

# LIVING LABS FRAMEWORK REPORT

A collaborative model process for the co-creation, development and testing of SE4Ces educational material.





# D.4.1: Social Economy Living Labs framework

Lead partner: Stimmuli for Social Change







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#### **PROJECT**

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### Table of contents:

List of abbreviations:	6
1. Introduction	7
1.1 Few words about SE4Ces project	7
1.2 Overview and objectives of D.4.1	8
2. Exploring the concept of Living Labs	10
2.1 Historical overview of Living Labs	10
2.2 Laying the foundations: What is a Living Lab?	11
3. SE LIVING LABS FRAMEWORK	18
3.1 Conceptualisation of SE Living Lab framework	18
3.1.1 SE Living Labs : meaning and methodological approach	18
3.1.2 Co-creation of knowledge and educational material	20
3.1.3 Co-teaching and socially-driven approaches	23
3.1.4 Application of Service Learning in SE curricula	27
3.2 Surveys and relevance with SE Living Lab framework	32
3.2.1 Objectives and structure of surveys	32
3.2.2 Methodological note on sampling strategy	32
3.3 Analysis of surveys' results	33
3.3.1 Previous experience on co-creative and participatory metho	ods 33
3.3.2 Findings for the co-creation of material	40
3.3.3 Findings for the application of co-teaching	48
3.3.4 Findings for the application of Service Learning in SE curric	cula 51
3.3.5 The role of skills' development for the SE Living Lab particip	pants 59
4. Bibliography	62
Annex	65

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Version	Date	Comment	Modifications made by			
1.0	March 2022	First draft of D.4.1, including the analysis of surveys' findings and first presentation of framework's methodology.	Stimmuli			
1.1	1 July 2022	Updated version of framework, incorporating partners' input and feedback from national co-creation workshops and lessons learnt after each Chapter.	Stimmuli and contribution by all partners			
1.2	July 2022	2 <sup>nd</sup> round of comments and revision of the second version of framework in the part of lessons learnt from 3 project's pilot partners	Revisions made by AUTH, UNIBO and UoEssex			
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		1 SAC member and the coordinator (AUTH) revised the 3.1 of deliverable (Conceptualisation of SE Living Lab framework) and 2 more SAC members reviewed the part 3.2 of the second version (lessons learnt of surveys' findings' analysis).  In particular:				
		<ol> <li>Part 3.1: reviewed by SAC member Esra Erdem</li> <li>Part 3.2: reviewed by 2 SAC members: Vasilis Kostakis and Maria Daskalaki</li> </ol>				
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		<u> </u>	
		phases and activities that structure the methodology and essence of SE Living Labs framework.	
2.1	Mid-November 2022	Final version presenting a complete version of the SE Living Labs framework report.  The final version of deliverable was revised in relation to the following:  1)A new sub-section (referred as 3.3.5 in the deliverable) was added regarding the role of skills in the development of SE Living Labs' stakeholders.  In p. 60, a detailed table presents a concise definition of reported skills that were identified as important by the survey participants and co-creation workshops' stakeholders for the material co-development and the pilot activities of the SE LLs.  2) Further elaboration about how D.4.1 relate to the lessons learnt and identified needs under WP3 in sub-chapter 1.2 (Overview and objectives of D.4.1).	Stimmuli, review by evaluators, as part of the interim report process

#### List of abbreviations:

\	
WP	Work Package
SE	Social Economy
SE Living Lab	Social Economy Living Lab
LL	Living Lab
HEIs	Higher Education Institutions
HEA	Higher Education Area
CSOs	Civil Society Organisations
MIT	Massachusetts Institute of Technology
ENoLL	European Network of Living Labs
ICT	Information, Communication and Technology
MDDA	Manchester Digital Development Agency
UDG	Universidad de Guadalajara
IEEE	Institute of Electrical and Electronics Engineers
KWMC	Knowledge West Media Centre
HEA	Higher Education Area
DT	Design Thinking
R&D&I	Research, Development and Innovation
PPPP	People, Public, Private, Partnership
SL	Service Learning
NGOs	Non-Governmental Organisations

#### 1. INTRODUCTION

#### 1.1 Few words about SE4Ces project

Social Economy (SE)4Ces is a Knowledge Alliances project which is co-financed by Erasmus+ programme and consists of a consortium of 10 partners from 5 European countries (Greece, Italy, Belgium, Spain, and UK). The project includes an interesting variety in terms of involved partners, from Higher Education Institutions (HEIs) and Social Economy (SE) organisations to Research and Training Institutions with long experience. One of the primary objectives that SE4Ces seeks is to create new educational and professional opportunities through a sustainable partnership among multiple SE stakeholders (HEIs, SE enterprises, students, and local societies). Moreover, the project has been designed to improve the employability and transversal skills of students as young graduates and future employees in Social and Solidarity Economy (SSE) field. Adopting a value-based and result-driven strategy for implementing its foreseen activities, SE4Ces is based on four values underpinning the SE philosophy: *Connected societies, Co-creation of knowledge, Community development, Collaborative educational practices*.

#### What is the innovation of SE4Ces project?

SE4Ces project leverages the concept of Living Lab (LL), as a means to strengthen an active and collaborative environment among multiple SE actors towards co-creating and testing a set of educational material focused on current educational needs and societal challenges in SE area. SE4Ces project promotes the high-impact and significance of experiential methods, by motivating stakeholders from the academic community as well as SE third actors to interact with each other at local level. This process will help them to upgrade SE knowledge, skills and current educational methods in the sphere of SE, having as a final aspiration the co-development of a master's programme on 'Social Economy and Community Development', consisting of different modules on the basis of co-created material designed by the project consortium under a joint forces vision. The design of this multi-disciplinary, challenge/goal-driven programme is based on a co-creative methodology that the partners have commonly developed, with the aim of getting away from fragmented modular approaches. During this challenging but intriguing educational journey, the project includes also a 'Wiki platform' that will offer a creative and collaborative digital space for HEIs, SE organisations, and students for the collection of useful material and the coordination for the development of educational material. A second aspiration of this platform' scope is that it is designed to serve as a match-making online tool for supply and demand for SE skills and for knowledge sharing among actors.

Finally, SE4Ces project envisions to establish, sustain, and expand the *first European Community of Practice* in SE area. This Community will foster growing, promising and sustainable collaborations among HEIs, SE actors and community from a wide range of disciplines across Europe.

Overall, the project's general objectives are the following:

- 1) provide an overview of the current SE education landscape and analyse the needs in training and skills in SE organisations as also in academic SE study programmes;
- 2) bridge the gap between supply and demand of SE education and skills, by co-developing an international master's programme on 'Social Economy and Community Development

Strategies', that aspires to become the first joint international master's degree in the area:

- 3) implement SE Living Labs (LLs) at local level in four EU countries (UK, Spain, Greece, Italy) as innovative spaces for interaction, collaboration and knowledge co-creation that go beyond the traditional adopted teaching approaches.
- unite the power of HEIs, students, SE organisations and local communities to thrive together towards the co-design and pilot testing of new educational material (AUTH, 2021).

#### 1.2 Overview and objectives of D.4.1

This deliverable constitutes the first outcome under Work Package (WP)4: *Co-design of SE Living Labs framework and co-creation of educational materials*. It is primarily focused on designing the overall framework and the concrete methodology that will apply in the implementation of SE Living Labs . This framework is based on several innovative and participatory approaches and will be fully operationalised during the pilot implementation phase of the project. Through this detailed report, the approaches upon which the SE Living Lab's operation is based are presented, first at theoretical level but also in relation to the project's activities and planning. These approaches regard the following aspects:

- the co-creation of knowledge and educational material on SE
- the application of co-teaching and socially driven teaching approaches with the active participation of SE members/representatives
- the application of service learning through students' short volunteer placements in SE enterprises.

Regarding the following sections of D.4.1, Chapter 2 puts emphasis on the theoretical background, definition, characteristics, and benefits of Living Labs as innovative approach in learning and teaching. At this chapter, several successful case studies based on Living Lab theory are presented, engaging diverse stakeholders, and covering a range of examined topics and thematic areas. These case studies offer fruitful ideas as paradigms of a cooperative model under the LL approach, while some of their elements are useful in the context of the upcoming SE Living Labs .

Next, Chapter 3 proceeds with the conceptual part of this deliverable (section 3.1), by describing in detail the methodology of SE Living Labs framework and the approaches that are leveraged for its application, from the initial co-creation phase to the pilot phase of educational material. In the second part of this chapter (specifically in sub-chapter 3.3), the report continues with the analysis of results from three surveys that were launched in four partner countries (UK, Greece, Spain, and Italy). In this analysis, the needs and perspectives of three target groups on innovative methods as well as their role in co-creation of knowledge are analysed. Through this analysis, some similarities were observed between surveys' findings (under WP4) and lessons learnt presented in D.3.1 ('State of art' and 'Needs analysis' report) under the previous WP (WP3). In WP3, the necessity of inserting in university curricula more innovative teaching and assessment methods (e.g., practice-based learning) or the need for networking opportunities among students and SE organisations were strongly supported. These perceptions were confirmed by the findings analysed in sub-chapter 3.3 and informed the SE Living Labs' methodology that is presented in sub-chapter

3.1. This methodology is based on general principles and models around Living Labs theory, but it primarily takes into consideration the highlighted needs both from D3.1 and from this surveys' trends regarding the experience and engagement of stakeholders in innovative methods HE area.

In the closing part of Chapters 2 and 3, a summary table mentions the key messages of all main points of their content. Finally, in Chapter 3 there is a last sub-section dedicated at the role of skills' development for the SE Living Lab participants. A detailed table of the most important skills identified by the launched surveys and co-creation workshops of the project and their following definition are displayed. The deliverable finishes with the bibliography that gave inspiration to many parts of this deliverable while in the Annex all readers can find the text of three launched surveys.

#### 2. EXPLORING THE CONCEPT OF LIVING LABS

#### In a nutshell

Chapter 2 explores the concept of Living Lab (LL), by showcasing its definition, background as well as the core characteristics that are applied in every LL activity through in-depth online research. In this way, the foundations of LL as concept and some theories about LLs are presented, while a first taste of how it is foreseen to leverage the most-used LL elements in SE4Ces activities is offered. The chapter closes with the most important key messages on the theoretical exploration of LL concept and the current methodologies surrounding it.

#### 2.1 Historical overview of Living Labs

The concept of the LL is relatively new, as it was first introduced in the early 2000's. Its emergence has been attributed to Professor William J. Mitchell from the Massachusetts Institute of Technology (MIT). Professor Mitchell suggested to move various types of research from laboratories to 'in vivo' settings (such as specific buildings, institutions, or areas of the city) to facilitate the users' interaction with and responses to the innovation. The concept was empowered by the idea of the influence of 'lead users'1, more specifically of user groups, as co-creators of open innovation. Since then, the concept has been strongly endorsed by the European Commission, has been incorporated within the Innovation Europe Common Strategic Framework and has been embedded within the organisational structure of various businesses. In order to acquire a good level of conceptualization, standardisation and international cooperation around the concept of LL, a pan-European network was created and is currently operating under the umbrella of the 'European Network of Living Labs '(ENoLL)2. Prestigious academic institutions (e.g., Harvard, Yale, Cambridge, Bristol, Delft, etc.) have adopted this concept within their strategy for sustainability. Also, it has been promoted as a 'silver bullet solution' by which cities together with universities and other members of society can be transformed into 'smarter' and more sustainable patterns in light of emission reduction targets and growing urbanisation levels (Graczyk, 2015). The LL approach is not the first approach that argues for an active role of users. LLs draw on a long tradition of user-centred and participatory research, as important 'predecessors' of the reasoning around their operation were identified beforehand, as displayed in Table 1:

l able i	1. Importani	t predeces	ssors of L	Living La	ibs (Soi	urce: Ruijsi	nk and Si	nith, 2016.	:5)
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1960's-1970's	1980's:	1990's	2000's (birth of LLs)
Scandinavian cooperative and participatory design movement (e.g., the Scandinavian Collective Resource Approach)	European Social Experiments with IT	Digital City Projects	The LLs originate from MIT

<sup>&</sup>lt;sup>1</sup> The term 'Lead users' stands for highly motivated users who are so involved in an innovation project that they at times end up knowing more about a product than those who have created or are promoting it. Source: Colobrans, J. (2019).

<sup>&</sup>lt;sup>2</sup> ENoLL is an international non-profit association of benchmarked LL in Europe and across the world. It aims to support co-creative, human-centric, and user-driven research, development and innovation in order to better cater for people's needs (Source: Ruijsink, S. & Smith, A. (2016). WP 4 | CASE STUDY Living Labs , TRANSIT: EU SSH.2013.3.2-1. Grant agreement no: 613169).

#### 2.2 Laying the foundations: What is a Living Lab?

According to what existing literature reveals, a Living Lab (LL), either defined as a methodology, an open ecosystem, or a community, is about bringing people together to innovate and co-generate new ideas. It is the practitioners who take over the role of carrying out experiments and offer valuable contributions (as end-users, public administrators, company representatives or academic researchers) to any topic and issue under investigation. The LLs are interpreted in multiple ways and serve many purposes. Most importantly, they are considered to operate as intermediaries and as a collaborative model among citizens, research organisations, companies, cities, and regions for a common value co-creation, rapid prototyping, or validation to scale up innovation and businesses (Malmberg et. al. 2017). Generally speaking, a LL includes every area where innovation and development activities are present and active; as a process, it can incorporate activities across many different domains. Some indicative examples of such fields in which the philosophy of LL has been expanding are the following: ICT (Information, Communication and Technology) tools, Health, Design, Creativity, Education, Smart Cities, Research, Environment, Green and Sustainable Energy & Low Carbon, Future Internet, Big Data, Fashion, Agriculture, Social responsibility (Aversano et. al., 2016; Graczyk, 2015).

The concept of LL has been attributed various terminologies, depending on the environment that the concept is embedded in and the desired outcome/innovation. LLs have been occasionally characterized as a methodology, an organization, a system, an arena, a new experiential environment, or a systematic innovation approach. The wide-ranging field of LL, although currently gaining increased academic attention, continues to lack one standardized definition. This has led many researchers to expand on the concept and come up with different ways to approach and leverage it. Indicatively, some scholars have described the LL as a 'user-centric research methodology for sensing, prototyping, validating and refining complex solutions in multiple and evolving real life context'. Moreover, according to Feurstein et al. (2005), LL is understood as a 'systematic innovation approach in which all stakeholders in a product, service or application participate directly in the development process' (Graczyk, 2015).

Another interesting interpretation of LLs as a concept and approach comes from ENoLL which defines them as "real life test and experimentation environments where users and producers co-create innovations". There are four main activities that are employed in a LL:

- •Co-Creation: co-design by users and producers
- •Open Exploration: discover emerging usages, behaviours, and market opportunities
- •Experimentation: implement live scenarios within communities of users
- •Evaluation: assess and validate concepts, products, and services according to socio-ergonomic, socio-cognitive, and socio-economic criteria (Ruijsink & Smith, 2016).

At conceptual level, LL as term is also used to refer to one or more of the following characteristics:

- 1. A space for designing and validating projects, involving technological, social and/or cultural innovation:
- 2. A type of structure dedicated to Research, Development and Innovation (R&D&I);

- 3. A legal entity designed to make it possible to work on a single level with stakeholders from both the public and private sector as well as citizens (PPPP People Public-Private-Partnership)<sup>3</sup>;
- 4. A set of fundamentally qualitative research techniques;
- 5. A variety of participatory methodology, based on active collaboration and cooperation between the various agents of a system (Colobrans, 2019, p.5).

Regarding the latter feature that relates to the role of LLs as *participatory method*, it is worth mentioning that the dynamic and direct engagement of many different actors is a prerequisite in LLs. What a LL usually strives for is to create the conditions that bring effectively together different actors' perspectives, by facilitating them to share their experience and knowledge, learning from each other and co-designing new ideas; hence, the importance of involving, empowering, and urging various agents to participate in a joint experiment - especially those most implicated in the problem as also beneficiaries of a solution - is a typical feature and objective of every type of LL. On top of that, a LL has been considered as a 'user-centric innovation' approach, as opposed to technology-centric innovation. In the context of a LL's operation, users are not considered as passive respondents but as **active collaborators** or co-producers of a new product or an innovative solution. Based on an identified problem, the development of a solution through the actual implementation of a LL is realised in close interaction with end-users, a process of 'co-creation aimed at gaining access to the ideas, experiences, and knowledge of these end-users' (Aversano, 2016, p.7).

Apart from the classification of a LL as concept, another dividing of various types of LLs have also been developed:

Many different types of LL environments exist such as:

- 1. **Research Living Labs**: focusing on performing research on different aspects of the innovation process;
- 2. **Corporate Living Labs**: that focus on having a physical place where they invite stakeholders (e.g. citizens) to co-create innovations;
- 3. **Organizational Living Labs**: where the members of an organization co-creatively develop innovations;
- 4. **Intermediary Living Labs**: in which different partners are invited and encouraged to collaboratively innovate in a neutral arena;
- 5. A time limited Living Lab: as a support for the innovation process in a project. At this case, the Living Lab closes when the project ends (Ståhlbröst and Holst., 2012).

Even though there are differences in terms of defining, conceptualising and approaching a LL, there is an agreement on the common purpose of LLs to create new solutions that are evaluated or validated with the support of all relevant stakeholders towards creating innovation (Graczyk, 2015). On top of that, it is extensively supported that in order to improve a system (*an incremental innovation*), alter a system (*a radical innovation*) or replace one system with another (*a disruptive innovation*), the various involved parties that may have an impact on the process of understanding, conceptualising, testing and validating any

<sup>&</sup>lt;sup>3</sup> PPPP stands for 'People-Public-Private-Partnership' and it is a concept that is used when public, private and social entities (e.g., NGOs, associations, and citizens' networks) collaborate and cooperate in projects.

designed change need to coordinate with each other. This requires the establishment of a **common language** among the participants of a LL that should embrace a cooperative mindset and should be free of prejudices; in this way, they can better design jointly solutions, aimed at improving or replacing one (current) situation or state of play with a new system (Colobrans, 2019).

In order to create new ideas, concepts and projects, apart from establishing a common 'language' among the participants, LLs need to be implemented with 'communities of users'. As Colobrans (2019) mentions, "in the technology context, such communities help to validate ideas, concepts, designs and prototypes, providing feedback on their experiences of using new products and services, and collectively passing on their intelligence via all manner of consultations on creative proposals". As a methodological approach, LLs are characterised as a means of implementing and/ or developing something founded on:

- the active participation of the people involved;
- the condition that the results should take into account the experiences and needs of the users;
- the assumption that the creative process carried out within a LL is a complex, recurring, and collaborative process. In this context, any design or new solutions/ products (either technological or even educational ones) is not the product of a single specialist but rather a collective effort of many people who jointly address a shared challenge and contribute to problem's solution by joining forces (Colobrans, 2019:12).

Notwithstanding the widespread usage of the term of LL and some attempts to approach the LL concept from a methodological point of view, at general level it has been observed that the methods and tools used for the implementation of a LL tend to widely differ. Consequently, the LL approach lacks a standardized reference methodology; however, since 2008, a lot of work and research have been conducted by a variety of stakeholders to establish key frameworks that could be replicated and implemented by LLs at any level of development. Nevertheless, a LL, as a research methodology, can use a range of resources and methods. According to the literature, it has been observed that there are various expressions for applying innovation processes which include an open character and are simultaneously focused on the users' experience. Indicative examples of such processes are the following: Open Innovation, User-Centred Design, People-Centred Innovation and User Experience Research (Colobrans, 2019: 11).

