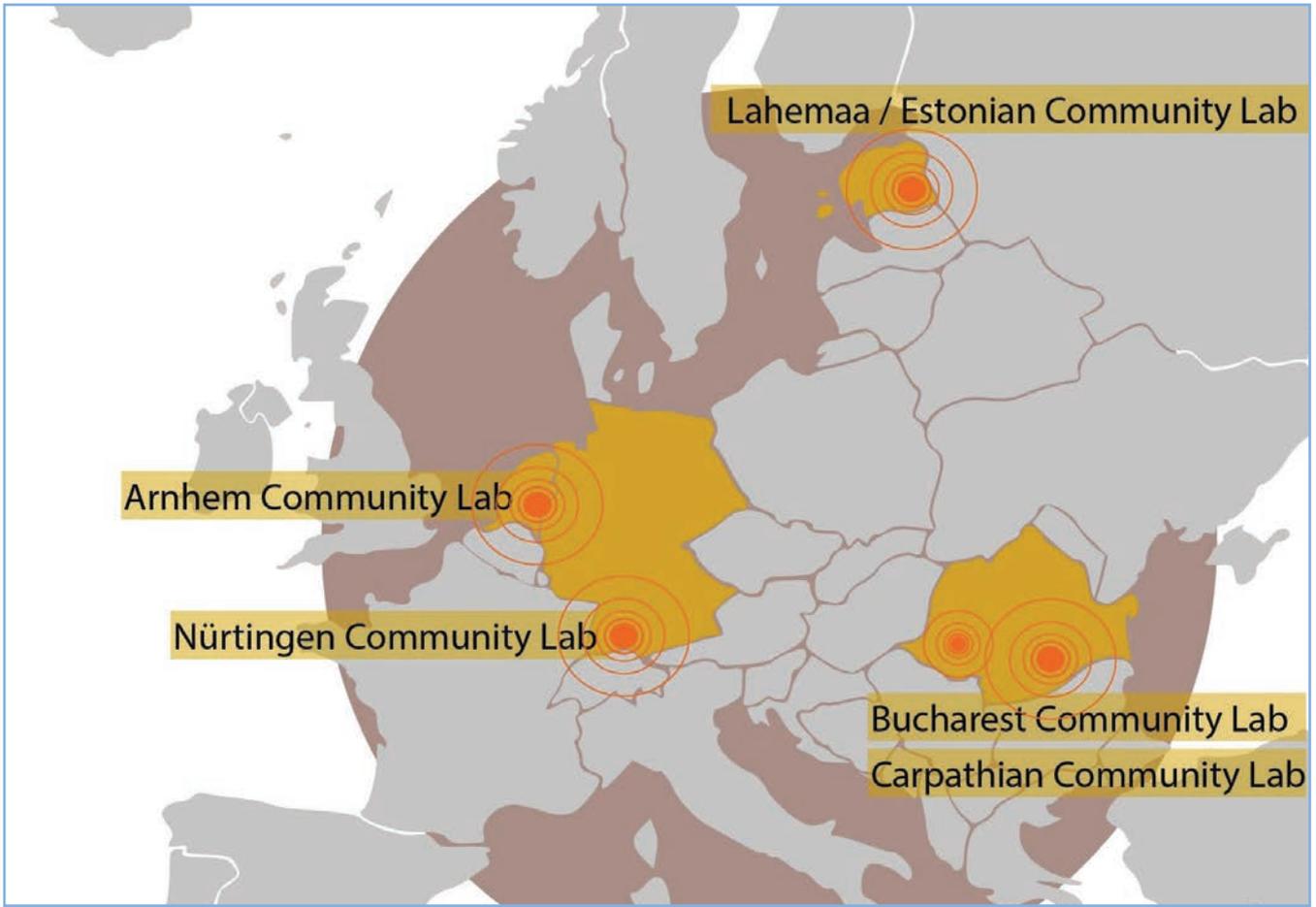
Community Innovation Labs
Five Stories

Urban Community Innovation Labs

Picture: Mihai Petre, creative commons

Hölderlin Lab

Nürtingen is a small town on the river Neckar and part of Stuttgart Greater Region. This story shows how Nürtingen-Geislingen University has established a new collaborative ecosystem for transformative education.

"

Hölderlin Lab is rather an innovation format.
It takes place whereever the respective communities are.

What has been the institution's motivation for establishing a local community innovation lab?

Nürtingen-Geislingen University (NGU) is a university of applied sciences with about 5.000 students at two locations. Both Nürtingen and Geislingen are medium-sized towns located at the edge of Greater Stuttgart Region, which is one of the most industrialised and productive regions in Europe. NGU offers a broad range of study programmes ranging from environmental protection to economics and business administration. Hence the university's profile combines environment and business, with the idea of promoting knowledge and capacity building for sustainable development. The university is part of the educational system of a boosting metropolitan region. Local sustainability challenges are primarily linked to cultural and social integration, biodiversity conservation, climate change adaptation, affordable housing, energy transition, mobility and in particular the transformation of a highly productive local economy in the light of digitalisation and globalisation.

All of this happens within a limited territory where spatial, social, natural and economic resources are highly under pressure. Even if Nürtingen is only a small town with about 45 000 inhabitants, it is home to a diverse and complex community. Our goal was to build a relationship of trust between the university and diverse

community groups and actors from outside the academic realm, following the idea of transformative sciences, as described earlier in this report. Together, we share the same territory and local sustainability challenges. By engaging in a shared process of collaboration and co-creation we aim to make this partnership strong and sustainable for the future and to generate innovative ideas for local change and sustainability.

In how far does this approach link to the strategic goals of NGU?

Nürtingen-Geislingen University aims to become a model university for sustainable development, in particular by creative synergy of its economic and environmental competences. More recently, the guiding principle of the entire institution has been reformulated under the headline *Education for Responsibility*. Therefore, the entire institution has an increased interest in further developing its capacity in the field of education for sustainable development. A local community lab fits perfectly into this perspective since it provides a shared context for teachers, students and local community. All groups involved are part of a development process. Not only in the sense of developing innovative ideas. In addition, everyone develops his/her competences for sustainable development.

What was your status quo when you started?

In October 2018 we started with a loose network of people from different backgrounds: some NGOs, the local sustainability forum, staff from the city administration and some interested citizens. We did not have an overall strategy of how to build a relationship of trust. We also did not know which sustainability challenges to prioritize. Some orientation could be gathered from the Integrated Urban Development Concept Nürtingen 2025 (ISEK, 2015). Our community innovation lab started and developed quite iteratively and organically, which will be further explained in the following.

Building the Community

How did we start? In the context of an ideas workshop on 16.10.2018, people reflected together which social challenges are perceptible in Nürtingen and suitable for joint work with students. Fifteen citizens from Nürtingen, representing different local interest groups, used this opportunity to contribute their ideas. The international CLLC project team also attended this meeting. First, everyone was asked to name a topic or an idea. These were written down on cards and then grouped into themes. Afterwards, there were lively discussions in four mixed groups. This resulted in some starting points suitable for in-depth work with the students.

The community representatives had identified the following core themes:

- Local biodiversity: protection and development of local orchards and development of a youth farm
- Sustainable local mobility
- Social integration: development of open spaces, fair-trade, integration of disadvantages groups, urban gardening and inclusive meeting points
- Energy transition: how to make Nürtingen carbon-neutral?
- Development of an alternative entrepreneurship centre

All participants were invited to vote on which theme they considered most relevant. The outcome was that all themes received a significant number of votes, while the topic of social integration stood out as the most relevant one. This has provided a good basis for

further steps taken by the team. The first round of projects taken up in the initial Social Innovation course in the summer term 2019 focussed on the following topics:

Reactivation of the inner city of Nürtingen: An integrated approach with urban planning and business students; 'Embrace a Friend': an attempt to establish an open networking between students and local youth with and without migration and refugee backgrounds; contribution to Nürtingen's application for hosting a garden festival: students developed ideas for an integrated open space development strategy; alternative newspaper: another group collaborated with the local independent newspaper group, reflecting on a new format of delivery for the journal

In the course of the project, we have not managed to deal with all of the sustainability themes emphasized during the kick-off meeting. Especially mobility and energy topics have not been addressed yet by our team within the framework of this particular ERASMUS project. However, the topics we were able to focus on, especially social integration, green space development and local retail, were taken up with a great level of detail leading to tangible results and various follow-ups. They contributed substantially to developing a local ecosystem of social innovation. In the following, we will focus on the two projects which had the strongest impact so far: sustainable local retail and urban gardening.

Identifying local challenges at the kick-off meeting in October 2018.

Focus: Sustainable local retail and inner city development

Our starting point was in summer 2019 with a joint lecture between urban planners and economists. The aim of the event with 46 students was to generate ideas and proposals to make the city centre more attractive. This was also an interesting approach because currently, the inner city does not have much to offer for younger people.

Besides some really innovative, creative and well elaborated proposals from the students, it became obvious that there had been more projects and initiatives in Nürtingen in the past in which ideas for more attractive offers and design of the city centre had been collected. Therefore, an overall positioning and implementation deficit was identified as the problem. For this reason, we initiated a follow-up project in order to evaluate the work and cooperation of the actors responsible for the city marketing. In this context of the winter term 2019-2020, we gathered important insights on how the joint work on and in the inner city could be done more efficiently and effectively.

The COVID-19 pandemic was a major challenge for the continuation of our community work. In the summer of 2020, we therefore decided to hold a seminar to evaluate the online activities of the Nürtingen retailers to organise very practical help during the pandemic. Five companies took part, and their websites and social media activities were analysed. The students made suggestions for the improvement and further development of their online marketing.

One of the participating companies was the world shop in Nürtingen. This resulted in deeper cooperation, which on the one hand led to a joint initiative of a group of sustainability actors in the city for the certification of Nürtingen as a Fairtrade Town and on the other hand to the development of the world shop into a world house - Welthaus. This woould comprise a larger retail space, integration of a café and a new location. In the following winter- and summer-term, students wrote theses on these topics and developed business models and business plans in a community-based

seminar for this social enterprise. All activities described either originate from the local community or are carried out with their close involvement and intensive participation.

An important interim result of the activities so far is that the university has gained much greater visibility as a (sustainability) actor in the city. This is not only evident in the events and the increased media presence but is also actively evaluated by members of the community.

Building on this, it has been possible to establish a network of actors in the city centre who work intensively on common issues in a spirit of trust. The very good and close cooperation with the municipality and the Welthaus community should be emphasised.

Local retailers participating in the analysis of their online activities

The concrete results of the work on this topic in recent years can be summarised as follows:

(1) Professionalisation of city marketing. In the course of the joint work in recent years, two overlapping local marekting organisations were merged and have received new leadership. Cooperation with the city administration has been realigned. More ambitious projects are being taken up and, above all, implemented. Communication between the participants has improved significantly. The activities in the Hölderlin Lab are not solely responsible for this, but they have made their contribution.

(2) Professionalisation of the online marketing at the participating medium-sized retailers. Web sites were redesigned, social media presences are managed much more professionally, and in a thesis completed in July 2021, a concept for social-media controlling was developed for a fashion retailer in the city centre.

(3) On 05.07.2021, the documents for the application for the Fairtarde-Town Nürtingen were sent out. The steering group consists of 15 members from all areas of society. A total of 26 institutions and companies participated. The initiative was accompanied by seven articles in the local press in 2021.

(4) Statutes for the planned citizens' cooperative have already been drawn up and the documents for applying to the cooperative association for the foundation should be ready by September. This is to organise the necessary real estate for the 'Welthaus'. Business plans for the enlarged world shop and the new world café to be founded are also available now (start-up matrix: +1).

(5) 105 students have participated in community-based project seminars and four students wrote their final thesis in community projects.

Focus: Community Integration by Urban Gardening

What made the urban garden in Nürtingen happen? At least three processes have come together at the right moment: the neighborhood development project for Klein-Tischardt (started by the social department of the town hall in July 2018), the Fridays for Future demonstrations in Nürtingen from September 2019 and the urban gardening initiative *Bunte Beete* (driven by two persons who had been involved for a while in a local sustainability forum). This example shows very well that social innovation is highly dependent on identifying and linking disconnected processes. It is therefore very important to be open and attentive to what is going on in the community. And of course: not every engagement leads to an innovative idea and system change. But some do.

Our process biography

The neighbourhood development project was a good opportunity for the university team to connect to a very diverse group of residents. Klein-Tischardt is a working class neighbourhood of about 2.000 inhabitants

and located very close to the city centre. A first community walk in summer 2018 and a follow-up workshop revealed already many local sustainability issues, such as lack of community spaces, quality green areas and local supply and too much traffic impact. During the community walk, one university representative, Ellen Fetzer, met with one of the local urban gardening initiators, Monira Kilian. Both spotted a well-suited ground for an urban garden next to the river on an urban wasteland which is part of Klein-Tischardt. The vision emerged in that moment. But since a housing development plan was already in force on the same plot, there was limited optimism that a project like this could ever start. Nevertheless, this idea was raised again at the first CLLC brainstorming workshop with the community in October 2018. At that meeting, a representative from the urban planning department started to think about how to make it possible from a legal point of view.

