



Civic engagement of HEI students in the co-creation of a Pan-European mapping app for socially inclusive HEI institutions and accessible European cities

PROJECT RESULT 1

MAP4ACCESSIBILITY SERVICE-LEARNING AND COMMUNITY MAPPING METHODOLOGY

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1. INTRODUCTION

The aim of Map4Accessibility is to foster Higher Educational Institution (HEI) service-learning (SL) through the implementation of various activities for community accessibility mapping for the improvement of the physical and digital accessibility of HEI institutions and cities. To achieve its purpose, the Map4Accessibility project targets multiple profiles including higher education students, higher education staff, people with disabilities, the elderly and residents in the areas being mapped. The project adopts a co-design process involving all stakeholders in all parts of the process from issues identification and understanding to the mapping accessibility solution generation.

This Project Result 1 (PR1) “Map4Accessibility Service-Learning and Community Mapping Methodology” aims at providing:

- the SL pedagogical approach to be applied within the project and in HEIs.
- An overview and application of community mapping practices with a specific emphasis on exploratory and urban walks as co-design field observation methods.
- The gaps in current accessibility mapping tools, needs and requirements as regards both physical and digital accessibility.
- A facilitation guide on how to apply the methodology (enable future replicability of the PR), “How to” for participants in the walks, short DIY for potential volunteers on how to organise their exploratory preliminary to detailed urban mapping walks.

To develop PR1, Map4Accessibility went through the following four tasks:

T1.1: Benchmarking: Service-Learning Practices and Accessibility Mapping (Leader UNITUS)

T1.2: Partners’ internal feedback: Analysis of needs and requirements (Leader UNITUS)

T1.3: Multi-stakeholder external feedback (Leader ARFIE)

T3.1: Exploratory Walks and Participatory Community HEI Student Training (Leader UNITUS)

Thus, based on the benchmarking (T1.1), the end user multi-stakeholder requirements (T1.2, T1.3) and the exploratory walk method (T3.1) all information were gathered, analysed and compiled to feed the PR1.

The PR1 methodology presents three sections that correspond to the three main topics as follows:

SECTION 2: The Digital Accessibility Mapping

By Prof. Andrea Zingoni, Dr. Sediola Ruko, Dr. Federico Camporese and Dr. Raffaele Pelorosso

SECTION 3: The Service-Learning

By Prof. Luisa Carbone, Prof. Tony Urbani, Dr. Miriam Noto, Dr. Luca Lucchetti, Dr. Federico Camporese and Dr. Raffaele Pelorosso.

SECTION 4: The Exploratory Walks

By Dr. Raffaele Pelorosso

All the partners (see Appendix B) contributed to the different section participating to the surveys’ development and compilation. Moreover, exploratory walks reports compiled by UNICT, SWU, AS and

ESCP have fed section 4. Finally, the document was approved by all consortium partners before publication.

PR1 is freely available on the website (<https://map4accessibility.eu/>). To cite this work please refer to:

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2. THE DIGITAL ACCESSIBILITY MAPPING

In this initial phase of the Map4Accessibility project, the efforts have been made to provide an overview and benchmarking of accessibility mapping projects/publications to develop a Progressive Web App (Project Result 3). This App aim at supporting disabled people with free accessibility information at a city level worldwide.

During the project preparation phase, partners have already identified inclusive accessibility mapping projects across Europe, including + Acesso Para Todos (Portugal), the developers of which Associação Salvador are also partners in the Map4Accessibility; Mapeirons, Latvia designed by Apeirons with which the project partners SWU and EP have been collaborating in EU funded projects; French app Jaccede, Wheelmap, Handimapp and other StreetMap accessibility projects. Thus, the main aim of the activity is to make an overview and select the best possible approach for a mapping tool by building on and expanding upon what is already available.

To do this, UNITUS and ARFIE developed two questionnaires and a focus group was organized by ARFIE (section 2.1). Additionally, a systematic review of publications and projects was carried out by UNITUS (section 2.2). Finally, some suggestions for Map4Accessibility App contents and features are reported (section 2.3).

The idea of accessibility refers to the possibility to access a place, an urban area for all and in all its aspects: places, buildings, shopping areas, public transports. Accessibility refers to how a place is inclusive, allowing people to reach every place they want to get with not need of support by a caregiver. Achieving urban accessibility equals to having accessible paths, roads, allays, parks etc. by all means (e.g. ramps, pathways for the blind with tactile markings, traffic lights with sound marking, special equipment to light during the night on roads with STOP signposts). In general, to define something as accessible in the city it must be easy-to-use or possible-to-use from all the citizens of the community without excluding anyone - regardless of disability, age, sex, ethnicity etc.

*So, **digital accessibility mapping** can be defined as methods that consist of preparing digital maps containing useful spatial information to increase accessibility in urban contexts.*

2.1. THE QUESTIONNAIRES AND THE FOCUS GROUP

Two digital questionnaires were elaborated in Google module by UNITUS and ARFIE, respectively. To optimize the activities, we chose to investigate both Service-Learning (SL) and Digital Mapping (DM) topics. Only DM issue will be presented in this section 2 while the SL results will be exposed in the following section 3.

A first comprehensive questionnaire has been elaborated by UNITUS to cover Task 1.1. and 1.2. This questionnaire was disseminated by each consortium partner into their internal network to gather information on state of the art of awareness about SL and DM issues. The questionnaire is thus hereafter named internal feedback questionnaire (section 2.1.1.)

ARFIE, as Task 1.3 leader, elaborated a second questionnaire to gather external multi-stakeholder feedback on SL and DM topics. This second investigation sheet is then hereafter named external feedback questionnaire (section 2.1.2.). Furthermore, a focus group was organized by ARFIE in Luxembourg to draw the attention on the topics of digital mapping and accessibility (section 2.1.3).

2.1.1. INTERNAL FEEDBACK QUESTIONNAIRE

The questionnaire was designed to receive the quickest and largest possible information by involved people. The nine questions included in the google module¹ were:

1. What is your definition of Service-Learning? Please provide a short description and then add your most important scientific references about it.
2. Please state the elements of Service-Learning, then mention which are the most essential components. Write your most important project about it.
3. What is your definition of Digital Mapping? Please provide a short description and then add your most important scientific references about it.
4. Please mention and briefly describe some projects aimed at improving accessibility via digital mapping.
5. Do you know any companies, public bodies or research groups involved and investing in accessibility relying on digital mapping? Please mention and briefly describe their activities.
6. Please evaluate your skill level in digital mapping techniques in a scale from 1 to 10. Explain which techniques you master, then evaluate your skill in using in these in a scale from 1 to 10.
7. What are your ideas about applications of digital mapping to improve accessibility?
8. What could be your contribution(s) in terms of digital mapping applications that you can give to the project Map4Accessibility?
9. What distinguishes Service-Learning from other forms of Experiential Education?

A brief summary of the investigated topics is reported in figure 2.1.

¹ <https://docs.google.com/forms/d/e/1FAIpQLSfDD3m6y5tEKtT6v-MA4own6DCK4zZlZWibe9qgS9i08dkBZA/viewform>



Figure 2.1. Overview of items in the internal feedback questionnaire.

Respondents related to each Map4Accessibility partner were: 6 for SWU, 5 for UNITUS, UNICT and EP, 3 for ARFIE and AS, 1 for ESCP. A total of 28 respondents were correctly registered until 20 April 2022, deadline for these tasks.

The quantitative analysis of the Map4Accessibility internal questionnaire, shows the following results (see also table 2.1): number of participants (28), number of people who answered all questions (15), number of people who answered individual questions, number of people who answered in English (27), number of people who answered in Italian (1).

For the qualitative analysis of the answers to the nine questions, the following parameters were taken into consideration: written argued answers (affirmative and negative); synthetic answers (affirmative and negative); affirmative answers; negative answers; only numeric answers; no answers. See Figure 2.2 for a summary of the responses.

Table 2.1. Participants quantitative approach to the questionnaire.

Number of questions:	9
Number of participants in the questionnaire:	28*
Number of people who answered all questions:	15/28
Number of people who answered question no. 1	28/28
Number of people who answered question no. 2	27/28
Number of people who answered question no. 3	26/28
Number of people who answered question no. 4	21/28
Number of people who answered question no. 5	25/28
Number of people who answered question no. 6	25/28
Number of people who answered question no. 7	26/28
Number of people who answered question no. 8	20/28
Number of people who answered question no. 9	24/28
Number of people who answered in English	27/28
Number of people who answered in Italian	1/28

* One person answered the questionnaire twice, so only the answers given the first time were considered.

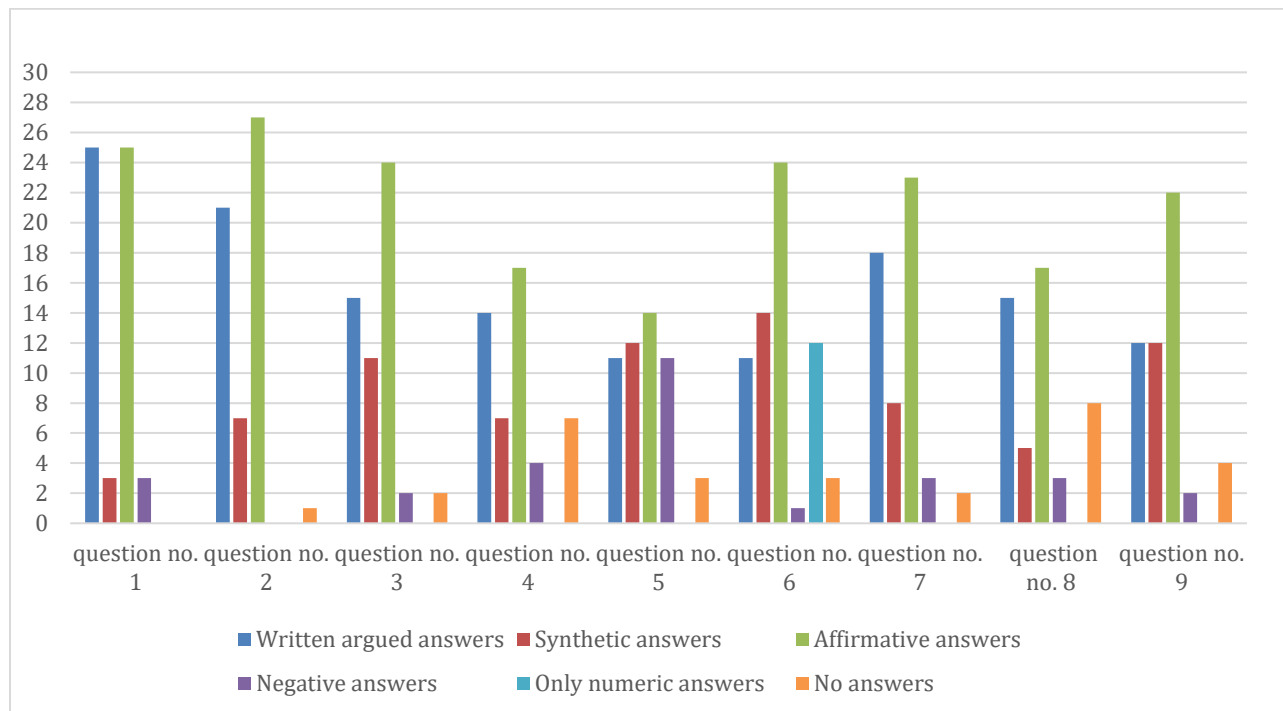


Fig. 2.1. Type of answer for each question

Analysis of responses on Digital Mapping

Beginning from question no. 3, whose topic is about the knowledge of what DM is, the answers are distributed like in Fig. 2.3. Namely, 22% of them do not give a definition or do not know about DM. It is a high percentage considering that these people work on projects addressing the mentioned topics, though some participants have more pedagogical expertise (like SL) rather than knowing DM in depth.

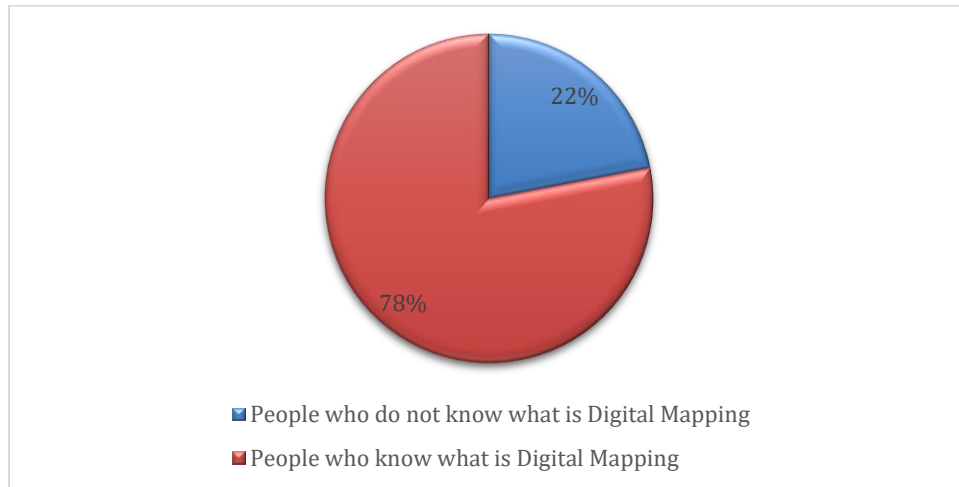


Figure 2.3. The percentage of people who know what DM is and those who do not.