Furthermore, according to ENoLL, there are **five core elements** that are central to the LL approach as key principles for their participatory and inclusive operation, as follows (Malmberg Katariina et. al., 2017:12):

- Multi-method approaches: although there is not a single LL methodology, all LLs combine and customize different user-centred, co-creation methodologies to best fit their purpose and cover users' needs who are involved in their operation.
- 2. **User engagement**: this element is essential as it is generally recognised that the key to success in any activity is to involve the user already at the beginning of the process.
- Multi-stakeholder participation: even if the focus of a LL is on users, ensuring the involvement of all relevant stakeholders is of crucial importance. These stakeholders can include representatives of public and private sector, academia, and community members.

- 4. **Real-life setting**: a very specific characteristic of Living Labs is that the activities take place in real-life settings to gain a thorough overview of the context.
- 5. Co-creation: typically, activities are designed as top-down experiments, benefiting from users who are being involved as factors rather than actors. It is increasingly recognised that this needs to change so that users become equal contributors and co-creators rather than subjects of studies. The LL approach strives for mutually valued outcomes that are results of all stakeholders being actively engaged in the process from the very initial steps of a LL process. These elements are also depicted in Figure 1:

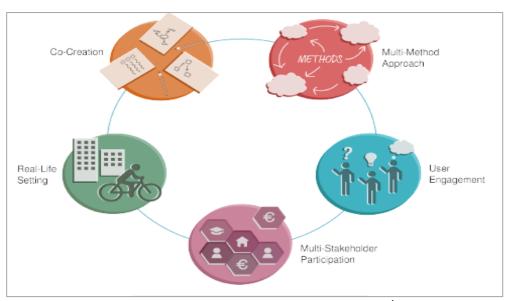


Figure 1. Common elements of Living Labs 4

In SE4Ces project, all the above-mentioned elements are leveraged through a cooperative effort. For example, the element of co-creation is one of three approaches of the SE Living Labs framework in the name of which a variety of SE actors are invited and encouraged to collaborate towards co-creating educational resources related to SE area. In parallel, the project aims at integrating real-life societal issues into curricula, by making use of open methodologies that have an experiential and innovative character and can generate positive social impact. An indicative example of such methods is the SL methodology, a core element of SE Living Lab framework which will be leveraged with the aim to extend the role of HEIs and SE study programmes beyond teaching and pure research, fostering in this way the community development and combining theoretical with practical knowledge. At this point, it is important to notice that it is a precondition in Living Lab activities to be situated in realworld contexts, not in constructed and typical laboratory settings. Regarding the element of user engagement, it is also harnessed though the SE Living Labs in the sense that SE students will interact closely within their communities and create sustainable solutions to pressing social issues. Finally, with respect to the multi-stakeholder and multi-method approaches, SE4Ces leverages the involvement of a variety of SE actors (SE educators, students from SE studies, SE organisations, community members, public authorities) by adopting interactive and collaborative teaching and learning approaches, supported by

<sup>&</sup>lt;sup>4</sup> Source: Malmberg Katariina et. al. (2017). D2.2: Living Labs Methdology Handbook in IoT context.

multiple audio-visual practices, SL and other co-creative practices (e.g., Design Thinking) towards the co-production of SE educational material.

Apart from the previous five key principles, there is another set of criteria that structure a Living Lab (Ståhlbröst & Holst, 2012:12):

1) ICT and Infrastructure (outlines the role that ICT for the facilitation of new ways of cooperation and co-creation of innovations among stakeholders); 2) Management (relates to the ownership, organization, and policy aspects by which a LL can be managed, e.g., consultants, companies or researchers); 3) Partners and Users (regards the involved participants of a LL including the end-users who may be part of process. They bring their own knowledge and expertise to the collective effort); 4) Research (represents the collective learning and reflection that take place in the LL); 5) Approach (represents the methods and techniques utilised in a LL for its successful operation). At the centre there is always the component of Innovation, as Figure 2 shows:

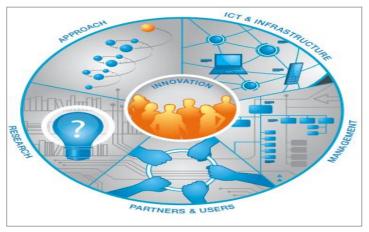


Figure 2. Criteria that structure a Living Lab

Besides the previous common elements and components that each LL should embrace, another common aspect within LL methodologies relates to the different stages that are followed in an innovation process. From the perspective of an 'innovator', there is a separation between the 'current state' and the 'future state', where the existing, 'current state of being' (the 'as-is' or 'status quo') is opposing to 'possible future states'. More specifically, Schuurman et al. (2013) proposed that Living Lab projects resembled a quasi-experimental approach. This includes a **pre-measurement**, an **intervention**, and a **post-measurement**,

where the intervention equals to the real-life experiment. Following the above reasoning, three main fundamental elements are distinguished within Living Lab projects, following the innovation development phases, depicted in Figure 3:

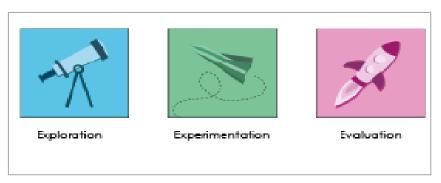


Figure 3. Phases of innovation process

The *Exploration* focus on getting to know the 'current state' and designing possible 'future states'. Respectively, the *Experimentation* is about the real-life testing of one or more proposed 'future states, while the *Evaluation* strives for assessing the impact of the experiment with regards to the 'current state' in order to iterate the 'future state' (Malmberg Katariina et. al., 2017:13). These innovation phases, according to the <u>U4loT Toolkit</u>, can be further divided in 3-5 iterations, with a variety of tools and methodologies in each iterative step. The phases and iterations of the innovation process in a LL could be principally followed in a step-by-step or linear manner, but the purpose of the entire process is to be followed in an iterative manner. This means that the different phases and iterations in the whole process are often overlapping, repeating, and mixing in order (loT, 2018).

Moving a step further from the previous approach of the three suggested phases (exploration, experimentation, evaluation), there is another method titled as "FormIT" methodology. Specifically, it is about is a human-centred approach aimed at developing digital innovations and facilitating the creation of innovative solutions that are based on a

holistic understanding of people's needs. The methodology pays specific attention to issues of equity, autonomy, and control with regard to actual use situations. It was also developed in Botnia Living Lab (BLL). By now, FormIT has been applied in more than 100 user engagement processes, spanning from early need-finding to real-world tests of market ready innovations. FormIT is grounded in the theoretical streams of Soft Systems Thinking, Appreciative Inquiry and NeedFinding. The FormIT process is typically applied in three phases, with each of them consisting of four stages, as illustrated in Figure 4:

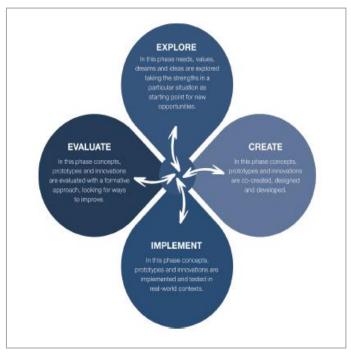


Figure 4. FormIT stages

The three main phases suggested by the FormIT approach are the following: 1) Concept design; 2) Prototype design, and 3) Innovation design. In each of these phases, four stages are carried out: 1) Explore, 2) Co-create, 3) Implement and 4) Evaluate. These stages are repeated in iterative processes. Besides these three phases, one additional phase is included and is the planning. It stands for planning the project as a whole and in this phase is it important to gain as much information as possible about the underlying circumstances for the project (aim and scope, constraints and boundaries that need to be examined and discussed), by mixing different competencies to stimulate knowledge exchange and an increased understanding of the involved stakeholders' visions. Additionally, it should be underlined that the planning phase is often difficult to accomplish, since LL participants

usually want to make multiple contributions to many diverse areas, often complicating the decision about what to include and what to exclude in the specific intervention. Consequently, it is imperative that both an inclusive approach and a participatory approach be promoted so as to cultivate the productive dialogue, the mutual trust and confidence between the stakeholders that jointly share a common vision in this process (Ståhlbröst & Holst, 2012; Malmberg Katariina et. al., 2017).

#### Key messages for Chapter 2:

- The concept of the LL is relatively new it was first introduced in the early 2000's.
- LLs within the organisational structure of various businesses.
- LLs lack one standardized definition they defined either as methodology, an open ecosystem, a community or a methodology.
- The goal of a LL is to bring people together to innovate and co-generate new ideas
- In a LL, there should be a common language among participants and users are active collaborators of the innovative solution or the final product
- Five core elements are central to the LL approach, as key principles for their participatory and inclusive operation:
  - 1) Multi-method approaches, 2) User engagement, 3) multi-stakeholder participation, 4) real-life setting, 5) Co-creation.
- Various theories, methologies and innovation phases have been developed around the implementation of a LL.
- A common aspect within LL methodologies relates to the different stages that are followed in an innovation process. From the perspective of an 'innovator', there is a separation between the 'current state' and the 'future state'.
- FormIT is a human-centred methodology has also been developed in Botnia Living Lab (BLL).
- Schumman's theory suggests three fundamental elements that are distinguished within Living Lab projects: *Exploration*, *Experimentation and Evaluation*.

#### 3. SE LIVING LABS FRAMEWORK

#### In a nutshell

Chapter 3 is dedicated to the overall methodology and approaches underpinning the operationalisation of SE Living Labs (LLs) framework. In particular, sub-section 3.1 explains theoretically the approaches that are leveraged in SE LLs and next their actual role for the co-development and piloting of new educational material. Sub-section 3.2 sheds light on the methodology of primary data that were collected in four pilot countries and on their added value for the project's next activities. Section 3.3 emphasises on the analysis of findings, reflecting the views of involved stakeholders about the application of co-creation, co-teaching and SL method in SE study programmes. A summary table concludes the sub-sections 3.1 and 3.3, with some key messages of the reported information.

#### 3.1 Conceptualisation of SE Living Lab framework

#### 3.1.1 SE Living Labs : meaning and methodological approach

SE4Ces leverages the concept of Living Labs (LLs) as a means to upgrade SE educational programmes in HEA and strengthen the collaboration among multiple SE actors (educators, students, SE organisations, etc.). The project builds on the SE Living Labs methodology for this collaborative process. This methodology explains the whole philosophy of SE Living Labs' implementation, from the general understanding of the examined SE-related topics to the materialisation and pilot testing of educational resources related to these topics. Also, it explains the different innovation phases and the leveraged approaches surrounding the operationalisation of SE Living Labs framework. The framework is embedded in the core principles of SSE<sup>5</sup>, articulating a uniquely collaborative approach between academic community (teaching staff, students, trainers) and SE organisations. Before delving into the core of the framework's methodology, it is critical to underline what the SE Living Lab is about. A SE Living Lab is defined as a form of multi-actor partnership that brings together various SE actors (HEIs in SE area, students, SE organisations) who join their forces for cocreating and testing a set of educational material based on selected SE thematic blocks; the final aspiration is to transform these co-created educational resources into a joint professional online master's programme on SE that will be launched after the end of the project. The actual implementation of SE Living Labs constitutes an important step towards the establishment of an EU-wide Community of Practice and of the foreseen, pioneering master's programme. As overall, SE Living Labs aim to:

- facilitate the exchange of knowledge/experiences and social interventions between HEIs, SE organisations and community stakeholders;
- design and test innovative and socially driven methods of collaborative teaching;
- facilitate the co-creation of academic knowledge and educational materials on SE
- promote stronger and solid cooperation formats between research into the SE (HEIs) and on the ground actors of SE (SE organisations) that address directly social challenges

• promote the integration of local and regional societal issues into the curricula and the application of problem-based learning opportunities (through service learning) focused on community problems

Figure 5 illustrates visually the different phases and activities of the SE Living Lab:

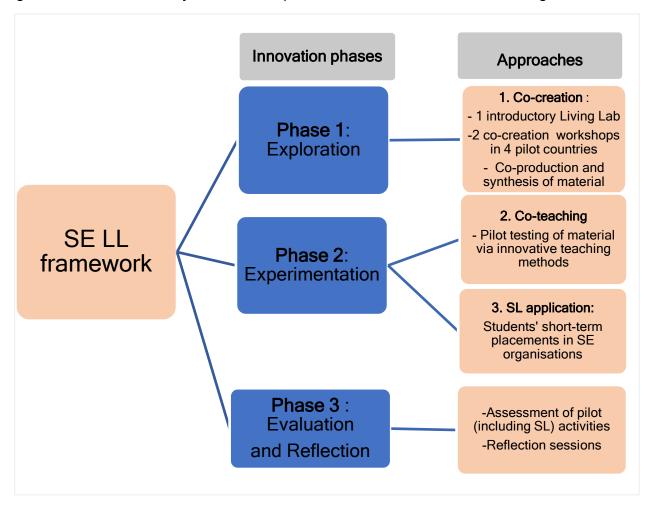


Figure 5. SE Living Labs framework's phases and activities

Overall, the framework encompasses three interconnected general approaches for the whole implementation of SE Living Labs, as depicted in Figure 6:

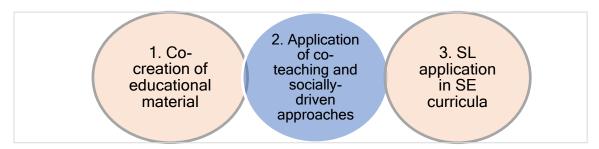


Figure 6. Approaches of SE Living Lab framework

Upon these approaches the logic and all relevant activities behind the actual implementation of SE Living Labs are founded. Specifically, these approaches are connected with three innovation phases, inspired by Living Lab (LL) theories, as follows: The *Exploration*, the

**Experimentation,** and the **Evaluation**. These phases build on the Schuurman's thinking which has already been mentioned in sub-section 2.2. As already stressed, the central point of all phases is to bring together different SE actors (i.e., *students, educators, SE professionals, community members*) to achieve the following:

- foster the exchange of knowledge/experiences and social interventions between HEIs, SE organisations and community stakeholders
- design and test innovative and socially driven methods of collaborative teaching
- facilitate the co-creation of academic knowledge and of educational materials on SE
   The next section proceeds with the theoretical background of three leveraged approaches
   underpinning the framework and the role they serve in each phase of the SE Living Lab's

#### 3.1.2 Co-creation of knowledge and educational material

#### Theoretical background and meaning

implementation.

From a theoretical perspective, the concept of co-creation has been interpreted and defined in different ways. As approach, co-creation is considered as any act of collective creativity that is experienced and performed jointly by a group of people (Sanders & Simons, 2009). Ryan and Tilbury (2013) define co-creation as a new pedagogical idea that focuses on learners' empowerment. In the area of education, co-creation is conceptualised as a 'collaborative, reciprocal process through which students, together with teachers and other stakeholders, have the opportunity to contribute equally to curricular or pedagogical conceptualization, decision making, implementation, investigation, or analysis' (Bovill et. al, 2015). Co-creation is strongly related to students' commitment, engagement, and participation throughout the learning process, becoming co-creators of their own learning and personal development.

Moreover, the concept of co-creation is perceived as a form of *Open Innovation*, where multiple and different ideas, knowledge and experiences are shared rather than kept. For some experts, co-creation is described as '*participatory design*'. This is a broader term that refers to the collaboration of a group of stakeholders (often including external participants as well as teachers and students) in the design and development of initiatives, including a learning curriculum (Bovill, 2019).

#### Impact of co-creation in educators and universities

Collaboration and co-creation of knowledge in academic curricula can generate a positive impact on the existing institutional culture, by transforming students' learning experience, and creating a sense of a more democratic-based learning community. This is particularly likely in phases where students are involved in curricular development and research and work collaboratively with academics. At the same time, the academic staff can gain much inspiration during co-creation from the new, creative ideas of students and other stakeholders coming from the private or third sector. Another advantage for educators is the potential to open up opportunities for universities to create partnerships with external agencies and actors, by creating joint value in society and advancing their reputation as academic institutions (Bournemouth University, n.d.). At individual and professional level, the active engagement of educators in the co-creation of knowledge is a pathway to enhance their professional development, by getting rid of traditional approaches and adopting a more open attitude while interacting with different stakeholders.

#### Different roles of students in co-creation

According to Bovill et al. (2016), a specific typology was outlined regarding four specific roles that students can adopt in a co-creation procedure: 1) representative, 2) consultant, 3) co-researcher, and 4) pedagogical co-designer. It is likely to meet some overlaps in many co-creation journeys among the previous roles, but this model can help us to understand the characteristics and identity of each role. For example, the representative role tends to be an elected role, including a small group of students that may represent a larger group of students; next, the 'consultant or intern' role, which often involves the selection of students by academic staff, and a kind of reward to collaborate on projects; finally, with regard to the co-research and pedagogical co-designer roles, students may or may not be selected depending on the discretion of teachers to work with a small group or a whole class of students (Bovill: 2019).

#### Benefits of co-creation in the educational design process

Co-creation in education generates various benefits. It contributes to the learners' better learning opportunities, to the teachers' professional development through new teaching practices as well as to the engagement of other external actors. These benefits are depicted in Figure 7, illustrating the effects of active involvement of different stakeholders in the educational design process:

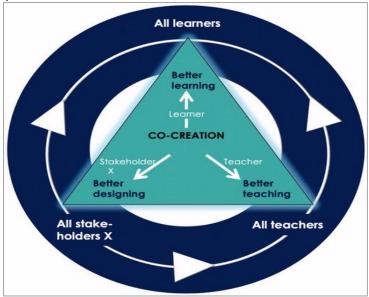


Figure 7. Framework of Stakeholder Involvement in Co-creation6

#### Co-creation in SE Living Lab framework

After a theoretical portrayal of co-creation as concept, at this point the deliverable proceeds with the fundamental role of each approach in the SE Living Lab framework's

<sup>6</sup> Inspired by the following source: Könings, K et. Al. (2020). *Learner involvement in the cocreation of teaching and learning: AMEE Guide* No. 138. <a href="https://doi.org/10.1080/0142159X.2020.1838464">https://doi.org/10.1080/0142159X.2020.1838464</a>

operationalisation. Beginning with co-creation, it is the first participatory approach that is deployed for initiating the operation of SE Living Labs. The co-creation for the SE Living Labs is a means to **bring together educators**, **students**, **and SE organisations** to explore new educational opportunities and needs related to specific topics and to share knowledge and new ideas for the methods that could frame the synthesis of the new educational material. Methodologically speaking, the co-creation is related to the innovation phase of *Exploration*, already presented in sub-section 3.1.1. In terms of the co-creation's practical application in the project, two main co-creation activities were carried out in four pilot universities (UNIBO, UoEssex, UAB and AUTH), as presented in Figure 8:

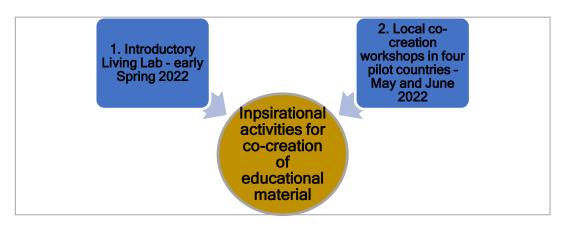


Figure 8. Participatory activities of co-creation process in SE4Ces

The first activity that initiated the co-creation process was a Living Lab (LL) that was organised by the respective universities in each one of four pilot countries. At this initial phase, all partners and invited stakeholders were transformed into active co-creators of knowledge. The main aim was to gather new participants from three different target groups (*SE students, SE educators and SE professionals*) to share personal experiences and discuss on their needs and current challenges around four concrete thematic areas in SE education. These examined themes that will also feed in the package of the co-created educational resources were jointly selected by the project consortium and are depicted in Figure 9:

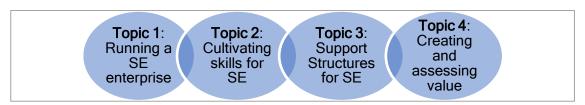


Figure 9. Examined topics of 1st Living Lab

The productive interaction among participants on the aforementioned topics facilitated the generation of useful feedback that was further utilised for the second co-creation process. The latter activity pertains to the implementation of **two local workshops**, again in each pilot country. During these workshops, the general aim was to first present to participants of the same target groups an overview of existing material on each examined topic. Secondly, the university pilot partners enabled participants to brainstorm and develop ideas for innovative and participatory educational material in a way that reflects different SE stakeholders'

expertise, perspectives, and needs. The ideas that were produced during the two workshops provide the fundamental elements for the material that will be synthesized and will be pilot tested, before being turned into the foreseen master's programme after the project. At this point, it is worth mentioning that for preparing the methodology for the actual local workshops partners were inspired to some extent by the *Design Thinking* (DT) methodology (by the step of Ideation), enriching the involved participants' creative thinking.