Meanwhile, the community focussed on preparing their first neighborhood

festival, implemented in July 2019. The issue of open space quality was taken up twice with students, both in summer and winter 2019. Over the summer, a group of landscape architecture students envisioned open space strategies for the entire town and in November 2019, a group of local and Middle East students worked on various topics of the neighbourhood, including its open space development. In August 2019, a new political chapter opened in Nürtingen with freshly elected mayor Dr. Johannes Fridrich taking up his position with a strong will to improve the living quality. This political turn has been a highly supportive factor for our work since then. In September 2019, the Fridays for Future demonstrations became relatively strong for a small town like Nürtingen. Also, many students participated and claimed for more climate action at all levels, including a 10-point climate agenda for the Town Council. The students also demanded more visible climate action on the ground and suggested urban gardening as a powerful tool for achieving this. They came into contact with the existing lo-

Placemaking for health and well-being: the urban garden hosts regular Qi Gong sessions

cal urban gardening movement and started dreaming of something bigger than the wooden garden boxes that the initiative had been distributing across the town so far. University representatives joined them and finally met in November 2019 in the town hall to discuss the implementation of a temporary urban gardening project on the territory we had already envisioned in summer 2018. We closed the meeting with an official confirmation for a temporary use contract for an urban plot of 1.200 square meters, ideally suited for community involvement due to its very central location.

The plan was then of course to involve as many students as possible as part of the 2019 social innovation online class, so they could learn about social innovation from the international team and practice it on the ground. The pandemic put all of this into a very challenging context. However, the mixed team of community members, students, activists and university staff managed to start the urban garden, which soom came to be known as the 'Wörth-Garden', Wörth being the local site name for these former industrial grounds on the river. In parallel, an international group of seminar participants supported the development of the community garden conceptually, enriching it with many international perspectives and learnings from case studies from across the globe.

Once the first beds had appeared, more and more neighbours joined in and became part of the co-design.

During the lock-down conditions it was indeed difficult to involve the community adequately into the design of this garden. For example, we could not launch an official kick-off with many people attending. However, once the first beds were laid out in May 2020, we launched a small leaflet campaign in the neighbourhood and more and more people from very diverse backgrounds started to engage in the garden. Website, newsletter, instagram and facebook were set up as well, hoping that multiple channels would reach out to a diverse audience. At the beginning, some local people had the impression that this was to become a 'students' place' and felt less comfortable because of that. Especially since they saw many unknown young people working on a site they somehow still considered as theirs, even if nothing had happened there for years. We immediately realised that this impression could become counterproductive since we really hoped that the local community would take ownership of the site. This problem was eventually solved by itself. Since students naturally come and go, the original group was no longer very present on the site after the summer, and even less in the year to follow. Some new students came in, but more importantly, we could clearly see that a diverse group of local residents started taking ownership of the site by using it regularly. However, a core management team of around five people, only one of whom is a resident of the direct neighbourhood, is still necessary for keeping the project up and running.

Small beginnings in May 2020

Already in July 2020, the area has become a small wild paradise.

What contributed greatly to the success of the project was the integration of different social and cultural activities in the garden, which made it become a real place of encounter, positive experience and learning. It all started with a lady from the seniors council who offers Qi Gong lessons every Thursday. We held public lectures, movie nights and even an exhibition. In summer 2021, a children's coffee club moved in, hosting playful sessions for kids every Monday. With the help of the local integration office, we started offering meetings for people who would like to practice German language in a relaxed environment.

The 2021 spring seminar of our CLLC course brought again a group of 25 students together to be inspired by the project and for taking it further. That course was again heavily impacted by the second lock-down and many international students being stuck in their home countries because of travel restrictions. However, they managed to transfer the concept to two locations in India, one in an urban and one in a rural context. One group conceived a network for sustainable food planning, another one transferred the urban garden to the context of school grounds and another one reflected on how to combine urban green spaces with public health services.

Despite the limited possibilities during the pandemic, the garden has sparked a lot of interest and inspired people even on different continents.

In parallel, the political and planning conditions changed quite unexpectedly. While we were told at the beginning that a limit of two years of temporary interim use was the maximum possible limit, the original development plans for the site were turned down in spring 2021 by the town council itself. By the time of this writing, we have just received an extension for at least another year, which is an incredible success. A new development will however come at some point in time, but, according to our latest notice, with less building intensity than originally planned and, in the very best case scenario, leaving room for an urban gardening part to stay.

In the upcoming semester, we will still move further and think about how an urban youth farm might be established in Nürtingen. We will combine this project with a local initiative that aims at introducing small herds of sheep and other domestic animals into the maintenance of orchards. This way, we proceed on our pathway of addressing the challenges brought to us at the first community meeting in October 2018.

Sustainable knowledge management and communication

As shown in our process maps, most of our activities became part of an organic evolution from one learning activity to another. After one year, we started calling the entire process *Hölderlin Lab.* This name refers to Friedrich Hölderlin, a very famous German poet and philosopher, who had spent his youth in Nürtingen. 2020 was supposed to become a year of celebration linked to his 250th birthday, if there hadn't been the pandemic. The name suits well to our activity because it combines two dimensions: First, the strong linkage to our specific city and region and second, the 'out-of-the-box' character associated with Friedrich Hölderlin's work. Hölderlin-Lab is supposed to serve as a 'third space' constantly evolving between the university, the town administration and the various local community groups. In that sense, it does not need a constant physical place. Hölderlin Lab is rather an innovation format and it takes place wherever the respective communities of interest are. This can be at the university, but also in spaces owned by the respective communities, the town hall or right in the public space. We recently even discovered a former shop in the town centre, owned by a very engaged local couple. They turned their shop into a meeting place for the community to discuss arts, sustainability and politics, and frequently give free room for university projects as well.

Hölderlin Lab has soon become much more than just a working title. We started putting together a presentation in which interim results were documented and presented to different audiences, including the local press. We combined this with a local instagram channel and also set up a website later on in the same year. The website is developing into the central information hub where results from previous projects are documented and communicated to a wider audience. We started documenting results in the form of 'Storymaps' using web-GIS technologies, so we could effectively combine spatial information with innovative ideas and processes

HÖLDERLIN LAB NÜRTINGEN
Zukunft gestalten

Was ist das Hölderlin-Lab?　　Was wir tun　　Wer wir sind　　News　　Unser Netzwerk　　Kontakt　　Newsletter

WAS IST DAS HÖLDERLIN-LAB?

Das Hölderlin-Lab ist eine offene Plattform zur Zukunftsgestaltung. Das Lab arbeitet in, mit und für Nürtingen. Hier kommen Studierende und Lehrende der Hochschule mit Vertreter:innen aus Stadtverwaltung, Wirtschaft, den vielfältigen lokalen Initiativen und aktiven Bürger:innen zusammen.

emerging from our community lab. This way, we also intend to make sure that future community-based projects are building on the knowledge and ideas which are already out and become more efficient and impactful this way. Furthermore, we have a digital place where ideas, even if not immediately followed-up, can just 'sit and wait' for the next good opportunity or interest group to take them up.

But next to establishing these channels, the most important factor is to stay close to the communities and citizens we are working with. To keep them informed about the results, continue listening to their needs and to develop suitable follow-up learning activities that build on their needs. In that regard, university educators take up a new role for which they are not originally trained. One important learning is probably that much of this process is dependent on an open-minded and responsible character of the educators involved, including good organisation and communication skills.

As mentioned already in the first example, one way of measuring impact was to keep track of the number and diversity of people involved, as well as documenting the variety of topics we have dealt with, which is part of this documentation. Since October 2018, we have been able to involve over

100 students from five disciplines in 10 community projects. Each project involved on average 10-15 local community members throughout its process, i.e. from the preparation to the final evaluation phase.

Many community innovation ideas are now out there to inspire new approaches and they might be taken up sooner or later. By the time of this writing, we can say that two ideas have significantly advanced and materialised during the project lifetime. The urban gardening project is implemented, it has a sustainable organisational form and creates a lot of positive local impact, which was also reconfirmed by an in-depth interview with the community in summer 2020 and a community-resilience study done by a master student in the fall semester 2020-2021.

The municipality even changed its original opinion and is open to keep it longer than originally thought. As mentioned, the new fair-trade hub ('Welthaus' and its associated cooperative) is very advanced in its conceptualisation and brings already 200 supporters together. The community association, that is supposed to implement this new fair-trade-hub, is supposed to be founded at the end of this year.

The Future of our Community Innovation Lab

Our sustainability strategy has various dimensions. A very important one is to make sure that students have a valid opportunity within their curriculum so they can effectively participate in community-based learning activities. We have created two possibilities for this. One is a module called 'Community Innovation Lab' which is now part of the portfolio of elective courses in the bachelor programme for business administration, and also eligible for students from economics. In addition, students from all study programmes can take the same course as part of the 'HfWU Modules' portfolio, which is a brand for cross-cutting courses with an emphasis on sustainable development. These are also very much sought after by international students, which shows that education for sustainable development and social innovation have started to become a characteristic element of NGU that is well perceived by our international partners.

The second important dimension is to make sure that our community partnerships are sustainable as well. At the moment, a lot is dependent on the relationships and knowledge of specific team members and colleagues. So we were asking ourselves how to transform this into a more systemic relationship of the university with its community. We therefore started to establish a so-called 'Advisory Board for Sustainable Development of the City of Nürtingen'. The role of this board would be, amongst others, to make sure that community, local administration and university meet biannually to discuss the learnings and findings from previous activities and to decide on what to prioritize for the upcoming courses. By the time of this writing, the establishment of this board is not finalised yet, but obviously on a good way. Once set up, it will create a constant flow of knowledge and needs management between the university and its local community partners.

The third aspect is to make sure that results and ideas are always well doc-

Visual overview of what the new 'Welthaus' will offer

umented and disseminated, so that as many people as possible can participate and, ideally, become involved in follow-up activities. This is primarily supported by the Hölderlin-Lab Website, the story maps and the associated social media activities.

Institutional development

From an institutional point of view it has become obvious that our university can contribute a lot to the social innovation of its direct community environment. It has become much more clear what such an approach comprises and which types of innovative processes and ideas can be initiated. We also observe a clear spill-over effect: starting with one challenge within one specific community not only generates follow-up projects, it also invites other actor groups and citizens to address the university with their local sustainability problems which creates new cooperations. While we always thought at the beginning that our community innovation lab would need a centrally located physical space, we realised in the process that such type of investment is actually not really needed. Instead, our approach is much more focussed on

bringing the university to different non-academic locations and to meet the communities within their places and contexts, which also greatly helps the students to empathize with them.

During the project lifetime, our university has managed to acquire significant federal funding for establishing a local start-up and innovation centre (Zukunft Gründen - ZUG). The team behind this project focuses on serving the regional economy in the process of innovation for sustainability. In combination with this project, our institution has visibly increased its innovation and entrepreneurship infrastructure since we started in October 2018. For the future, we aim at linking social innovation ideas emerging from our seminar activities closer to this new entrepreneurship centre, in particular if the Theory of Change includes a business model. At the moment, Nürtingen-Geislingen University is in the process of updating its Transfer and Third Mission Strategy. On that basis, we aim at acquiring additional funds to intensify our approach of linking social innovation education with local community development.

Open air exhibitions have been very effective, especially during the pandemic

Arnhem Lab

Arhem is a Dutch city and part of the Arnhem–Nijmegen metropolitan area. VHL UAS has recently launched a new programme titled 'Management of the built environment. This story shows how our project helped linking the course to local communities and their sustainability challenges.

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The nature of the work of the future graduates of our course is to promote project and process management in a community setting.

What has been your institution's motivation for establishing a local community innovation lab?

At VHL UAS, we already had some experience with the living lab aproach which we understand as process of building a learning community of stakeholders, students and teachers around a practical societal issue outside the school building and in the community. The idea is that by the interaction of students, teachers and stakeholders in situ (in the community), the learning process of all participants is accelerated.

In our new bachelor course *Management of the Living Environment* we were looking for cases in which we could

build on these Community Innovation Labs. The nature of the work of the future graduates of our course is to promote project and process management in a community setting. So the CIL idea is a perfect practical environment to mimic the real life situation.

In how far does this approach contribute to the strategic goals of your institution?

VHL UAS is dedicated in its mission to the Sustainable Development Goals. Within these 17 goals, we pay special attention to Goal 4 (Quality Education), Goal 16 (Peace, Justice and strong institutions) and Goal 17 (Partnerships). In our CIL's approach we can easily address this selection of goals. Especially

The food forest is slowly developing on the VHL university estates in Larenstein, Arnhem.

Goal 17 is an important goal, since our institute is becoming more and more dependent on partnerships and cooperations, especially when it comes to research projects. It is also a very successful strategy to give our students a head-start on the job-market. Most of our students will receive a job offer or an offer for a traineeship in the project they have participated during their studies. In the strategic goals of VHL there is also a wish to strengthen the relation between applied research and education. We think that community innovation labs or *living labs* are the best way to make this happen.

What was your status quo when you started?

At the start of the project we decided to opt for three projects in and around Arnhem. The main concern was to have small teams of not more than five students. Initially, we wanted to cooperate with the Spijkerbuurt neighbourhood in Arnhem because they were doing a lot of groundbreaking participatory projects on health care subjects with the Arnhem-Nijmegen University of Applied Science. VHL UAS was looking for urban projects focussing on circular economy (SpijkerBike, BuurtKlusBedrijf) and greening of the urban environment. We could easily blend in with the already established CIL. We did projects on *worm hotels*, energy transition and citizen landscaping teams.

We decided to copy the CIL approach also to the Food Forest project happening on site on our Larenstein Campus Estate. The Food Forest became our second project. This one hectare Food Forest is sort of an open experiment, and we took some time to establish a stakeholder group within the school community. We involved researchers, students, teachers, the Green Office, the catering, the gardeners and the middle level and vocational school Helicon MBO. The aim of this Food Forest is to learn from the experiment on aspects of ecology, nutrition, agronomy, economy, sociology and education. As an example, our CIL team of students did research on the willingness of locals to participate in our school forest. This Food Forest experiment was expanded with a Food Forest initiative in Elderveld, Arnhem. Students are making a business plan for the start-up of this citizen initiative.