Question no. 4 and 5 inquired about the knowledge of projects, companies, public bodies, or research groups involved and investing in accessibility relying on digital mapping. Several respondents from all the countries answered that they know companies which create DM applications. However, only some of them have high skills in DM as confirmed by responses of question no. 6 (see Figure 2.4).

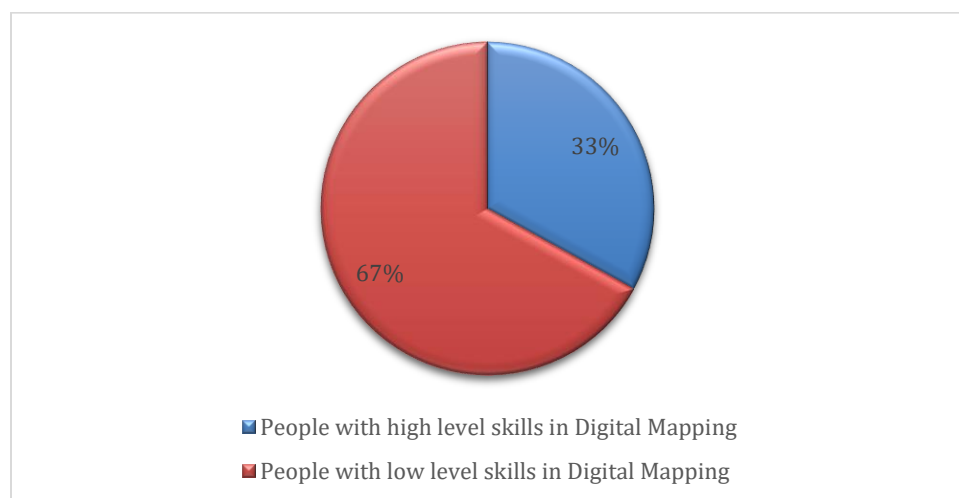


Figure 2.4. The percentage of people with high- and low-level skills in DM

The two last questions (no. 7 and 8) are dedicated on ideas about applications of DM to improve accessibility. Among the answers are using visual components to ensure that people have a more accessible interface and more information about accessible places; mapping social services, sports, and recreational facilities and places; mapping employers providing good opportunities for people with special needs; mapping public areas; constantly updating the provided information; raising awareness of governments and private entities; geo-located databases of accessible locations/services.

2.1.2. EXTERNAL FEEDBACK QUESTIONNAIRE

Task 1.3 aims to collect inputs and feedback from relevant stakeholders outside the consortium regarding accessibility features and existing mapping solutions. In this sense, to gather feedbacks from external stakeholders, ARFIE was in charge of carrying out a European survey on accessibility and mapping tools, as well as of organizing a co-productive focus group with persons with disability, service providers and local authorities.

The google module questionnaire² was composed of 16 questions which intended to approach service-learning, accessibility, and digital mapping.

The questionnaire has been shared with all the members of ARFIE and all the professionals and experts from the ARFIE network, as well as with the National networks of the Map4Accessibility Partners. In general, it was anonymous, yet participants were asked to optionally leave their contact information if they wisht to be informed about the results of the survey and of the next steps of the project implementation.

The questionnaire has been translated in French, Italian and Bulgarian to collect maximum feedback in the involved countries, and beyond.

70 replies from participants have been received from Belgium, Luxembourg, France, Spain, Portugal, Italy, Bulgaria: 42 in English, 21 in Italian, 9 in Bulgarian, 2 in French. This makes it possible to get some relevant feedback from the involved stakeholders.

Analysis of responses on Digital accessibility

The first question focused on the profile of the participants, the majority being divided between workers (35) and students (26), the remaining being divided between retired and tourists. Among the respondents 20% declared to have a permanent or temporary disability or impairment: mobility problems, visual impairment, quadriplegia, arthritis, depression, high anxiety.

We then asked participants what about their definition of “urban accessibility” (question n. 5). The idea of accessibility is quite clear to all respondents. It refers to the possibility to access a place, an urban area for all and in all its aspects: places, buildings, shopping areas, public transports. In the end it refers to how a place is inclusive, allowing people to reach every place they want without the necessity to be assisted by a caregiver. One respondent gave a comprehensive definition that summarise

² https://docs.google.com/forms/d/e/1FAIpQLScI9iLCn9jFAMGuKUjvnnv_FlyqGeguVSpJx0i7KWK7NXUbEBg/viewform

well all replies: “Achieving urban accessibility equals to having accessible paths, roads, allays, parks etc (e.g., ramps, pathways for the blind people with tactile markings, traffic lights with sound marking, special equipment to light during the night on roads with STOP signposts). In general, to define something as accessible in the city it must be easy-to-use or possible-to-use from all the citizens of the community without excluding anyone - regardless of disability, age, sex, ethnicity etc.”.

More than 60% of the respondents are digital map users (Fig. 2.5), and among them the vast majority are not satisfied by the digital mapping systems currently available (the ones they are aware of) in terms of accessibility of the user interface and the information provided.

6. Are you a digital map user?

34 responses

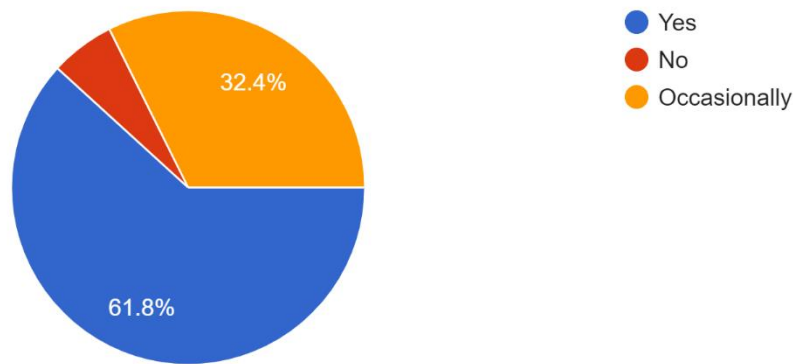


Fig. 2.5. Question n. 6

We then asked (question 7.a) What is missing in the digital maps currently available in terms of accessibility? Below is a summary of received responses:

1. Missing information on accessibility of places and alternative accessible paths;
2. Lack of real time information and updated info on the status of the streets;
3. Lack of information regarding accessible parking areas;
4. Absence of accurate information on accessibility and possible barriers: sometimes a street is generally marked accessible (by the administration) but in reality it has barriers (like a ramp that is too steep). That element has also been pointed out also in the Focus Group where one participant showed a nearby street where people are forced to walk on it (a big traffic street) as a streetlight is placed on a pavement, barely large enough for a single person;
5. Lack of an effective voice over, and when present not always satisfactory;
6. Lack of signs that tell when a place or an entrance is accessible with a wheelchair or a baby buggy.
7. Operative Systems not always user-friendly and often not easy to visualise;
8. Systems often give the fastest route, never the most accessible;

9. Clear and up-to-date navigation instructions via voice-over;
10. Not effective ways for users to provide real-time information.

In question 7.a, respondents are asked if they are aware of any digital mapping system that includes information on accessibility. There was some uncertainty in responses as most of them were negative, underlining some limited features of well-known apps (like Waze that mention parking for persons with disability) or apps operating only in certain areas like CityMapper in Paris or +Accesso in Lisbon.

In question 8 we tried to identify the elements that are mostly appreciated to value the accessibility of an urban area (Fig. 2.6). All the proposed elements were considered relevant for most of the respondents:

- Presence of physical barriers
- Time required to access
- Distance to be covered
- A combination of time and distance
- Availability of direct connection with public transport
- Entrance inside buildings
- Adapted toilets
- Sidewalk

8. How do you usually measure the accessibility to specific urban area (Time, distance, a combination of time and distance)? For each element please indicate the degree of importance: 1 = not at all important; 2 = slightly important; 3 = important; 4 = fairly important; 5 = very important

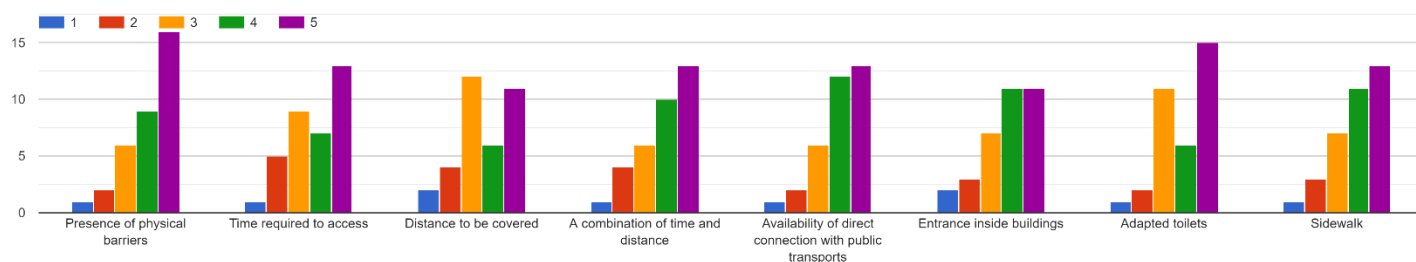


Fig. 2.6. Question 8

We then asked (question 9) What are the main problems and/or constraints experienced when trying to get access to a specific urban area? Responses varied, yet they can be summarized in the presence of physical barriers limiting the access or forcing to find an alternative path, and the absence of information, facilities and services making a place accessible (spacious elevators, adapted toilets, ramps).

The following set of questions focused on what could be done to improve the digital mapping system in terms of accessibility. In question 10 we asked, "What can be done to improve digital mapping in terms of information provided with regard to the urban areas you usually have to access?". Here most respondents agreed on the necessity of a more timely, detailed, and clear information in terms of

presence of barriers, sidewalks, works in progress, but also of offering an alternative path fully accessible (even if longer).

We then asked (question no. 11) about the type of information expected from a digital map in terms of accessible locations. Similarly to the previous question, the answers focused on reliable up-to-date information regarding accessibility of places, presence of elevators, disruption and alternative paths. In questions 12 and 13 we asked how to improve digital mapping in terms of accessible information and user interface. Replies focused on clear and reliable information, with the use of icons and symbols that make the communication clearer even for foreigners. It was outlined that it would have been interesting to have magnification to assist people with visual impairments or in need of clearer images and larger fonts. The desire for a clearer and a more reliable voice over system is another commonly identified element.

The section concluded with a question on estimated improvement in general in the digital mapping system. Apart from what already pointed out in the previous replies, respondents outlined the need for:

- A better real time street-view function;
- The possibility for qualified users to contribute with live updates;
- A more responsive and effective voice-over system;
- The possibility to customize the app so that you can select features that fit your profile;
- More accurate maps with accessibility features;
- The possibility to retrieve both an accessible and fastest path;
- The possibility, for registered profiles only, to receive assistance via a dedicated phone number to be speedily called by, for example, a dedicated button.

In question 15 we asked participants about the most important urban areas to which they wanted to have a better access. Replies emphasized on placed of public interest like hospitals, administrative offices, and schools and universities.

As less relevant, still important, are identified libraries, commercial areas, restaurants, sport facilities, and stadium.

15. Which are the most important urban areas you would like to have a better access to? For each element please indicate the degree of relevance: 1 = not at all relevant; 2 = slightly relevant; 3 = relevant; 4 = fairly relevant; 5 = very relevant

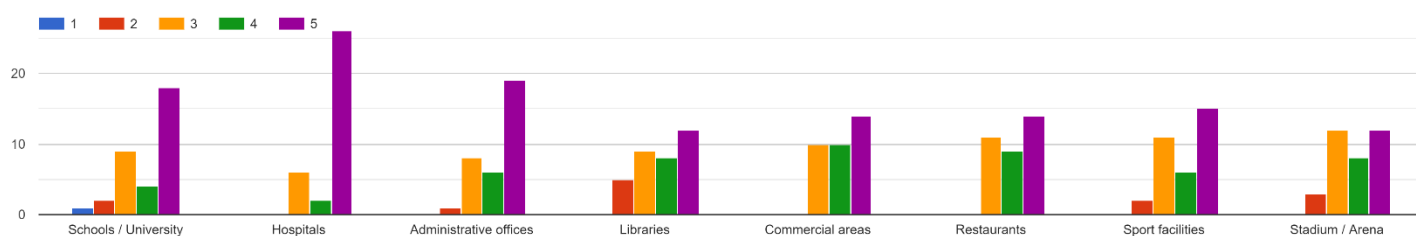


Fig. 2.7. Question 15

The last question was dedicated to collect information on other projects aimed at improving accessibility via digital mapping. The majority of the respondents have showed little knowledge of other initiatives. However, besides the +Acesso para Todos app developed by the project partner Associação Salvador, feedback elaborated on the following list:

- TRIPS Project managed by the European Network for Independent Living (ENIL);
- Kimap-City Project, aimed at enabling users to visualize in detail the maps of available cities and understand which routes have the best accessibility conditions;
- MobidataLab Project, aimed at developing new mobility data sharing solutions

Answers to the question proved particularly useful to identify other consortia and initiatives with which Map4Accessibility could to increase the effectiveness of the action.

2.1.3. FOCUS GROUP

A focus group was organized on 14 July 2022 by ARFIE in Luxembourg with educators and beneficiaries of the Tricentenaire Group³. The Tricentenaire Group is a service provider for people with disability based in Luxembourg with a particular interest in mobility and accessibility issues. Participants included people with disabilities (from mild to highly disabled), educators and service providers. It provided an open forum to discuss the accessibility of urban areas with those most affected by barriers, but also to receive recommendations on how to improve accessibility using digital maps, which display information that best addresses their needs.