To sum up, the co-creation as approach that initiated the starting point of SE Living Labs was focused on the exploration and understanding of stakeholders' needs and challenges in four specific topics around SE education. The synthesis of educational material and their first validation is part of the next phase (Experimentation). One point that should be clarified is that the particular focus area of new material and methods, based on the four selected topics, will be commonly decided by the project consortium, after having examined all shared ideas from the previous activities (LL, local workshops). Finally, it is important to underline that although co-creation is an approach that is predominantly manifested in the first phase (Exploration), it transcends all three phases. The only particularity is that co-creation in the experimentation phase during the pilot activities of the project takes the form of co-teaching/learning, as the pilot stakeholders will test in practice and in their own setting the co-created material.

#### 3.1.3 Co-teaching and socially-driven approaches

#### Theoretical background on co-teaching approaches

Before delving into to the critical role of co-teaching for the SE Living Lab framework's operation, it is important to first shed light on some theoretical aspects of this approach, its characteristics, and its popularity in HE area.

Based on in-depth research that was conducted under WP4, co-teaching has already begun to be widely used as a pedagogical tool in K-12 and in some tertiary learning environments for some decades. However, its practical application in HE area only recently started to grow in popularity. Hence, the utilisation of co-teaching as academic process in HE and university curricula seems to be in early stages (Kelly, 2018). Despite its infancy, during the last decades many scholars and academics have focused on the examination of opportunities that co-teaching methods offer in HE as well as on their advantages, challenges, and practical strategies.

With regard to its definition, co-teaching is often referred as *team teaching* or *teaming*. In particular, co-teaching has been interpreted as a process where 'two or more individuals come together in a collaborative relationship for the purpose of shared work...for the outcome of achieving what none could have done alone' (Lock et. al, 2016). Co-teaching has also been defined as 'two instructors who team teach by providing simultaneous instruction to a large group of students in a course over a period of time' (Kelly, 2018). Apart from the previous definitions and interpretations around co-teaching, there are six co-teaching approaches that are considered to meet students' learning needs and cultivate a meaningful teaching, according to Table 2:

- 1. *One teach, one observe*: in this type, instructors decide what information is to be gathered through observation, one observes and the other teaches, and together they analyse this information.
- 2. **Station teaching**: in this case, the co-teaching pair divides the instructional content into parts. Each teacher has specific content to be taught to one group and then repeats teaching the content to the second group. The third station is where students work on their own.
- 3. *Parallel teaching*. Two teachers divide the class and provide simultaneous instruction of the same content that is to say they teach the same instructional material. The aim is to increase student participation and allows for differentiation of instruction.
- 4. *Alternative (differentiated) teaching*: One instructor is responsible for teaching a big group and the other is engaged with a small group of students for such purpose as enrichment or further support. The learning outcome is the same for all students although the avenue for achieving it is different.
- 5. *Teaming*. Both instructors are involved in delivering the same content to a group of students through lecturing and providing opposing perspectives in debate or two processes for problem solving.
- 6. *One teach, one assist*: One instructor has the responsibility to teach the large group while the other provides individual assistance in the classroom.

Regardless of the type(s) that will be selected to be applied in the pilot period of LLs in SE4Ces project, the co-teaching as collaborative approach is generally considered to generate a genuinely *peer-learning* relationship in which communication shifts between different contexts within and beyond classroom. As such, the co-teaching relationships are not generally considered as simple educational schemes, because they do not always occur naturally or evolve in a healthy manner. According to Yanamandram and Noble (2005), in a successful co-teaching relationship an investment of both time and effort is demanded. Despite any difficulties to effectively apply a co-teaching model, there are multiple advantages and opportunities created by the application of collaborative learning models in HEA. For example, it is widely supported that co-teaching, by its very nature, exposes students to various perspectives as well as to several innovative teaching methods within a course. This variety in different teaching styles foster students' interest and further development, both at academic and personal level, by enhancing their critical thinking and open-mindedness (Gaytan, 2010).

The effectiveness of a co-teaching delivery style relies on mutual respect and appreciation for diverse teaching and learning strategies. There are **four key strategies of high-quality tertiary co-teaching pedagogy**, as follows: 1) Develop co-teaching norms and pedagogies through a community of practice, 2) Establish two-way dialogue, 3) Diversify strengths of teaching teams, 4) Enforce continuous reflection and feedback (Kelly, 2018). Each strategy, depicted in Figure 10, is based on the general assumption that co-teachers should act respectfully while communicating with one another and contributing to the improvement of academic curricula.

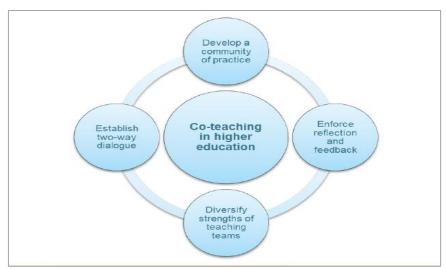


Figure 10. Key concepts of effective co-teaching in HE area

#### The role of co-teaching in SE Living Lab framework

Following the Exploration phase and the first co-creation activities, the next phase of SE Living Lab's operation is the *Experimentation*. The approach of co-teaching is the second key element that structures, as approach, the SE Living Lab framework and is related to this phase. The main goal is to enable SE Living Labs participants experiment with the co-designed educational resources during the pilot activities, by building new opportunities in teaching and learning methods among all involved SE actors. These stakeholders will join their forces to bridge academic knowledge with practical experience so as to examine real-life societal issues and try out new forms of teaching and knowledge transfer through collaborative teaching models. These approaches may, for example, include focus groups, interactive learning scenario development or a role-playing activity in an examined thematic area, as collaborative tools for testing the co-created modules. More concrete ideas about this part are suggested in the sub-section 3.3.3 (*Findings for the application of co-teaching*) taking inspiration from primary data and specifically from the surveys' participants.

In brief, during the experimentation step, it is given emphasis on the testing of co-developed material by the project pilot partners (the four HEIs), considering the suggested ideas of invited stakeholders from the previous co-creation activities. This phase also regards the validation and refinement of material by the main actors of SE Living Labs in all pilot countries, as preparatory step before their pilot-testing. The scope of refinement process is to help SE Living Labs 'stakeholders to review the material and reflect on which collaborative teaching approaches fit better to be tested in practice. In this way, the SE actors who will be involved in the pilot phase will have the chance to proceed with all necessary adjustments according to their local contexts/needs. The examination of co-creation material' quality and their refinement will be achieved through two preparation activities: 1) the organisation of two ignition meetings and 2) a learning mobility as training workshop for educators and SE professionals. During these processes, SE Living Labs actors (i.e., professors, SE professionals. etc.) will be trained on the synthesised material and will reflect on the suggested methods and topics before the official pilot period begins.

Overall, Table 3 summarises the foreseen activities included under the Experimentation phase before the official pilot testing:

Table 3. Preparatory activities before the actual pilot testing

1. Synthesis and codevelopment of educational package - under WP4

 Validation and refinement of material under WP5:



2 ignition meetings (1 before and 1 after the learning mobility) 3. Learning training mobility (M25) - under WP5:



Training workshop for SE entrepreneurs, SE training staff and university teachers before the initiation of the actual pilot testing activities. 4. On the ground testing of codeveloped material (M25-M32) - under WP5

Professors, students, SE professionals test the co-created material and implement Service learning (SL) activities

During the official pilot period, there will be many co-teaching opportunities that will be further utilised by SE educators, SE organisations and students. This opportunity will strengthen their collaboration and will help them practice multiple skills (both transversal and hard) that are essential for their fruitful partnership while testing the material inside and outside classroom and beyond the scope of curriculum. The responsible partner for pilot implementation activities is the University of Bologna (UNIBO), as one of the four pilot universities of the project. The rest of project partners (apart from the other pilot universities) can provide access to SE organizations that will be actively involved in common academic activities with pilot universities.

As a whole, the application of collaborative teaching approaches, with the active participation of teachers, students and SE organization representatives will create new pathways for:

- On the ground testing of all educational materials of the joint professional online master's programme.
- Direct communication channels, skills' development and networking among students, SE professionals and educators

In terms of types of co-teaching approaches that will be applied during the pilot activities of educational package, the sub-section 3.3.3 offers indicative examples that were suggested by surveys' participants and can be leveraged by the pilot stakeholders. Additionally, the D.4.2 (*training toolkit*) complements these examples with other mapped ideas through online research, by clarifying the role of each stakeholder in the experimentation phase in which the application of co-teaching/ collaborative learning approaches is included. There can be various models for collaborative teaching; what is worth being underlined is that in every collaboration (as the partnership of SE actors through the SE Living Lab) including co-teaching, a shift of thinking or role is required. The main essence is that SE educators, students and professionals will become equal co-learners and transformers of the educational process, by shifting into different roles to test both academically and practically the co-designed material under a new teaching perspective.

#### 3.1.4 Application of Service Learning in SE curricula

#### Theoretical background on SL method and reflection

Service Learning (SL) has been broadly recognised, as innovative pedagogy, for its effectiveness in HE area and its potential to provide a holistic educational approach in academic curricula. It direct links the academic knowledge with real-world problems and community service. Multiple SE actors and mainly students, as young learners and potential employees in SE fields, can gain benefits and develop multiple skills from SL within university curricula (Astin, 2000). Despite the appearance of valuable efforts to incorporate the idea of SL into the academic mainstream cycles, its actual institutional framework seems to be yet uncertain. In some settings, SL is perceived by some educators as a theoretical pedagogy that may cause potential problems in the traditional way through which many current curricula are implemented (Buttin, 2006).

SL is defined as an educational experience in which students i) 'participate in an organized service activity that addresses identified community needs' and ii) 'reflect on the service activity in such a way to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility" (Bringle & Hatcher: 1999). As pedagogical approach, SL is closely related to social action, where students are involved in community action and volunteering as a means of investigating real and compelling projects to work on. (Kalemaki et.al., 2018). In addition, SL is common with other student-driven approaches, like the project-based learning. The particularity of SL programmes from other experiential approaches is their intention to equally benefit the provider and the recipient of the service as well as to ensure equal focus on the provided service and the learning that is occurring (Furco, 1996).

Although several definitions of SL exist, four core features are commonly referenced to describe SL application: 1) a **practical learning experience**, 2) a **reflective approach**, 3) a **community-based service** and 4) a **win-to-win experience** for the student and the participating enterprise/SE organization (Calvert, 2011). Moreover, a good and effective SL program should follow a specific format so that education and continuous learning can occur throughout the entire process. Creating a detailed plan for each step of the SL application will

make it easy to introduce this program and keep students engaged, while meeting basic rules to ensure success. These guidelines form the following five steps, known also as 'IPARD' process: I stands for *Investigation*, the P for *Planning & Preparation*, the A for *Action* (the most action-oriented part), the R for *Reflection* and the D for *Demonstration*, as Figure 11 illustrates (nylc, n.d.):

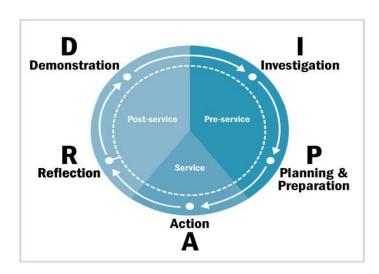


Figure 11. The IPARD process in SL experience

As the above-presented diagram illustrates, the experience in a SL process does not begin immediately with the act of service, nor does it end with the completion of the service activity. Every part of the process is rich with learning and growth opportunities. Apart from the steps that form a SL activity, Table 4 presents 4 types of SL programmes:

Table 4. Types of SL programmes (source: Ferry, n.d.)

#### Direct SL: It focuses on face-to-face interaction

#### Indirect SL

In these programs, students often remain behind the scenes while focusing on broader issues within a community.

#### Research-Based SL:

This brand of SL centers around gathering and presenting information. The instructor chooses an area of interest and projects that emphasise the finding, gathering, and reporting of information

#### Advocacy SL:

Advocacy is about motivating students lend their voices, talents, and resources to community issues with the hope of alleviating or eliminating a problem.
Students also work to raise awareness and inspire action on community issues.

#### The role of reflection in SL application

Reflection is a key component of SL method; it is considered the link between the service and the theoretical knowledge and is defined as the 'intentional consideration of an experience in light of particular learning objectives'. To reflect in SL means to think critically about and analyse emotional responses to service activities in relation to a course's content and to its learning objectives (Gateway Technical College, 2013). Reflection is broadly acknowledged as an "active, persistent, and careful consideration of any belief or supported form of knowledge in light of the grounds that support it".

The integration of reflection in a SL activity can offer multiple benefits at personal and collective level both to the participant ad to the recipient of a business / SE partner to the process. First and foremost, it gives meaning to the experience and it helps both student and the organisation/ agent that collaborates with them to reflect on whether the goal was accomplished, how they acted in this experience, how is community served by this, how is this part of a larger effort, etc. Some of the most significant benefits of reflection process are the following (Gateway Technical College, 2013):

- Provides an opportunity to establish expectations (individually, team)
- > Helps students understand the limitations and opportunities of the service site or community organization
- > Relieves tension and provides re-energising and renewal especially important when service is emotionally challenging)
- > Creates a sense of accomplishment that is crucial, especially where there are limited external rewards
  - Develops a "spirit" of service and civic-mindedness
  - Contributes to an improved service As students examine the effects of their behavior, they discover ways to improve the quality and quantity of their service.

Moreover, reflection activities can be incorporated **either before**, **during or after** the service experience. Reflection activities prior to service usually focus on helping students anticipate what their service experience will be like and what assumptions they are bringing into the situation. Reflection during and after the service experience supports students understand

the actual outcome of their experience in relation to the course content. Reflection can happen through many different pathways, e.g., via writing, speaking, listening, reading, drawing, acting, and any other way involved stakeholders can imagine and are familiar with.

#### Good practices of SL application in SE HE disciplines in Europe and beyond

#### 1. SL trajectory Master Sociology - Master Social Economics (University of Antwerp)

The first example of connecting SL with a Master's degree in the field of SE comes from the University of Antwerp (Belgium). In more detail, through the programme "Master in Social Economics" that brings together the disciplines of Sociology, Economics and Business, the university offered during the academic year 2019-2020 a unique experience to 42 students to work alongside the employees of six social enterprises in the city of Antwerp. This venture included a SL approach, and the goal was to encourage social inclusion and well-being via active employment. The students in this programme were offered the opportunity to work more than 40 hours next to workers of specific social organizations/companies, such as Flexpack, Steunpunt tewerkstelling, Levanto, Met Sense and Wotepa. The central question of such an initiative was whether the exclusion of significant groups can be solved through entrepreneurship actions in SE field. Via the actual experience of working alongside socially vulnerable actors and via a critical reflection strategy, various group conversations, personal diaries and debates between organisation-student and professors were applied (European Observatory of SL in HE, 2021).

#### 2. CASE Master program on Sustainability-driven Entrepreneurship (Joint Master)

It is about a Joint Master Programme for "Sustainability-driven Entrepreneurship" for European universities, which was created under the EU funded project "CASE: Competencies for a sustainable socio-economic development. This programme initiates new ways of teaching as well as a strong cooperation between HE and business sector for the enhancement of a socioeconomic development and of sustainability-driven enterprises. Thus, a series of innovative learning methods are adopted, fostering the sustainability and entrepreneurial competencies, such as creativity, opportunity-detection, strategic action competence and communication skills. By acting as entrepreneurs, students learn to address complex real-world sustainability problems within a business setting. Also, in the first semester of this master in the module named "1.1: Transformation and Sustainability", a well-designed seminar is offered to students, incorporating the following activities: 1-weekexcursion for intensive group experience; activities for group dynamics and teambuilding from experiential education; team work on sustainability challenge; excursions to or guests from regional sustainability-driven enterprises and start-ups. Since the teaching method of this course is based on collaborative and project-based learning, the suggested assessment for students is to focus on writing an essay/ learning report, combined with reflection, after their experience (Biberhofer & Bockwoldt, 2016).

#### The role of SL in the SE Living Lab framework

The SL method constitutes the third approach that is adopted in the SE Living Lab framework's operation. As an action-learning method, it is involved in the Experimentation and Evaluation phase and in the pilot activities of the project will be applied under WP5. Apart from the pilot testing of new collaborative teaching approaches, another goal of pilot implementation of SE Living Labs is to ensure the active participation of students in SL

activities. SL plays a significant role in networking and cultivation of 21<sup>st</sup> century skills, as SE students will be given the chance to gain real-work experience by cooperating with SE professionals through **short volunteer-related placements in SE enterprises**. Through their active engagement in SL projects and hands-on activities, students, with the guidance of their educators, will focus on community problems via problem-based learning opportunities, promoting the integration of local and regional societal issues into their curricula.

The SL methodology that is part of the project's pilot implementation phase will further support interested HEIs and SE organisations to upgrade students' employability competences and offer hands-on opportunities in SE educational area. All SE LLs stakeholders will contribute to the community development and cultivation of wide range of transversal - soft skills (e.g., critical thinking, active citizenship, collaboration, empathy, conflict management, teamwork, etc.) that are needed in complex societal issues and in fast changing labour market needs. The integration of SL method in the operation and collaborative activities of SE Living lab framework will promote the integration of local societal issues into the academic curricula, proving students with real-work experiences. This opportunity will ameliorate the interaction and collaboration among teachers, SE professionals, students, and citizens, by combining academic theory with practical experience. It should be clarified that the overall plan for the application of SL will be inspired by the framework's methodology (explained in 3.1.1) and by the educational material that will co-produced by the project consortium (mainly the pilot HEIs, with contributions from participating SE organisations).

After the application of SL activities that will also bring together students with SE professionals and their organisations, two additional activities will be carried out, as follows:

1) Implementation of reflection sessions: these sessions will take place during the whole pilot implementation phase, with the active involvement of project partners and other invited pilot stakeholders as participants (students, SE organisations, educators, community members). Each evaluation and reflection activity will aim at progressively participants' view on their experience with the piloting of material and at identifying any points of further improvement. Special focus will be given to encourage students' self-reflection on their service-learning experiences, while a SE Living-Lab reflection handbook will be developed. The outcomes of this task will also be used for the evaluation of the material' implementation under the evaluation process of WP7.

#### 2) SE Living Labs reflection handbook:

This handbook aims to be a practical and useful tool for all educators and teaching staff in the field of SE that are interested in applying reflection sessions after the implementation of SE Living Labs in their educational settings and integration of SL activities in these labs. The handbook will suggest several reflection types, as follows:

 Students' self-reflection: it is related to students' learning impact through an interactive learning process where they will be asked to think critically about their SL activity (irrespective of the content of any applied activity, if for example is about a project or a research activity for a real-life case study) and their theoretical background gained in class and combined with their service and experience in the community.