Our third project was to set up a citizen landscaping organisation in the city centre of Arnhem. We cooperated with the municipality of Arnhem, a citizen group and a commercial landscaping business. This project was not very successful, due to the pandemic situation. We decided to drop this initiative and to move on to a greening gardens project in Dieren-West, municipality of Rheden and a Campus Woudhuis project in Apeldoorn. The Dieren-West project evolved around a Steenbreek project in which gar-den-owners would exchange tiles for plants. We involved a local school, Leerrijk, to promote active participation of school children and parents.

This Campus Woudhuis project is located in a 40 hectars forested estate on the eastern fringe of Apeldoorn. It is establishing a learning environment for nature education and promotes labour inclusiveness for regional care organisations. Our university is now considering adopting this place as a living lab for a range of study programmes. In 2021, we tried to strengthen the social and physical links between the city and the campus by developing educational programs for schools and elderly.

Links:

Spijkerbuurt neighbourhood
https://mijnspijkerkwartier.nl

Steenbreek project
https://steenbreek.nl

Campus Woudhuis
https://campuswoudhuis.nl

Building the Community

We are working with several community projects at the same time. How did we identify them and how did we start the collaboration? The Spijkerbuurt project already had a thriving community and we could make use of stakeholder lists that were already successfully applied. The Larenstein Food Forest started partly from scratch. The internal stakeholders were easy to identify, but the local population was not identified at all. So students paid visits to houses in the neighbourhood and tried to involve locals with questionnaires and invitations for a meeting in the fall called the *Larenstein Harvest Festival*. The Arnhem Inner City project identified two separate groups: an entrepreneurial community of shopkeepers and restaurant and bar managers and two groups of locals with houses in the city centre. These groups were approached via representatives of entrepreneurs and housing projects. Due to the pandemic conditions, this approach turned out to be difficult. The Dieren-West project was researched by a survey and a number of interviews by other student groups. A useful organization was identified (Sustainable Dieren-West) that could share information on local contact persons. In the Food Forest Elderveld an initiative group of civilians was used in order to connect throughout the neighborhood.

How did you approach the community and who was eventually involved?

We mostly approached people with a mix of questionnaires, flyers, house visits and invitations to meetings. In the case of SpijkerBike Spijkerkwartier a community of potential clients and students that were living in this neighbourhood were approached and involved. Since this was a social enterprise in a start-up phase, there were not many clients yet. In the case of Larenstein Food Forest the internal stakeholders were active, but the external stakeholders or the locals around the school's premises were not very active. There was little response or willingness to cooperate on a practical level. But at an occasional harvest market without many obligations, a group of interested people got together. The Arnhem Inner City project included the idea of a citizen driven landscaping group. But it turned out to be very hard to involve other people than the official representatives. This was disappointing for the students, because these types of diverse groups are lively and active in the Spijkerbuurt neighbourhood. This low involvement was partly due to Covid-19 restrictions preventing live-meetings. For this reason, we paused these two projects and moved on to Apeldoorn and Dieren-West. In both of these communities, some groundwork had been done by the Campus Woudhuis organisation and also by other groups of VHL students.

How did you manage mutual expectations? How did you establish trust in the cooperation?

Mutual expectations were managed through questionnaires asking for the willingness of stakeholders to participate. We also did door to door visits and client interviews (SpijkerBike, BuurtKlusBedrijf).

Trust was established by openness in the process, clarity in the startup contracts or startup letters of intent and in the regular evaluation and feedback meetings of staff, students and stakeholder representatives. Trust became an issue in two groups (Dieren-West and Voedselbos Elderveld), in which students did not keep enough contact with the commissioners. We realised that the 2nd year students were taking the project and the process for the stakeholders for granted and were too much focussed on their own study results. In the 3rd year of their study they receive much more tools and background knowledge on project- and process management. Their level of responsibility is higher in their 3rd grade major project, compared to the 2nd year. We hope to address the subject of trust in a way that students feel responsible for this and recognize the effect of their behaviour.

Presentation of the community project on developing the Sonsbeek public park in Arnhem.

Too many unused bikes in Arnhem: How might we bring them into a second lifecycle?

How have you identified relevant topics, opportunities and challenges with your community?

The challenges were in part proposed to the community in the form of a question or assumption, for example *Would you be willing to be actively involved in our school's Food Forest for practical help, maintenance and harvest?,* or *Would you be willing to join a citizen landscaping team to promote, prepare and establish more green spaces in the inner city of Arnhem?* Obviously, most of our subjects emerged from *outside the community*. The Food Forest Elderveld Arnhem was an example of an internal wish of the community. We could see that these *internal wish subjects* were more meaningful to the community. In general, students had a tough time keeping up with the community's initiatives and actions.

Which topics, opportunities and challenges have you addressed?

We addressed a number of challenges in Arnhem and Apeldoorn. We had the challenge of getting rid of stray bicycles in Spijkerbuurt, Arnhem and to establish a social enterprise that would repair these bikes so they can have a second life. This idea links well to SDG 12 Responsible Production and Consumption. In the following year, we started a BuurtKlusBedrijf (a Handyman-Social Entreprise) that addressed the challenge of SDG 8

Decent Work and Economic Growth together with SDG 7 Affordable and Clean Energy and SDG 13 Climate Action. This company is training unemployed persons from the neighborhood to do odd-jobs that have to do with the energy transition: isolating houses, fixing another energy-source than fossil fuel.

We addressed the problem of changing climate and failing agriculture by starting an experimental Food Forest at Larenstein estate to see if we can produce more healthy food on a small one hectare plot with minimal inputs and with food security in the ever drier and hotter summers of The Netherlands. So SDG 13 Climate Action (storing water, cooling heat), SDG 2 Zero Hunger and SDG 15 Life on Land (promotion of biodiversity) came together. We expanded this subject, by helping a civilian Food Forest initiative in Elderveld, Arnhem, in the following year. This group wanted to save a former four-hectars meadow from real estate development by establishing a green place where everybody can learn and eat.

We addressed the challenge of unpleasant stony city centres that lack green spaces of quality and that are missing positive involvement of entrepreneurs and local inhabitants. At the same time, the municipality of Arnhem would like to raise the level of greenery in the city centre with less

money to spend. This subject was promoting the goals SDG 13 Climate Action (storing water, cooling heat) and SDG 15 Life on Land. The year after we moved on to the neighborhood Dieren-West, Rheden, and did a similar project. SDG 1 No poverty and SDG 4 Quality Education were added: a school Leerrijk joined in which some children were struggling with poverty issues.

The latest project titled *Campus Woudhuis* was addressing the challenge of nature education and labour for all in the city of Apeldoorn. On this forested estate (40 hectares) a forest labour team was established with people with a mental handicap. So it is a place to learn about nature, to build up work experience and to study. Our students tried to connect this Campus Woudhuis to the nearby neighborhood Woudhuis, Apeldoorn, by organising activities for school children. The SDGs that were central here are: SDG 4 Quality Education, SDG 8 Decent Work and Economic Growth and SDG 15 Life on Land.

How did you generate ideas together with the community?

In all three projects the idea generation was done in creative sessions based on design thinking. But there were also other creativity techniques used in a number of sessions. In the case of BuurtKlusBedrijf, Spijkerk-

wartier a MIRO session was held with a brainstorm. All our three projects had a business side, because students were trying to work out a social enterprise model for the challenge. So a lot of idea generation was done: financing models, the product quality, the organisation of the business, the promotion of the ideas. All groups had to prepare a promotional YouTube clip, a presentation pitch and an online presentation session in the form of a VHL Greentrepreneur day in June 2020 and 2021.

How did you co-design solutions?

Co-design was mostly done within the CIL's stakeholder environment and in school under the guidance of teachers. In the case of the Food Forest Elderveld, Arnhem, a map was drawn in AutoCad by a VHL student, based on a charcoal-sketch. This map was needed to get municipal committee approval. This was a nice example of co-design, because the initial sketch needed further detailing. The student, a teacher and a civilian sat together to get the map up to planning standards.

In Dieren-West, Rheden case, a field visit at the Leerrijk-school with a student, an external expert from Wageningen UR, two school teachers and a VHL-teacher provided a discussion on how to offer young children a food growing experience. The idea of a

garden plot was exchanged for a hydroponics solution, for many practical reasons: the plantcare is much more easy for young children in this non-soil environment. Weeding and harvesting is very easy and children can easily reach the raised plant beds.

At the Campus Woudhuis an online session was held brining the international student team of the CLLC course together with the commissioner. Our students presented an excelsheet for financing the activities, and during the session all the relevant financial posts were discussed and decided upon. At first the commissioner was hesitant to talk about money first, but the students managed to convince him to look at the events from a business perspective.

The BuurtKlusBedrijf group had several co-design sessions with experts and the commissioner. Especially on the matter of wages for the future handymen. This is a complicated issue, since there are many rules on paying wages and keeping a state benefit.

Knowledge management and communication: How did you manage the knowledge transfer from one learning activity to another?

Because VHL was starting a new course on Management of the Living Environment, we co-designed

our own education closely together with the project team of our CLLC ERASMUS project. We used the EU's EntreComp framework to look at the broader educational goals of entrepreneurial learning. We further applied the Sustainable Development Goals as channels for our goals. We also made use of a well established text book on entrepreneurship (Osterwalder, 2014). We want to give the students good reference materials for their entrepreneurship development.

The EntreComp framework was used as a structure for a portfolio: the students had to clarify how they contributed to all the elements of the framework over the course of half a year.

How did you communicate the activities, ideas and results of your Community Innovation Lab?

The CILs were communicated within the existing structures of the website of the Spijkerbuurt, Larenstein UAS, the Municipality of Arnhem, a newsletter from Dieren-West. On a practical level the main communication was done by email and telephone.

How did you measure success and impact of your lab?

The students' work was evaluated with the CIL's evaluation forms, but the three projects were also evalu-

Design Thinking tools like the Value Propostion Canvas greatly helped in the co-design process with diverse interest groups.

Communities might not be visible from the very beginning. Informal open events like the Larenstein Food Market are a great opportunity for building new network around a shared interest.

FOODMARKET LARENSTEIN
using food to build a community
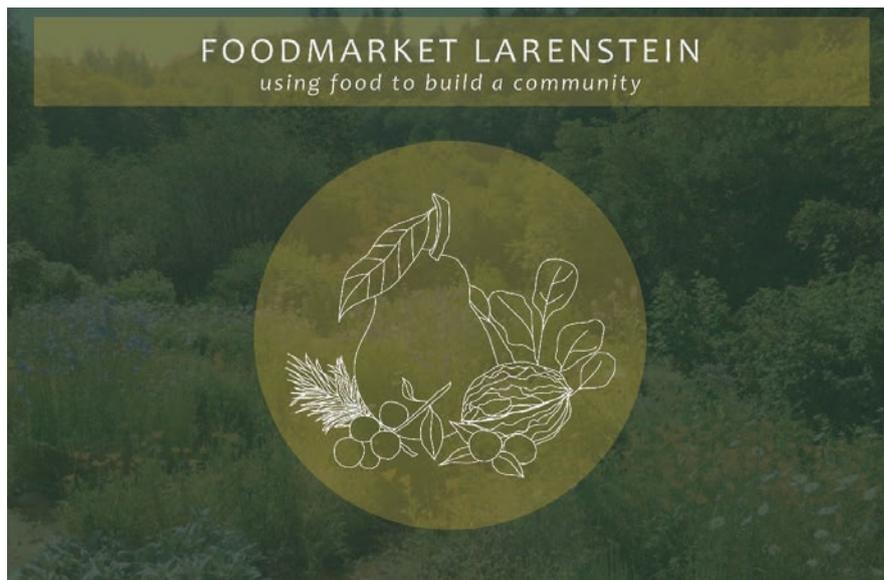
ated with a rubric that is used for entrepreneurial plans. This is more an evaluation of student work, than of the project itself. In the list below the projects are described in terms of success, impact and CIL-development: The SpijkerBike, Spijkerbuurt project was evaluated by the Spijkerbuurt organisation and rated as promising and effective. There is a real Spijker-Bike initiative that is benefiting from the work of our students. The CIL-development could be rated at +1, because the project will be further developed by the community.

The BuurtKlusBedrijf, Spijkerbuurt business plan had some flaws and it was rated as 'meagre' by the commissioner. However, the CIL-development could be rated at +1, because the project will be further developed by the community.

The InnerCity Arnhem project was rated as inadequate by the Arnhem project leader, because the students had failed to dig deep enough into the situation of the inner city and into the wishes of the entrepreneurs and the inhabitants. It was however remarkable that in September 2020 a similar project was started in another part of the city of Arnhem. So the idea itself was valuable. The CIL-development could be rated at -2, because the project will not be further developed by the community.

The Larenstein Food Forest was also below expectations. The students failed to really involve locals in their initiative. But this project has a long standing time horizon, so next year we will carry on with another group of students and a slightly different challenge. It needs to be mentioned that the Covid-19 crisis has hampered communication at all possible levels of involvement. These projects are by definition dependent on community activities and these were cancelled on a big scale. The CIL-development could be rated at 0, because the project will be continued by the VHL-community when COVID-19 measures are not hindering the activities of civilians at school grounds any more.

The Food Forest Elderveld group lost contact with the civilian group. But they produced a basic business plan that can be helpful in later stages of the initiative. The CIL-development could be rated at +1, because the project will be further developed by the initiative group. There is a GO by the municipal committee to elaborate the plans. VHL will stay on as a knowledge partner.