A short project introduction and purpose of the study, collecting feedbacks from relevant stakeholders regarding Service-Learning and Digital Mapping, were presented before the actual questionnaire. The discussion focused on 4 main questions:

1. What are the main problems and/or difficulties you encounter in terms of accessibility when trying to access a specific urban area?
2. Are you a user of digital maps? Yes/No (if not, why);
3. Are you satisfied with the digital mapping systems currently available in terms of accessibility (user interface and information provided in relation to the searched places)?;
4. In general, what would you like to see improved in the digital mapping system? What would make a digital map more accessible in terms of content and user interface?

With regards to difficulties encountered, all participants expressed dissatisfaction of the discrepancy between the information available and the reality. Being persons with disability, most of them rely on public transport, the discrepancies between the displayed information in the app, and the real time of arrival makes mobility difficult. Moreover, not all vehicles are wheelchair accessible and this is not known until the transporter arrival. Another problem is that entrances/access are not always fully adapted which is hardly mentioned anywhere. In Luxembourg, however, there is a label that certifies the total accessibility of buildings (e.g., Tricentenaire Bar au Chocolat, is certified).

³ <http://www.tricentenaire.lu/fr>

All participants are users of digital maps and are satisfied with the application used, like Mobilete.lu (which provides integrated information on public transport and mobility), Google Maps for updated information, the Adapto mobility service (a public transport service for citizens with disabilities). They were satisfied by the modern and accessible tram system which is also provided for free in Luxembourg. A participant with a severe physical disability, experiencing difficulties in communicating was really satisfied with the Adapto app that enables him to move to the desired places freely (<https://www.mobiliteit.lu/en/reduced-mobility/adapto/>). Adapto is a specialized mobility service that serves as an individualized public transport service for citizens with an irreversible disability or a physical, mental, sensory, or psychological impairment when this disability results in severely reduced mobility. It is an occasional “door-to-door” transport service on request that sends transport to pick-up clients and drop them off at their destination.

When it comes to features which have been identified as necessary to be included in a new app, all respondents agreed on the possibility to get an accessible path (similar to the fastest route usually proposed), real time reliable information, and a clear and reliable voice-over system to support those who have difficulties with navigating on a small device.

2.2. REVIEW OF THE SCIENTIFIC LITERATURE, STUDIES AND EXISTING APPLICATIONS OF DIGITAL MAPPING

Digital Mapping (DM) is a method that consists in preparing maps, which contain useful spatial information to ease some specific task(s) for the users (Comai et al., 2015).

Nowadays, DM technology is successfully employed in several fields and different sectors as geology (Maerten et al., 2001; Montero S, et al., 2005; Wilson et al., 2006; Whitmeyer et al., 2009; Passchier & Exner 2010; Bemis et al., 2014; Pavlis et al., 2014; Bubniak et al., 2020), engineering (Petrie, 1990; Ahmad, 2011; Cintra & Nero, 2015; Gao & Wang, 2017; Grimaccia et al., 2017; He et al., 2019; Nabil et al., 2021), architecture (Alonso et al., 2017; Jaskot & Graaff, 2017; Yaneva, 2016; Choe & Han, 2019; Liu & Nijhuis, 2020), land surveying (Rahmig & Kluge, 2014; Ibraheem et al., 2015; Meouchea et al., 2016; Tariq et al., 2016;), mining (Mehrijardi et al., 2015; Taghizadeh-Mehrijardi et al., 2016; Wylie et al., 2018; Zhang et al., 2018; Jelihouni et al., 2020; Taghizadeh- Maxwell et al., 2020), agriculture (Dong et al., 2018; Owens et al., 2020; Zeraatpisheh et al., 2020; Suleymanov et al., 2021; Žižala et al., 2022), forestry (Bernard & Prisley, 2005; Žihlavič et al., 2007; Horst-Heinen et al., 2021), tourism (Eboy, 2017; Fusté-Forné, 2019; Guilarte et al., 2019; Soliman et al., 2021; Stankov & Gretzel, 2021; Valls & Roca, 2021;), environmental (Ebert, 2015; Lamichhane et al., 2019; Tajik et al., 2019; Chen et al., 2022;), sport (Hayduk III & Walker, 2018; Cornax-Martín et al., 2020; Nilssen & Tjønndal, 2021; Varriale et al., 2022), archaeology (Meredith-Williams et al., 2014; Lambers, 2017; Štular et al., 2021; Trepal et al., 2021) and many others.

This section presents an extensive review of applications and projects facing accessibility issue and supporting people with disabilities.

The papers were searched on different online databases for peer-reviewed journals and scientific documents (i.e. Google Scholar, Research Gate, Scopus), and existing projects and initiatives from Google Search engine. The final sample of documents consisted in over 100 articles, 31 projects and initiatives (including applications, case studies, and tools), and 106 research proposals.

The review showed that 10% of the articles or projects aimed at using DM to help the visually impaired; 74% of them aimed at helping people with mobile and physical disability; 16% aimed at both as shown in Fig. 2.8.

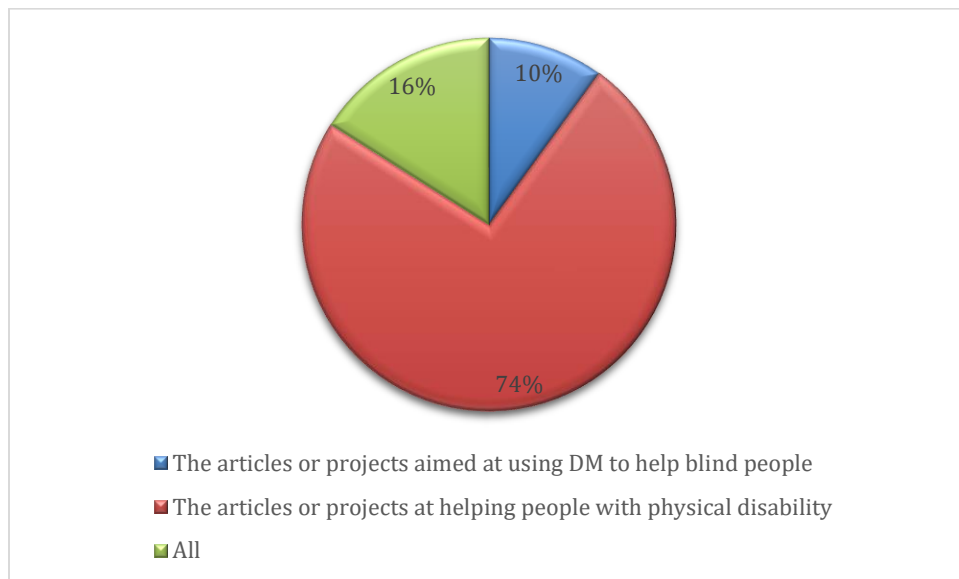


Figure 2.8. Targeted disabilities of the analysed papers and projects

DM employs different types of technologies that can be categorized in three main class: GIS-based technologies (25%), images and 3D-based technologies (38%) and other technologies such as vocal assistance, smart sensing etc. (37%) as shown in Fig. 2.9.

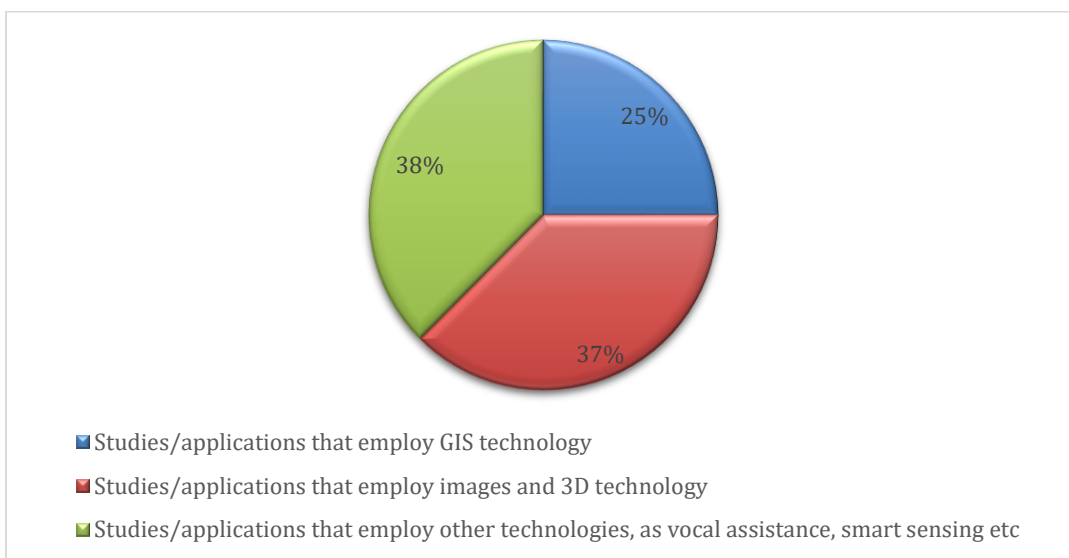


Figure 2.9. Used technologies in DM studies

Several projects shared the aim of Map4Accessibility, i.e., improving city accessibility through Web smartphones or tablet applications. Table 2.2 reports a list of the most relevant projects. Some of them consisted of users' surveys, others had as a result a prototype. Overall, most of them were proposed for research purposes and are currently not available as applications.

Table 2.2. Main projects and studies fitting Map4Accessibility purposes

Name	Status	Target	Disabilities
Pedestrian Pathway Characteristics and Their Implications on Wheelchair Users (Pearlman et al., 2013)	Survey studies	Pedestrian pathways	Wheelchair users
PAM - Personalized accessibility map (Karimi et al., 2014)	Prototype	Sidewalks	All
MEP- Maps for Easy Paths (Comai et al., 2015)	Prototypes	Pedestrian pathways	Manual or electric wheelchair
Mapping review of accessible pedestrian infrastructures for individuals with physical disabilities (Gamache et al., 2018)	Survey studies	Pedestrian pathways	Physical disability
Route planning for blind pedestrians using OpenStreetMap (Cohen & Dalyot, 2020)	Prototypes/application	Pedestrian pathways	Visually impaired people
The IMPACT Project - Mapping The European Digital Accessibility Field (Oncins, 2020)	Survey studies	Digital accessibility	All
Tur4All (Fernández-Díaz et al., 2021)	Prototypes/application	Accessible tourism	All

MapIt (Guay et al., 2021)			Prototypes/ application	3D pathway	All
Robotic Software	Wheelchair System	Tracking (Jawawi et al., 2021)	Prototypes/ application	3D pathway	Robotic wheelchair
Exploration of School Library Services (Raharja et al., 2021)			Survey in 5 schools	Analysis of destinations, barriers and facilitators	All
ASPD -Audio Smartwatch Picture Description (Reza G. et al., 2022)			Prototypes	Fulfilling learning	scientific Visually impaired people

In general, the projects focused on the accessibility of sidewalks and points of interest (such as schools, bus stops, metro stations, restaurants, museums, shops, municipal offices, houses, etc.), while the users served the most are people with wheelchairs.

Numerous projects and publications are dedicated to supporting users by providing them with information on accessible places. Among them, PAM and mPASS projects fit most closely with the goal of Map4Accessibility because suggest optimal paths to reach a destination. However, both apps are not available for users (see table 2.3).

The PAM project (Karimi et al., 2014), coordinated by the University of Pittsburgh, resulted in a prototype named PAM-Pitt app which contains accessibility information based on the Americans with Disabilities Act (ADA) standards. The App aims at providing disabled people with campus accessibility information by spatial digital maps. The routing module elaborates optimal routes between requested origin/destination pairs using the pedestrian network of the University of Pittsburgh main campus. Another essential feature of PAM-Pitt is the ability to include personalized routes.

The mPASS project (mobile Pervasive Accessibility Social Sensing) is a novel geospatial mapping service developed by Mirri et al. (2014) based on OpenStreetMap database. The app aimed to provide a personalized pedestrian path to users with special needs.

Several apps dealing with accessibility have been developed in these last years. Table 2.3 lists some of them and their respective compatible platforms, supported languages, diffusion, target disability, number of download and user rating in Play Store. A common issue with the apps is that their spread is often limited to the city/country where they have been developed. Moreover, many apps are not available for users, scarcely installed and evaluated. Only Wheel Map and Wheel Mate are rated by users confirming the limited spread of this type of tool.