- Teacher self-reflection: teachers will also be provided with innovative tools to measure their own continuous professional development in SL methodologies and innovative teaching collaborative practices.
- SE organisations self-reflection: this kind of reflection comes from SE organisations as
  hosting actor of SL activities. This part of reflection can measure the organisations' level
  of participation in the learning process, their members' professional development and the
  added value gained from the innovative approaches and the implementation of SL in their
  settings.
- Group reflection: through a specialized section with tools on group reflection, teachers, students, SE organisation representatives and other participants will be encouraged (and enabled by the means of practical guidelines) to participate in group sessions where the opinions, feelings and thoughts about the educational experience can be shared.

The aim of reflection handbook is to assess and reflect on the quality of educational material, and on gained capacity of students, educators, and SE professionals. Before closing the sub-section 3.1.4, it is important to notice that for the third innovation phase, the *Evaluation*, a separate work package (WP7) will examine and undertake the overall progress and work done during the pilot activities, considering all participants' comments and assessment from the reflection sessions. The specific evaluation strategy for all pilot activities and the reflection session is further elaborated in this WP.

#### Key messages for Section 3.1:

- The SE Living Labs 'framework is the foundation of Living Labs operationalisation.
  It provides the overall methodology of the SE actors' partnership to co-create and
  test educational material in SE area.
- The co-created material will form a joint professional master's programme that will be validated and refined before its official launching in four pilot HEIs.
- The co-creation, co-teaching and SL are the three main approaches for the SE Living Lab framework's operation.
- In line with LL theories, co-creation is related to *Exploration* phase, while the coteaching and SL are related to the *Experimentation* phase.
- The *Evaluation* phase regards the assessment of all pilot activities and of reflection sessions, applied after the SL activities.
- Co-creation enhances students' educational experience, teachers' professional development and external actors' engagement in learning process.
- Students can take over different roles both in co-creation and in co-teaching application (consultants, representatives, researchers, co-designers)
- The practical application of co-teaching in HE area has started to be applied in HEA during last decades.
- A successful co-teaching relationship requires both time and effort.
- SL is considered effective in HE area for its potential to provide a holistic educational approach in academic curricula.
- SL direct links the academic knowledge with real-world problems and community service.
- SL programmes differ from other experiential approaches as they equally benefit both the provide (SE enterprise) and the service recipient (student or community).

- Reflection is a key component of SL method and reflection activities can be incorporated either before, during or after the SL experience.
- As part of SE Living Labs 'operation, SL activities will be applied through students' volunteer placements in SE organisations.
- SE Living Labs will utilise various reflection tools and activities in relation to the
  engagement of all SE Living Lab stakeholders. The aim is to evaluate and reflect
  upon their experience considering all pilot activities, with strong emphasis on
  students' engagement in community service during their SL experience.

#### 3.2 Surveys and relevance with SE Living Lab framework

#### 3.2.1 Objectives and structure of surveys

To ensure a participatory and bottom-up character in the design and implementation of SE Living Labs, the secondary collected data, used for the theoretical part of this deliverable, were combined with primary data, in sequential exploratory order (Johnson and Onwuegbuzie, 2004). For the collection of primary data, a quantitative research process was followed, by developing three online surveys, addressed to the following target groups: educators/trainers, students, and representatives from SE organisations. The surveys were developed by Stimmuli, in close collaboration with all pilot HEIs and AICCON that contributed to their online design. The collection of primary data from SE actors indicates their view on how the three leveraged approaches (co-creation, co-teaching, and Service-Learning/SL) can be better applied in the phases of SE Living Labs operationalisation. In order to design the surveys' items for some examined sections useful feedback was drawn from the 'State-of the-art' and 'Needs analysis' reports under WP3. As such, the three selfadministered<sup>7</sup> surveys included mostly closed items, so as to ensure validity and easier processing of results (Robson and McCartan, 2016). Once the surveys were prepared and finalised, they were launched in four pilot countries (Greece, UK, Spain and Italy). After their closing, each pilot university prepared a summary report, indicating on average the most important findings from all groups. The project's next steps build on these initial findings.

#### Aim of the developed surveys

The aim of surveys was to first capture the views of stakeholders from the abovementioned target groups about their experience with innovative and co-creative methods and the level of their collaboration with SE actors. Next, participants were expressed about their potential contribution in co-creation phases of educational material as also about the most critical skills and obstacles in this collaborative process. The surveys did not cover only questions about co-creation; they also touched upon the wasy through which co-teaching could be applied as also about the potential and obstacles of SL application in SE curricula.

#### 3.2.2 Methodological note on sampling strategy

In terms of sample strategy for the collection of survey findings', a non-probability quota sample was selected as the optimal sample type, helping the lead partners to capture indepth information from the targeted stakeholders (Bryman, 2012). More specifically, the

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<sup>&</sup>lt;sup>7</sup> A *self-administered survey* is a questionnaire that is designed explicitly to be completed by a respondent **without** an interviewer's assistance (or bias). Self-administered surveys are widely used for collecting quantitative research data. More information can be found here: <a href="https://www.geopoll.com/blog/self-administered-survey-modes/">https://www.geopoll.com/blog/self-administered-survey-modes/</a> & <a href="https://www.wits.ac.za/media/migration/files/cs-38933-fix/migrated-pdf/pdfs-3/hsa%20-%20section%202.pdf">https://www.wits.ac.za/media/migration/files/cs-38933-fix/migrated-pdf/pdfs-3/hsa%20-%20section%202.pdf</a>

three developed surveys were addressed to three groups of stakeholders (i.e., students, educators/trainers, SE organisations), with predefined quotas set for each category at national level: 20 respondents per category was the initial aim that was defined, aggregating to a total quota sample of 60 respondents in each country. In terms of data collection, a snowball technique was chosen by the consortium. Based on this technique, the surveys were distributed to all consortium partners, who in turn circulated it through their internal networks. This strategy helped the consortium to reach out to the desired audience of surveys and fill in successfully many of the quotas that were set up. This was actually based on the advantage of the snowball sampling: instead of just randomly distributing the survey to the general population of the selected pilot countries, the contacts of the responsible consortium team were leveraged for reaching out to specific types of respondents (Bryman, 2012). Even though representation in terms of numbers was compromised, the consortium succeeded in collecting answers from the desired target groups through the combination of the quota and snowball strategies. Since our sampling strategy was not aiming to a generalisability and representativeness of results, but rather on collecting the opinions from particular stakeholders, the aforementioned selected strategy was deemed effective.

#### 3.3 Analysis of surveys' results

## 3.3.1 Previous experience on co-creative and participatory methods Greece:

The majority of Greek educators who participated in the survey are permanent staff and part-time lecturers, accounting for 39% of the total number (23 in total). Most trainers come from a public university, while there is a variety in years of their teaching experience (ranging from 1 to 26 years). Regarding their familiarisation in applying co-creative and participatory approaches in the SE programmes, 52% of educators stated that they are **not experienced** in such methods. However, it is interesting that **65%** of them have some direct links or collaborations with SE organisations as part of a SE study programme, according to Figure 12:

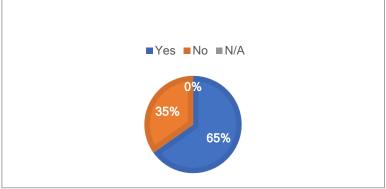


Figure 12. Level of collaboration of Greek educators with SE organisations

Regarding the Greek students' profile, the majority of involved students, accounting for 65% of the total number, attend a master's programme in the SSE area. In terms of their satisfaction with current teaching methods adopted in their study programme, 33 out of 48 respondents (reaching 65% of total number) indicated their dissatisfaction, whereas a percentage of 27% of participating students are not satisfied at all, as illustrated by Figure 13. The high level of recorded discontent on behalf of Greek students may be attributed to

the fact that both ongoing study programmes and currently used pedagogical approaches tend to be traditionally oriented.

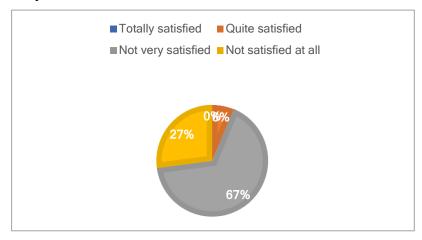


Figure 13. Greek students' satisfaction with teaching methods of study programmes

For example, some teaching methods are often restricted in simple lectures or supplementary seminars, despite of the diffusion of several innovative practices that have started to be applied sporadically, as it was highlighted in D.3.1 ('State of the art and needs analysis report'). In the interviews that were conducted under WP3, some students emphasised the need for more experiential programmes that could offer more new opportunities and collaboration with SE organisations. This necessity indicates that theory and practice should be bridged in the teaching of current SE educational programmes. Additional remarks from the WP4 survey's findings show that most Greek students are not so well-connected with SE organisations or have not been involved so far in any SE initiative or organisation. This is also proved by the needs analysis of WP3, where a part of students supported that more networking opportunities with SE organisations should be offered. Nonetheless, from the students who verified their engagement with a SE initiative or a SE organisation in the survey, indicative examples of such involvement include collaborations with rural cooperatives, energy communities, social cooperative enterprises, or charities. With regards to the Greek SE organizations, the survey attracted a range of employees employers like directors, business consultants, executive staff, Project Managers (PMs), coming from several types of organisations like associations, cooperatives, and SE enterprises. Specifically, 53% of Greek SE representatives reported their experience in applying co-creative and participatory learning approaches (as cooperation with educators) within SE study programmes. Also, 60% of participants (around 9 out of 15 in total) expressed that they have direct links with SE study programmes or have established some kind of collaborations with HEIs.

#### Italy:

From the group of Italian educators, around 77% of participants are permanent staff and come from various scientific fields such as Business, Management or Economics. Their teaching and research fields relate to accounting, social impact assessment, law, finance, sustainability, fundraising, public management, etc. There is a wide variety of teaching experience from the side of participating educators, ranging from participants with less than 10 years of experience (23%) to those with more than 30 years of experience. Despite their

rich academic experience, **only 31%** of the total number of Italian educators (i.e., 9 out of 13 total participants) are experienced in using and applying co-creative approaches and participatory teaching in SE, as Figure 14 depicts.

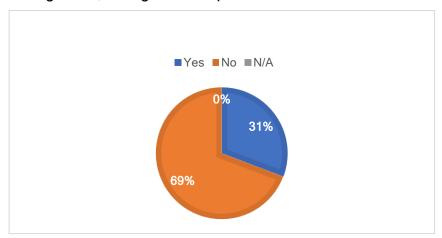


Figure 14. Experience of Italian educators in participatory approaches

Despite the aforementioned lack of educators' experience in participatory teaching and learning methods, 46% of them verified their connection with SE organisations. This collaboration was also reported by some Italian interviewed educators in the needs analysis of D.3.1. A part of them have supported that that during the implementation of several programmes in HEA in Italy, SE professionals and practitioners are invited to meet students as guest lecturers, they participate in educational workshops, or they cooperate with students through internship projects. These attempts, although they are considered as valuable efforts to bring together SE enterprises with the academic community, are scattered and not so widespread in all SE-related programmes.

Regarding the Italian students, the majority of total 21 participating students attend a twoyear Master of Science in the area of Management for SE at the University of Bologna. Although most participants (accounting for 71%) **are quite satisfied** (Figure 15) with the teaching methods in their studies, about 48% stated they have never collaborated with a SE organisation; those who have collaborated they have been engaged with such organisations once or few times just as volunteers/activists or as interns.

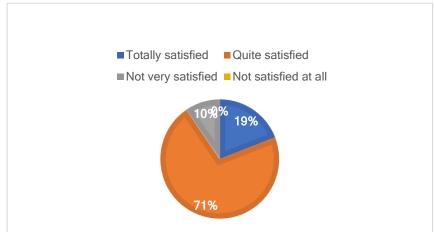


Figure 15. Level of Italian students' satisfaction with their study programmes

The high percentage in the absence of students' collaboration with SE entreprise indicates the general absence of real opportunities for sustainable collaboration between students and SE organisations. In parallel, the application of collaborative methodologies as joint work of these three target groups (educators, SE actors and students) is not sufficiently promoted in Italian HEIs. This shortage may be initially attributed to the fact that very few educators are well-equipped and trained in designing, testing, or embedding such methods in their courses, by inspiring in turn their students. As a result, many students are not facilitated in developing new collaborations or gaining hands-on experience through action-learning processes.

Second, according to some students' opinions that were reported in the need analysis of D.3.1, the involvement of SE organisations during the design process or the delivery of academic study programmes is limited and in many programmes non-existent. This fact signifies that more attention should be given from the academic staff to engage students with SE actors. Simultaneously, students should be encouraged to spend more time of their studies to work together with SE organisations. Additionally, the need for developing programmes with more experiential opportunities was pointed out by many students in order that they can be more involved in the SE sector and able to exercise multiple skills. Finally, regarding the Italian representatives from SE organisations, 43% of the total number of participants (i.e., approximately 9 out of 23 recorded answers) work in cooperatives and SE enterprises, while associations and foundations follow as participating associations (a relevant case with the Greek profiles). The majority of these actors include members of the organisations' leading team (e.g., CEOs, directors, and presidents), while others are just employees (mainly educators and fundraisers) or external consultants. The most significant insight from this group is that only 35% of participants are experienced in applying cocreation and participatory teaching or learning approaches in SE within HE area, as depicted in Figure 16:

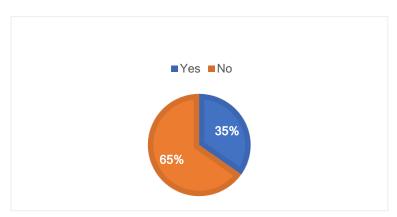


Figure 16. Experience of Italian SE representatives in participatory approaches

In addition to that, **only 17%** have direct links with SE study programmes or collaborate with HEIs in this area. The reason behind which very few SE practitioners are well-connected and involved in joint activities with HEIs is that such activities are circumstantial and limited, focusing more on personal contacts of the academic community's staff.

This finding is also verified through the needs analysis of D3.1. Based on this analysis, it was stated by some SE organisations that existing collaborations are mainly a series of joint

actions in research projects, guest lectures or events; that is to say there are no institutionalised collaborations between SE organisations and HEIs, despite the strong interest and motivation of SE actors to strengthen and promote SE education together with academics and students.

#### Spain:

The Spanish case presents some interesting differences in relation to the two preceding countries (Greece and Italy). To begin with the Spanish professors, most of them are permanent staff in private institutions, while few respondents are part-time lecturers. Most respondents are experienced staff with more than 10 years of professional teaching experience. Also, a rich variety of scientific backgrounds (e.g., *environmental science*, *humanities*, *business studies*, *organizational studies*, *law*, *economics*) is observed, as participants come from 10 different universities and research centres across Spain. Contrary to the Greek educators, **over 50% of Spanish educators** - in absolute values 15 out of 27 recorded answers - are experienced in applying co-creative and participatory methods in their courses, as displayed in Figure 17:

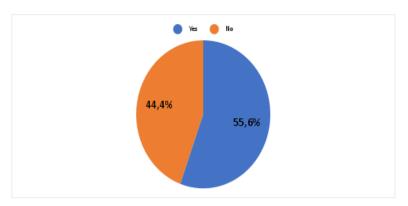
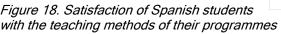
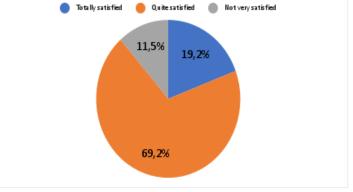


Figure 17. Experience of Spanish educators with innovative teaching approaches

The previous finding is also verified by the 'State of the art in SE education' report (under D.3.1), where it was mentioned that the increasing interaction between HEIs and SE actors happens not just in the delivery of the programmes but also in the development phase. Regarding the latter, it has been supported that various SE actors, together with local governments, participate in the co-organisation and financing of HE programmes. As for Spanish students, 26 responses were collected from four different universities across Spain, with most of them (around 20 students) being master's students in the fields of SE or in other

related disciplines. The vast majority of involved students in this survey are quite satisfied (roughly 69% - in absolute values is 18 out of 26 total students) by their master programmes. Only a small number of students supported their partial dissatisfaction (around 12%, i.e., 3 out of 26 participants).





On the other hand, most respondents (approximately 14 out of 26 in total) have not been adequately connected with SE organisations, while few participants seem to have been involved in SE initiatives, either as volunteers, employees, or founders of cooperatives. Regarding Spanish SE professionals, they are active in various fields of production and reproduction. The survey's participants are engaged with a variety of SE organisations, from cooperatives to foundations or associations. In terms of their position, some respondents are either directors or sub-directors while the rest of them are either employees or members of the collective schemes. Regarding their experience in applying participatory teaching or learning approaches in the study field of SE, 47,4% of SE organisations' representatives (9 out of 19 participants) supported that they are not so experienced in applying such approaches in HE area in the examined field, as presented in Figure 19. At the same time, the same percentage was observed in the question related to the any collaboration or direct links of these organisations with universities. The results indicated again a low score in collaborative initiatives between SE educational institutions and SE external actors.

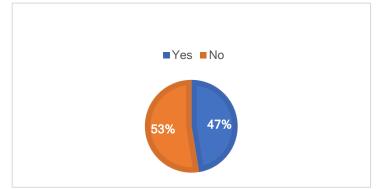


Figure 19. Experience of Spanish SE representatives in participatory approaches

#### UK:

The British case presents some similarities and differences with the other countries in all target groups. Starting with the educators' profile and experience, most respondents are permanent staff and are mainly engaged with Business, Marketing or Management schools. Also, 10 out of 11 in total participating educators come from a public or semi-public institution and are currently employed in 10 different universities, indicating a good representation of SE education across UK HE institutions. With regard to their experience in participatory teaching approaches, 64% of educators (7 out of 11 participants) stated that they do not have such experience, according to Figure 20:

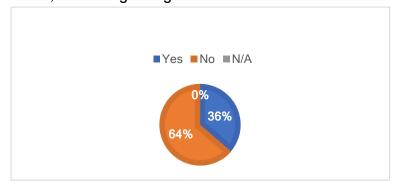


Figure 20. British educators' experience in participatory approaches

At this point, it is worth mentioning that there is an interesting contradiction in this group, as the same percentage was recorded also in the question about any existing links or collaborations with SE organisations. In the latter, SE educators stated that they are linked to SE initiatives; nevertheless, these links are usually based on personal initiatives/networks rather than formal institutional arrangements. Moving to the participating students' background, most participants were male and currently PhD students, while very few attend or hold a master's programme in the area of management or economics. Concerning their level of satisfaction with the current teaching methods, 50% of students (5 out of 10 totally recorded answers) are quite satisfied (the same as Italian students), as shown in Figure 21.

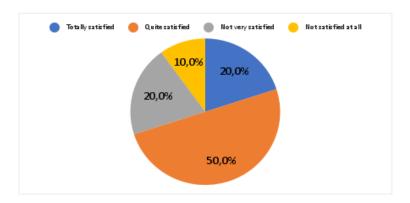


Figure 21. Percentage of British students' satisfaction with teaching methods of their programmes

In terms of students' past experience or involvement with any SE initiative, 6 out of 10 respondents have no prior hands-on experience related to SE area. Very few students (3 out of 10 respondents) stated that they have already been involved to some extent in community or voluntary initiatives (Mexico and Kenya), in NGOs (Bangladesh) active in SE-related projects or in Cooperatives. Last but not least, concerning the profile of British SE representatives, they hold key roles in their professional activities. Some of them are entrepreneurs, other are CEOs or even managing directors in social enterprises, or foundations. No members of cooperatives or associations participated in the survey. The majority of respondents (62%) have a good experience in applying co-creative and participatory teaching approaches in the field of SE (Figure 22).