The Campus Woudhuis business plan was a well received summary of everything that is needed to start educational events at the campus. The CIL-development could be rated at +1, because the project will be further developed by the Campus and several schools. VHL hopes to deepen its cooperation in the future. The Dieren-

West business plan was focussing on the 'not spent costs' for medical and social aid, when you involve people in a greening project. This was quite a challenge and it opened up a new view on the social impact of greening projects. The CIL-development could be rated at +1, because the project will be further developed by the community, the municipality of Rheden, Steenbreek, Leerrijk and VHL.

What is the sustainability strategy for your Community Innovation Lab?

At VHL UAS we adopted the living lab approach for all our research and we are now seeking to involve all courses in these kinds of projects. The new challenge is to find added value by combining non related subjects in one integrated project. E.g. We hope to cooperate with the Campus Woudhuis organisation that combines healthcare with landscaping by learning from clients with a handicap to perform successfully in a green maintenance job. For VHL it is interesting to see how we can put students from different courses together to work on this society/greening goal in one project. We hope to do this for Campus Woudhuis in Apeldoorn and there is a living laboratory available for students to work on site. At Spijkerbuurt, Arnhem, we have built a long lasting relationship and we hope to have our next intensive study programme at their site.

What has your institution learnt from the CIL?

Since we have tried to integrate the international blended learning course with local living labs into our curriculum, together with the knowledge on social enterprises, we can look back on a successful curriculum impulse. As an institute, we learned a lot and we had the opportunity to get familiar with online learning, blended learning and with internationalisation. This was very helpful in times of long distance learning and working, due to the Covid-19 crisis. We learned that cooperation with other institutes at a practical scale is beneficial for our own CIL/Living Lab development. The cooperation principles in international cooperation are similarly useful for local cooperation. The techniques of design thinking can even be used in institutional development matters. Yes we benefited a lot!

The techniques we have adopted can be applied in the wider institutional development of VHL: design thinking, cooperation models with stakeholder groups, SDGs, entrepreneurial skills, blended learning, online learning.

As an institute we were able to successfully apply for other EU-funded Erasmus cooperation INVEST, partly based on our track record with this project. Within this new project, we have supported a blended learning training group and CLLC was used as an example. In our institutional plan 2021-2024 we hope to embed the SDGs in our organisation and our pedagogy (cross boundary learning). At VHL, we have established a Green Entrepreneurship Centre for students who want to bring their business idea to the market. This centre is also very dedicated to the UN Sustainable Development Goals.

Student presentation on the Spijker Bikes business model

Creative representation of a more circular Van Hall Larenstein Campus

University

Van Hall Larenstein University of Applied Sciences

http://www.vhl.nl

Lab contact persons

Daan van der Linde >> daan.vanderlinde@hvhl.nl

Freddy van Dijken >>freddy.vandijken@hvhl.nl

Suzanne van der Meulen

>> suzanne.vandermeulen@hvhl.nl

Links and references

VHL Greentrepreneur day
https://www.hvhl.nl/business-fair-2021#

Green Entrepreneurship Centre
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Fruit4Schools
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https://www.invest-alliance.eu

Bacigalupo M, Kampylis P, Punie Y and Van Den Brande L. (2016): EntreComp: The Entrepreneurship Competence Framework https://publications.jrc.ec.europa.eu/repository/handle/JRC101581

Osterwalder, Y. Pigneur, (2014), Value Proposition Design, How to Create Products and Services Customers Want.

Bucharest Lab

The Bucharest Living Lab worked with existing social enterprises in the field of circular economy. With the pandemic experience, also the topic of green urban spaces was included. The lab is a great example of an established university, ASE Bucharest, collaborating with a local NGO partner, Aterlier Merci, on local sustainability challenges.

Type of Stakeholders

Social entrepreneurs (NGOs, artists working with waste)

Companies (collection, treatment, disposal, raw materials)
Public institutions

Public authorities (legislators)

Individual consumers

Mass media

HE programs

THE PAPER MILL
Paper collection & recycling

WUNDERCRAFT

MASS-MEDIA
design

UPCYCLERS' MAP
https://bit.ly/2pPSRpn

SOCIAL ENTREPRENEURS/ UPCYCLERS
- UPSIDE-DOWN
- WOOD BE NICE
*UPCYCLERS MAP

ECOTIC
- Disposal of electronic waste

IKEA Romania

Raw materials

Product design

CIRCULAR ECONOMY

wider system

MUNICIPALITY OF BUCHAREST
ENVIRONMENT MINISTRY

Waste management

Production (remanufacturing)

Zero Waste Romania
Waste management in companies

MASS-MEDIA
business

RECICLETA.RO
- Collection of paper, cardboard, PET, aluminium

Consumption
Use - Re-use - Repair

GABI URDA
- Yard SALE organizer

*UPCYCLERS' MAP

MASS-MEDIA
education

consumers

What was your starting point and motivation for developing your community innovation lab?

Our goal was to recognize the benefits of student engagement with their communities in acquiring knowledge. We had the ambition to design, and redesign, courses which focus on revitalizing the community. There was also an urgent need to qualify univesity teacher to effectively do community-based learning. Implementing and recognizing academically based community service courses where teachers and students work on real community problems is a major development step for university curricula. We expected a mutually beneficiary

effect with positive impact on both, student learning and the communities themselves. When we started, there was only little knowledge and awareness about the existing issues in the community in immediate vicinity to the university buildings.

Are there any links to strategic goals of your institution?

There are indeed strong links with the third mission assumed by the university regarding regional development and innovation. The university aims to strenghten its partnerships with key actors from the socio-economic environment and to be a trusted partner for local institutions and authorities.

At the same time many participants in the CIL are directly or indirectly connected with the UNESCO Chair of Business Administration (part of the University), which has clear-cut objectives related to sustainable development and education. As stated on the website, the UNESCO Chair explicitly aims at contributing to the achievement of the SDGs and development of sustainable cities and communities. Therefore the establishment of a CIL within this broader context appears a natural step towards the above mentioned statements.

Focus 1: Circular Economy

Building the Community: How did you identify the community?

Before describing how we identified the community, we need to present the problem tackled and the solution envisioned which indicated further the identity of the stakeholders targeted. These were identified through consultation of various reports and papers about waste management and issues connected with it in the larger european context of circular economy.

Problem: Not enough waste prevention and waste management mechanisms in place in Romania; broken ecosystem; a need to support good practices.

Solution envisioned through our Bucharest CIL: Strengthening the capacity and supporting business development plans of social enterprises based in Bucharest which contribute to the waste prevention and management ecosystem in Bucharest.

Therefore, the community targeted was related to the local context describing the need to support local social entrepreneurs involved in waste management activities in order to overall support the waste manage-

ment economy built around the National Waste Management plan. An initial database of social enterprises based in Bucharest and involved in waste management was built with information collected from various reports: Ashoka's innovators map, google search for various social enterprise grantees and award winners.

How did you approach your local community?

The initial communication was done by emailing the social enterprise representative and introducing the opportunity to collaborate. After this introduction, we continued the conversation by phone and email and a first face-to-face meeting took place at the university for a workshop with the team project to understand and deepen the challenges proposed initially and decide on the final topics for the challenges.

Who was eventually involved?

From the 11 social enterprises approached, four finally became partners of our Bucharest living lab:

SOMARO: social supermarket
SOMARO collects products such as food and essential household goods as well as clothing, footwear, shoes,

etc. from different companies and sells them at symbolic prices, with significant reductions, to low-income customers. The entire range of products offered in the SOMARO stores includes 100% consumer-friendly products but can not be marketed in other stores due to damaged or dirty packaging, or as soon as their shelf life expires or for other reasons.

RECICLETA (ViitorPlus association)
This is a social enterprise which provides services for collecting paper, cardboard, PET and aluminum dosages for recycling. The program was created in 2009 by ViitorPlus - the Association for Sustainable Development, which promotes both the care for nature and social equity. Therefore, the transportation of waste is made without emissions, with tricycles, thus providing stable and legal jobs.

GOOD BOUTIQUE, Red Cross Romania
is a social boutique which encourages people to adopt a new lifestyle: to consume more responsibility, recycle, reuse textiles. The funds obtained by selling the donated clothes are for the social projects of the Red Cross-Branch Sector 6.

CLLC team meeting Bucharest in February 2019: Social enterprise partners discuss their challenges with the ERASMUS partners to prepare international staff members for the learning activites of spring 2019.

Theme	Goals	Activities
Identifying and understanding Local Challenges	• Identifying the challenges around which stakeholders can be activated. • Focus on challenges of social enterprises based in Bucharest and active around the issue of waste: *Improving municipal solid waste management through strengthening the activity of the social enterprises located in Bucharest.* • Identifying the system context of the local challenges and in-depth system analysis of each of the challenges formulated by the social enterprises: What drives the problem? What is the impact? Who wins and who loses?	• Invite stakeholders/community members after initial screening of the local situation. • Bring students, university professors and community members together in a face-to-face discussion about potential challenges the 4 social enterprises are facing in their current operations.. • Collaborative analysis of the system context. • Tools: Built DPSIR Models: Drivers-> Pressure -> State -> Impact ->Response to be dealt with later, Stakeholder Mapping, Power Mapping, Sociotope Mapping, System context of target groups concerned, Active listening, Create empathy maps, Impact Gaps Canvas.
Community Ideas Workshop	• Collect as many ideas as possible • Prioritize ideas • Built a Theory of Change • Create prototypes	• Students, university professors and community members from the four social enterprises worked together. • Tools: Collect ideas and How might we?-Questions, prioritize democratically, use Theory of Change Canvas, Value Proposition Canvas • do prototyping and pitching of ideas
Modeling Community Innovation	• Design a system for implementing your theory of change. This might be a business model, an alternative type of collaboration and partnership or an intervention • Evaluate your innovative system: What are the alternatives? Why does your system address the local challenge in the best way?	• Students and community members work together. • Tools: Business Model Canvas for social enterprise.
Planning Community Innovation	• A deep reflection and further development of the alternative business or system model after validation of the potential solution with the social entrepreneurs in a face-to-face meeting. • Further development and specification of value proposition(s), financial framework and financial modeling, marketing structures, modeling the implementation process.	• Students, mentors and community members work together. • Resources: lecture materials from the social entrepreneurship course on financing, marketing and business planning.
Pitching Community Innovation: Ideas and Visioning	• Celebrating the community innovation process and raising public awareness (through press release about the activities) • Sharing ideas with the wider community and stakeholders • Finding supporters (internal or external the social enterprise) to make implementation/start-up more likely • Train the pitching of ideas • Envisioning the next steps together with the social enterprises representatives.	• Students and community members present ideas jointly to an audience of local experts, stakeholders and business angels. Make sure there is a party at the end. • Tools for the pitching session: Presentation with interactive poster session, role plays, prototyping demonstration, interventions etc. • Tools for the visioning session: Mapping the participants' situation, where they are now and what they want to achieve in the coming months. Agree on follow-ups

Group photo with community partners and students taken after the final presentation of the international ERASMUS workshop hosted in May 2019 by the Bucharest Social Innovation Lab.

ATELIERUL DE PANZĂ (The Canvas Workshop)

This is a social enterprise developed by the non-profit organization Viitor-Plus - Association for Sustainable Development. Since 2014, we have had a status of protected unit, which means that at least 30% of our employees are disabled people and we offer them a decent job. *'We want to reduce the consumption of plastic bags and give consumers an alternative to these - cloth bags.'*

How did you manage mutual expectations?

Each potential partner received a digital presentation with a brief description about our cooperation during the Bucharest CIL where mutual benefits and responsibilities were described. Furthermore, we always delivered what was promised in written and verbal communication.

How did you establish trust in the co-operation?

By being honest about the potential results and the *must have* responsibilities, the BCIL team established the trust necessary to develop the innovation lab experience, both the BCIL team and the social enterprises partners being at their first collaboration of this type. The community innovation lab framework described on the left page serves as a backbone for organizing social innovation processes in our Bucharest CIL. The framework comprises a series of community workshops for facilitating a process of problem definition, ideas generation, theory of change, business modelling and the planning of a concrete intervention or business foundation.

How did you identify the relevant topics, opportunities and challenges with your community?

Each social enterprise partner had various issues related to the community where community meant the community of people they were hiring or the community of people who were benefiting from the products or services delivered by the social enterprise. After exhibiting a first round of challenges, these were further developed in a face-to-face workshop with the international project team in Bucharest.

The challenges formulated by the four social enterprises were:

SOMARO challenge: New strategies to identify new suppliers.

RECICLETA challenge (dual challenge): A: Calculating a formula for CO2 saved through RECICLETA programme, as to have an accurate and custom-made indicator. This CO2 indicator will be a very powerful tool in public communication, as to increase the number of companies registered in the pro-

Students present a Theory of Change for the Recicleta Social Enterprise

Bucharest CIL Workshop May 2019: Bringing ideas to work. Intensive consultation of CLLC staff and students with the manager of the Somaro Social Supermarket.

gramme and to increase consumers' awareness regarding the need for reducing CO_2 emissions. The total CO_2 formula will depend of 3 other sub-formulas, "CO_2 saved" from 3 sources:

- CO_2 absorbed by trees that have been saved by recycling paper and cardboard;
- CO_2 saved by recycling of each type of recyclable material collected by RECICLETA, to the detriment of being thrown away at the wasteland, were the CO_2 is emitted;
- CO_2 saved through pedaling (the use of tricycles), to the detriment of using a car for cargo.

B: Multiplying the collecting actions from companies: a plan for growing financial sustainability through profit making activities (not including sponsorships).