Table 2.3. Main functionality of investigated applications for disabled people

Application	Compatible platforms	Supported languages	Diffusion	Target Disabilities	Download*	User Rating*
Ability App	Web	English	Worldwide	For all	-	-
Access Earth	Web, iOS, and Android	English	Worldwide	Mobility	+ 1000	-
AccessNow	Web, iOS, and Android	English	Worldwide	For all	+ 1000	-
AXS Map	Web	English	US	Mobility	-	-
iAccess Life	iOS, and Android	English	Worldwide	Mobility	+ 1000	-
Jaccede	Web and Android	French, English, Italian, Germany, Spanish	France, some European cities, and 11 cities around the world.	Mobility	-	-
mPass	Web, iOS and Android	English	Worldwide	Mobility	-	-
PAM Pitt	Web, iOS, and Android	English	Worldwide	Mobility	-	-
Plus Acesso	iOS, and Android	Portuguese	Portugal	Mobility	+ 1000	-
Situm	Web, iOS, and Android	English Spanish	Worldwide	Mobility	+ 5000	-
Sociability App	Web, iOS, and Android	English	UK	Mobility	+ 1000	-
Spot Viborg	iOS and Android	Danish, English and German	Worldwide	Mobility	+ 1000	-
WheelMap	Web, iOS, and Android	25 Languages	Worldwide	Mobility	+ 50000	2,3/5
WheelMate	iOS, and Android	English, Danish, French, Swedish, Germany	Worldwide	Mobility	+ 10000	3,2/5

*Play Store (update 20 November 2022)

The applications/projects on accessibility adopted different technologies to support disabled users:

- 1) applications that compute personalized paths through digital maps and information provided by users (Matthews et al., 2003; Coast, 2004; Beale et al., 2006; Jaccede, 2006; The Zero Project, 2008; Solomon et al., 2009; Bunte, 2010; DaSilva, 2012; Ferrari, et al., 2014; Prandi, et al., 2014; Mirri et al., 2014; Karimi et al., 2014; Prandi et al., 2015; Mirri et al., 2016; Mirri et al., 2016; Mirri et al., 2017; Mobasheri et al., 2017; Situm, 2017; Delnevo et al., 2018; Gamache et al., 2018; Gharebaghi et al., 2018; Winfield et al., 2018; Pierri, 2019; Shu et al., 2019; Bujari et al., 2020; Delnevo et al., 2020; Edwards, & Fougeyrollas 2021; Fernández-Díaz et al., 2021).
- 2) applications that incorporate more advanced sensors to acquire audio and video data and to describe the scene to visually impaired individuals (Karimanzira et al., 2006; Lagoa et al., 2007; Ability App, 2014; Melis et al., 2016; Cohen & Dalyot, 2021; Reza G. et al., 2022).
- 3) applications which use 3D mapping, e.g. scanning a place to generate a 3D model of the surroundings (Guay et al., 2021; Xu, 2021; Šupinskýa et al., 2022).

2.3. SUGGESTIONS FOR THE MAP4ACCESSIBILITY APP CONTENTS AND FEATURES

The surveys and the Focus Group proved to be an excellent tool to gather feedback from relevant stakeholders on digital mapping and accessible issues. The results identified gaps and needs in digital accessibility mapping.

Below is a summary of the main lapses of the current (most used) mapping systems identified with the questionnaires:

- lack of information on accessibility of places and alternative accessible paths;
- lack of information on the presence of barriers;
- lack of real time information and updated data on streets status;
- lack of accurate information: sometimes a street is generally marked accessible (by the administration) but, in reality, has some barriers;
- voice over systems not always effective and reliable.

At the same time, the project study outlines that new apps should have accessibility features ensuring:

- real time reliable information;
- possibility for registered users to provide real time updates;
- reliable on-time information on public transportation;
- a support phone number, if needed (or a “press here for assistance” button);
- possibility to receive an alternative accessible path (similar to Google Maps offering a longer or a panoramic route);
- possibility to customize the app selecting features that fit the user profile;

- a reliable voice over system, possibly interactive.

Results of the analysis of the questionnaires and the focus group, and of the review on digital accessibility mapping publications and projects, displayed the most innovative and worthy of consideration features for the development of Map4Accessibility app. Table 2.4 summarizes the main features which will be particularly addressed, including a short description, possible users and benefits and the innovation level.

Table 2.4. List of possible features for Apps on digital accessibility mapping

Nr.	Feature	Description	Possible users/benefit	Innovation
1	Path calculation	The app calculates the short or the best (with less barriers) route to reach a user destination. The users indicate the type of barriers which should be avoided in the function of personal special needs	All/real time visualization of the itinerary	High
2	The mobile sensing application	The route planning and navigation system consists mainly of four interrelated modules to: pre-planning journeys, to execute the journey, to provide users with general information, to provide orientation and navigation assistance during journeys.	A fuzzy decision system to eliminate unfeasible pathways in dependence of the type of disability and another fuzzy decision system to select a mobile equipment according to the users.	High
3	Evaluating place accessibility	Users can evaluate accessibility (1-5 stars for example) of places, services and so on. A description of the location is also possible to outline relevant barriers inside a bar or theatre, for example.	All/rapid and easy update of data by all	Medium
4	Using a camera sensor	The app has the function of describing images as sound output	Using by all people with different disability	Medium
5	Interface for visually impaired	The text-entry interface allows any visually impaired individual to use a regular mobile device, accomplishing even the most difficult tasks like writing a message or managing contacts.	Using by all people with different disability.	Medium

6	Work offline with base-maps	The APP allows to download local maps to work offline	All/App working also in closed environments without internet coverage	Medium
7	3D mapping	3D game developed to simulate free-roaming walks by controlling a pedestrian avatar	All/rapid and easy update of data by all	High
8	Public transport information	Reliable on-time information on public transportation	All/Use of only one app for urban journeys	Medium
9	Multi-language and users	Adoption of multiple languages and specific profiles/functionalities for different disabilities	All/global App diffusion and increased feedback for improvements	High

3. THE SERVICE-LEARNING

The analysis of the Service-learning (SL) topic was carried out in the two first tasks of the project (T1.1. and 1.2) by UNITUS, and in task 1.3 by ARFIE.

The first task 1.1 aimed at providing an overview and benchmark community engagement practices for HEI Service-Learning Approaches. This task was divided in:

- Identifying initiatives within the European Observatory of Service-Learning in Higher Education (EOSLHE)
- Identifying additional initiatives and organisations: all consortium members (through personal networks and involvement initiatives in their area provided additional inputs to the existing initiatives on SL.

The second Task “T1.2: Partners’ internal feedback: Analysis of needs and requirements” aimed at conducting consultations with all partners to determine:

- Current level of SL application in partner HEIs – issues, good and best practices, approach to follow for engagement, process development, student reflection tools;
- How to best apply the SL pedagogical approach in participating HEIs.

To reach these objectives, two Google Forms questionnaires on SL were distributed and analysed (see section 3.1): UNITUS created a questionnaire for the consortium partners while ARFIE did a second questionnaire to gather information from external stakeholder. Additionally, UNITUS investigated the EOSLHE database (see section 3.2) and the international literature (see section 3.3). Finally, all the above cited analysis fed the section 3.4: **Guideline for SL inclusion on HEI courses**.

In this project, Service-learning is an educational approach involving projects and programmes of community service aiming to satisfy an actual need within a certain territory in collaboration with, but not only, the community. Students’ participation is central - from the initial planning phase to the final evaluation - and intentionally linked with their learning experience, including curricula, reflections, skills development.

The SL approach is complex and challenging; it implies seeing the institution as a civic space open to community reference groups (CRGs). It is a different way of conceiving the university and organising it as a 'community': or students, citizens and employees. SL presupposes links with the economic, social and cultural context in which the institution is located.

The definition above reported derives from a comprehensive analysis of the questionnaire (section 3.1), the EOSLHE (section 3.2) and the literature review (section 3.3).

3.1. THE QUESTIONNAIRES: ANALYSIS OF RESPONSES ON SERVICE-LEARNING

Regarding the internal feedback questionnaire (see section 2.1.1), the questions related to SL were three out of nine (no. 1, 2 and 9). The significant results for each question follow below:

1. *What is your definition of Service-Learning? Please provide a short description and then add your most important scientific references about it.*

Most respondents provide a definition like those founded in literature and reported at the previous paragraph (26/28). Some respondents also include the following references:

What is service learning? Making sense of the pedagogy and practice, by Andrew Furco, Katrina Norvell, 2019; SERVICE-LEARNING: A BALANCED APPROACH TO EXPERIENTIAL EDUCATION, by ANDREW FURCO, 1996.

Honnet, E.P., & Poulsen, S. (1989). Principles of good practice in combining service and learning. Wingspread Special Report. Community-Campus Partnerships for Health

Mitchell, T. D. (2008). Traditional vs. critical service-learning: Engaging the literature to differentiate two models. Michigan Journal of Community Service Learning, 14(2), 50-65.

Felten, P., & Clayton, P. H. (2011). Service-learning. New directions for teaching and learning, 2011(128), 75-84.

Four people declared to not know the topic but provide a definition and comment. Finally, a person wrote a general comment on the involvement of the social sector/area in education

2. *Please state the elements of Service-Learning, then mention which are the most essential components. Write your most important project about it.*

Two people provided information on components of SL and projects where they are involved in. One person provided information on past SL project where they are involved.

23 respondents mentioned elements and components of SL while two people didn't reply to this question.

For a definition of elements and components of SL see section 3.4.

3. *What distinguishes SL from other form of Experiential Education?*

4 people didn't respond or declare to don't know the difference. 2 respondents wrote that there is no difference between SL and experiential learning.

Significantly, a person report that

" Experiential learning has established itself as opposed to the classic learning models. The reasons for this change of pace lie in the growing attention paid to the construction of students' cognitive, operational, relational, and transversal skills. From this point of view, it is possible to understand competence as acting knowledge: designing learning paths aimed at developing knowledge and skills is certainly necessary but not sufficient to allow students to achieve goals of competence and to develop reflective thinking that leads to "Learning to learn". Service learning considers learning in a situation as an essential condition for the development of individual skills and the development of the community and its socio-cultural heritage. Service-learning shifts, more than other forms of experiential education, the center of gravity of

education from the subject to the community; a learning in which the requests for individual improvement and social responsibility are held together, starting from service."

Regarding the external feedback questionnaire (section 2.1.2), the questions related to SL were two out of sixteen (no. 3 and 4).

3. Do you know what Experiential education is? Can you provide a short description?

Most respondents provide a definition such as those founded in literature and reported at the previous paragraph (26/28). In particular, those aware of this way of learning presented it as a teaching philosophy that informs many methodologies in which educators purposefully engage with learners in direct experience and focused reflection in order to increase knowledge, develop skills, clarify values, and develop people's capacity to contribute to their communities. A form of learning that begins with a concrete experience and then, after solving a problem, the learners reflect on the process and become able to apply lessons more widely to their lives. An active methodology that starts from the traditional teaching model, allowing students to engage in experiential education that contributes to the development of organizational skills, communication, analytical skills, autonomous learning, entrepreneurship, creativity, teamwork, and ethical commitment. Some participants however admitted their lack of knowledge on the matter and admitted not knowing what SL is.

4. How would you describe Service-Learning?

In this case, the respondents were equally divided in those who knew or had an idea of what SL is, and those who had limited knowledge. Those who responded described it as an educational approach where a student/trainer/client learns theories indoors and at the same time develops community projects to support the non-profit/social sector and engages in reflection to deepen their understanding of what is taught and what can be done. A learning process combined with social work, an educational approach that combines learning objectives with a community service, an active methodology that departs from the traditional teaching model, allowing students to engage in experiential education that contributes to the development of organizational skills, communication, analytical skills, autonomous learning, entrepreneurship, creativity, teamwork, and ethical commitment.

Conclusion

A general comment can be carried out from the responses: only some consortium partners have awareness of the SL approach. People working at universities appear to be closer to the topic, terminology and pedagogical tools; some provide detailed definitions and descriptions of SL. However, real experiences on structured SL projects by partners are still limited highlighting the importance of Map4Accessibility in increasing the integration of SL in HEI courses. The SL approach is known mainly by people involved in it, who can provide comprehensive definitions and explanations. However, even those who are not familiar with SL attempted to frame and define it, showing a strong interest towards the learning methodology.

3.2. THE EUROPEAN OBSERVATORY OF SERVICE-LEARNING IN HIGHER EDUCATION - EOSLHE⁴

EOSLHE, supported by European Association of Service-Learning in Higher Education (EASLHE), was created in January 2019 as a permanent space for cooperation and exchange among the members of the European network Europe Engage for mapping the use of, collecting data, evidences and promoting the use of this learning methodology and its institutionalisation.

The aim of the EOSLHE is to enhance and disseminate the knowledge of SL in European higher education as an educational approach which enhances students' civic engagement, brings them closer to different social realities while allowing them to work in a real environment. Most of the time they are able to have first-hand experience of the impact their work has.

EASLHE promotes SL as an ideal teaching methodology for the development of civic engagement.

The following definition of SL is given by EASLHE:

Service-learning in higher education is an experiential educational method in which students engage in community service, reflect critically on this experience, and learn from it personally, socially and academically. The activities address human, social and environmental needs from the perspective of social justice and sustainable development, and aim at enriching learning in higher education, fostering civic responsibility and strengthening communities. Service-learning is always recognized with ECTS.

In our analysis (update May 2022) we checked all 109 projects⁵, for a total of 18 European Countries, available on the EOSLHE website.

The following analysis criteria were used for SL projects, present in EOSLHE:

- completeness of the project descriptive information;
- number of projects for each European country;
- disciplines mostly applied to SL;
- type of interaction of the beneficiaries.

Appendix A reports for each EOSLHE project with the following descriptive sheets: Project name, Year, Institution, Person in charge, No. of students, Interaction with beneficiaries, Academic Degree, Discipline (s), Community Service Area, Purpose.

⁴ <https://www.eoslhe.eu/>

⁵ To note that the Observatory is continually update

3.2.1. MAP OF THE OBSERVATORY'S SL ACTIVITIES AND INITIATIVES

The complete picture of the geographic distribution of the analysed SL projects is presented in Fig. 3.1.



Fig. 3.1. Map representing service-learning experiences (SL) in Europe (source <https://www.eoslhe.eu/>).