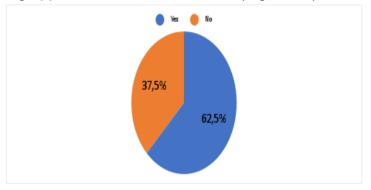


Figure 22. Experience of British SE representatives in participatory approaches

Also, as opposed to the Italian and Spanish SE representatives, 87% of British SE agents from SE organisations have direct links with academic institutions within SE study

programmes (Figure 23), with some indicative examples being the Judge Business School (University of Cambridge), Newcastle University and Sheffield Hallam University.

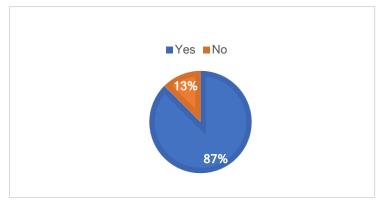


Figure 23. Level of direct links of British SE professionals with academic institutions

## Key messages for sub-section 3.3.1 (experience and profile):

- In Greece, Italy and UK most participating educators are not well-prepared or acquainted with co-creative and collaborative approaches within their SE field.
- There are valuable efforts for collaborations between universities and SE enterprises, but most of them rely on personal networks and are not supported at institutional level.
- In Spain, educators are more experienced and familiarized with co-creative and in general innovative teaching approaches, in contrast to the participating Greek, Italian and British educators.
- In Greece, participating students are not so satisfied with their study programmes. The same views were also observed in participating students from UK.
- In Italy and Spain, master programmes' students are quite satisfied with the current teaching methods in their study programmes.
- In all countries, the students have been engaged few times or never with a SE organisation. This shortage stresses the necessity for further improvement and investment in students' connection with SE organisations.
- SE representatives from Greece and UK seem to be more experienced in participatory and co-creative approaches.
- In Italy and Spain, SE professionals are neither well-connected with HEIs and study programmes nor do they have much experience in participating in participatory and innovative methods in HE area.

# 3.3.2 Findings for the co-creation of material

The co-creation of knowledge and of educational material is the first part of the surveys' core questions. Specifically, participants expressed their opinion for the following examined areas:

- 1) Role of each group in different co-creation phases;
- 2) Ways through which the co-creation of material can be organised,
- 3) Most necessary skills to be promoted within a co-creation process;
- 4) Critical obstacles for the co-creation of knowledge on SE between HEIs and SE organisations

The findings are analysed per country and per examined category in line with the above-presented themes. The preference of participants in all questions is expressed on average level, while the surveys' items were designed in a Likert scale format (from 1 to 5). Also, it

should be clarified that the part of questions related to **skills** and **obstacles** was addressed only to **educators** and **SE organisations**. That is to say, no further data were collected from SE students for these two specific examined themes.

#### Greece:

## Role of each group in different co-creation phases

To begin with the first group, Greek educators expressed their opinion for the role of SE organisations and of students for the co-creation process of educational material. According to the survey's findings, the majority of educators agree that SE representatives can contribute better to the refining process during co-creation, as expressed in the average score 4.5 from all respondents8. SE organisations are considered critical agents for this process, as they could provide practical feedback for the final refinement of educational material. The next most important phase for SE actors' contribution is the planning, where SE organisations can advise educators about the learning content before the step of developing the material. With regards to students' role, educators provided the highest rate for validation and refining, as the most critical co-creation phases for this group to contribute. In the last two phases, students can test the educational material and provide their feedback for their improvement. Finally, educators also paid attention to the role of students during the preparation of a course, as they can contribute as consultants, by sharing ideas on new material' structure. Similarly, Greek students ranked the refining and validation as the most important phases for themselves to be involved in. Next, students consider also their role important during the development phase, where they can support the design of new learning material. Regarding the role of SE organisations in co-creation phases, the Greek students agree with educators and SE professionals that the role of the latter is critical during the refining process. From their own side, representatives from SE organisations indicated the development process as the second most important co-creation phase for them to contribute, after the refining stage that is on the first place by all for their role.

#### Ways to organise the co-creation of material:

Concerning the second examined theme (*how to implement the co-creation of educational material*), Greek participating educators showed their high preference for the **common organisation of academic activities** (e.g., conference, a journal's creation) with SE professionals, as part of SE study programmes. Such activities are the first most preferable pathway, with an average 4.1, on a scale from 1 to 5. The second most desired way to organise a co-creation process is the **interactive focus groups** between SE educators, students, and SE professionals. The latter method is viewed by educators as an important way to better address current skills' gaps. The option of **discussions for the co-development of business ideas** and **joint brainstorming activities** with students and SE professionals are also considered useful ways to co-create educational material, as both were rated with 3.9 on average. Next, educators emphasised the co-creation workshops as another idea, reaching 3.6 on average.

Regarding the participating students, they voted for the brainstorming activities as the first most interesting way to organise the co-creation of educational material. The second option

6211511-EPP-1-2020-1-ELEPPKA2-KA

<sup>&</sup>lt;sup>8</sup> Respondents could provide their answers in a scale **from 1 to 5**, where 1 means 'Strongly disagree' and 5 'Strongly agree'.

for students regards the common discussions with educators and SE professionals, reaching the same average (4.4) with the brainstorming method. Finally, representatives from SE organisations seem to have the same opinion with students and educators in some options. They distinguished the interactive focus groups, the common academic initiatives with students and educators and the brainstorming activities as the most important ways to organise the co-creation of material, reaching 4,4, 4,3 and 4,1 respectively on average (in a scale from 1 to 5 as posed by the specific question). From the recorded average levels, these options indicated a high preference from SE representatives.

#### Most necessary skills to be promoted within a co-creation process:

The majority of Greek educators expressed their high interest for the **democratic decision-making** and participatory governance as also for the **communication skills**, both accounting for the same highest average (4.4). The same options received the highest (average) rate also from the group of participating SE representatives. Moreover, educators emphasised on **soft skills** as the second set of competencies that could be enhanced in a co-creation process, reaching 4.3 on average. On the other hand, SE professionals indicated the **social impact assessment** (with an average 4.4) and **managerial skills** as the next most important competences (after democratic governance and communication skills) that could be promoted in a co-creation process, contrary to the educators' preference on soft skills.

#### Obstacles for the co-creation of material on SE:

The common obstacles that may hinder the co-creation of educational material in SE area and were ranked highly both by Greek educators and by SE professionals are the fowling ones: 1) lack of time (accounting for 4.2 as the highest average, 2) inflexibility of academic curricula to insert new methods engaging external actors (this option marks the highest average from the group of educators), 3) absence of communication channels between HEIs and SE organisations , 4) lack of motivation both from the side of academic staff and from SE professionals to mutually participate in the co-creation of educational materials.

#### Italy:

#### Role of each group in different co-creation phases.

Italian educators focused primarily on the **structuring** and **development** phases of educational material to which both students and SE organizations can contribute effectively. The role of students was also considered important in the validation of material. However, students need a motivation, an incentive so as to be enabled to support this validation. As it is mentioned by one participant: 'Students should be enough motivated to provide feedback and be guided for the content of co-creation process so as to validate it'. Respectively, the role of Italian SE organisations was deemed by professors more relevant for the **refining** of material and less relevant for their planning or validation.

Next, with regards to the Italian students' opinion on their own role during co-creation, they expressed their interest in being involved mainly in the last phases of co-creation process, specifically during **refining** and **validation**. This finding indicates a similarity with Greek students' opinion. Moreover, Italian students consider important the role of SE representatives, both for the first phases of co-creation (such as planning and structuring) and for the last ones, specifically for the refining. From the side of SE representatives, the majority of them agree with educators that their contribution would be useful in the planning (before any development of material) as well as in the structure and development of material.

Overall, it seems that the phase of structuring and development of SE programmes is for all groups the main area of collaboration; additionally, students and SE representatives agree in the strong contribution that SE organisations could offer in the planning phase.

# Ways to organise the co-creation of material:

Italian educators expressed their high preference for the following suggested ways through which a co-creation process could be organised by their side: 1) organisation of academic activities with SE professionals, related to SE knowledge and values; 2) co-creation workshops - where students, professors and SE professionals can design and develop together educational material; 3) values focus-groups to address the skills' gap and bring together SE professionals, students, and professors to co-create ideas and material. Like educators, students showed a high interest from their side for the last two previous options (workshops and focus groups). Other ways, suggested by students, regard the joint participation in brainstorming activities or team assignments researching the current needs of SE field. Additionally, SE representatives highlighted the organisation of common discussions for the development of business ideas, while they agree with educators and students for the option of co-creation workshops. Other suggested co-creation tools are the Open Space Technology<sup>9</sup> or the so-called 'Future Search methodology'.<sup>10</sup> Overall, the suggested methods that attracted the attention of three target groups for the organisation of co-creation of educational material are the following ones: 1) co-creation workshops, 2) interactive focus groups between SE educators, students and SE organisations 3) organisation of common discussions for business ideas.

# Most necessary skills to be promoted within a co-creation process:

The perception of competences that could be promoted within a co-creation process differs between educators and SE representatives. While the latter group emphasised on entrepreneurial, managerial, and social impact assessment skills, educators have awarded higher scores to soft and communication skills. Table 5 highlights the answers of two groups on 2 levels: high (+), and low (-), where high regards an average score higher or equal to 4<sup>11</sup> and low is a score lower than 4 (considering that the question was designed in a scale from 1 to 5 where 1 means '*strongly disagree*' and 5 '*strongly agree*'). In Table 5, some gaps and convergences/ similarities between educators and SE representatives' opinions are identified. For example, it is displayed, among other, that there is a convergence on soft and communication skills to which both target groups assigned high scores. On the other hand, the biggest gaps in the skills are observed in entrepreneurial or managerial competences—which marked a high average (over 4.0) by SE representatives – as also in social impact assessment skills. The latter set of skills reached the lowest average scores from educators and the highest average from SE representatives.

<sup>&</sup>lt;sup>9</sup> More information about the Open Space Technology can be found here: https://openspaceworld.org/wp2/what-is/.

<sup>10</sup>More information about Future Search methodology' can be found here: https://futuresearch.net/about/methodology/

<sup>&</sup>lt;sup>11</sup> That is to say between 'agree' (labeled as n.4) and 'strongly agree' (labeled as n. 5) in the related Likert scale question.

Table 5. Most important set of skills for Italian educators and SE representatives

Competence	Educators	SE representatives
Democratic decision-making culture and	_	
participatory governance		
Managerial competences	-	+
Entrepreneurial competences	-	+
Soft skills	+	+
Communication, networking, and	+	+
community building		
Social impact assessment skills	-	+

#### Obstacles for the co-creation of material on SE:

The common obstacle that hinders the collaboration of SE actors and was ranked highly both by educators and SE professionals is the absence of communication channels that does not facilitate a co-creative cooperation among HEIs and SE professionals. Regarding educators' separate opinion, they focused also on lack of time of academic staff and on lack of training in applying innovative teaching methods. The structure of academic curricula in SE area is not considered an obstacle; so, it is thought to be flexible enough to include new methods and to engage external actors in the co-creation of knowledge and of new material. As for the Italian participating SE organisations, they emphasised on the lack of motivation from the side of academic staff to interact and cooperate with SE actors during the creation of educational materials, reaching 3.5 in average. Additionally, a part of SE organisations' respondents mentioned that they are not perceived as interesting stakeholders, since they do not have always the appropriate academic knowledge or necessary competences in designing learning materials.

#### Spain:

#### Role of each group in different co-creation phases.

Spanish educators showed their preference for the contribution of SE organisations in the co-creation of educational material in the planning step before the materials' content development. Next, the role of SE organisations was considered important for structuring and development of curriculum, as they can offer valuable support during the actual materialisation of new material. These two first options were rated highly also by SE representatives for their own role, specifically with 4,5 and 4,3 respectively on average. Moreover, educators focused on the "fine-tuning" (in other words the refining process) of educational material for SE organisations' contribution. Regarding the students' role in educational material' co-creation, educators indicated as the most important phase in which they could contribute the phase of validation. The refining of material follows as option, as the second most preferable phase in which students can offer their knowledge. Other options for students' role with a moderate average are the phases of actual development of educational material and the preparation of a course. In the last option (preparation), it was suggested by few educators that students could serve as consultants. Overall, the majority of educators' responses show that SE practitioners are more useful as agent in the first steps of co-creation process (planning, structuring) whereas students are considered more critical

agents in the final phases. From their own side, Spanish participating students agree with educators that their participation in the initial planning phase is not so important; specifically, they indicated their important role during the **validation** process. Likewise, it seems that students value the participation of SE organisations in almost all phases of the co-creation process (structuring, development, refining and validation process).

## Ways to organise the co-creation of material:

The ways to organise a co-creation process that were preferred by the three target groups and noticed the highest rates on average are the following ones: 1) organisation of common discussions with SE organisations, educators and students for the development of business ideas, 2) interactive focus groups on how to better address current skills gaps, 3) co-creation workshops, 4)joint participation in brainstorming activities (this last option was highlighted mostly by students and SE professionals).

# Most necessary skills to be promoted within a co-creation process:

In general, Spanish educators agree that students need to acquire various important skills. In particular, it seems that **soft skills** such as critical thinking, creativity, teamwork etc. as well as skills related to **participatory governance and democracy** are the first options with the same and highest rate, reaching 4,4 on average. The same set of skills were preferred also by SE organisations' representatives, as the options with the highest average score (with 4,4 and 4,6 on average respectively). The communication, networking and community building skills slightly follows as option, with small difference between the two groups. The managerial competences and social impact assessment skills follow as options, with a slightly different score, accounting for 4.2 on average for educators and for 4.3 for SE representatives.

#### Obstacles for the co-creation of material on SE area:

The horizontal problem of the **absence of time** that seems to hinder the co-creation of material between HEIs and SE actors was highlighted as the primary obstacle for educators, accounting for 4,5 on average; for SE actors, it was considered as the second most critical barrier, reaching 3,9 on average. Moreover, the **absence of communication channels** was ranked as the first most crucial obstacle for SE organisations' representatives (with 4,0 on average) and as the second barrier for educators (reaching 3,5 on average). Other important hindrances that may operate as obstacles in the co-creation process are the following ones: inflexibility of academic curricula structure to insert new methods, the lack of motivation from the academic staff (this barrier was rated highly for SE representatives) and the lack of training from the side of academic staff in applying such methods.

#### UK:

#### Role of each group in different co-creation phases.

British educators' preferences for the involvement of SE organisations in different cocreation phases of educational material are in the same line with those of respondents from the preceding countries. In more detail, the participating academic staff from UK strongly supported the contribution of SE organisations both at the beginning and at the final stages of this co-creation. That is to say, the most important phases that SE organisations could contribute to are the **planning** (reaching 4,5 on average), **structuring or development process** (reaching 4,6) and the **refining** process (with 4,4 on average). With regards to the students' role, it was considered critical for the structuring, preparation, and refining process of new material. From their own side, British students expressed a high interest in participating across various phases in the co-creation of educational material. with the phase of **preparation of a course** and the validation - refining phases reaching the highest rate in their preference. Regarding their opinion in SE organisation's contribution, it seems that students rated with the highest score the **refining** process (accounting for 4,6 on average), showing a consensus with educators' view.

Next, from the group of participating SE organisations, a preference in many different stages (planning, structuring/developing and refinement) was observed. However, the option with the highest average is the **refining** and next the **structuring** and **planning** processes. From these results, it is observed that the participants from SE organisations agree with educators for their role during a co-creation process.

## Ways to organise the co-creation of material:

The participating educators from UK strongly supported the use of interactive focus groups, reaching the highest score (4.4). **The joint participation in brainstorming activities** and the co-creation workshops also attracted their attention, accounting for the same average score (4.2). It should be underlined that the previous options and specifically the focus groups and the co-creation workshops were also preferred by British students and SE organisations. The suggested way that marked the highest score among students are the option of co-creation workshops, reaching 4,4 and 3,6 respectively.

# Most necessary skills to be cultivated within a co-creation process:

Educators appear to place greater value on the development of **soft skills** and attribute less importance to managerial and entrepreneurial competencies. Second, the communication and community building skills as also the democratic decision-making culture were also highly rated. In these sets of skills, the opinion of SE representatives converges with that of educators and in both groups their average is over 4.0). One while financial and economic competencies appear to be of the least importance. This slightly contradicts our initial findings from the interviews where equal importance was given to the development of soft and hard skills. Additionally, some British participants emphasised the need to understand the changes in the organisational communication processes or even to help practitioners adapt to power relations and decision making, across formal and informal organisational settings. Others emphasized the need to raise awareness and develop skills that would support the management of pressing **societal challenges** (from climate change to inequalities and how to promote solidarity).

# Obstacles for the co-creation of material on SE area:

From the side of British educators, the institutional constraints and the inflexibility of academic curricula seem to be the key obstacles in the co-creation of knowledge. The absence of communication channels was also scored relatively high by the surveyed educators, as serious obstacle in the co-creation process among SE actors. As for SE representatives, they place as primary barrier the lack of time. This is in line with the findings of semi-structured interviews with SE practitioners (as part of WP3). Those participants had mentioned that the lack of resources (including time) was considered as the main obstacle and concern for extensive participation in the co-creation of materials. There is also a strong belief amongst practitioners that academic curricula structures lack flexibility, as also educators stressed. One participant from SE organisation pointed out that there is a need

for HE institutions to become less hierarchical, being engaged more with the community and integrating a team-based approach to decision making. Furthermore, according to the findings from the interviews as part of D.3.1., the lack of collaboration among SE professionals and academic staff is deemed as another obstacle, due to the lack of formal infrastructure linking SE practitioners with HEIs. The existing connections and collaborations are in fact initiated by individual academics rather than through institutional channels. As such, enhancing and fostering a collaborative environment for the co-creation of educational materials would require the development of more formal infrastructures and the provision of sufficient resources.

The point where educators disagree with the perception of SE actors that the former lack motivation to interact with SE organisations. While on the one hand there seems to be great trust in SE educators' skills and competencies to apply innovative and multi-stakeholder pedagogical approaches, there is a relatively strong assumption by some SE representatives that academics might not be motivated to interact with SE stakeholders. This generates the question that maybe further investigation is needed into the reasons for this perception about academic staff's lack of motivation.

Key messages for sub-section 3.3.2 (co-creation of knowledge):

Role of each group in different co-creation phases (all groups and all countries):

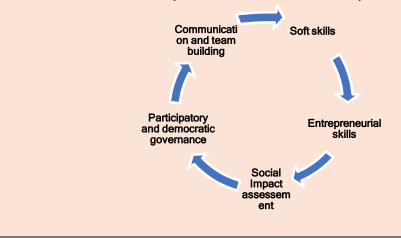
- The involvement and contribution of SE organisations are considered necessary at initial stages, mainly at the planning and development phase of a course. Only in Greece and UK there is a preference for their support in later phases such as the refining process of co-created material.
- Students' role is considered as most significant in the **refining/ validation** phases as also in the preparation of a course.

Most preferred ways for implementing the co-creation of educational material (all groups and all countries):

- Interactive focus groups for addressing current skill gaps
- Co-creation workshops for co-design of educational material
- Brainstorming activities for ideation and collection of ideas
- Organisation of commons discussions among educators, students and SE professionals about how to develop an entrepreneurial idea or on how to start a SE enterprise.