Practical case study: a campaign for the companies around their new headquarter to join the program, meaning accepting the payed offer: the fee that they have to pay is for 1 transport = 75 lei (max 150 kgs & 1mc of recyclable materials picked-up/collection), sign the contract, send them the infrastructure to create the recycling corner in their office.

GOOD BOUTIQUE, Red Cross Romania challenge (dual):
- The management of household textiles (collecting, sorting, reuse, disposal, etc).
- Recycling technologies (both upcycling and downcycling) for tailor- made textiles.

ATELIERUL DE PANZĂ (The Canvas Workshop) challenge (triple):

A: How to ensure financial sustainability of the social enterprise?
Changing regulations impacted dramatically the financial sustainability of the social enterprise. The profitability of a social enterprise that produces 100% cotton bags, in a country where recycling is below 5% and responsible consumption is not promoted, is a big issue (the tax benefits that the authorized protected units had until September 2017 were abolished, so sales declined, and 2018 was not profitable unfortunately).

B: What other products can we produce to provide our customers with sustainable, natural alternatives to common plastic products? New products to help reduce the consumption of plastic (until now, most of our products have been: canvas / textile waste transformed into shopping bags and

bags, urban life (the main business), bulk shopping bags (different sizes), cotton aprons and vests.

Focus 2: Urban Greening

Which local challenge have you addressed?

In the last three decades, there has been a continuous reduction of the green space surface in all 319 urban settlements in Romania, where more than 55% of the population lives. This is a result of the constant tendency to expand the built-up area, which has led to an average surface of the green space of less than 10 square meters per inhabitant (Account Court, 2014), while the EU standards require 26 square meters/inhabitant and those of the World Organization of Health require even 50 square meters/inhabitant. This is a great problem for the capital city Bucharest that must deal with several challenges: continuous degradation or overuse of existing green spaces, unequal distribution and accessibility across the city; insufficient developed measures regarding reservation of spaces – for planted area creation and protection areas for isolating noise pollution sources (traffic, industry) from residential areas.

Therefore, there is a strong demand for expansion of the green areas in Bucharest, protection of the already existing green and open space, and building of alternative, creative green areas. This main problem was addressed by the Bucharest Community Innovation Lab in 2021 with a focus on District 1 where the university, ASE, is located. Once this ambitious goal *- to increase urban green space in Bucharest, District -* was clearly set, the project team sought to identify representatives of stakeholders that could be mobilized to implement viable solutions. We started to think of all people who are connected to the problem, who have influence or power over it, or have an interest in positive change in this field. Thus, representatives of local public authorities, local green NGOs, researchers, faculty, staff, and students were involved in the identification of potential solutions. Small business owners and residents were included as stakeholders.

How did you approach the urban green space community?

While mapping the community, 3-5 of the most important stakeholders directly linked to problem were selected, considering the following criteria: who has a financial stake/interest, who has an emotional interest, what are the top motivations for each stakeholder, who are the biggest supporters or non-supporters.

The students working on these social innovation projects have been approached and selected during the lectures and seminars, mainly by the academic staff involved in the ERASMUS project. Announcements have also been posted on our website.

Other stakeholders have been approached directly, through the network of the project members. The initial invitation was sent through email and the conversation was carried through Zoom meetings. The students also talked face-to-face with small business owners and residents, and did some field research.

Who was eventually involved in the innovation process?

The following representatives of stakeholders were mainly involved in the BCIL:

- Mr. Ioan Ciopasiu, technical director of the Bucharest City Hall, responsible for green spaces;
- Dr. Diana Culescu, president of the Romanian Landscape Association with relevant experience for the project
- Social enterprises 'Atelierul de Panza' and 'Lepindea Museum of Traditions'
- Students from the Bucharest University of Economic Studies plus some students from the ERASMUS partners.
- Inhabitants and entrepreneurs from the geographically delimited area mentioned above.

Typical streetscape in central Bucharest: lack of green, no walkability and irregular parking makes the city less and less livable. COVID-19 made an already bad situation much worse.

Which concrete topics were you able to address during the process?

The main challenge was the lack of green spaces in Bucharest, specifically in District 1 in the Piata Romana area which can have negative consequences on the wellbeing of the citizens being associated with an increase in overall temperature during summer months and an increase in air pollution. The sites which have been approached are in the surroundings of the Bucharest University of Economic Studies and the solutions generated are also meant to offer more recreational opportunities for the students. The newly designed sites are user friendly and inclusive. They are aimed at stimulating dialogue, exchange of ideas between students and other community members, generating connections between neighbours which do not necessarily know each other. Like in many other big cities alienation and loneliness are increasingly problematic in Bucharest. They are also meant to offer a pleasant atmosphere to spend time between lectures and to organize outdoor events. All of this has become highly important during COVID-19 times. Some of the sites are supposed to be administered by students for students (not only) and thereby they offer the opportunity to practice the theoretical knowledge and to experiment, to innovate, to implement new, sustainable ideas

How did you manage the knowledge transfer from one learning activity to another?

At the beginning of each meeting the BCIL team members performed a recap of the main results or issues identified in previous sessions. Feedback received from the discussions with the stakeholders was considered and incorporated in the projects. Some social business ideas were redesigned or adjusted according to the feedback received. All the materials were made available for the students for consultation and the tutors and professors constantly made references to previous lectures/workshops.

Which communication channels does the Bucharest Community Innovation Lab use?

The existence of the Bucharest Community Innovation Lab was communicated through our website, the project's wiki page and through social media (mainly the project's Facebook page) and in several Zoom meetings with the main stakeholders.

The communication was also done directly via email and by phone with representatives of the social enterprises, students and within the members of the project team. The documents were shared either by email or by using Google Drive.

The communication with the university management was made through monthly activity reports which specified the progress in the operationalization and functioning of CIL.

How did you measure success and impact of your CIL?

There are several means that we used to understand the success of our BCIL and to measure its impact. First, we looked at the number and variety of people and community members actively involved in developing the social innovation projects, specifically number and background of students, faculty and staff working on the projects, number of individuals representing varied categories of stakeholders supporting the projects and offering feedback. Also, we looked at some behavioral change in relation to the main challenge, by measuring the level of understanding and awareness among students and staff regarding potential social innovation solutions that can be implemented. Moreover, the impact of our BCIL can be reported through the integration of new topics and improvements made to specific subjects included in the university curricula, changes in the students' assignments and their assessment, as well as development of new disciplines.

To understand how the impact and success of our BCIL was perceived among its core community, we applied a survey to students, research-ers, and faculty at the Bucharest University of Economic Studies. Our goal was to understand their familiarity and awareness level concerning social entrepreneurship for the purpose of community development and their interest to take part in future similar projects. The respondents' participation in our study was voluntary and they agreed with the processing of their responses only for research purposes.

The sample included 46 students and 12 faculty and staff, and we analyzed those two groups separately. Concerning the students' sample, 10 males (21.7%) and 36 females (78.3%) responded, the mean age of the respondents being 21.63 years (median = 21; standard deviation = 0.97).

Regarding the professors' sample, we have got 5 males (41.7%), and 7 females (58.30%), the mean age of the respondents being 40 (median = 37.5; standard deviation = 7.61).

Respondents' level of familiarity and their awareness concerning social entrepreneurship for the purpose of community development was measured through a seven points Likert scale (1 strongly disagree to 7 strongly agree).

Our first goal in measuring the social entrepreneurship impact was to quantify the respondents' level of familiarity concerning the domain. In this respect, we asked the participants in our study to associate social entrepreneurship with a familiar concept. The faculty and staff members realized a strong connection among society, business, and sustainability, in the sense that social entrepreneurship appoints an activity meant to improve society's wellbeing without considering profit maximization. Students asociated social entrepreneurship more with society, humanity, and social integration. The emphasis is on the development of society through the community (see word clouds).

We measured the intention of the respondents to involve in activities of creating value through social entrepreneurship. The survey findings

revealed that students are more likely to get involved than faculty and staff in actions of creating value through social entrepreneurship.

Concerning the identification of novel ways of improving the community through social entrepreneurship, it was revealed a moderate implication of faculty and staff and high involvement of students.

At the end of our survey, it was intended to quantify the knowledge of the participants concerning the existence of a community innovation lab focused on social entrepreneurship solution at the Bucharest University of Economic Studies. The survey revealed that 58.30% of the faculty and staff know about the implementation of this project, while 69.90% of students manifest knowledge about the project. Moreover, 93.50% of the students expressed their intention to be part of similar projects, while all the faculty and staff manifest a positive intention in this regard.

How far have the ideas generated in the BCIL develop during the process?

Since all the solutions generated through BCIL depend on the involvement of and collaboration with external stakeholders for implementation, discussions are in progress at this moment. We cannot clearly assess the interest of the stakeholders in following up activities, therefore it can be concluded that the start-ups could be rated at 0 (on a matrix from -2 to +2). However, all of the institutional stakeholders involved (i.e., the university and the public company) expressed the intention to ensure the necessary resources to carry out the implementation of the projects they find most suitable in the following years.

What is the sustainability strategy of your Community Innovation Lab?

Through our CIL, the Bucharest University of Economic Studies has positioned itself as a social partner trying to do things differently, to use innovative tools and to generate change in the community.

By our knowledge, it is the first university in Romania to assume the role of facilitator in a framework created by a Community Innovation Lab. The general objective of BCIL's sustainability strategy is to provide the necessary framework for local communities to respond to challenges through collaboration, experimentation and knowledge transfer between stakeholders.

In this context, our main goals are:

(1) Defining and developing annually two priority themes, by a collaborative process. CIL will involve at least 10 students and 2 teachers annually. The objective will be achieved within the disciplines taught at the university.
(2) Creating a database with the existing innovation laboratories in Romania and supporting the initiative to connect them in a common network.

(3) Continuous integration of the knowledge acquired through CIL in at least two disciplines taught in the university: *Social entrepreneurship* and *Multilevel governance and access to financing in the European system*

(4) Organizing an annual event for the dissemination of CIL results.

The collaboration with social enterprises, Bucharest City Hall and other NGOs involved in CLLC project will continue and the expansion of the number of stakeholders will be pursued.

What did your institution learn from the Community Innovation Lab?

BCIL responds to the three missions of the university: education (problem-based learning, theory of change and constructive thinking), research (in an international environment, related to sustainable development goals) and community (working together, participatory decisional process). We learnt a lot about:

• Online learning and blended learning in an international environment.
• How to address community challenges.
• How to conduct field research in the local community.
• How to cooperate with other organizations in the process of creating and testing solutions.
• How to cooperate and transfer knowledge from international partners.

Any institutional development aspects to consider?

BCIL will be under the coordination of two university structures: Student Entrepreneurial Society (SAS) and The Research Center for Productivity (RCP). Projects focused on topics targeting the local community and social

enterprises will be developed within SAS, and those targeting business communities within RCP. We intend to develop behavioral economy tools for creating routes into larger scale impact and we would like to attract new financing for the CIL with our international partners. The activities run via BCIL will continue to be implemented with active participation of students, faculty and staff having multidisciplinary backgrounds and coming even from different schools, manifesting a specific interest in contributing to community innovation.

Links
- https://fabiz.ase.ro/erasmus-community-learning-for-local-change
- https://localchangewiki.hfwu.de/index.php?title=Intensive_Study_Programme_Bucharest_2019
- https://www.facebook.com/local-change.eu

ATELIER MERCI

University

Bucharest University of Economic Studies

http://www.ase.ro

Lab contact persons

Monica Dudian >> monica.dudian@ase.ro

Carmen Paunescu >> carmen.paunescu@ase.ro

NGO partner

Atelier Merci - Mercy Charity

http://www.ateliermerci.ro

Lab contact person:

Daniela Staicu >> daniela@mercicharity.ro

Bucharest CIL May 2019: Getting ready for the community presentation

Rural Community Innovation Labs

Lahemaa Lab

EMU, the Estonian University of Life Sciences, has developed a very fruitful partnership with the rural community of the Lahemaa National Park, the oldest reserve of this kind in Estonia. Amongst others, the partnership has stimulated the foundation of a local tourim association.

What was the motivation of your institution to establish a Community Innovation Lab in Lahemaa?

At EMÜ we have a number of years' experience with rural business and rural community learning delivery including creating communities of learners: stakeholders, students, trainees and teachers around defined economic & societal issues outside in their own communities. This experience has demonstrated that stakeholders, students, trainees, and teachers working together in their community enhances the learning process of all participants.

The CIL concept is a natural extension to these ideas and enables the university to develop and refine the practices which facilitate effective community learning and innovation.

There hadn't been a similar initiative in the area before the CIL concept was introduced in February 2019 and brought together a club of entrepreneurs.

How did you identify the community and how did you approach them?

The territory of the Lahemaa CIL is closely linked to the area designated as the national park and the neighbouring villages and a small town. The community had previously hosted one of the intensive study programmes (IP) preceeding this current project. Community work was supported by a local social enterprise (Ökokuller), the manager of which, agreed to assist us with the administration of the IP. The students' work outputs from the IP were very well appreciated by the community (municipality and agency staff and entrepreneurs) and they welcomed

the possibility to work again with the university and its students.

How did you approach the community and who was finally involved?

Contact with entrepreneurs and other local stakeholders was organised and managed by Ökokuller and later by Lahemaa Tourism Association. Key actors in the operation of the CIL included: EMU staff, local entrepreneurs, Ökokuller NGO.

Primary actors included: EMÜ students, more local entrepreneurs.

Secondary actors included: local residents, state agency and municipality staff.

How did you manage mutual expectations?