We analysed 109 SL project in 18 European Countries. According to EOSLHE, an SL experience is a description of a specific SL practice which took place within 1 academic year. All students participating in the SL experience share common service and learning objectives, reflection, dissemination, and evaluation activities. All students participate in the experience over a specific period (such as a semester or academic year), although they may serve in different social entities. To date, several projects (46) face the topic of inclusion, and 15 projects present the word “disability” in their description. No project registered on EOSLHE investigates urban accessibility for disabled people.

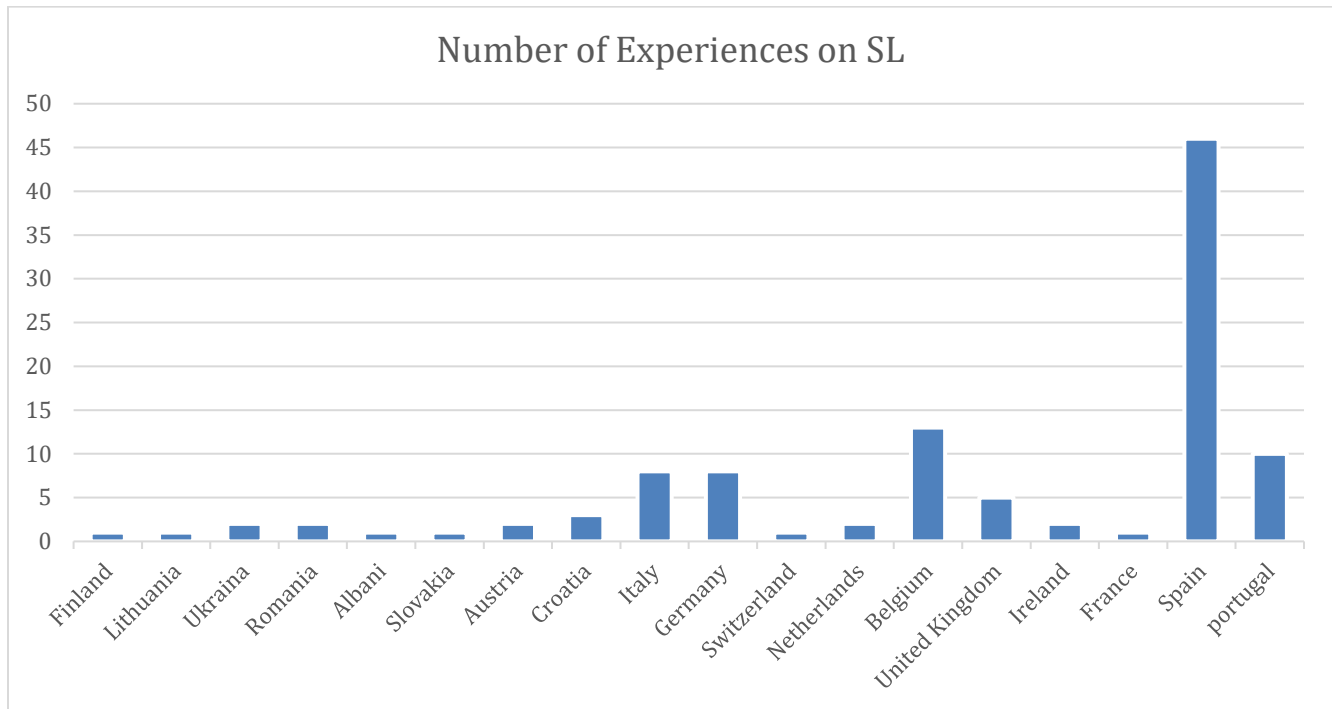


Fig. 3.2. SL projects per Country

The discipline that has been most applied in the SL experience is Education (Fig. 3.3)

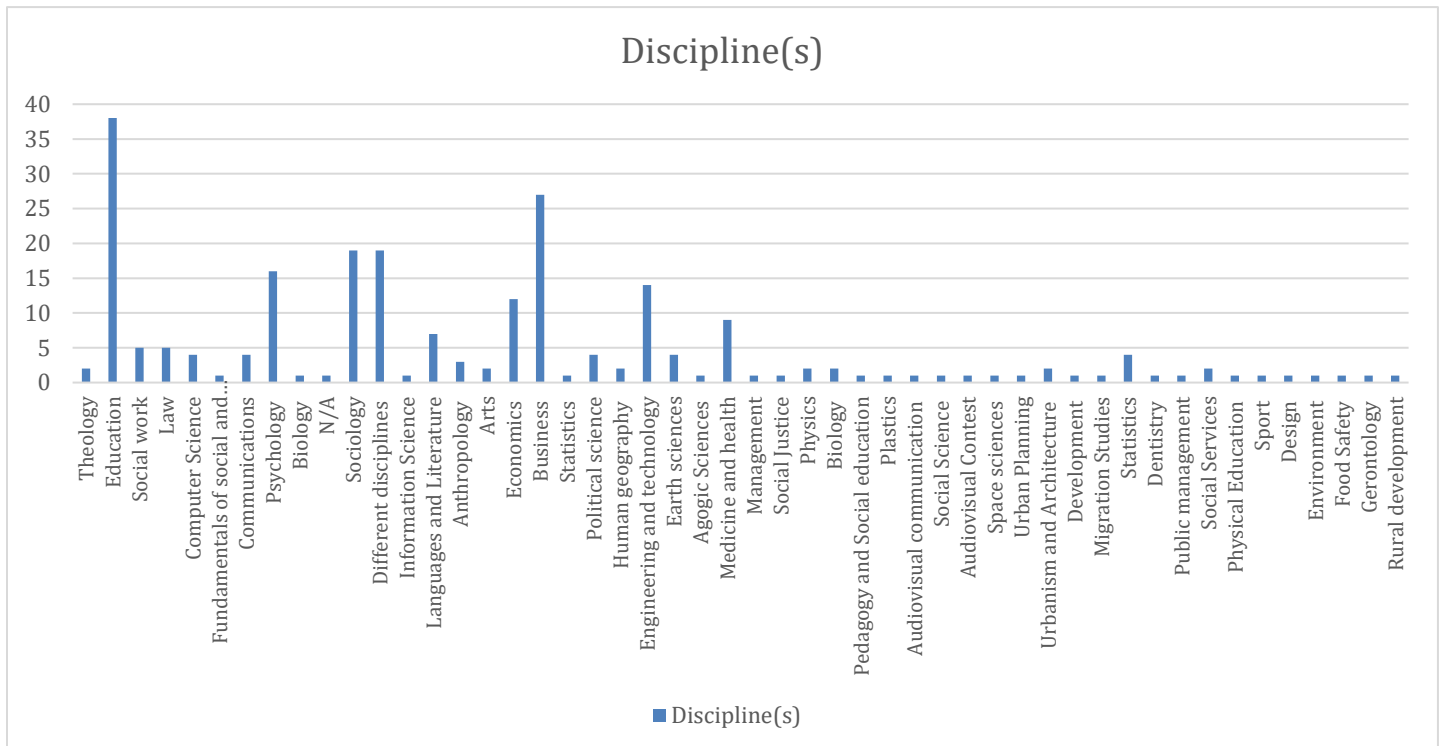


Fig. 3.3. SL projects per discipline. To note that many projects can have transdisciplinary character.

The most used type of interaction with SL beneficiaries is face to face (Fig. 3.4)

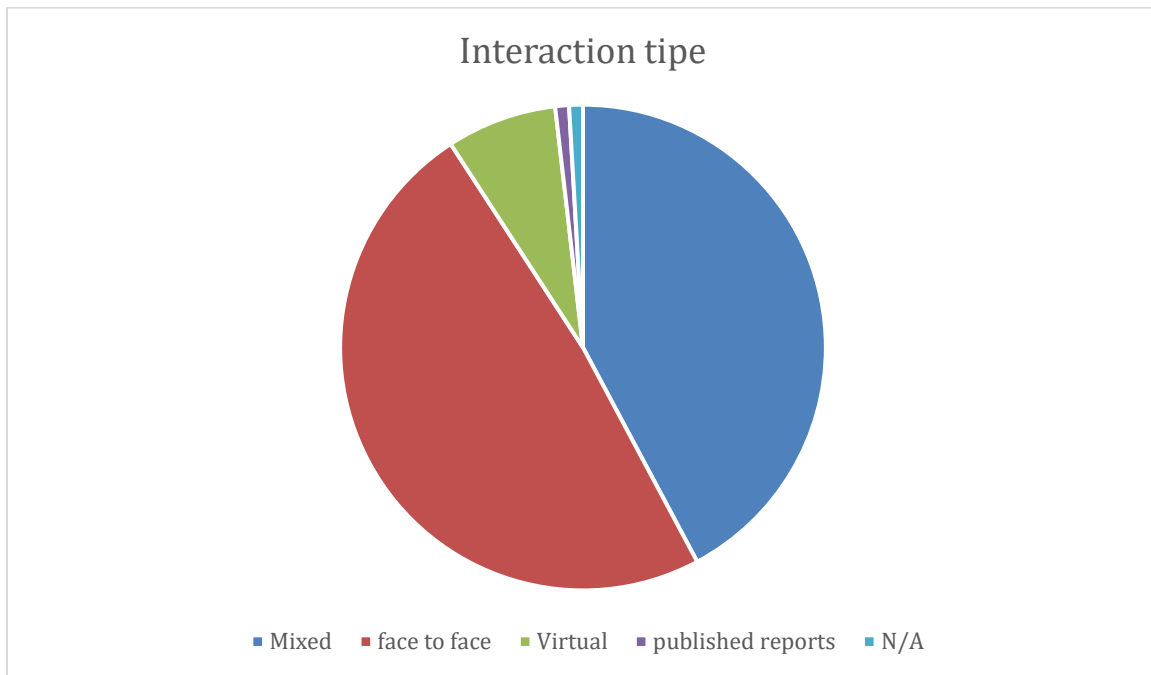


Fig. 3.4. Interaction with beneficiaries

3.2.2. COVID AND SL PROJECTS

The 2021 Annual Report of EASLHE⁶ has data analysis gathered before and during the pandemic in two surveys. The first survey was conducted between July 2019 and October 2021 (28 months in length) (Basic Questionnaire for mapping SL experiences). This questionnaire was designed to map and collect detailed data regarding SL experiences in Europe. The second survey was conducted between January 2021 and October 2021 (10 months in length) (Mapping Service-learning response to COVID_19). This questionnaire was specifically developed to collect SL experiences in times of the COVID-19 pandemic. Respondents were asked to share SL experiences which have been implemented or are currently implemented in their institution in response to the pandemic. Thus, 31 experiences of SL during the COVID-19 pandemic have been registered on EOSLHE (Fig. 3.6).

⁶ Ribeiro A., Aramburuzabala P., Paz-Lourido B. (2021) (Coords.). 2021 Annual Report of European Association of Service-Learning in Higher Education.

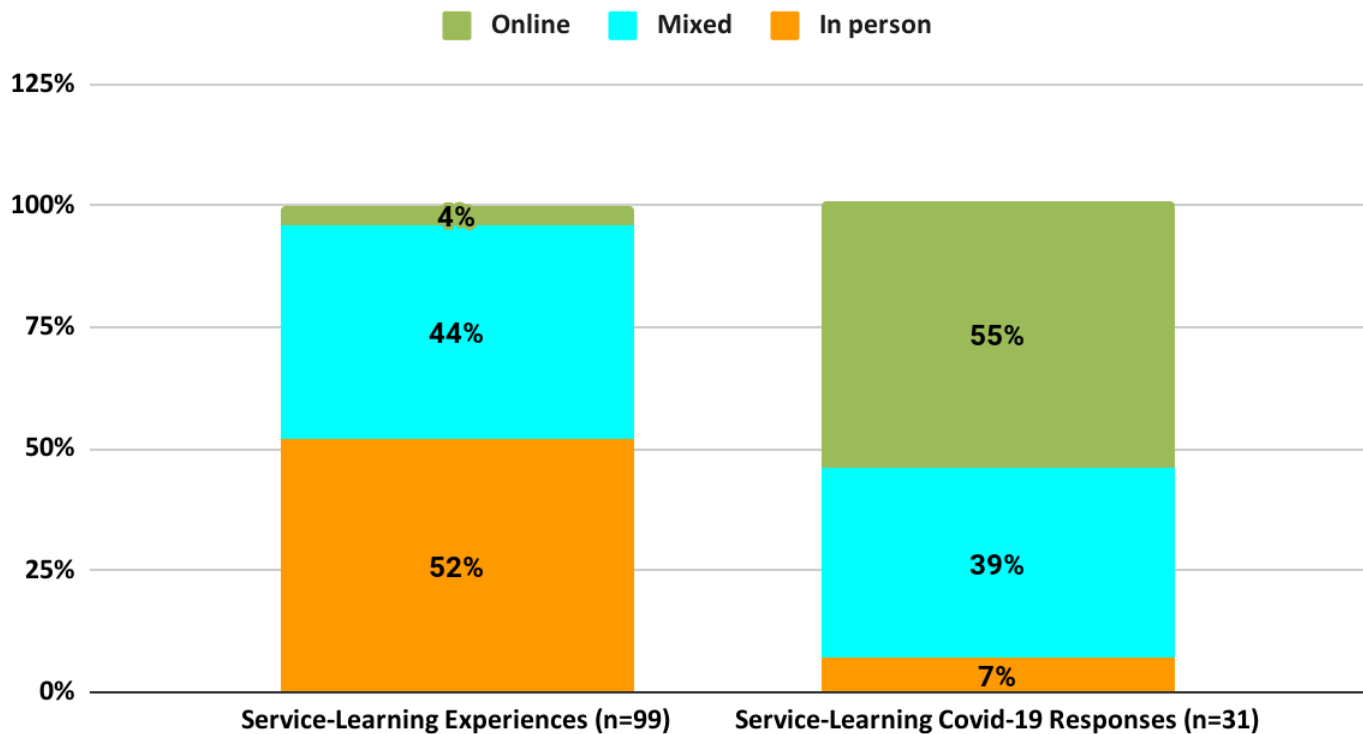


Fig. 3.6. Student involvement in SL

During the pandemic, to face the world's dramatic changes from outdoor to indoor lives, the online format became the norm. The report suggests that SL providers had to pay attention to students with shortage of technological supplies, poor internet connection, and the lack of motivation. SL providers had to be sensitive to education conditions when training for all the parties involved including coordinating technological options with community partners, producing explanatory guidelines for students and community partners, scheduling pre-set meeting times to enhance communication, and implementing strategies to facilitate group interaction. Consistent with the previous results with regards to project format, virtual student interactions have also increased during the Covid-19 pandemic period, reaching 58% (Fig. 3.7). It is therefore important to advance e-service-learning (e-SL) pedagogy, to seed funding for e-SL development or research, and fellows' programs for HEI. More details can be found on the 2021 annual report.⁷