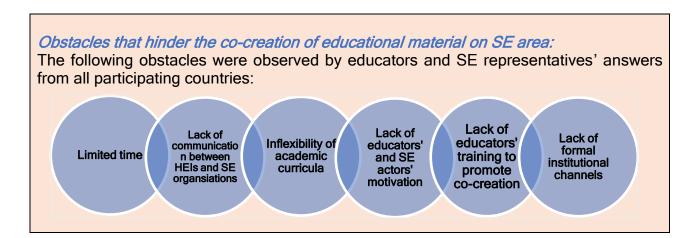
Most necessary set of skills within a co-creation process:

As a whole, both participating educators and SE actors from all countries rated as the most essential skills that could promoted in a co-creation process the following ones:



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# 3.3.3 Findings for the application of co-teaching

#### Greece:

In Greece, the participants focused on a variety of suggested ways for the implementation of co-teaching between SE educators, students, and SE organisations. To begin with Greek educators, they strongly supported as the first two preferable ways the **in-person visits** of students in SE organisations' settings and the invitation of SE representatives as **guest lecturers**. The average of both ways is over 4.5 - that is to say most participants expressed a high agreement for the previous suggestions. The contribution of SE professionals as guests in a class is in the list of the first suggested ways also for SE professionals nd students. The third most innovative way for educators for applying a co-teaching process is the collaboration of multiple SE actors to provide students **with real-life problems** reflect on during classes, having a slight difference in its average (average 4.3) compared to the first two options.

Moving to the Greek students' point of view, the **networking opportunities** to directly interact with SE organisations/professionals is the first most important way for students to experience co-teaching, marking the highest average (4.6). The second most preferred suggestion for this group is to foster students to write essays or blog entries on particular aspects of SE in collaboration with SE professionals and professors. Another suggestion that follows in their preference regards the organisation of debates in class for addressing real SE controversial issues. Also, a high interest was expressed about the role-playing games through which students may understand better how a business operates or to reflect on how they should manage a difficult situation based on SE principles.

Regarding the SE representatives' stance, likewise educators, they believe that **in-person visits of students to SE organisations' settings** is the most useful way to enhance a coteaching approach, accounting for 4.6 (the same average that was observed to educators' opinions). The similarity with educators' opinion continues to the second most preferable option that relates to the invitation of SE professionals as guest lecturers. Next, collaboration between SE professionals and professors to provide students with real-life problems as well as brainstorming meetings between SE professors, students and SE organisations/professionals are considered, being ranked with an average of 4.2 and 4.1 respectively.

#### Italy:

Italian educators seem to believe in co-teaching as a new way to improve practical and experiential learning. In line with the participating Greek educational staff, they rated as the first way for applying co-teaching the participation of SE representatives as **guest lecturers**. This option was rated highly by Italian SE professionals. This opinion is verified also by specific insights from the 'State of the art' report under WP3. In that report, it was supported that in Italy professionals from the SE fields are invited to meet students as 'guest' lecturers and are often encouraged to participate in workshops or to even offer internships to them. The latter choice is promoted as a form of better connection with students, as part of a SE study programme. Next, the suggestion of proposing **real-life case studies** to students is the second most preferable one for educators, reaching 4.1 on average. The same average was observed also in the option of **mentoring programmes**, which was considered a way to facilitate students' career orientation and access to the job market. This option was supported strongly also by students as first option in that group.

Concerning Italian students, they expressed interest for brainstorming meetings or workshops for students and institutional representatives in order to learn more about the SE framework overall. Next, the choice of class debates about SE real societal challenges as well as the simulation games about decision-making in a democratic governance context seem to have the same high average in the students' opinion (both with 4.4). The next most interesting ways for students in a co-teaching process are related to the following: 1) the provision of students with real-life problems to solve during classes, 2) the invitation of SE professionals as "guest lecturers" to offer a more hands-on perspective and 3) the students' networking opportunities with SE organisations. All these options accounted for the same average (4.3). It is worth mentioning that some of the previous initiatives are already used within master programmes in Italy, such as in the Master of Science of the University of Bologna on SE Management. The enrichment of study programmes with case studies and evidence-based methods about current challenges are issues that were highlighted also in the 'Needs analysis' report, under WP3. These findings stress some ways through which an interactive and action-learning process can be applied, beyond the typical teaching methods, as follows:

- Students create their own cooperative / social enterprise at the beginning of the academic programme.
- Students work in partnership with local communities to address community-related challenges. For example, that can do it through a **live project module** where they go through different phases of learning.

Finally, for Italian participants from SE organisations one the most important ways to implement a co-teaching process is the **in-person visits of students** to SE organisations' settings, as the way with the highest average score (4.5).

#### Spain:

Spanish educators paid attention to provision of students with real-life problems during classes, reaching the highest rate (4.6 on average). This option was closely followed by another two suggestions, namely the "in-person visits of students to SE organizations' settings" and the invitation of SE representatives to act as 'guest lecturers' in class, with both

options being rated with 4.5. The latter choice was highlighted also by SE representatives, the most popular answer

With regard to Spanish students, the suggested ways that reached the highest rate relate to the option to offer students **networking opportunities** in order to connect with SE organisations and to **mentoring programmes**, matching students and SE professionals to facilitate job placement/career orientation. These options reached 4,7 and 4.5 (on average) respectively, reaching almost the 'highly agree' rate.

Among SE representatives, a preferable way to realise a co-teaching process is the organisation of **class debates** addressing real SE controversial issues, along with the guidance of SE professionals, reaching 4.2 on average. All remaining options were rated below 4. Lastly, SE representatives seem to be less appealed by options with a more generic character like the organisation of workshops with students and institutional representatives. **UK**:

British educators appear to strongly support, as also most educators from all the previous countries, the presence of SE representatives as guest lecturers. Another way that is seemed to be preferred by educators is the collaboration with SE practitioners in **simulations** and in-class **problem-solving activities**. Encouraging students to offer ideas or even advice to SE organisations was also scored highly, while more traditional essay writing or class debates are also viewed as being of great significance.

From their own side, students showed generally a strong interest in co-teaching/co-learning activities and value greatly the opportunities to implement such initiatives. All different possible ways to implement co-teaching are seen favourably by them. **Guest lecturing**, brainstorming sessions and problem-solving activities related to specific societal issues were ranked at the top of their list, in agreement with SE representatives. Networking opportunities for students by visiting their premises and/or attending their meetings is another effective way, according to British students. This is in line with some findings from the interviews that were conducted as part of WP3. Based on these interviews, both students and SE practitioners emphasized on the need for establishing formal network infrastructures to encourage collaboration between the various SE stakeholders. Regarding the opinion of SE representatives, apart from the wasy that are common with the other two groups it was observed that they also supported the suggestion of **in-person visits** of students to SE organisations.

# Key messages for sub-section 3.3.3 (application of co-teaching):

- In all countries, the engagement of SE practitioners as 'guest and invited lecturers'
  in the context of academic programmes and the in-person visits of students in the
  premises of SE organisations are the two most reported and preferred options for
  almost all target groups.
- In Italy and Spain, the provision of mentoring programmes that could help students in the field of job placement and career orientation was rated highly by educators and students.
- Greek, Italian, and Spanish students expressed their preference for more networking opportunities between them and SE professionals.
- The integration of simulation/ role-playing games was emphasised by many Greek and Italian students as also from some British educators.

- The organisation of brainstorming meetings among educators, students and SE organisations was rated highly by Greek SE representatives and also by Italian and British students.
- The provision of students with real-life issues in class was highlighted by Greek and Italian educators, by Greek SE representatives and by Greek and Italian students.
- The idea of problem-solving activities was emphasised by British educators and students as a good way for applying co-teaching.
- The suggestion of fostering students to write essays or blog entries on particular aspects of SE in collaboration with SE professionals and professors was underlined by Greek students and British educators.

# 3.3.4 Findings for the application of Service Learning in SE curricula

Before proceeding in more detail with the analysis of surveys' results about the SL application in SE academic curricula, it is important to underline that not all questions were addressed to all target groups. For example, the survey included a first question regarding the potentials of SL application that was intended for educators, students, and SE professionals. The second question about the obstacles that hinder the SL application was designed only for educators from the participating countries. As for student's viewpoint, they were asked whether they would be interested in being engaged with a SL activity and about the areas that they consider as most stimulating to offer their services, in collaboration with a SE organisation.

# Potentials of SL application in study programmes Greece:

For Greek educators, it seems that the potentials of SL methodology in SE programmes and academic curricula were really appreciated, given their relatively high average. Among all options, the majority of participants gave emphasis first on the potential of SL to encourage students to apply their knowledge to real cases (e.g., by working on consultancy projects with existing actors of the local economy), reaching the highest average score (4.4). Other potentials that were rated highly by educators regard the holistic educational experience that can be offered to students, accounting for 4.3, as the Figure 24 displays. Apart from their preference on the specific statements offered by the survey, some educators provided their own suggestions about the SL application. According to one respondent, a good idea for implementing SL activities could be to establish more officially internship programmes (either as compulsory or as optional) for students to connect with SSE (Social and Solidarity Economy) organisations, under the guidance of academic staff. This opportunity can offer students extra motivations and benefits (e.g., compensation, insurance, accreditation with extra ECTS in the study programme). Another educator suggested to embed SL activities as a compulsory part of a course or as an option to be implemented in the context of a student's thesis. This idea is highly recommended, as the experience shows that students who have gained a new experience in the context of their fieldwork are usually more facilitated in their learning process. The connection of students with local institutions and cooperatives or the mobility of students for further training (through Erasmus or university programmes) are considered more than essential in order for the SL application to be truly efficient and applicable for learners involved in SE study programmes.

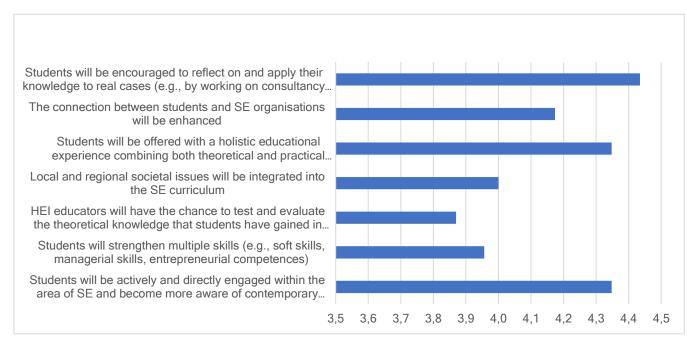


Figure 24. Preference of Greek educators on the SL potentials

Regarding the opinion of Greek SE representatives, they rated as first most important benefits of SL application the following three ones: 1) chance to **train potential job candidates**, 2) the opportunity to shape students' learning and 3) the chance to address local and regional societal issues, with all options accounting for the same average (4,3). The majority of SE professionals expressed a willingness to participate in a SL activity and to be engaged in the co-creation workshops that are the first part of SE Living Labs implementation. As additional feedback from SE organisations, it was supported that it is essential that a SE organisation dedicate sufficient time a student for applying properly a SL project. Additionally, it was also stressed that students should not view their involvement in SL as a 'forced' process. Other opinions from SE professionals pointed out that the link between academic research and labour market is important; in this way there is a two-way relationship between the introduction of know-how and the results of SL application in practice. Through SL, it is possible to interchange empirical learning with volunteering, while the social awareness and empathy of participants towards different social groups' needs are enhanced.

#### Italy:

Italian educators expressed more interest for the potentials of SL application in SE study programmes, comparing to their rating about co-creation and co-teaching. In accordance with the Greek educators, educators from Italy voted as first option the opportunity to **apply their knowledge with real issues**, reaching the highest average of 4.6. Other options for which educators showed a high preference regard the students' chance to become more aware of contemporary community problems and the potential to strengthen students to gain multiple contemporary skills, as depicted in Figure 25. With respect to respondents from SE organisations, it seems that the method of SL is not so well known in Italy among such organisations, as no major difference is observed among the offered options and their rating. Nevertheless, they stood out that through the application of SL SE organisations have the chance to extend their ability to address unmet needs, with a relatively high average (4.0).

The same score was also recorded in another statement that focuses on the potential of SL to address local and regional societal issues, in the context of SE curricula.

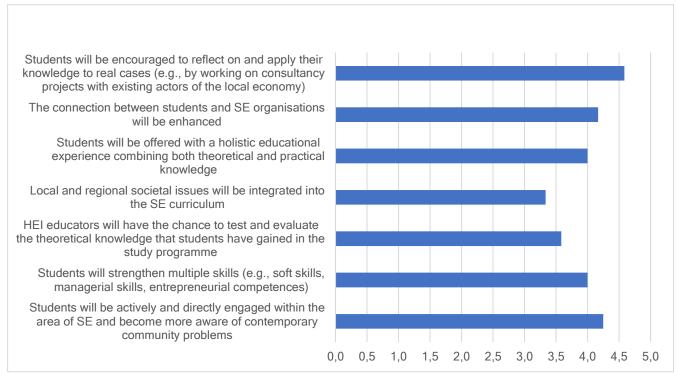


Figure 25. Preference of Italian educators on the SL potentials

In addition, some participants from SE organisations approached the SL as a strategic practical experience. In their opinion, SL is "very useful and at the same time challenging to combine the active learning - centred on the student as a protagonist - with the direct experience on the field. It would be an important quality leap for the world of volunteering, much more focused on the aspect of "service" than "learning". Moreover, the creation of "nurseries" of young people is considered essential in order to generate short-term "advantages" (new intervention models, new forms of governance, new skills, etc.) and to promote organisational changes. Finally, SL is considered useful both in terms of acquiring social skills and of expanding the professional potential for the benefit of trainees and organisations. When it comes to their interest in participating in a SL activity, around 78% of participating SE representatives responded positively and interested in working with students who aspire to learn by offering a service that meets the needs of a SE organisation. Overall, Italian students and SE representatives have shown less interest for the SL application to SE study programmes, comparing to educators. This may be attributed on the one hand to the fact that this methodology is not well-known in the group of SE professionals. On the other hand, it may be attributed to the fact that most students enrolled in SE programmes have already been engaged as volunteers, activists, or employees in SE organisations; as a result, they may not be interested in receiving more this activity from the university. However, SE representatives who are familiar with SL have fully grasped its potential, characterising SL as a 'boost to innovation for SE organisations, within which it is often absent - due to the lack of time and the fear of change of some structures within university".

#### Spain:

#### 6211511-EPP-1-2020-1-ELEPPKA2-KA

Spanish educators participating in the survey showed an overall positive opinion for the opportunities of SL application. What educators from this country found as most appealing with the SL methodology is its potential to **offer a holistic educational experience to students**, by combining theoretical and practical knowledge. This option reached the highest rate (4.3) among all suggested potentials. Next, educators expressed their interest for other three options with the same score (4.2) that relate to the following aspects: students' active engagement within the area of SE and their awareness of contemporary community problems. The above observations show a particular tendency of the educators to value the connection between learning and practice which lies at the core of SL meaning and operation.

Last but not least, SE representatives seem to be amenable to the SL methodology and first drew attention to the choice related to their opportunity to **extend their own capacity to address unmet needs** in SE study programmes, by applying this method, with an average 4.1. After that, SE representatives acknowledged the usefulness of SL methodology in **addressing local and regional societal issues** (reaching 3.9 on average), while they also agree about its importance to motivate students to learn and bring to their organisation new insights, perspectives, and knowledge (accounting for 3.8 on average), as shown in Figure 26:

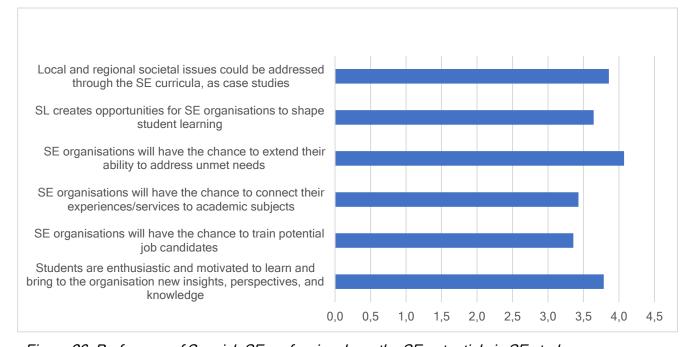


Figure 26. Preference of Spanish SE professionals on the SE potentials in SE study programmes

#### UK:

The application of SL methodology in SE study programmes and the potentials that can be generated through this application gained the respect of British educators. They emphasized on the potential of encouraging the reflection and applicability of students' acquired knowledge to real cases. being offered a holistic educational experience, strengthening multiple skills (soft skills, managerial skills) and helping students appreciate contemporary community-based problems. As one participant stressed: "I think SL can offer real benefits to students and SE organisations...the application of real-world problems and their resolution

from SEs and students as part of their course provide excellent learning opportunities and social value creation...The key is to ensure that the educators have the skills to balance the needs of students and of SEs, and to ensure that the approaches undertaken allow for both top-down and bottom-up value creation.

From their own side, SE representatives appear to strongly value the application of SL methodology. They focused more on its potential in addressing local and regional societal issues, reaching as option the highest rate on average (4.3). Students' enthusiasm and motivation to learn and gain new knowledge and the possibility to create opportunities to shape student learning through SL methodology are the next options score relatively high (3.8) according to Figure 27. As additional feedback for the opportunities of SL application in academic curricula, some educators and SE representatives from UK paid attention also to initiatives for collaborative and co-creative activities, by reflecting on their own experiences. Indicatively, some participants emphasised the use of participatory and DT-inspired programmes across different stages of students' academic period of their studies. Other respondents suggested the use of contemporary issues to develop potential research projects with students, such as the impact of Covid-19 on the voluntary, community and SE sector.

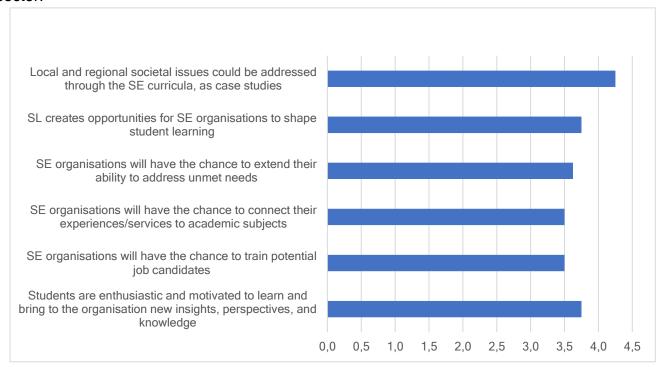


Figure 27. Opinion of British SE professionals on the potentials of SL application in SE study programmes

Finally, the use of team-working activities to build partnerships with SE organisations and the creation of community owned companies were highlighted as good practices. Such practices can be applied by some SE practitioners in close collaboration with university students. The idea on community owned companies serves as a source for inspiration to move beyond the simulation of work-related issues (e.g., modes of governance and decision-making processes) and to let students being involved in real-life issues.

Despite the aforementioned positive opinions and suggestions for the role of SL, on the other side some concerns were raised about SL. In particular, one participant stressed that "SL

and practical experience can be a good thing, but many NGOs and charity organisations, when (re)considered from a more critical perspective, can make social problems worse, not better. We can see this in Enterprise Education, where inequality is exacerbated through well-intentioned but misguided use of competitions as a route to social mobility/social capital. Students must process experiences critically, and evaluate how much organisations genuinely empower communities, or reproduce status quo". It is obvious that a critical approach both to the SE initiatives' impact in society and to the deconstruction of dominant narratives is much needed for generating productive outcomes during the SL application.

#### Existing obstacles of SL application - all educators, all countries

When it comes to obstacles that hinder the application of SL in SE academic programmes, the majority of **Greek educators** drew attention to inadequate resources and to demanding academic schedules, both reaching the score of 4.0 on average. The existence of institutional barriers (e.g., bureaucratic problems) that hinder the collaboration between academic community and SE enterprises is the second impediment towards the SL application, with a lower average (3.7).

From the side of **Italian educators**, the only significant barrier that impedes the SL implementation in SE programmes regards the demanding academic schedules that does not often leave extra free time to students for being engaged in SL activities, rated with 3,8 on average.