By closely supervising meetings with students making clear what was involved in the student placements and agreeing expectations from both students and placement providers. Open CIL meetings were held where all participants were able to express their views and to contribute to development plans for CIL activities.

How did you establish trust in the cooperation?

Student placements helped greatly in assisting CIL entrepreneurs with their business development activities. Entrepreneurs were very happy with the competence, diligence and innovativeness of the students.

Key persons in the community were central to getting the messages about CIL activities out to them and feeding community needs back to the CIL organisers and in helping to coordinate these activities, always ensuring activities took place as planned also greatly helped the establishment of trust.

Our learning process with the CIL

Community workshops were held during the autumn and winter seasons each year and were aimed at:

- Identifying the challenges in Lahemaa National Park
- Identifying the challenges facing local stakeholders
- Facilitating the learning process (for both community members and students of EMÜ)
- Encouraging the generation of business ideas
- Encouraging social interaction between local stakeholders and EMÜ students
- Familiarising EMÜ students with Lahemaa and the local community with the university
- Finding summer placement hosts for the students

The community meeting templates provided through the CLLC project: "CLLC Workshop Framework" and "Methods for Community Workshops" were used the plan the initial workshops (see also page 48).

Lahemaa Community Workshop in Kolgaküla Community House

Almost 50 local stakeholders attended the first workshop and the group consisted of mostly local micro-entrepreneurs, officials of the Environmental Board and State Forest Management Centre, a representative of the local newspaper and the head of the local government; 10 EMÜ nature tourism students were also present.

During the first workshops, local challenges were identified and grouped them into four categories:

- Marketing and local image
- Collaboration
- Workforce
- Seasonality

Workshops on Idea Implementation

During the later workshops, we took a more personalised approach and set our focus on the needs of each entrepreneur who wanted to develop an idea through the innovation lab. This then progressed on to working with entrepreneurs who wanted student help during the summer.

These enterprises are:
- Tammistu Sheep Farm: a small family farm maintaining semi-natural coastal meadows and wants to develop small-scale family tourism
- Muuksi Stable: a horse farm also focusing on family tourism
- Kärka Accommodation: home accommodation

- Viinistu Hotel: one of the largest hotels in the area that also focuses on nature tours and harbour services
- Kolga Manor: an art gallery

Knowledge management and communication: How did you manage the knowledge transfer from one learning activity to another?

First we analysed what kind of knowledge exists in the Lahemaa community and what kind of new knowledge is needed. Then we analyzed how new knowledge transfer should be implemented. This process was done through a series of workshops with the use of internal (EMU) and external experts.

The local activities of Lahemaa CIL were most effectively communicated through email lists and a Facebook page. Additionally, local newspaper was used.

Links
- https://www.facebook.com/VisitLahemaa
- https://sonumitooja.ee/kolgakulas-esinesid-kaitsealade-turismiasjatundja-usast-ja-soomest
- https://sonumitooja.ee/kaitsealade-paev-uus-algatus-kohalikele-turismiettevotjatele

Lahemaa CIL: Thematic map
of the local challenges

How did you measure success and impact of your CIL? How far did the ideas develop?

Lahemaa Mobile Tourism Info Cafe (LMIC)

During the 2018/2019 period, the first Estonian mobile tourism info cafe was built. The LMIC was co-created by EMÜ and NGO Ökokuller. The mobile info cafe is a place for EMÜ students in their summer placements and local youth for learning entrepreneurship. It will offer local services and products and information to Lahemaa National Park visitors. Due to the Corona pandemic however, the LMIC has not yet been put into active use, the silent period was rather used for furnishing it. Hopefully, life will be normal again and the LMIC will be fully operational in the summer of 2022.

Services Being Developed
- Marketing & area information point
- Café & shop
- Classroom in nature
- Service provision point
- Service cooordination point
- EMU student placement site

What LMIC will deliver
- Local Food and souvenirs
- Environmental education
- Advertising of local services
- Bringing providers together
- Service provision
- Student hands-on experience
- Business planning support for entrepreneurs

Lahemaa Tourism Association

During the autumn/winter of 2019 the idea of a community-led tourism organisation that would include all the stakeholders of the whole national park and the buffer zone around it, was born.

After much discussion and planning in March 2020 Lahemaa Tourism Association (LTA) was registered just before the difficulties caused by the arrival of the Corona virus in the country.

LTA now has around 50 members and an advisory board and is growing. The organisation has already initiated several essential developments, e.g. local tour-guides training and community tourism collaboration.

Celebrating the Day of the Parks

Due to the 2020 Coronavirus pandemic, tourism almost ceased throughout the world and for months most events were either cancelled or transferred online. But, when Estonian restrictions became less severe, the Lahemaa Tourism Association took the initiative and used the "Day of the Parks', a traditional European annual event (which this year was celebrated online in most countries), for a campaign to open the post-corona season. Other protected areas in Estonia were invited to participate and the campaign became national. On 24th May 60 European Day of Parks themed events were organised where more than

770 guests were able to visit 35 protected areas in small groups with local guides on hiking, canoeing and other programmes. In Lahemaa, a dozen hikes took place, from shorter cultural history walks to longer Nordic walking tours. Other activities included manorial and cinematography heritage, management of semi-natural communities and appreciation of edible flowers. Local restaurants were open, some offering take-away picnics.

Development workshops

Workshop training and discussion activities continued throughout 2020 and into 2021 whenever the Corona restrictions allowed, topics included were all based on member feedback of perceived needs and included the following:

- digital marketing
- product development and packaging
- Lahemaa development
- creating tourism packages
- creating a webpage
- creating the persona of Lahemaa visitor
- introducing the persona
- introducing the ViSEnet project learning materials
- introducing the "It's safe here" sign
- creating Lahemaa visuals
- tour-guiding in Lahemaa

Green Destinations programme

Tourism awoke in summer 2020 and CIL/LMA entrepreneurs in Lahemaa were busier than usual that year. Lahemaa Tourism Association decided to take part in a 2-year Green Destinations pilot programme organised by the Enterprise Estonia. We have now reached the first phases. Lahemaa has been announced as one of the TOP100 global sustainable destinations! In 2021 Lahemaa as the only destination in Estonia gained the gold level in the Green Destinations project.

How do you see the future of the Lahemaa Community Innovation Lab?

CIL workshops greatly encouraged the local enthusiasts who were involved in the collaboration projects, to develop and grow their ideas during these years and to create different tourism products and become sustainable entrepreneurs.

Just two examples of these are:

• **Kolga manor** is an old manor complex which now houses an art gallery, a summer café, a museum and offers several tourism products that carry EHE ecotourism quality label for Estonian rural tourism products.

• In **Tammistu sheep farm** the sheep breeders have with the help of CIL created a tourism product where visitors can walk along a well-kept restored coastal meadow to get acquainted with sheep and the cattle dogs and learn about old traditions for the maintenance of semi-natural communities.

CIL has helped in creating Lahemaa Tourism Association which now consists of around 50 local stakeholders - entrepreneurs, NGOs and private individuals, and an advisory board of local municipalities, EMÜ and other essential institutions. LTA keeps the ideas of LCIL alive and has started Lahemaa community development projects. In the autumn of 2021, a web platform visitlahemaa.com will be launched which reflects the messages of the Lahemaa community.

Opening of the LMIC in August 2019 with EMÜ staff and local stakeholders

Members of the Lahemaa CIL and Tourism Association on a field visit to Hara Port

Members of the Lahemaa CIL and Tourism Association on a field visit to Hara Port

Online workshop on the image of Lahemaa

What did your institution learn from the Community Innovation Lab process?

Regular communication with key community people is important to maintain contact and ensure that plans are updated, agreed upon and any changes can be implemented.

The CIL concept can be a highly effective tool in identifying and characterising community development needs and then addressing these.

Are there any institutional development aspects to consider?

To maintain a smooth implementation of institutions inputs it was important to ensure communication channels were open and regularly used between institute colleagues supporting the CIL and also with national partners.

Winter in Hara: a former Soviet submarine base waiting for new times

University

Estonian University of Life Sciences

http://www.emu.ee

Lab contact persons

Roger Evans >> evanter.ou@gmail.com

Kaisa Linno >> kaisa.linno@gmail.com

Tarmo Pilving >> Tarmo.Pilving@emu.ee

NGO partner

SEV - Estonian Social Enterprise Network

http://sev.ee

Lab contact persons:

Erkki Kubber >> erkki@sev.ee

Kerly Piirsalu >> kerly@sev.ee

24 certified local tour guides and their trainers in spring 2021

Bison Hillock Lab

WWF Romania and Rewilding Europe together with local, national and international partners are working to create a sustainable development model in the Southern Carpathians by valuing the largest wilderness stronghold in Europe.
This involves the community of Armeniș in Romania.

WWF Romania and Rewilding Europe together with local, national and international partners are working to create a sustainable development model in the Southern Carpathians by valuing the largest wilderness stronghold in Europe.

It is hoped that the local communities' wellbeing can be sustained through nature-friendly enterprises connected to the largest national bison reintroduction plan in Europe. WWF is leading a bison reintroduction program in the Țarcu Mountains, an environment where the European bison disappeared over 200 years ago.

The bison is an umbrella species that has great significance for maintaining ecological processes specific to wilderness areas. A national bison reintroduction programme creates a unique opportunity for wildlife revitalization, local community development, eco-tourism, research and education. (Source: WWF Romania).

The rewildering process was supported by the LIFE-programme of the European Union with the project 'Urgent actions for the recovery of European Bison populations in Romania'.

The Bison Hillock is located in the Armeniș commune, part of Caraș-Severin county in Romania, 25 km from the city of Caransebeș, 70 km from Reșita and 140 km from Timișoara. Bison Hillock is the name the locals gave to a hilly area, part of the Țarcu Mountains where this ambitious bison rewilding initiative started in 2017. WWF Romania's work in the region is linked to a field research station located in Feneș village, Armeniș commune. It came to life as a result of a grassroots refurbishment project, using natural locally sourced materials, by up-cycling with lots of creativity.

The vision is to grow a nature-based economy based on the bison reintroduction. The ongoing community work towards this vision provided a unique learning context for students.

Having tested co-creation as a method to increase trust and generate continuous co-interest amongst different stakeholders, it was through multidisciplinary workshops that we generated ideas to pursue in the CIL moving forward. Ideas were understood as solutions that might reverse the needs or challenges that the community is facing.

The ERASMUS Intensive Study Programme in May 2019

Within the framework of this project, we managed only once to visit the Bison Hillock with a group of international students. Due to the pandemic, the planned second and third workshops were done only digitally, as best as possible. The workshop in May 2019 was a deep experience for everyone involved. The teams embraced the community intensively and elaborated five project ideas, one of which was implemented in summer 2021.

Ideas generated during the Intensive Programme

The Herd: A Branding and Resource Sharing Community of Entrepreneurs of Common Heritage. The idea is to create a network that will link locals with customers. This network will be a place that joins all the local people who have products or services to offer but are not in a place to start a business themselves. This should give the locals an entry point to the tourism market. At the same time, it will provide tourists the local products and experiences they actively seek for. Through this network, the locals will be visible and much easier to find because we will create visuals that will be put on the doors of people who have something to offer.

Woolies: This team brainstormed the idea of revalidating sheep wool as a local resource. Currently, the local community cannot make use of this material although there is an abundance of it. Therefore, unfortunately, despite its value as a raw product, sheep wool often gets burned. The project intends to promote intergenerational learning in the field of wool processing and to reestablish and rebrand local wool products.

Bibi Bison: Videos for Social Impact: This idea involves publishing videos with stories from the local hunter community, of which Bibi is a well-known individual. The activity has two main goals: First, to involve the hunters' community in the change process

Creative ideation phase moderated by community manager Oana Mondoc, WWF Romania, at the field research station in Feneș village.

Student teams visit the town hall and do field-testing of their ideas with the local major and vice major.

Local hunting celebrity Bibi is part of the idea presentation of the 'Bibi Bison Video Blog' that would promote local stories to a wider audience

Prototyping 'Bison Hillock Digital'

The 'Woolies' challenge: we need sheep to maintain the landscape but their wool is not competitive on the market

of the landscape of Armenis, in which hunting will hopefully have a different role in the future, and second, to promote the community by sharing local stories, customs and atmospheres. With this, the hunter community can become an important player in the transformation of Armenis for sustainable tourism.

Bison Hillock Digital: The challenge the local community in Armenis is facing is the lack of access for tourists to get to know about Armenis. Bison Hillock Digital came up with the idea of having an integrated application for mobile devices. The creators would like to redesign the existing website in order to reduce the expense of developing a completely new mobile phone application. The new app will offer services where tourists can book their accommodations and other activities. The application will link the locals, who offer services, to the tourists. This way, we will create new job opportunities for the local community.

Prosperity Camp: This idea builds on the unique landscape qualities and aims at realising a non-invasive way of bringing visitors to this nature and landscape experience. The prosperity camp would provide pure and simple accommodations that are embedded in the landscape so they do not affect the original rural character of the village. Target groups would be 'urbanites' seeking for something different, recovering from urban stress and practicing skills development and self-

reflection in the Bison Hillock landscape. The project assumes that this market is relevant a source of income which could be used to support other local developemnt activities.

From Idea to Realisation
The local WWF community manager, Oana Mondoc, was able to take up this idea and to convince significant supporters to co-finance this start-up that soon got to be known and branded as the *WeWilder Campus*. A management and design team was soon put together and did an incredible job over the pandemic period to bring this idea to reality. Our hope was that another group of international students would already be able to use the new facility within the lifetime of our ERASMUS project. However, links to WWF Romania and the Bison Hillock are well established now and we are very optimistic that students will be staying on this unique nature campus in the near future.