⁷ ibidem

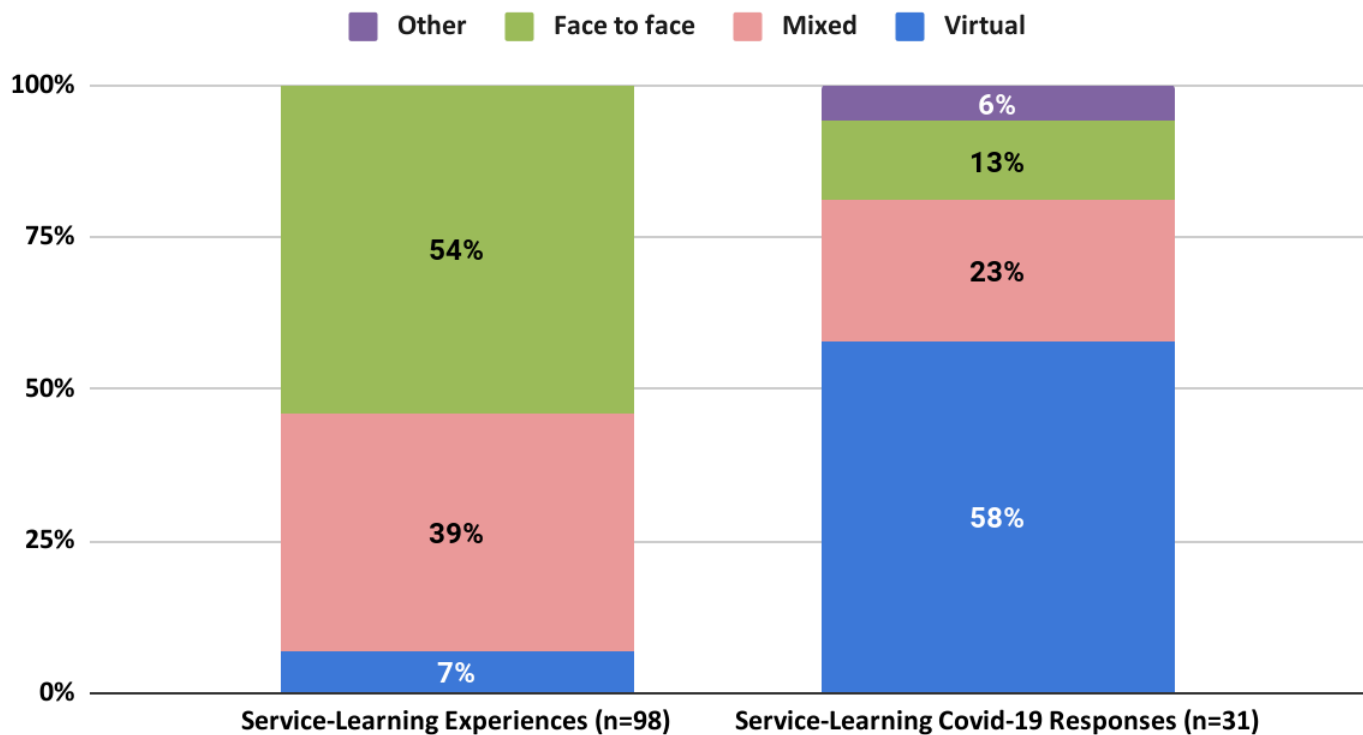


Fig. 3.7. Interaction type of students

3.2.3. EASLHE POLICY RECOMMENDATIONS FOR SL INCLUSION IN HEI

Recently EASLHE published a Policy Brief entitled – A European Framework for the Institutionalization of Service-Learning in Higher Education. In this report, a summary of challenges and recommendations for proper SL inclusion in HEI is displayed. Although the use and research of SL is growing in all the European countries some countries are at the critical mass construction phase while others have already passed it and are making progress in the institutionalization process. While in Ireland all rectors signed a declaration of their commitment to the community and in support of the SL methodology, in other countries, such as Denmark, Sweden and Greece, there is no evidence that this methodology is being used.

The policy recommendations for the Higher Education Institutions proposed by EASLHE are:

1. Include SL in the HEI strategy plan.
2. Create a SL program and structure to coordinate all activities, ensuring the necessary human and material resources.
3. Incorporate SL into existing academic programmes and promote it in collaboration with students, teachers and staff, assessing the needs of the local community and its existing capacities.
4. Provide high quality SL training to teachers.
5. Allocate time in the teachers' schedules to prepare, plan, guide and evaluate SL,

6. Internal and external recognition, both for teachers through promotion mechanisms and accreditation systems, and for students, who must obtain recognition of their participation in SL experiences in terms of ECTS,
7. Guarantee sustainability of the SL projects,
8. Promote both basic and applied research needed to examine how SL influences civic education and academic learning, and to provide evidence of the impact of SL on students, community, teachers, and participating entities.
9. Appoint a national SL Committee to formulate, review, and recommend general HEI curriculum, operational guidelines, policies, and tools and criteria for the evaluation of SL experiences that include indicators for assessing effects on the environment and on the various actors.

3.3. SERVICE-LEARNING IN ACADEMIC DISCIPLINES. A LITERATURE REVIEW

SL literature has seen a rising trend of publications, which can be categorized into three main distinct areas, i.e.:

- (1) studies on the experience of SL implementation in any specific discipline,
- (2) conceptual and theoretical studies and
- (3) studies which explored and validated the significance and positive outcomes of this pedagogy.

This study has presented a systematic review of SL literature. For this purpose, total 133 studies were analysed, out of them 80 studies were grouped in first cluster, which were regarding the acceptance and use of SL pedagogy in different academic disciplines. Based on the findings of these studies, it is evident that SL has been widely reported in medical and nursing disciplines, followed by business and economics; computer science and information technology; sociology and criminal justice; teacher education; geography; environmental studies and linguistic and communication disciplines. However, in some academic disciplines, SL incorporation is still at its infancy, e.g., arts, mathematics, natural sciences, sports, engineering, hospitality and tourism. Moreover, findings of this cluster have revealed that SL integration is equally popular in traditional classroom (i.e., face-to-face learning) and online learning mediums. Therefore, SL is often regarded as a frequently reported approach in experiential learning methods.

Map4Accessibility is an effort to answer four major research questions,

- a) To what extent is SL adopted in different academic disciplines in higher education?
- b) What are the emerging issues for SL integration in higher education curriculum?
- c) What are the limitations of current SL frameworks?
- d) What are the potential outcomes of SL pedagogy?

To bridge this gap in literature, a systematic literature review was performed.

SL in different courses, e.g. criminal and social justice (Burke and Bush 2013; Davis et al. 2014; Toporek and Worthington 2014), social work (Postlethwait, 2012) and research based technical writing courses (Soria and Weiner 2013; Stevens 2014). In this regard, Burke, and Bush (2013) have described

the usefulness of SL in undergraduate students during their criminal justice course. Further, M. Salam et al. (2017, 2019) and Burke and Bush (2013) reported that their students found SL projects beneficial for them; however, there were some obstacles related to the required time and the limited resources, as well as some restrictions from students' families for participating in SL projects. Similar findings of another study by Davis et al. (2014) from criminal justice discipline support the notion of SL pedagogy and validate its positive impact on students' learning outcomes.

Another recent study by Tracey and Kacin (2014) has proposed a design case framework for incorporating e-service learning in online courses. They have entailed a detailed description of processes involved in the development of a virtual collaboration environment between SL participants, using modern ICT tools, e.g. email, instant messaging, Microsoft Teams, Skype, Zoom and Google applications. Moreover, Tracey and Kacin (2014) identified a set of good practices for integrating e-service learning in online courses, with the support of ICT for creating a virtual environment.

Numerous research (Furco and Billig, 2002; Gregorová, Heinzová and Chovancová, 2016) have highlighted that SL activities raise competence levels, school and university activities participation, the motivation to study, to improve self-esteem and that favour the acquisition of pro-social behaviours.

The objective of these initiatives is to create paths that can convey the importance of responsibility and commitment to the community and to the common good: students who participate in these experiences grow in terms of the development of their sense of humanity, as they experience first-hand the values of solidarity, inclusion, civic engagement. In the same way the same students learn more easily and achieve better results than peers who do not have participated in this type of activity.

According to Shelley H. Billig (2000) SL facilitates the achievement of certain objectives and the acquisition of the competence objectives envisaged by the various study paths. Especially:

- increased sense of responsibility, social competence, self-esteem,
- lower exposure to risky behaviours,
- better relationship with others and with members of other ethnicities,
- greater ability to accept cultural diversity,
- increased confidence in adults,
- greater willingness to work with the disabled and the elderly,
- greater capacity for empathy and willingness to help others,
- greater willingness to engage in voluntary organizations,
- better results in both humanities and science,
- greater participation in the classroom and motivation in the study,
- reduction in the number of absences and early school leaving or university dropouts,
- greater mutual respect between teachers and students and creation of a more positive school and university climate.

3.4. GUIDELINE FOR SL INCLUSION ON HEI COURSES

The EASLHE elaborated guidelines for the Institutionalization of SL in European higher education in 2021⁸. The following paragraph reports a discursive of them integrated with an additional literature review.

The vision of school or university that the SL proposes, pushes the realization and care of alliances with various external stakeholders, allowing the different systems (educational, economic, social, cultural, etc.) to interact, favouring a closer connection between 'inside' and 'outside' the classroom, overcoming the dichotomy between theory and practice and between school/university and real life.

Assuming that the vision of school or university represents the cultural background within which to build SL interventions, SL introduction cannot be improvised, but requires training for the teaching staff, both at the beginning and during the implementation.

The training and professional development of teachers, both initial and in progress, is the starting point for a significant project action. Issues concerning the approach of SL, for an initial presentation, the active teaching methodologies it promotes, the tools and the evaluation methods are aspects that must be taken care of for the success of the path.

These interventions favour and support the sharing, dissemination, and continuity over time of these projects.

In the same way it is important to foresee and implement monitoring activities (questionnaires, interviews, etc.) aimed at analysing the impact of the project actions on the reference community and on the subjects involved in the phases of the SL project also to highlight the strengths and weaknesses of each path with a view to continuous improvement.

From an organizational point of view, SL paths require more adaptability of the HEI courses, also under the point of view of scheduled activities and additional time required to properly realise SL projects. The observed experiences include laboratory activities, procrastination of a collaborative nature and paths that favour the learning of transversal skills that also take place outside the school/university itself. All this highlights how the lesson time consisting of sixty minutes is not enough to achieve these objectives

SL can complement teaching with commitment to the community in which the university or school is located. The systemic approach allows schools or universities that use SL to create learning/service paths aimed at developing disciplinary and transversal skills based on the active participation of students and the various subjects present in the territorial and social context in which the school or university is inserted.

SL promotes a vision of open school and university, in constant relationship with the outside. The SL promotes in the student the acquisition of knowledge, values, skills and attitudes associated with civic engagement through a structured experience within the school, university and territorial community. In

⁸ Ribeiro, Álvaro, Aramburuzabala, Pilar and Paz-Lourido, Berta (2021). Guidelines for the Institutionalization of service-learning in European higher education. European Association of Service-Learning in Higher Education. Madrid.

other words, SL transforms the what and how it is learned, as is based on an approach that favours learning based on the figure of the student, intended as a tool and source of knowledge, and supports the renewal and reconfiguration of ways, spaces and times of learning.

3.4.1. QUALITY STANDARDS FOR A CORRECT IMPLEMENTATION OF SL

The definition of quality standards for SL activities has been faced in a recent project 'Europe Engage – Developing a Culture of Civic Engagement Through Service-Learning Within Higher Education in Europe', (Erasmus+ 2015-2017). According with the report of Prof. Stark⁹, SL is a running target and benchmarking SL activities should be considered an ongoing process. Thus, quality standards for SL activities should not aim at standardizing or unifying SL. Instead, they must "offer that the standard for SL lies in its inherent diversity and creativity to develop new and innovative formats for experience-based learning".

It's therefore better to define a minimum set of standards to serve as a guideline of indicators to design or evaluate SL activities. These minimum standards should be fulfilled for good quality SL projects.