**Spanish educators** agree with Greek and Italian educators about the demanding academic schedules that cannot offer flexibility (mainly in terms of timing) to students and educators to perform SL activities, reaching 3,9 on average. In addition, some educators provided further ideas about the implementation of innovative learning methods that could be implemented in SE study programmes. In particular, special emphasis was given on the importance of valid student evaluation and tools that could be useful for their reflection before or after the SL application, as part of their study programmes.

Finally, **British educators** paid attention firstly to the lack of resources and to existent institutional barriers as primary impediments for the collaboration between HEIs and SE organisations, in line with the Greek. In addition, they agreed the educators of all previous countries about the demanding academic schedules as core hindrance in the application of SL in HEA.

#### Students and their engagement in SL activities

#### Greek students:

The vast majority of Greek students seem to value the SL methodology and are willing to be more directly involved in a SE organisation through a SL experience. More specifically, it is believed that the active involvement of a student in such an activity is a valuable opportunity to acquire practical knowledge, a potential that the traditional academic courses cannot always offer sufficiently. Through volunteer service, as part of a SL activity, a valuable cycle of learning and reflection on the social aspect of SE area - which cannot be fully covered by a simple internship - can be realised in practice. A variety of useful suggestions were provided by students regarding the kind of organization in which they would be interested to be placed for a future SL activity. Indicative examples include students' involvement in a cooperative (social, agricultural, etc.) or in a social enterprise, by contributing as much as possible in all stages of a business operation. One participant expressed their interest in

being engaged in a rural cooperative that can promote the women' rights in the SE field. As SE area and its principles are often unexplored comparing to mainstream thinking and the culture around which the economy is formed, such kind of engagement in community services indicates the need to offer students new pathways around the SE philosophy and the way it operates. Concerning the area of activities in which they are interested in offering their service, a diversity of essential areas around the SE area or related fields is observed. Some students mentioned that they would like to contribute to activities related to environmental issues and sustainable development, others prefer the area of migration and disadvantaged groups while some drew attention in the area of human rights and women empowerment in society in line with SE principles.

#### Italian students:

For Italian students, it is partially believed that SL can support the acquisition of practical learning as a way that can navigate them more easily to the job market. Almost all SE students expressed their willingness to do their placement in a SE organisation (such an NGO, cooperative and social cooperative, social enterprise). This means that they have coherent objectives with the current SE study programmes. With regards to the question that relates to the SL application to SE study programmes, students seem to be interested in being actively engaged within the SE area and become more aware of contemporary community problems. Also, the majority of students agree on the SL potential to enhance them with multiple skills and to integrate local and regional societal issues into the SE curricula. Moreover, most of the students enrolled in SE programmes already been volunteers and activists or employees in SE organisations; therefore, they are not interested to a big extent in experiencing such an activity from the university.

#### Spanish students:

Regarding Spanish students, their vast majority expressed a keen interest in participating in SL activities since they value the opportunity to translate the theoretical knowledge into real action and problem-solving activities. Most students are willing to cooperate closely with a SE organisation in a series of diverse fields such as circular economy, migration, education, etc. Finally, they also pointed out other methods that can be combined with SL such as DT, education through arts, etc.

#### British students:

Students' responses indicate a strong interest in participating in SL activities, as they view such activities as new opportunities for networking, for gaining experience and knowledge on a range of real-life problems and for increasing their awareness about SE specific issues. They seem to be motivated to work with cooperatives, NGOs, and other social enterprises, particularly with activities focused on social and economic impact, from housing and women rights to migration and environmental issues.

#### Key messages for sub-section 3.3.4 (application of SL in SE curricula):

Overall, the majority of participants showed their appreciation for the SL method and the new educational opportunities that can be generated through its application. Despite the existence of scattered examples of SL application in academic curricula, the advantages of this pedagogical approach should not be overlooked. As general observation, it seems that the number of promising, action-learning initiatives remains insufficient. Second, it was highlighted that not all current SL initiatives are always aimed at providing a service to SE actors or a positive social impact with long-term prospects to students.

Below, some key messages are displayed about the application of SL, the most critical barriers for its application and students' view for their potential engagement in SL:

#### Application of SL method in SE curricula:

The SL application in academic curricula is perceived by all participants as: a pathway to help students to apply their knowledge to real cases (highlighted most by Greek, Italian and British educators).

- a holistic educational experience by which students become more aware of contemporary community problems
- a way to offer more hands-on learning opportunities to students
- a means to transform theoretical knowledge into real problem-solving activities
- a way to develop intercultural and soft skills in SE area (social awareness, empathy of participants towards different social groups' needs, etc).
- a path to introduce students more successfully to the working environment and job market
- a means to expand the professional potentials and networking opportunities for the benefit of trainees and organisations
- a way for SE professionals to extend their own capacity to address unmet needs in SE study programmes (highlighted most by Italian and Spanish SE professionals)
- a possibility to interchange empirical learning with volunteering and community service

#### Additional suggestions or requirements for the SL application:

- 1. Enable students participate in internship programs, with extra benefits
- Train students as potential job candidates, by addressing local and regional societal issues
- 3. Ensure that educators have the appropriate training and competence to manage the needs of students and SEs
- 4. Ensure that any SL process can give space both for top-down and bottom-up value creation.

# Barriers for SL application:

According to educators' opinion from all countries, the most critical barriers that hinder the application of SL initiatives in SE academic programmes, are the following:

- 1st core barrier: demanding academic schedules (was highlighted by educator from all countries) that result in insufficient time for students to participate in SL activities
- 2nd core barrier: Lack of adequate resources, e.g., funding, relevant educational material about SL (reached the highest average score in educators from Greece and UK)
- <u>3<sup>rd</sup> core barrier:</u> **Institutional barriers,** e.g., bureaucratic problems (highlighted by British and Greek educators)

#### Areas that students prefer to experience a SL activity:

Students' responses indicate a strong interest in participating in SL activities and are motivated to work with cooperatives, NGOs, and other social enterprises. Their area of interest ranges from housing and women rights to migration and environmental issues, while they focused on the importance of both social and economic impact when addressing local and regional societal issues. Interesting methods that were suggested by Spanish students is the Design Thinking (DT) method or the promotion of art-based education.

# 3.3.5 The role of skills' development for the SE Living Lab participants

The SE Living Labs in practice are oriented towards upgrading knowledge in SE area and promoting people's empowerment with a wide range of **transversal** and **practical** skills. Based on the innovative methodology of SE4Ces educational framework that includes three participatory approaches (co-creation, co-teaching, SL) and on various SE stakeholders' opinions from the project's previous survey findings, there is a strong emphasis on the role of skills to tackle current mismatches between supply and demand in the area of employability and SE education. Such mismatches are also highlighted in the renewed EU Agenda for Higher Education (EC, 2017) as gaps faced by several European HE systems. An indicative example that is displayed therein regards the 'shortage in certain high-skill professions both in terms of qualifications and of the quality of associated skills'. Simultaneously, it is supported that too many students graduate with **poor basic skills** (literacy, numeracy, digital) and **without the range of transversal skills** (problem-solving, communication, etc.) they need for resilience in a changing world (ibid.).

Therefore, it is imperative that formal education and training institutions support learners both with hard and soft or even with life skills; this can offer opportunities to all stakeholders and mainly to students' personal development, social inclusion, active citizenship and employment, as also stressed in the *New Skills Agenda For Europe* (EC, 2016). The acquisition of a mixture of these skills is considered a driver for creativity and innovation. As a response to all these necessities that should be examined in HE curricula, the SE LL framework leverages the experiential possibilities and the testing of co-created educational material to offer new methods that promote the development of skills for young learners and for SE entrepreneurs.

On a final note, the framework proceeds with the definition of specific skills that were identified as the most important ones by the participating SE stakeholders during the surveys as part of the project under WP4. As the previous parts of sub-section 3.3 reveals, there is a preference and insistence both in **entrepreneurial** or social-impact assessment skills but also in **soft** skills (such as communication, critical thinking, team building, democratic governance, etc). The following table presents a concise definition of reported skills that need to be further cultivated in the co-creation and pilot activities of the SE LLs:

Table 6. Most essential skills for SE stakeholders (input form surveys) and meaning

Critical skills/ competences highlighted by surveyed participants	Definition - meaning of identified skill
Soft skills	Also known as non-cognitive skills, soft skills are defined by UNESCO as 'patterns of thought, feelings and behaviours' that are socially determined and can be developed throughout the lifetime to produce value. Soft Skills can comprise personality traits, motivations and attitudes and are vitally important for the employability and adaptability of European citizens. Among the most critical attributes of this category of skills are the

	communication skills, leadership, teamwork, decision-making, creativity, conflict resolution, etc.						
	Source: https://skillsmatch.eu/soft-skills-definitions/						
Entrepreneurial competencies	They include a set of skills and behaviour needed to create, develop, manage, and grow a business venture. It also includes the ability to handle the risks that come with running a business.  Examples of entrepreneurial skills:  Risk-taking abilities  Out-of-the-box thinking and creativity  Problem-solving abilities  Taking initiative  Persistence  Persuasion and social skills  Business management skills  Critical thinking skills  Networking skills  Effective communication skills  Effective communication skills  Source: <a href="https://possibleworks.com/blog/entrepreneurship-">https://possibleworks.com/blog/entrepreneurship-</a>						
Social Impact Assessment (SIA)	SIA as skill is defined as the competence of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions.  Source: <a href="http://www.socialinnovationacademy.eu/project/social-impact-assessment-definition/">http://www.socialinnovationacademy.eu/project/social-impact-assessment-definition/</a>						
Other skills/ competencies suggested mainly by British SE stakeholders	<ul> <li>need to raise awareness and develop skills that would support the management of pressing societal challenges (from climate change to inequalities and how to promote solidarity).</li> <li>understanding of changes in the organisational communication processes or in helping practitioners adapt to power relations and decision making within formal and informal organisational settings.</li> </ul>						

Table 7. Most important skills to be cultivated in pilot activities

List of additional selected skills by the co-creation workshops	Definition of each highlighted skill
Organisational skills	Organisational skills are a set of techniques used by an individual to facilitate the efficiency of future-oriented learning, problem-solving, and task completion.
	Source: <a href="https://link.springer.com/referenceworkentry/10.1007/978-1-4419-1698-3-935">https://link.springer.com/referenceworkentry/10.1007/978-1-4419-1698-3-935</a>
Collaboration skills	They are defined as the <b>interpersonal</b> and <b>intrapersonal</b> qualities and competencies we leverage to collectively solve a problem or make progress toward a common goal.
	Source: <a href="https://blog.webex.com/video-conferencing/collaboration-skills-what-they-are-and-how-to-improve-them/">https://blog.webex.com/video-conferencing/collaboration-skills-what-they-are-and-how-to-improve-them/</a>
Human resource management (HRM)	(HRM) is defined as the practice of 'recruiting, hiring, deploying and managing an organization's employees'. SE students could deepen their knowledge for HRM during their SL experience in order to see how SE organisation works at management and operational level.  Source: <a href="https://www.techtarget.com/searchhrsoftware/definition/human-resource-management-HRM">https://www.techtarget.com/searchhrsoftware/definition/human-resource-management-HRM</a>

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# ANNEX

In this part, the format and content of developed surveys in English are presented for all three target groups. Apart from their development in English, the surveys were translated and launched also in other pilot partners' language (Greek, Italian, Spanish).

## Survey for educators:

General Information

□ UK □ Other

Innovative educational approaches in Social Economy (SE) study programmes Online Survey for SE educators and trainers

<u>Social Economy 4Ces</u><sup>12</sup> is an ongoing Knowledge Alliances project consisting of 9 partners from 5 different European countries - which aims at mobilising Social Economy (SE) educators, students and relevant stakeholders to develop innovative. co-teaching / learning methods for Social Economy study programmes. We are particularly interested in a specific methodology, which is inspired by the <u>Living Labs approach</u>, with the aim to construct our unique Social Economy Living Labs (SELLs).

This is why we invite you, as SE educators and trainers, to share with us your perspectives about relevant innovative educational approaches that could be implemented in SE programmes in your university and other universities/organisations around Europe.

Thank you for your participation and for helping us design innovative, co-teaching/co-learning approaches in the SE area. Your opinion matters!

Estimating survey completion time: 25 minutes

# Job title: \_\_\_\_\_\_ Name of the University: \_\_\_\_\_\_ Type of employment: □ Permanent staff □ Part-time lecturer □ Other (please define) What is your gender? □ Male □ Female □ Prefer not to say In which country do you teach? □ Greece □ Italy□ Spain

If you selected other, please write down the country in which you teach here:

6211511-EPP-1-2020-1-ELEPPKA2-KA

<sup>&</sup>lt;sup>12</sup> This survey is organized under the ERASMUS+ project "Social Economy 4Ces" that aims to create a MSc programme on 'Social Economy and Community Development' by bringing together SE professors/educators, SE students and SE professionals in order to develop innovative teaching and learning methods for Social Economy study programmes.

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In which town/city is your educational institution located?
How many years of teaching experience do you have? Years:
Legal status of the University/ HEI: ☐ Private ☐ Public ☐ Semi-public
In what departments/faculties do you teach? (e.g. Business Studies, Human studies etc.):
Briefly specify the SE subject(s) that you teach in the university:
Previous experience
Do you have any experience on applying co-creative and participatory teaching or learning approaches in the study field of Social Economy? ☐ Yes ☐ No
Do you have direct links with Social Economy organisations or collaborate with them within the educational framework of a SE study programme? $\square$ Yes $\square$ No
If you choose yes to one of the previous questions, please provide details/examples (what the co-creative process or the collaboration focus on, who participates, relevant links or websites, etc.) [max 500 characters, not mandatory]
Co-creation of educational materials in SE study programme
In your opinion, in which phase(s) could SE organisations contribute to the process of co- creating educational materials and how?
(Please rate the following statements on a 1 to 5 scale, where 1 is 'strongly disagree' and 5 is 'strongly agree):
During planning, SE educators should consult SE organizations about the content before
the content development phase
During structuring and developing SE programmes, SE organizations/professionals can be
active contributors to the design of the learning material (e.g, by participating in joint brainstorming sessions etc.)
During validation, SE organizations can assess and validate the educational material
During refining, SE organizations can provide feedback for the final refinement of the educational material
Other (Please specify, max 500 characters):

# In your opinion, in which phase(s) could students contribute to the process of co-creating educational materials?

(Please rate the following statements on a 1 to 5 scale where 1 is 'strongly disagree and 5 is 'strongly agree)

During planning, SE educators could consult students about the content before the content development phase

During structuring and developing, students can be active contributors to the design of the learning material (e.g., by participating in joint brainstorming sessions)

During the preparation of a course, SE students can take part as consultants, sharing and discussing valuable perspectives on learning and teaching

During refining, students can provide feedback to HEIs educators for the final refinement of the educational material

During validation, students can test the educational material

Other (Please specify, max 500 characters):

# Which skills and competences do you think could be further promoted through a cocreation process between the various SE stakeholders?

(Please rate in a 1 to 5 scale, where 1 is 'strongly disagree' and 5 is 'strongly agree', the following sentences)

Democratic decision-making culture and skills to promote participatory governance Managerial competences, such as ability to manage complexity, human resources management, team building

Entrepreneurial competences, such as business planning, project management skills, accounting, fundraising, etc.

Soft skills (e.g., critical thinking, problem solving, creativity, teamwork)

Communication, networking and community-building/trust building skills

Social impact assessment skills

Other type of skills (Please specify, max 500 characters):

# Which of the following obstacles may hinder the co-creation of educational materials on SE area between Higher Education Institution (HEI) educators and SE actors?

(Please rate in a 1 to 5 scale where 1 is 'strongly disagree' and 5 is 'strongly agree' the following sentences)

Academic staff are not motivated to interact with SE stakeholders during the creation of educational materials

SE practitioners/professionals are not motivated to participate in the co-creation of educational materials because they don't see the benefits of the expected results for them Academic staff and SE practitioners/professionals do not have enough time to support effectively the co-development of educational material

The academic curricula structure is not flexible to insert new methods by engaging external actors in the creation of knowledge

SE educators are not sufficiently trained in applying innovative and multistakeholder pedagogical approaches

The absence of communication channels between HEIs and SE organisations does not facilitate a co-creative cooperation among the interested stakeholders

Other (please specify, max 500 characters):

As SE educator, how would you organise the co-creation of educational materials together with SE professionals and students? (Please rate in a 1 to 5 scale, where 1 is 'not useful at all' and 5 is 'very useful')

- Through co-creation workshops, where students, professors and social economy professionals can develop educational material together (e.g. a lesson to deliver);
- Through focus groups facilitated by students on what they would like to learn;
- Through interactive focus groups between SE educators, students and social economy professionals on how they believe SE curricula could better address current skills gaps;
- Through students' team assignments researching the current needs in the social economy field and elaborating a set of lessons accordingly;
- Through joint participation in brainstorming activities with students and SE professionals to encourage their active engagement;
- Through common organisation of academic activities with SE professionals, related to SE knowledge and values (e.g., conference, a journal's creation) within the study programme
- Through discussions with SE organisations, educators and other students for the development of business ideas and plans for starting a social enterprise, as part of a course

development of business lucas and	plans for starting a social enterprise, as p
course	
Other (Please specify):	
I don't know □	

#### Application of co-teaching approaches in SE academic curricula

This section is asking your opinion on co-teaching approaches. The co-teaching process moves beyond the existing traditional models of teaching and learning by using community-centred, cooperative approaches with the active contribution of all SE actors

from both the academic and business/community sector. For instance, SE organisation/enterprise representatives could regularly cooperate with professors in classes as "co-lecturers" and contribute to the wider understanding of a specific subject by providing hands-on experiences.

# In which way could co-teaching/co-learning between SE educators/professors, students and SE organisations be implemented?

(Please rate your level of agreement/ disagreement on a scale from 1 "highly disagree" to 5 "highly agree" with the following suggestions)

Brainstorming meetings between educators, students, and SE organisations/professionals to address societal challenges (such as poverty, immigration);

SE professionals and professors provide students with real-life problems to solve during classes:

In-person visits of students to SE organisations' settings;

SE representatives as "quest lecturers" to give a more hands-on perspective on a particular subject;

Students involved in simulations of decision-making in a democratic governance context with the guidance of SE professionals:

Mentoring programmes connecting students and SE professionals to facilitate job placement and career orientation;

Workshops with students and institutional representatives, such as EU parliament members, public administration, national and international SE networks to learn more about the SE framework overall:

Students offering ideas/advice to SE organizations to address a real problem through special events such as designathons

Students' engagement in writing essays or blog entries on particular aspects of SE in collaboration with SE professionals or professors;

Class debates addressing real social economy controversial issues with the guidance of SE professionals;

impl	emented	(please s	pecify):	J	5 1	•	

Other ways through which you think co-teaching/co-learning approach could be

# Application of Service Learning (SL) in SE educational programmes

Definition of Service Learning (SL):

"SL is considered as a pedagogical tool that offers students opportunities to learn and develop a wide range of skills both in the classroom and in their wider community. By facilitating direct interconnection of students with local organisations, service learning

generates positive impact in society and broadens the learning experience" (Levesque-Bristol et al., 2011).

What makes SL different from the purely experiential learning experience? The purpose of service learning is to orient the learners towards practical environments where the primary motivation is service. Learning takes place in two ways: firstly, during the actual service-learning experience, and secondly, as they reflect upon this experience in following discussions in the class. It also applies a more democratic identity, as it requires students to work together with their teachers in designing educational strategies for the students' own learning. The rationale for service learning is that "students learn best by doing, by serving, and by reflecting on the experience" (Witmer & Anderson, 1994).

This section is asking your opinion about <u>service-learning in SE study programmes</u>. Service-learning is a short placement of students in SE organizations on a voluntary basis. Students join SE organisations for a short period of time and provide services for the benefit of the community. For instance, students may volunteer in a local social cooperative fighting food waste and then, they would reflect upon what happened during this experience and what they have gained through discussions in the class.