The following part reflects the experience of the community engagement process that has been going on for several years now.

Which challenges have you found?

Lack of confidence to start something new

Setting up local businesses related to ecotourism implies a sustained commitment from the locals - which in effect require locals to stop current activities and reorient their time towards a new business. Locals who

have experienced being part of a business, who are employees or running a small business are reluctant to start a new business on a part time or full time basis on a promise of the potential. Resources (time and people) are needed to compensate that locals who are entrepreneurial invest time and shift their area of business to the point they would commit to it.

For ecotourism enterprises to be sustainable beyond a minimum viable product much more knowledge and capacity is needed to ensure the delivery of a good experience at a consistent standard related to tourism and outdoor experiences. Without maintaining a standard any such business would fail its customers and the potential and special profile of the area.

Lack of infrastructure for commercialising local food products

The aging population of Armenis still produces sustainable food products, relevant to ecotourism. But they have no experience or desire to move products to the commercial market. These producers can be presently used as suppliers on a small scale (e.g. events), but in order to commercialise these kind of products they need to build hard infrastructures that meet EU and Romanian regulation standards in regard to production and processing.

The younger population is not interested, by instinct, in continuing such activities - they are deemed subsist-

ence activities and not ones with a potential revenue stream comparable to working abroad or in cities. Also, without bringing such products to market, they will in effect remain occasional activities with no real impact on the local economy.

Lack of skills to run a business as well as lack of skills to maintain a good standard of hospitality essential for the sustainability of ecotourism experiences (cause for point 1 above - lack of confidence)

Outdoor experiences, immersive cultural experiences and wilderness exploration are new concepts for the local community. The potential in local guides to deliver high standard nature immersive experiences is low. The unique selling point, the hook for the Bison Hillock area is dependent on a very complex set of skills for a wilderness guide: a role model of wilderness ethics, experience in nature guiding, tracking and trailing wild animals, outdoor skills, situational awareness, understanding of ecology, first aid and vigilance in the prevention of accidents; communicative and high level of hospitality towards guests, staff and colleagues; good level of English.

Outdoor ecotourism activities take people out of their business as usual and day to day world view and occupations; the local WWF-RE team has involved locals constantly acquiring specific products or local services and observed that traditional practitioners are lacking entrepreneurial thinking and access to key information and resources (funding sources, potential partners, model/best practice business cases, business mentors/incubators/investors, fiscal/financial consultants, project consultants), and new ideas for valuing natural resources sustainably. There is no knowledge, even imagination about how to transform traditional activities in experiences for slow-tourism or ecotourism.

The students' idea of the prosperity camp was followed-up by an inception workshop with locals, co-founders and supporters.

Summer 2020: The world is stuck in the pandemic, but things proceed on the Bison Hillock. The first WeWilder Campus hut comes into bing.

The process was challenging and demandig, but there are results.
A new facility exists, waiting for exploring creative new opportunities.

How did you generate ideas together?

We used the following processes and methods:

- *Experiential training* with local community members
- Stimulating locals to pilot social enterprise ideas based on nature through an *incubation/acceleration programme* that was kickstarted during the ERASMUS Intensive Programme we ran within the framework of the CLLC project.
- *Ideas festival*
- *Initial needs and opportunities assessment* as a basis for designing the ERASMUS intensive study programme
- During the ERASMUS workshop we used *methods of co-creation*
- *Ongoing meetings* to advance promising ideas with locals involved
- *Field trips with locals* to experience social entrepreneurship elsewhere

- *Local events* to test products and services on the general public
- *Co-design workshop* of how the Prosperity Camp will look like and function

How are you measuring the success and impact of your Community Innovation Lab?

We have developed an impact monitoring system with real time monitoring, where participants in a given activity become **human sensors**. We are keeping record as things happen. This includes in particular: participation, engagement, changes in perception of people involved in the project activities, exchange of knowledge or resources, volunteering hours and income generated.

So far, we have tracked over 3400 hours of in-kind mentorship and support offered by urban professionals in the project (both on site and remote). Workshops, training sessions, visits or meetings are documented using an *event journal* which references main themes and areas of interest, as well as areas for improvement that come up in conversations.

This documentation is providing relevant insights and helps to better design future programmes or events. We have used developmental evaluation in the first half of 2020 when we had to adapt to the effects of COVID-19 restrictions on society, where an external facilitator was helping the team respond to the changing conditions (C19).

For more information, please visit our impact montitoring dashboard:

https://we-wilder-panda.hub.arcgis.com
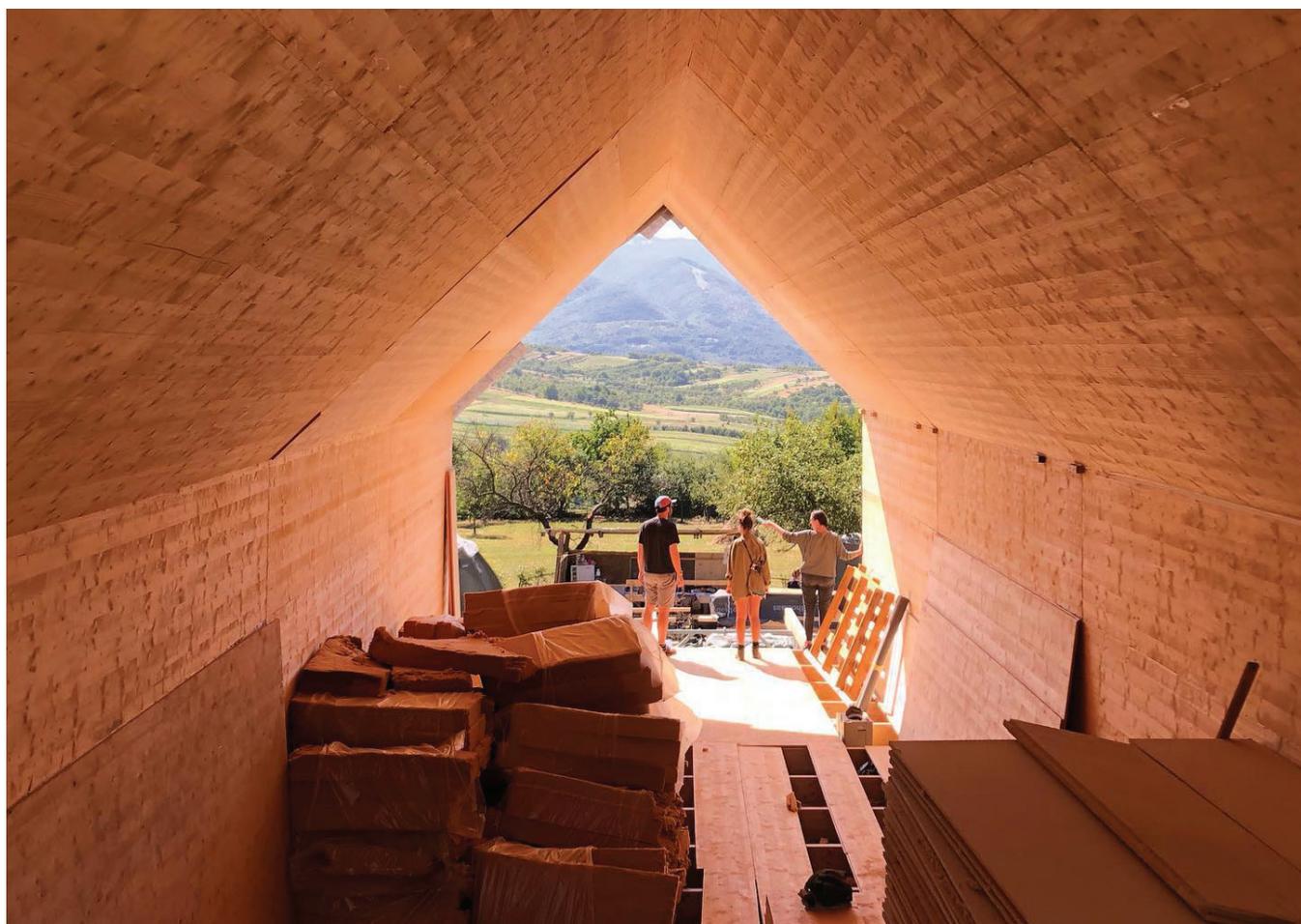
How are you envisioning the future of your Community Innovation Lab?

We are currently building Romania's first rural hub, an innovative approach to living and working, located in the wild South Western Carpathian mountains. We expect this model to become a blueprint for developing self-sustaining pockets of wilderness.

We believe we can change the rural reality by bringing different people together, by creating new communities within the already existing ones, by enhancing creative experiences in the midst of nature, by enjoying local food and by making young proud they live in a rural area surrounded by nature. Through wewilder we are creating a blueprint for setting up an ecosystem for collaboration that can be multipled in other nature hotspots and programmes to accelerate local nature based entepreneurial solutions that reduce threats to our most valuable ecosystems.

NGO Partner: WWF Romania

https://wwf.ro

Lab contact persons

Oana Mondoc

omondoc@wwf.ro

Bison Hillock Lab

https://bisonhillock.ro

WeWilder Campus

https://www.wewilder.com

Learnings from our Community Innovation Labs

Over the past three years, we have gained experience in setting up and running Community Innovation Labs in five locations in four European countries. In the following, we summarize some overarching experiences and learnings.

In the following, we will summarize some overarching experiences and learnings from our ERASMUS project. As a guideline for this, we refer to a recent study in which **real-world labs (RwL)** are evaluated with regard to their success factors. This was part of an extensive international literature review combined with expert interviews of persons responsible for 14 living labs in Baden-Württemberg, Germany.

According to this observation (Bergmann et al., 2021, p.541/544-546), RwLs are characterized by five features:

1. transformation oriented
2. transdisciplinary research approach
3. using experiments
4. enabling learning
5. long-term orientation

These characteristics also apply to our understanding of Community Innovation Labs (CILs), which is why they can be considered a manifestation of a RwL.

Following the authors' argumentation, there are eleven success factors for a CIL. In the following, we will explain them and compare these factors to our own experience:

(1) Find the right balance between scientific and societal goals

Bergmann et al. have identified a general tendency that the societal impact has a higher priority than the scientific utilization of the findings. They justify this with the fact that the close cooperation with the communities creates an obligation to realize transfer services and to provide support for the goals of the practitioners (Bergmann et al., 2021, p. 547).

We have already discussed this tension in our report when we presented Transformative Science and Action Research as our reference frameworks. In this context, it is important to be always clear and transparent regarding the goals and roles of everyone involved in the process. In this project, our focus was largely on transfer. Self-critically, we can note here that we did not consciously and explicitly discuss the possibilities of conducting accompanying research. We certainly gained new insights into formats and methods of cooperation with the communities, but this happened largely on an experiential basis. A systematic evaluation of

the transformative process itself still needs to be further developed.

(2) Address the needs, interests, and restrictions of practitioners

You will only have the support and commitment of your community if you address their problems and needs (Bergmann et al., 2021, p. 547). In line with the comments on the first success factor, this was not only at the heart of our CLLC projects, but also implemented consistently. In all projects, we have shaped a process of co-creation from the very beginning. Understanding the system relationships of people and their environment was at the starting point of every collaboration process and the basis for any idea generation.

For this purpose, we used a broad spectrum of methods: roundtable workshops, interviews, community walks and landscape safaris were organized. The information was subsequently processed in DPSIR Models, Empathy Maps, Personas or Community Maps and finally discussed. On that basis, current and relevant challenges were derived and transformed into solution spaces.

It is always a challenge to take both the students and the members of the communities along on this intensive analysis phase. The desire to work quickly on solutions is strong in most cases. For the work in our CILs, this generally leads to the requirement to take sufficient time for *understanding* and to open the minds of all participants. In addition, in the case of long-term collaboration with the same community, it is necessary to go through this phase repeatedly. This way, we can adjust to changing framework conditions and capitalize on previous results and achievements.

(3) Make use of the experimentation concept

Bergmann et al. understand the design of a RwL as "one continuously conducted experiment, as a sequence of several single experiments or as a thoughtful mixture of both [...] associated with uncertainty about the outcome." (Bergmann et al., 2021, p. 547). This addresses the need for systematic research in RwL, which in their experience can be difficult due to lack of understanding and acceptance by communities. (Bergmann et al., 2021, p. 547)

This aspect is closely related to the first success factor. If a CIL is to be used more strongly for research goals, this needs to be explained to the community, including the experimental approach itself. As indicated above, our project focussed more on transfer of knowledge and practices.

(4) Communicate actively

A clear result of the study of Bergmann et al. is the importance of transparent and regular communication for the success of RwLs or CILs. Depending on the context and goal of the communication, the widest possible range of communication channels should be used (Bergmann et al., 2021, p. 547).

In our CLLC projects, we did this actively and extensively. Here is a selection of the main communication channels chosen:

- **traditional:** meetings and presentations, workshops, house visits, press releases and articles in the local newspaper, leaflets, posters.
- **digital/online:** email, newsletters, website, social media (Instagram, Facebook, YouTube), online meetings and -presentations, interventions, 'storymaps' using web-GIS technologies

Overall, it would be helpful to compile an overview of the whole range of possible communication channels, combined with indications in which situations and with which target groups they are particularly recommended.

(5) Develop a 'collaboration culture' between science and society

Cooperation should be based on trust and characterized by mutual understanding and interest in the goals and wishes of the partner. RwLs / CILs at the interface of higher education and civil society need such a culture of cooperation to work successfully in the long term. (Bergmann et al., 2021, p. 548)

Through the community-based approach with a consistent co-design of the entire collaboration, all CILs have succeeded in establishing and cultivating such a trusting collaboration characterized by appreciation. In addition to the transparent and intensive communication already mentioned above, a variety of methods were used to promote collaboration.