The minimum quality standards (also called elements) that characterize a SL project are:

- meeting the true and felt needs of a community,
- students are the protagonists in every phase of implementation of the activities (from the analysis to the final phase),
- the activities are integrated with the curriculum/study plan and in relation to the students' learning objectives,
- the dimension of reflection accompanies the unfolding of activities,
- it supports the development of a network of relationships, inside and outside the school.
- the dimension of reciprocity is promoted and present among the subjects (school, university, and community) involved.

We are in the presence of an SL path when:

- The activities are linked to the curriculum/study plan: the link with the disciplines is evident and identified jointly between teachers.
- The theme/problem on which the activities are based is significant and ensures the involvement of all students, guaranteeing them a leading role.
- The community outside the school or university actively participates, also through the establishment of networks and alliances on the territory and with the subjects that contribute to the realization of the activities. It is precisely the concept of 'reciprocity' that distinguishes SL from other forms of school-territory collaboration, as it is based on an interchange that takes

⁹ Quality standard for Service Learning Activities <https://blogs.helsinki.fi/europe-engage/files/2016/03/Quality-Standards-Service-Learning.pdf>

place between the participant in the service and the individual or social agency that receives the service. During the activities the student actively participate and learn in the same way.

- The paths are institutionalized and are not episodic: the presence of the SL in the official documents of the school at the level of the training offer works to overcome an episodic vision of the experiences in support of a widespread diffusion within the institutions. The SL approach is not realized with the design of additional activities but with the implementation of structured and continuous activities over time (beyond the end of the project and beyond the end of the school or academic year).
- A process is started that integrates knowledge with know-how, transforms learning spaces by opening up to external contexts and reorganizes time at school or university to support activities that undermine the traditional setting of the lesson, supporting an orientation 'beyond the classroom'.

The activation of a SL path starts from a careful analysis of the needs of the territory and the community in which the school/university is placed, to verify the possibility of starting intervention strategies that combine the specific learning objectives of the educational institution with the active service to the local community.

It is very important that the action of SL is linked to a real need that emerges from the territorial context that welcomes the school and that has an interdisciplinary opening; among the actions of SL are particularly appreciable also the models of intervention that have replicability characteristics and that, with some specific implementations, can express intervention actions even in areas and circumstances other than that of their first implementation.

For a correct planning of the intervention, it is important that the objectives to be pursued are well defined, both in relation to the skills the students need to acquire, and in reference to the socio-relational objectives to be satisfied.

The involvement of students in each phase of project implementation remains a central element, as the sharing of objectives promotes accountability with respect to the achievement of the latest results and activates meaningful learning processes in young people.

Finally, it is essential a constant enhancement of the centrality of the curriculum to underline the structural connotation of SL methodology, while reinforcing the acquisition of skills.

The more the project is linked to the curricular learning objectives, the more students participate in it in a conscious and active way. Hence, SL activities should not be promoted as sporadic, extracurricular learning opportunities, but as structured didactic actions, defining the teaching experience as a path that involves the disciplines in a transversal way, acting at the same time on the acquisition of transversal skills (soft skills).

3.4.2. THE DETERMINANTS FOR SL

The actors actively involved in the realization of the SL path are numerous and different according to the different phases of project design/implementation. From an organizational and managerial point of

view, the role of the teacher is fundamental above all in the early planning stages, for the definition of learning paths implemented in coherence with the curriculum/study plan.

The teacher also plays a central role from a managerial and administrative point of view in the phases of stipulation of any agreements, protocols and/or agreements with local authorities or territorial associations, where this is necessary; he assumes a central role also in the preliminary phases concerning administrative-accounting feasibility studies and in the preventive assessments on the economic resources and administrative conditions available in order to profile any needs and to carry out, where appropriate, sponsorship interventions or partnerships with public and/or private institutions. Not infrequently the teacher is the first main promoter and activator of the culture of SL as a tool for authentic formation.

The active participation of teachers, alongside the students, in every phase of the project, even after the first moment of the design, guarantees the sustainability of the intervention through the monitoring of the different phases of the project, allowing an ongoing evaluation of the quality of the objectives achieved and at the same time detection of possible critical issues for any remodulations of the action. The involvement of the entire Class/Course gives the action a broader and better calibrated level of formal structuring in relation to the specific objectives to be pursued and in consideration of the group of students involved in the project.

The reflection on the implementation of the projects on the didactic-curricular level has stimulated a rethinking on the theme of spaces and learning environments leading to an extension of learning environments beyond the perimeter of the classroom.

The assessment of the skills acquired in the SL paths is important to make this type of learning experience in a situation fully assessable and widely documentable.

We can distinguish two different stages of evaluation:

1. ongoing evaluation from the baseline level (situational observation), which can be carried out through evaluation tests also for soft skills (which often constitute one of the main objectives of SL project actions);
2. final evaluation, within which the results of a structured self-assessment and the impact on the reference community can converge.

The active awareness of students becomes the engine of a renewed and authentic commitment and nourishes the awareness of being protagonists of one's own learning and actors of one's own community of belonging.

The creation of relationships between university, schools, the territory and local communities is an essential prerequisite for the success of the project and at the same time constitutes one of the objectives of SL's action; in some projects, communication strategies are crucial in the phases of returning outputs to the local community, not only in terms of documentation and reporting of the results of the project, but even more so in consideration of the creation of a virtuous exchange channel between the educational institution and the territorial reality.

The sharing of the final results of the SL project is a way of promoting awareness and recognition of mutual belonging, of the school to the territory and of the students to the local community.

3.4.3. E-LEARNING AND SL: SOME CONSIDERATIONS

The Covid-19 pandemic pushed the digitalization of universities. The 2021 Annual report of EASLHE¹⁰ argues that e-Service-Learning (e-SL) should actively engage students in the online learning process with a technological mediation. Due to the global COVID-19 pandemic, the research on e-SL has expanded significantly, in conjunction with the increase of online teaching dimension. The major challenge of e-SL implementation is related to proper linking the methodology with digital technologies and the lack of training of HEI in the use of technologies has made the scenario even more complex. The role of technologies in e-SL pedagogy is still not fully explored. Indeed, e-SL asks for a generalized framework for all types of online services; specifically, to understand how projects can develop in terms of virtual design and how and to what extent technology can be included in the projects.

Traditional SL can benefit from e-learning methods. One of the advantages of e-learning is that it can provide related learning resources based on learners' personal needs, goals, abilities, and interests. Personalized learning allows learners to set personal learning goals, in which it is necessary to understand the needs of everyone. The research indicates that personalized learning has become increasingly essential to implement and accommodate individual learner differences over the past decade. Tarabasz et al. (2019) suggested that integrating the latest digital technologies and innovations into the learning environment are a competitive advantage and the key to success in an educational setting.

The SL, and in particular, the e-SL can benefit for some technological tools as the learning management systems (LMSs). A LMS is a software application for the administration, documentation, tracking, reporting, automation, and delivery of educational courses, training programs, materials or learning and development programs. LMSs are online platform that stores large quantities of teaching materials in a digitized format. LMSs are characterized by an user-friendly interface where educators can easily manage content, automate tasks, and streamline their curriculum from any remote location. Some popular LMSs used by HEI include Moodle, Blackboard Learn and Schoology.

Among the numerous LMSs, Moodle¹¹ is free, open-source software supporting expanding and modularized system functions and services to facilitate online courses or online resources and interactive activities. Nowadays, Moodle is the most widely used open-source e-learning environment in the world.

Moodle could support e-SL/SL integration in HEI by providing a structured platform able to increase accessibility of information and connectivity among users in the same university and in the world

¹⁰ Ribeiro A., Aramburuzabala P., Paz-Lourido B. (2021) (Coords.). 2021 Annual Report of European Association of Service-Learning in Higher Education.

¹¹ <https://moodle.com/>

(students, teachers, project partners). A future step could be the upload of SL experiences (as the urban walks in Map4Accessibility) in a Moodle platform. As an example, Map4Accessibility partners could have access to a UnitusMoodle tab to systematize the contents (reports, slides, audio-video) and apply the SL approach (see Tab. 3.1). The following information could be then shared within students' groups and interested people increasing the impact and effectiveness of e-SL/SL. An example of Moodle and SL integration has been reported by Chang and Yeh (2014)¹² to design a ubiquitous learning system for college students to support the experience learning in serving disadvantaged groups.

Tab. 3.1. Example of Moodle Tab for general SL purposes

Background and motivation	
General objectives of the project, timing and strategies	<p>Examples:</p> <ul style="list-style-type: none"> encourage the development of meaningful learning processes. train students in social and participatory responsibility. promote individual growth and social inclusion encourage collaboration and the sharing of experiences encourage acceptance of the other. identify accessibility issues in urban contexts
Phases of project design
Distinctive elements and design originality
Teaching methodologies and resources for the realization of the experience
Results and impacts
Evaluation methods

¹² Chang Wan-Jen, Yeh Z. M. (2014). Case Study of Service Learning Effectiveness based on Ubiquitous learning system for College Students. *Procedia - Social and Behavioral Sciences* 136, 554 – 558

4. THE EXPLORATORY WALKS

PR1 MAP4ACCESSIBILITY SERVICE-LEARNING AND COMMUNITY MAPPING METHODOLOGY outlines the SL and community mapping methodology to be applied in the project. Here, we present the SL pedagogical approach applied within the project, an overview and application of community mapping practices with a specific emphasis on exploratory and urban walks as co-design community mapping methods, an outline of the gaps in current accessibility mapping tools, the needs and requirements as regards both physical and digital accessibility. Finally, we provide a facilitation guide on how to apply the methodology.

Exploratory and urban walks are the practical and actual activities that involve students within the project where SL and DM concept are employed to mapping accessibility and/or barriers in the cities. The accomplished walks will also provide information for the app development. The walks' outcomes are therefore a fundamental test field for the active involvement of all the stakeholders related to disability and inclusion, and the pedagogical innovation in HEI and urban planning issues.

Exploratory Walk (EW) tasks are part of WP3. UNITUS organised a training event on EWs during the transnational meeting in Lisbon in May 2022. Moreover, UNITUS and UNICT constructed an EWs survey to be employed during the following EWs in the four study cities. The current section 4 reports the above cited materials and the facilitation guide for EWs. This guide has been fed by the difficulties and suggestions emerging from the four walks conducted: it aims to define a first framework for future HEI EWs based on SL and DM approach.

EW concept emerged in the 1990s in Montreal, Quebec, as an inclusive tool against women and children violence.

EWs are a response to a need for participatory planning, to gain a deeper understanding of urban life and urban spaces, and to find shared and sustainable solutions. EW is characterised by several aspects that are resumed hereafter.

EW are a community participatory tool for needs assessment in public spaces (squares, streets, green spaces, but also public institutions such as university campuses). During a period of 1-3 hours, participants are encouraged to walk within the city to:

- (i) identify the issues that limit their possibility to access and enjoy it and
- (ii) collectively explore solutions to make public space more adapted to their needs.

Depending on the issues at stake, targeted participants can be disabled people, women, children, the elderly, local citizens, students. EW are a way to “empower” them, to make them acquire a “right to the city”. EW gather qualitative information on the urban environment.

The Urban Walks (UW), the sequential walks scheduled in Map4Accessibility, provide spatial quantitative data of the case study (i.e., route/area). UW involve mapping the urban environment through a questionnaire that has been prepared based on the exploratory walk results. The data gathered during

the urban walk aims at supporting regeneration projects and accessibility plans, as well as feeding the database of the developing Map4Accessibility app.

The following chapters emerge from a literature review on the topic of EW. In particular, the main references were:

- Bazuń, D.; Kwiatkowski, M. 2020. Exploratory Walk As a Method of Studying Urban Tourism Space: a Case of Charles Bridge in Prague. *J. Spat. Organ. Dyn.*, 8, 92–106.
- Bazuń, D.; Kwiatkowski, M., 2021. Exploratory walk and local cohesion— the concept and application. *Mobilities*, 00, 1–20, doi:10.1080/17450101.2021. 1999775.
- Odzakovic, E.; Hellström, I.; Ward, R.; Kullberg, A. 2020. ‘Overjoyed that I can go outside’: Using walking interviews to learn about the lived experience and meaning of neighbourhood for people living with dementia. *Dementia*, 19, 2199–2219, doi:10.1177/1471301218817453.
- Facilitation Guide: Exploratory walk. Bring people together to explore and discuss neighbourhood public spaces. Co-Designing the Active City. Access April 2022 <https://participatoryplanning.ca/tools/exploratory-walk>
- Kit Exploratory Walks. Womenability. Access April 2022, https://issuu.com/womenability/docs/kit_explowalk_womenability

4.1. EXPLORATORY WALK CONCEPT

The exploratory walk (EW) concept falls within the so-called walking research. **Walking research** is an area to research (i.e., how, why, amount, and so on), a methodology to gain materials (via recording and interview and ‘subject’s relation with the surrounding environment) and a methodology for dissemination of ‘findings’ (e.g., through a ‘performance event’).

There are several alternative terms for research involving both interviews and participant observations during a walk. For example, ‘walking interviews’, ‘go-alongs’, ‘walk-alongs’, ‘mobile interviewing’, ‘walking probes’, ‘walking fieldwork’, ‘dwelling in-motion’, ‘stretched out belonging’, ‘walking with ethnography’, ‘shadowing’, ‘pedestrian enquiry’, ‘pace in place’. One of the most popular terms is ‘walking interview’. A **walking interview** is when the researcher walks alongside the participant during an interview in a given location. Each has a slightly different focus, and aim, but they all involve the researcher talking with a participant while accompanying them, usually on foot, around a specific location.