What is your opinion on the following statements about the application of Service-Learning methodology in SE study programmes?

(Please rate on a 1 to 5 scale, where 1 is 'strongly disagree' and 5 is 'strongly agree')

Students will be actively and directly engaged within the area of SE and become more aware of contemporary community problems

Students will strengthen multiple skills (e.g., soft skills, managerial skills, entrepreneurial competences)

HEI educators will have the chance to test and evaluate the theoretical knowledge that students have gained in the study programme

Local and regional societal issues will be integrated into the SE curriculum Students will be offered with a holistic educational experience combining both theoretical and practical knowledge

The connection between students and SE organisations will be enhanced Students will be encouraged to reflect on and apply their knowledge to real cases (e.g., by working on consultancy projects with existing actors of the local economy)

Oth	er (please specify):			

To what extent can the following obstacles impede the application of Service Learning in SE academic programmes?

(Please rate the following statements on a 1 to 5 scale, where 1 is 'strongly disagree' and 5 is 'strongly agree') SE educators are not interested and motivated in cooperating with external actors for the application of SL experiences There are institutional barriers (e.g., bureaucratic problems) that hinder the collaboration between academic community and SE enterprises There are not adequate resources (e.g., funding) or appropriate educational material to support the experiential learning through SL placements The limited number of SE organizations in the local economy cannot facilitate the realisation of service-learning activities for SE students; The demanding academic schedules do not give sufficient time to students for performing service learning activities: Other (please specify): Open-ended question: As SE teacher/educator, how would you suggest to implement service-learning within SE study programmes? If you have any suggestions, please provide any relevant practical examples or good practices (including links if possible) you are aware of. (max 500 characters) Conclusion Is there anything else you would like to add on innovative teaching methods that could be implemented in SE study programmes? Please write your answer here:

In the coming months, we will offer workshops to implement some of the activities of cocreation of knowledge and co-teaching; do you wish to be involved?

☐ Yes ☐ No

If yes, please, write your email address here, so we can get in touch with you later: Please write your answer here:

Would you like to be updated on the results of your contribution? Please, leave here your email

address to subscribe to the project's newsletter!

Please write your answer here:

Survey for students:

### Section 1: Introduction

With increasing levels of uncertainty, social inequalities and unemployment, social economy (SE) has proved that it is clearly making a significant contribution to address societal challenges by empowering people to play a vital role in meeting their needs. This has become vital in the aftermath of the 2008 financial crises and, even more so, in the Covid-19 crisis and the post-Covid era.

Educating people in social economy to enable them to take their lives into their own hands is crucial in the uncertain times that lie ahead. Equally important is to start the empowerment process now! This is why we invite you as students or potential students or professionals in social economy to share your experience and ideas with us to develop an educational methodology for you, but, most importantly with you!

<u>Social Economy 4Ces</u><sup>13</sup> is an ongoing Knowledge Alliances project engaging 9 partners from 5 different European countries - which aims at bringing together Social Economy (SE) educators, students and SE organisations in order to develop innovative teaching methods for Social Economy study programmes. We are particularly interested in a specific methodology, which is inspired by the <u>Living Labs approach</u>, with the aim to construct our unique Social Economy Living Labs (SELLs).

This is why we would like to capture your opinion about some innovative educational approaches that could be implemented in social economy programmes in your university and other universities/organisations around Europe. Please, be aware that this survey is asking your opinion about the teaching methods (the way things are taught), rather than about the content (what is taught).

Your role in the co-creation of innovative educational methods in social economy study programmes is vital. You are helping us and many future students/professionals!

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<sup>&</sup>lt;sup>13</sup> This survey is organized under the ERASMUS+ project "Social Economy 4Ces" that aims to create a MSc programme on 'Social Economy and Community Development' by bringing together SE professors/educators, SE students and SE professionals in order to develop innovative teaching and learning methods for Social Economy study programmes. (Grant agreement reference: 6211511-EPP-1-2020-1-ELEPPKA2-KA)

### Section 2: General Information

Programme ty	/pe			
□ Bachelor	☐ Master	☐ Master of Science	e (2 years)	☐ MBA ☐ Executive
master				
☐ Not a stude	ent, but interest	ed in social economy	☐ Other (sp	ecify)
Name of your	University:		· · · · · · · · · · · · · · · · · · ·	
Name of your	study program	ıme:		
In which coun	ntry do you stud	ly?		
☐ Greece ☐	∃ Spain □ Ita	aly □ UK□ Other,	please specify	r:
Gender				
□ Male □	l Female D	☐ Prefer not to say		
Have you eve	er collaborated	or been involved in ar	ny SE initiative	or organization? Please
		on this collaboration (n		_
		<u> </u>		
Section 3: Imp	plementing inne	ovative educational ap	oproaches in so	ocial economy study
programmes				
	•	•	` .	things are taught) that are
•		mme? Please choose	•	
		t very satisfied ☐ Q		-
		al materials in social e		• •
	• • •	pinion on the co-creat		•
. •		•		my professors/educators
create the edu	ucational mater	rial and the curriculum	of the study p	rogramme in collaboration
with social ec	onomy profess	ionals working in the f	ield, as well as	the students themselves.
For instance,	this process co	ould include a worksho	op where profe	ssors, SE students and
representative	es of SE organi	sations discuss the th	ematic focus o	of the following semester of
a SE study pr	ogramme, or, it	could include the pos	ssibility for stud	lents to take part in the
creation of a r	naster program	nme on social econom	ıy.	

In your opinion, in which phase(s) could students contribute to the process of co-creating educational materials?

(Please rate the following statements on a 1 to 5 scale where 1 is 'strongly disagree and 5 is 'strongly agree')

- During planning, SE educators could consult students about the content before the content development phase
- During structuring and developing, students can be active contributors to the design of the learning material (e.g., by participating in joint brainstorming sessions)

6211511-EPP-1-2020-1-ELEPPKA2-KA

- During the preparation of a course, SE students can take part as consultants by sharing and discussing valuable perspectives on learning and teaching
- During refining, students can provide feedback to HEIs educators for the final refinement of the educational material
- During validation, students can test the educational material
- Other (Please specify, max 500 characters):

# In your opinion, in which phase(s) could SE organisations contribute to the process of cocreating educational materials and how?

(Please rate the following statements on a 1 to 5 scale, where 1 is 'strongly disagree' and 5 is 'strongly agree':

- During planning, SE educators should consult SE organizations about the content before the content development phase
- During structuring and developing SE programmes, SE organizations/professionals can be active contributors to the design of the learning material (e.g, by participating in joint brainstorming sessions etc.)
- During validation, SE organizations can assess and validate the educational material
- During refining, SE organizations can provide feedback for the final refinement of the educational material
- Other (Please specify, max 500 characters):

As SE student, how would you help co-create educational materials together with SE professionals and professors/educators? (Please rate on a 1 to 5 scale, where 1 is 'Not useful at all' and 5 is 'very useful')

- Co-creation workshops, where students, professors and social economy professionals can develop educational material together (e.g. a lesson to deliver);
- Focus groups facilitated by students on what they would like to learn;
- Interactive focus groups between SE educators, students and SE professionals on how they believe SE curricula could better address current skills' gaps;
- Students' team assignments researching the current needs in the social economy field and elaborating a set of lessons accordingly;
- Joint participation in brainstorming activities with educators and SE professionals to encourage active engagement;
- Discussions with SE organisations, educators and other students for the development of business ideas and plans for starting a social enterprise, as part of a course;

<ul> <li>Other (Please specify, max 500 characte</li> </ul>	rs):

# 3.2 Co-teaching in SE study programmes

This section is asking your opinion on co-teaching in SE study programmes. Co-teaching means that professors/educators in social economy are delivering classes or activities together with SE professionals while students are playing an active role. For instance, SE organizations/professionals could regularly cooperate with professors during lessons as "co- lecturers" and contribute to the wider understanding of a specific subject by providing examples and hands-on experiences.

In which way could co-teaching/co-learning between SE educators/professors, students and SE organisations be implemented? Please rate your level of agreement/ disagreement on a scale from 1 "strongly disagree" to 5 "strongly agree" with the following statements:

- Brainstorming meetings between SE professors, students and SE organisations/professionals to discuss how SE addresses societal challenges (such as poverty, immigration).
- SE professionals and professors provide students with real-life problems to solve during classes.
- SE professionals invited as "guest lecturers" to give a more hands-on perspective on a particular subject.
- A mentoring programme matching students and SE professionals to facilitate job placement / career orientation.
- Workshops with students and institutional representatives, such as EU parliament members, public administration, national and / or international SE networks to learn more about the SE framework overall.
- Students offering ideas/advice to SE organization to address a real problem through special events such as <u>designathons</u>
- Students involved in simulations of decision-making in a democratic governance context with the guidance of SE professionals.
- To offer students opportunities to network with other SE organisations/professionals by, for instance, visiting their premises and/or attending their meetings.
- Students to write essays or blog entries on particular aspects of SE in collaboration with SE professionals or professors.
- Debates organised in class addressing real social economy controversial issues with the guidance of SE professionals.
- Other ways in which you think co-teaching / co-learning could be implemented (Please specify, max 500 characters):

# 3.3. Application of Service-Learning approach in SE academic curricula

This section is asking your opinion about service-learning in SE study programmes. Service-learning is a short placement of students in SE organizations on a voluntary basis. Students join SE organisations for a short period of time and provide services for the benefit of the community through the specific SE organisation. For instance, students may volunteer in a local social cooperative fighting food waste and then, they would reflect during discussions in the class upon what happened during this experience and what they have gained.

What is your opinion on the following statements about the application of Service-Learning methodology in SE study programmes?

(Please rate on a 1 to 5 scale, where 1 is 'strongly disagree' and 5 is 'strongly agree')

- Students will be actively and directly engaged within the area of SE and become more aware of contemporary community problems
- Students will strengthen multiple skills (e.g., soft skills, managerial skills, entrepreneurial competences)
- HEI educators will have the chance to practically test and evaluate the students' theoretical knowledge gained in the study program
- Local and regional societal issues will be integrated into the SE curriculum
- The connection between students and SE organisations will be enhanced
- Students will be encouraged to reflect on and apply their knowledge to real cases (e.g., by working on consultancy projects with existing actors of the local economy)

Other (please specify, max 500 characters):			
Open-ended question:			
Would you participate in a Service Learning activity? Please specify why. (max. 500 characters)			
In which kind of organization would you like to be placed (e.g. NGO, social enterprise, cooperative enterprise, networking organization, other)? Please specify why. (max. 500 characters)			

In which area of activities would you like to offer your service (e.g. migration, disability, women rights, etc.)? Please specify why. (max. 500 characters)

ection 4: Conclusion
there anything else you would like to add on innovative teaching methods that could be plemented in your study programmes and similar others? (max. 500 characters)
the coming months, we will offer workshops to implement some of the activities of coeation of knowledge and co-teaching; do you wish to be involved?  Yes □ No
yes, please, write your email address here, so we can get in touch with you later
ould you like to be updated on the results of your contribution? Please, leave here your
dress to subscribe to the project's newsletter!
ease write your answer here:
dress to subscribe to the project's newsletter!

# Survey for SE organisations:

### Introduction

<u>Social Economy 4Ces</u><sup>14</sup> is an ongoing Knowledge Alliances project engaging 9 partners from 5 different European countries - which aims at mobilising Social Economy (SE) educators, students and relevant stakeholders in order to develop innovative teaching methods for Social Economy study programmes. We are particularly interested in a specific methodology, which is inspired by the <u>Living Labs approach</u>, with the aim to construct our unique Social Economy Living Labs (SELLs).

<sup>&</sup>lt;sup>14</sup> This survey is organized under the ERASMUS+ project "Social Economy 4Ces" that aims to create a MSc programme on 'Social Economy and Community Development' by bringing together SE professors/educators, SE students and SE professionals in order to develop innovative teaching and learning methods for Social Economy study programmes.

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This is why we invite you as SE organisations/professionals to share with us your perspectives, your experience and ideas about what an education programme needs to have and how innovative educational approaches could be co-crated and co-designed. Thank you for your participation and for helping us design innovative, co-teaching/co-

Thank you for your participation and for helping us design innovative, co-teaching/co-learning approaches in the SE area. Your opinion matters!

Estimating survey completion time: 20 minutes

General Information
Job title:
Name of the Organisation:
Type of organisation [check all that apply]:
Association • Foundation • Cooperative • Social Enterprise • Mutual
Other (please define)
Country of your organisation:
- Greece - Italy - Spain
•UK •Other
Previous experience
Do you have any experience in applying co-creative and participatory teaching or learning
approaches in the study field of Social Economy? ☐ Yes☐ No
Do you have direct links with SE study programmes or collaborate with educational
institutions in the field of Social Economy? ☐ Yes ☐ No
If you said yes to one of the previous questions, please provide details/examples (what the
co-creative process or the collaboration focus on, who participates, relevant links or
websites, etc.) [max 500 characters, not mandatory]

### Co-creation of knowledge and of educational material

This section is asking your opinion on the co-creation of knowledge in SE study programmes. Co-creation of knowledge means that SE organisations contribute to the creation of educational resources of a study programme. organisations discuss the thematic focus of the following semester of a SE study programme.

In your opinion, in which phase(s) could SE organisations contribute to the process of cocreating educational materials and how?

(Please rate the following statements on a 1 to 5 scale, where 1 is 'strongly disagree' and 5 is 'strongly agree):

- During planning, SE educators should consult SE organisations about the content before the content development phase
- During structuring and developing SE programmes, SE organisations/professionals can be active contributors to the design of the learning material (e.g, by participating in joint brainstorming sessions etc.)

6211511-EPP-1-2020-1-ELEPPKA2-KA

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- During validation, SE organizations can assess and validate the educational material
- During refining, SE organisations can provide feedback for the final refinement of the educational material
- Other (Please specify, max 500 characters):

Other (Fiedde Specify, Max 500 Characters).	
	Which

competences and skills do you think could be further promoted within a co-creation process between various stakeholders of the SE area?

(Please rate in a 1 to 5 scale, where 1 is 'strongly disagree' and 5 is 'strongly agree', the following sentences)

- Democratic decision-making culture and skills to promote participatory governance
- Managerial competences, such as ability to manage complexity, human resources management, team building
- Entrepreneurial competences, such as business planning, project management skills, accounting, fundraising, competences to create and manage hybrid organisations, etc.
- Financial/Economic competences
- Soft skills (e.g., critical thinking, problem solving, creativity, teamwork)
- Communication, networking and community building/trust building skills
- Social impact assessment skills
- Other type of skills (Please specify, max 500 characters):

Which of the following obstacles do you think may hinder the co-creation of knowledge on SE between Higher Education Institutions (HEI) educators and SE actors?

(Please rate in a 1 to 5 scale where 1 is 'strongly disagree' and 5 is 'strongly agree' the following sentences)

- Academic staff are not motivated to interact with SE stakeholders during the creation of educational materials
- SE practitioners/professionals are not motivated to participate in the co-creation of educational materials because they don't see the benefits of the expected results for them
- Lack of time in supporting effectively the co-development of educational material both from academic staff and SE organisations' human resources perspective
- The academic curricula structure is not flexible to insert new methods engaging external actors in the creation of knowledge
- SE educators are not sufficiently trained in applying innovative and multistakeholder pedagogical approaches

•	The absence of communication channels between HEIs and SE organisations does
	not facilitate a co-creative cooperation among the interested stakeholders
•	Other (please specify, max 500 characters):

c in c. (product opening, man oct circulations).

As SE organisation, how would you organise the co-creation of educational materials together with SE professors and students? (*Please rate on a 1 to 5 scale, where 1 is 'Not useful at all' and 5 is 'very useful'*)

- Through co-creation workshops, where students, professors and social economy professionals can develop educational material together (e.g. a lesson to deliver);
- Through focus groups facilitated by students on what they would like to learn;
- Through interactive focus groups between SE educators, students and social economy professionals on how they believe SE curricula could better address current skills gaps;
- Through students' team assignments researching the current needs of the social economy field and elaborating a set of lessons accordingly;
- Through joint participation in brainstorming activities with students and SE professionals to encourage a feedback culture
- Through common organisation of academic activities with SE professionals, related to SE knowledge and values (e.g., conference, a journal's creation) within the study programme
- Through common discussions with SE organisations and students for the development of business ideas and plans for starting a social enterprise, as part of a course

Other (Please, specify):		

## Application of co-teaching approaches in SE academic curricula

This section is asking your opinion on co-teaching approaches. The co-teaching process moves beyond the existing traditional models of teaching and learning by using community-centred, cooperative approaches with the active contribution of all SE actors from both the academic and business/community sector. For instance, SE organisation/enterprise representatives could regularly cooperate with professors in classes as "co-lecturers" and contribute to the wider understanding of a specific subject by providing hands-on experiences.

In which ways could co-teaching/co-learning between SE educators and SE organisations be implemented?

(Please rate your level of agreement/ disagreement on a scale from 1 "highly disagree" to 5 "highly agree" with the following suggestions)

- Brainstorming meetings between SE professors, students and SE organisations/professionals to discuss how SE addresses societal challenges (e.g. integration of vulnerable groups, building resilient ecosystems, etc.);
- SE professionals and professors provide students with real-life problems to solve during classes.
- In-person visits of students to SE organisations' settings;
- SE professionals as "guest lecturers" to give a more hands-on perspective on a particular subject.
- Students involvement in simulations of decision-making in a democratic governance context with the guidance of SE professionals;
- Mentoring programmes connecting students and SE professionals to facilitate job placement and career orientation;
- Workshops with students and institutional representatives, such as EU parliament members, public administration, national and international SE networks to learn more about the SE framework overall;
- Students offering ideas/advice to SE organizations to address a real problem through special events such as designathons
- Students engagement in writing essays or blog entries on particular aspects of SE in collaboration with SE professionals or professors;
- Class debates addressing real social economy controversial issues with the guidance of SE professionals;

•	Other ways through which you think a co-teaching approach could be implemented? (Please specify, max 500 characters):		

# Application of Service Learning (SL) SE educational programmes

This section is asking your opinion about the application of Service Learning in SE educational programmes. Service Learning is a short placement of students in SE organisations on a voluntary basis. Students join SE organisations for a short period of time and provide services for the benefit of the community. For instance, students may volunteer in a local social cooperative fighting food waste and then, they would reflect upon what happened in this experience and what they have gained during discussions in the class.

What is your opinion on the following statements about the application of Service Learning methodology in SE study programmes?

(Please rate your level of agreement/ disagreement on a scale from 1 "highly disagree" to 5 "highly agree" with the following suggestions)

- Students are enthusiastic and motivated to learn and bring to the organisation new insights, perspectives, and knowledge
- SE organisations will have the chance to train potential job candidates

6211511-EPP-1-2020-1-ELEPPKA2-KA

- SE organisations will have the chance to connect their experiences/services to academic subjects
- SE organisations will have the chance to extend their ability to address unmet needs
- SL creates opportunities for SE organisations to shape student learning
- Local and regional societal issues could be addressed through the SE curricula, as case studies

odoo otaaloo	
Other (Please specify, max 500 characters):	
Conclusions Is there anything else you would like to add on innovative teaching methods that coul implemented in SE study programmes? [not mandatory, up to 500 characters]	d be
	_
In the coming months, we will offer workshops to implement some of the activities of creation of knowledge and co-teaching; do you wish to be involved?  ☐ Yes ☐ No	co-
If yes, please, write your email address here, so we can get in touch with you later:	

Would you like to be updated on the results of your contribution? Please, leave here your email address to subscribe to the project's newsletter!

# Stay in touch. Scan the QR!





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