Based on partly existing personal relationships and networks in the various communities, joint workshops were organized - often using co-creation techniques for idea generation

and concept development within the framework of design thinking. This has been achieved both in face-to-face events but also using whiteboard software such as Mural or Miro in digital formats under pandemic conditions. In some cases, project management software such as Slack was also used.

Interim results were presented and discussed in the communities, e.g., in pitching sessions with prototypes. Local events were also organized to test developed products and services. The processes were always open and inclusive and were accompanied by recurring feedback rounds and evaluations. Finally, a variety of community events were organized (e.g., neighborhood festivals, ideas festivals) to create space and time for personal contacts.

The major challenge is to identify and overcome different mindsets and (professional) languages between university staff and communities. Thus, there have been a few cases where students have developed too little interest and empathy for the concerns of the communities, resulting in disruptions in the relationship. Overall, it is important to make mutual expectations transparent right at the beginning of the collaboration

and to clarify any misunderstandings that may exist.

(6) Be attached to concrete sites

All 14 projects in the Bergmann et al. study were associated to a specific location. It has been shown that it is beneficial to have a physical location that allows meetings to be held, experiments to be organized, and visibility of the lab and its activities to be increased. (Bergmann et al., 2021, p. 548). Most communities also have a clear spatial reference in our activities, such as:

*   **National parks:** Lahemaa National Park in Estonia, Bison Hillock in Țarcu Mountains, Romania
*   **Neighborhoods:** Spijkerbuurt neighbourhood in Arnhem (Netherlands) or Klein-Tischardt in Nürtingen, Germany.
*   **Green open spaces:** Urban Gardening in Nürtingen or the food forest on the VHL university estate in Velp/Arnhem

The example of the urban gardening project 'Wörth-Garden' in Nürtingen, Germany, shows that these sites are not only a physical place to meet and organize projects. Places can be developed where the community meets and spends time together. Places of integration and relaxation like gar-

dening and creating beds together, Qi Gong courses, public lectures, movie nights, children's coffee club or practicing German language in a relaxed environment. This way, CILs become part of a so-called place-making process.

However, we also realized that a CIL can also work without being tied to a very specific location. CILs can also be a network, such as the one developed by the social enterprises from the circular economy domain in Bucharest, Romania, together with the university.

Finally, the Hölderlin Lab in Nürtingen, Germany, is supposed to serve as a 'third space' constantly evolving between the university, the town administration, and the various local community groups. It is not a physical place. Hölderlin Lab is rather an innovation format, and it takes place wherever the respective communities of interest are.

(7) Create lasting impact and transferability

Following the UN's 17 Sustainable Development Goals (SDGs), all CILs were built with the aspiration of contributing to the sustainable development of the communities. The work in the CILs must, of course, also be measured in terms of whether they create a transferable lasting impact. Not all initiatives and projects we started have been successful. However, there is a good number of measurable or visible successes:

*   Creation of the WeWilder Campus as a new rural tourism facility on the Bison Hillock in Romania
*   Creation of new places for the communities (urban gardens, food forest).
*   Foundation of Lahemaa Tourism Association (50 members) and 24 certified local tour guides and their trainers.
*   Application for the certification of Nürtingen as 'Fairtarde-Town' and preparation of the foundation of a cooperative for the common good in Nürtingen.
*   Development of a significant number of business models and

business plans for social enterprises and social innovations., remaining a the ideas stage for the time being.

- Support of initiatives and smaller companies to professionalise their activities (online and social media marketing, labeling, development of products and services)

In the cases mentioned, the sustainability of the results is also ensured. New institutions have been established, networks expanded and strengthened, and universities have established themselves as actors in the CIL. To expand the impact of the activities and results, the overarching transfer potential from the findings and results of the work of the last three years could be better exploited - based on this report. A review of good practice case studies and a guideline for the establishment and sustainable operation of CIL would now be conceivable and desirable.

(8) Provide and acquire sufficient time and financial means

In the study of Bergmann et al. it is emphasized that setting up a lab takes time and that the process of finding a common understanding of the goals and the type of collaboration sometimes requires patience. Further idea and concept development often requires learning loops. Likewise, the financial requirements for public events, external moderators and accompanying research are pointed out. (Bergmann et al., 2021, p. 549)

In a CIL, reality is to be shaped. If universities commit themselves to this idea, this cannot be done in irregular semester projects, but requires systematic, ongoing, and reliable cooperation with the communities. Consequently, the networks must be maintained, and, above all, formats and curricular windows must be defined to stabilize the cooperation on behalf of the university. In our programme, all four universities were successful in establishing the relevant structures for an ongoing work with the community. In one case the NGO
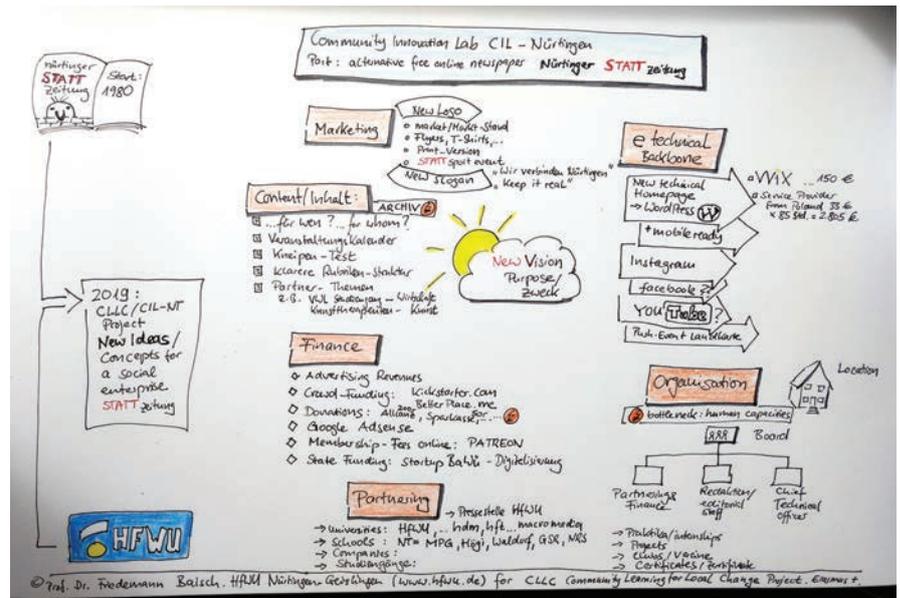
WWF Romania stands for a sustainable support of the local process.

With regard to financial resources, we conclude that support from a funded project is helpful in setting up a CIL. According to our experience, three years are sufficient. In the long term, the idea would be for a CIL to become an integral part of research, teaching and transfer at the university.

If there is a need for funding in specified projects or plans, this must be considered and included in the planning. Permanent funding cannot and must not be assumed here. For that reason, a social business model canvas is used in the CIL activities we organize, not only to develop project ideas, but also to ensure their structural and financial sustainability.

(9) Be prepared for adaptability

According to Bergmann et al. goals, contents, actors, and processes in RwL are constantly changing and all 14 RwLs agreed on the need for recursiveness and self-reflection. A path must be found between flexibility and agility on the one hand and the planning security on the other. The authors emphasize that current funding guidelines do not always adequately address the need for adaptability. (Bergmann et al., 2021, p. 549) In our CILs, we have had the same experience. In addition, there were

three semesters under pandemic conditions, which demanded the highest degree of willingness to change and adaptability. Due to the consistent community-based approach and the underlying action research principles, our CIL approach is able to adapt to changing conditions. Its conceptual and methodical design requires regular self-evaluation and learning loops and allows for adjustment of activities if necessary.

This is probably why CIL activities were successfully continued in online and hybrid formats despite the difficult conditions, and why the relevant results presented above were also achieved.

(10) Provide research-based learning and reflection in RwL settings

Bergmann et al. emphasize the great potential for learning from lab activities. In different roles and in the mutual exchange process, this applies equally to the students, the teachers, the researchers, and the community members. This is especially true when transdisciplinary formats can be implemented. (Bergmann et al., 2021, p. 549)

Students have been consistently and systematically involved in our CIL activities. The focus was on student training and knowledge transfer into the communities. For this purpose,

there are project-based modules in the various study programs. In some cases, students and teachers have also succeeded in making these modules interdisciplinary. Overall, however, there is still potential for development here.

For the years to come, we see a particular challenge in creating the structural, cultural, and methodological conditions to enable more interdisciplinary work in the CILs. To this end, curricular windows must be opened and, above all, a common foundation of theories, methods and (specialist) language must be developed. Only in this way, the innovative impulses and synergies from the joint work of different disciplines can be effective.

(11) Consider dependency on external factors

New challenges might lead to new priorities in the communities. Responsibilities can change and along with them the commitment to the joint project. In the various projects, there may also be personal, economic, or political conflicts of interest that paralyze the project and can also lead to university participants being appropriated for one position or another. For these reasons, Bergmann et al. demand that one must be aware of these dependencies. Therefore, it should be possible to fundamentally

realign the lab if external influences make this necessary. (Bergmann et al., 2021, p. 549)

Consequently, similar demands are made here as already in point 9. The actors in the labs must already be able to react to changing framework conditions; this applies to the sequence and types of projects as well as to the fundamental conception and orientation of the Community Innovation Lab.

Overall, it can be stated that the success factors of RwL defined by Bergmann et. al. have also been of importance in our CIL activities over the last three years. For the sake of clarity, we propose to summarize the following success factors:

- 1 (balance between science and society) and 3 (experimentation concept). Both points address the role of research in the Lab.
- 4 (communication) and 5 (collaboration culture): The communication in the project is part of the collaboration and also shapes its culture.
- 9 (adaptability) and 11 (dependency on external factors): Both points are about adaptability and agility in the lab.

Finally, it remains to be noted that the reference to a concrete space can be

helpful depending on the goal and content of the lab. However, there are also conceptions of labs that represent networks working on specific topics. In these communities, there must be places to meet and work together and to develop a shared vision and approach. However, this place does not always have to be the same or specified in a certain way. For this reason, common (physical) places can be an important feature of a community. However, it is not (necessarily) a success factor.

This results in a total of seven success factors that are used to evaluate our CILs. The following table shows an overview of these factors and what we believe still needs to be done.

Success factors and how our CILs have responded to them

Success Factor	Comment	Evaluation CLLC and further aspects
Define the role of science	The role of CILs in the broadspectrum of tasks of universities between research, teaching and transfer should be clearly defined. Clear goals prevent false expectations on behalf of those involved and lead tomore efficient processes.	The activities so far have focussed on teaching and transfer. Research activities (with regard to topics, methodology and/or didactics) still need to be stregnthened.
Address the needs of your community	You will only have support and commitment of your community if you address their problems and needs.	Our consistent community-based approach within the CILs has ensured that the interests of the communities have always been kept in mind. Mutual expectations could be clarified even more consistently and earlier.
Develop a collaboration culture	A CIL at the interface of university and civil society should be based on trust and characterized by mutual understanding of goal, as well as ways of thinking and working. A culture of cooperation and transparency as well as active communication are a precondition for successful and long term cooperations.	Overall, the CILs have been successful in building trustful collaborations with very different communities. A variety of methods, tools and communication channels was used. For future activities it will be important to make students fully aware of the goals and expectations of the communities they serve. Furthermore, it would be helpful to develop a guide that provides an overview of available information channels with recommendations on how to use them.
Create impact and transferability	CILs are a promise to communities to address challenges and to promote sustainable development. If they fail to do so, they loose acceptance.	Our CILs have succeeded in generating significant impact for and in the communities. In order to expand the impact of the CILs (transferability), a review of good practice cae studies and a guideline for the establishmend and sustainable operation fo a CIL would be a relevant next step.
Sufficient time and resources	Setting up a CIL takes time and the process of finding a common understanding of the goals and the type of the collaboration sometimes requires patience. In order to build a CIL, funding is very helpful.	Our CILs, the ERASMUS funding and the collaboration in a network of likeminded European partners and HEIs has greatly contributed to establishing a CIL at all universities involved. Now it should be possible to consolidate the structures and prcesses on the basis of our own resources.
Be adaptable	Goals, contents, actors and processes in CILs are constantly changing. This leads to a need for recursiveness and self-reflection. A path must be found between flexibility and agility on the one hand, and planning security on the other.	Due to our consistent community-based approach and the underlying action research framework, our CILs were very adaptable, even under pandemic conditions. New framework conditions were taken up. Contents, structures and processes were adapted accordingly.
Learn and reflect	CILs provide a great learning opportunity for students, teachers, researchers and the community itself. This applies in particular to transdisciplinary formats.	For the coming years, enabling more interdisciplinary settings and the related structural, cultural and methodological conditions are a particular challenge. Curriculum windows have to be created and opened. Above all, a common theoretical and methodical foundation and a shared language are needed, to fully benefit from the innovative impulses and synergies emerging from the joint work of different disciplines.

Resources, references authors and contacts

Our resources

Learning events of the Community Learning for Local Change consortium are always accessible via the following domain: **http://www.localchange.eu**

This link goes to our seminar wiki. The 'literature and resources' link leads you to the most recent recordings and seminar materials. Everything is open access. The wiki also documents past online seminars and intensive study programmes.

Our preceeding project 'Social Entrepreneurship for Local Change' has been documented under that same link.

Disclaimer

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DAAD Deutscher Akademischer Austauschdienst German Academic Exchange Service

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