Walking interviews have been shown to: a) enable more spontaneous conversation with participants, while generating focused and specific data about the place and social life of the neighbourhood; b) be more closely aligned to ‘naturally-occurring’ interactions and therefore more true-to-life than other methods; c) involve embodied patterns of movement, offering opportunities to learn from the non-verbal aspects of people’s engagement with their local environment.

Walking as an act, per se, could support a sense of freedom of movement, empowering people to take control of their movements and choice of direction and through this generating a degree of well-being. The term Exploratory Walk (EW) includes 'walking interview' as an important aspect.

EW refers to a scope of activities broader than just observing and interviewing. It also refers to the mobile version of participatory action research. According to this method, participants as the 'cowalkers' moving together on foot (or via a wheelchair) in a selected space explore the relationship between this space and community life and conduct conversations regarding observed phenomena, processes and regularities.

The main features of EW are three: the exploratory character, the mobile method and the participation and action research (fig. 4.1).

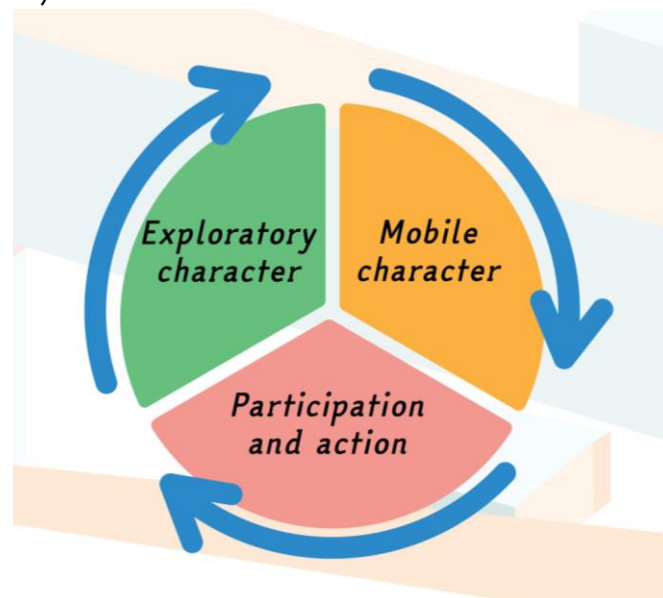


Fig. 4.1 The main interrelated characters of the EW¹³

EW as an exploratory study combines cognitive and practical functions to explore the means to think about something very carefully before it is decided upon. A joint exploration provides the opportunity to understand social phenomena better and to formulate recommendations on solving perceived problems more accurately than traditional research.

EW as a mobile method involves joint movement on foot (or via a wheelchair) and the exchange of perceptions and opinions about phenomena, processes, and regularities observed in the cognised space. Talking while walking can create different research conditions that are more conducive to exploration than those during a sedentary interview.

EW as participatory action research focuses on the relationship between space and the community. A joint exploration during a walk focuses on the issues of common space, helps strengthening the collaborative potential of participants as co-walkers and contributes to the expected social change in the given neighbourhood or community.

¹³ Bazuń, D.; Kwiatkowski, M. 2020. Exploratory Walk as a Method of Studying Urban Tourism Space: a Case of Charles Bridge in Prague. J. Spat. Organ. Dyn., 8, 92–106

EW refers to a comprehensive method of walking research with the following attributes:

- combining research and intervention functions. The goal of the walks is both to increase knowledge and to enable social change by social cohesion;
- ensuring active roles for participants (co-walkers) in the exploratory walk, including initiators, experts, or guides;
- going beyond the form of an interview. The interaction among the participants of the walk can have both the form of an 'interview in motion' and the form of a planned or spontaneous exchange of insights, opinions, and conclusions under the influence of the jointly studied space.

EW is a method of studying and shaping our cities by the:

- revitalization of public space (Urban regeneration projects),
- empowerment of vulnerable and marginalized groups. The walk is the most democratic form of movement. It is available to people belonging to different social and demographic classes and categories: children, women, the elderly, the sick, the disabled, immigrants, the homeless, etc.
- use of new technologies (app, digital maps, etc.)/

4.2. WHAT CAN EW INVESTIGATE IN THE URBAN AREAS?

Five interconnected characteristics of an urban area can be investigated by EW. They are attractiveness, security, accessibility, walkability, and connectivity (Fig. 4.2).

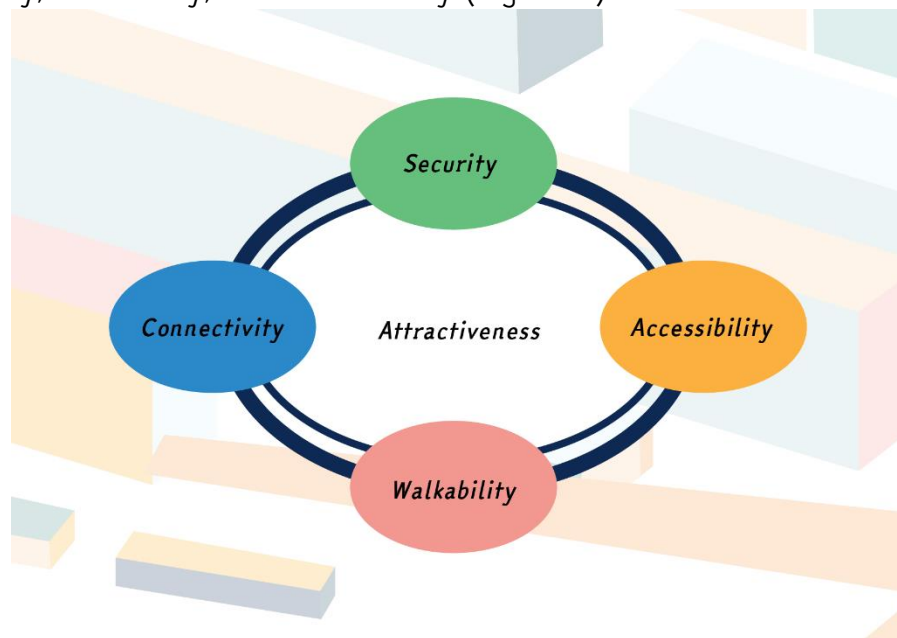


Fig. 4.2 The five interconnected urban characteristics that can be investigated by EW¹⁴

¹⁴ Bazuń, D.; Kwiatkowski, M. 2020. Exploratory Walk as a Method of Studying Urban Tourism Space: a Case of Charles Bridge in Prague. J. Spat. Organ. Dyn., 8, 92–106

Attractiveness

A specific space can be considered attractive if users want to stay in it, if they feel connected with it and feel comfortable in it. The assessment of the attractiveness of a given space is exposed to the subjectivity of different tastes and needs.

During EW, opinions on the following topics can be determined quite easily:

- (1) the condition of buildings;
- (2) the condition of roads, pavements and squares;
- (3) the presence and condition of trees, shrubs and other greenery elements;
- (4) the presence and condition of distinctive elements given space (e.g., fountains, sculptures, murals);
- (5) air purity and perceived smell; and
- (6) acoustic sensations.

Security

A secure space is one in which we are not afraid to be, and which is favourable to our health.

When assessing the state of safety, we should consider:

- the day of the week and the time of day,
- which categories of people are most exposed to danger in a given space (e.g., children and women). The selection of participants and the choice of time will therefore affect the effects of the walk,
- the same set of indicators for the assessment of attractiveness: degraded buildings, leaky roads, noise, and polluted air,
- Additional indicators:
 - (1) lighting conditions;
 - (2) city surveillance;
 - (3) the organization of road traffic and road markings; and
 - (4) places where people who threaten others' safety gather (e.g., night shops with alcohol).

Accessibility

Full accessible space is the one where everyone, including disabled persons, can use. Accessibility is applied to urban services in general terms, or to streets, pavements, parks, and buildings for specific urban features.

Limitations to accessibility can be related to age, psychophysical condition, social status, nationality, and ethnicity. There are many sets of available space indicators.

In general, a space that can be accessible to everyone should be as follows:

- (1) pavement and terrain facilitating the movement of people with reduced mobility;
- (2) technical assistance systems in places where independent movement is difficult (elevators, lifts, ramps);
- (3) contrast markings for the visually impaired; and

(4) simple messages for people with intellectual disabilities.

Particular attention should be paid to places with a greater likelihood of the appearance of people with mobility difficulties (health clinics, offices serving the elderly) and those that may pose the greatest threat (pedestrian crossings, busy streets).

Walkability

A walkable space is one where people can easily walk and ride a bike. Walkability as a feature of shared space is associated with accessibility. In order for a walk to be chosen by residents as an alternative to driving a car, it must meet four conditions at the same time, it must be:

- (1) useful, i.e., most aspects of everyday life are carried out in close proximity, and it is possible to execute them by walking;
- (2) safe, that is, pedestrians are safe on the streets;
- (3) comfortable, that is, the buildings and landscape encourage people to stay in it; and
- (4) interesting, meaning that “sidewalks are lined by unique buildings with friendly faces that signs of humanity abound” (Speck, 2012).

Connectivity

A connecting space is one where we can meet other residents and users of public or semi-public places. We can assume that people are more likely to contact to each other in an environment that they find attractive, safe, accessible, and walkable. When examining a specific area of a city or a village in terms of connectivity, we pay special attention to the following phenomena:

- (1) places that favour spontaneous contacts with others (silence, greenery, shade);
- (2) devices that allow a longer, more comfortable stay and conversation (e.g., benches);
- (3) spaces that enable purposeful organization of meetings with friends, families, and neighbours (squares, roofing); and
- (4) the tendency of residents and other users to use the common space to establish and develop contacts.

Another point of view for connectivity is the presence and quality of public transport with facilities for disabled people or sustainable and green way of movements. Finally, connectivity can be also related to ecological connectivity, as the ability of the urban landscape to facilitate the movement of animal species, as well as seeds and pollen. This last type of connectivity is related to healthy urban landscapes promoting biodiversity and ecosystem services for the wellbeing of citizens and nature¹⁵.

¹⁵ Pelorosso, R.; Gobattoni, F.; Geri, F.; Monaco, R.; Leone, A. 2016. Evaluation of Ecosystem Services related to Bio-Energy Landscape Connectivity (BELC) for land use decision making across different planning scales. *Ecol. Indic.* 61, 114–129.

It is worthy to mention that the greater the attractiveness, security, availability, walkability, and connectivity, the stronger the relationships between users, the greater the shared resources, and the greater the attachment to applicable rules. Thus, the weaker the features listed, the greater the deficits in local cohesion. The relationship between the level of local cohesion and the state of the common space is close and bidirectional. Space, of course, affects relationships, but there is also a reverse direction. The state of relations between residents and other users is reflected in the state of common space. Indeed, the strong relationship between the possibility of walking in a given space and good interpersonal relationships and quality of life is confirmed by empirical research described by neuroscientist Shane O'Mara: "... those who spend approximately 150 minutes walking per week are more socially active and have a sense of better overall well-being than those who are less active".

4.3. EW GENERAL ASSUMPTIONS FOR REALIZATION

Exploratory walks have three goals to achieve:

- determining the symptoms of crisis phenomena in the area of revitalization.
- identifying the potentials of stakeholders in the revitalization process.
- determining the areas and directions of revitalization activities.

To achieve these goals, the interviews during the EW should be in line with several general assumptions.

- to conduct walks in a deliberately selected, degraded area, but with development potential, even if it only refers to its location.
- to select interlocutors – guides who represented various environments, professions, and forms of activity. E.g., a city official, an architect or urban planner, a traffic engineer, an entrepreneur from the construction industry, a restaurateur, an educator, a person with disabilities practicing sports, a journalist, a city councilor, a cultural activist and a priest, a representative of the NGO.
- To prepare a list of issues to be discussed during the walk tailored to the places and people participating.
- To determine the methods of recording, analysing, and presenting data. For example:
 - a long walk with many points – conversation first, numerous photos during the walk, taking a note after completion (approximately 60 minutes);
 - a walk related mainly to one or two points, taking a note on the fly and a few photos at the same time (20–30 minutes);
 - a second researcher who will focus on documenting, recording short videos and taking photos
- To use a possible template for survey during the EW.

In this view, Map4Accessibility elaborated a survey template to be employed during the EW to support students and walk leaders in the analysis of study cases.

4.4. THE EW SURVEY TEMPLATE

The proposed Map4Accessibility EW survey template is focused on the accessibility characteristics of urban areas (see section 4.2). The structure and the content of the EW survey were decided by UNITUS and UNICT after a discussion with all partners on the possible urban aspects to be investigated, the terminology to be adopted and the focal points to be discussed with the students. Even if strictly linked with the goals of the Map4Accessibility, the survey structure aims to be a standard also for EWs with different objectives.

The Map4Accessibility EW survey template starts with a first page with the general info of the EW and walker and a list of items to be compiled. This page should be plotted for each preliminarily identified route or node of the EW (Fig. 4.3). A digital or printed map is then suggested to support the student work during the EW (Fig. 4.4). Finally, a resuming investigation sheet is proposed to discuss the main points of the EW (Fig. 4.5).



EXPLORATIVE WALK name: **Date and Time:** **Walk leader:**
Participant: **University:**
Academic course: **Role:**
Permanent or temporary disability or impairment (Y/N) **Type:**
Main aim of the explorative walk:

ROUTE N./NODE N. **Short description:**

Functions of the urban environment (yes or no/* specification)

Residential	Commercial	Public services	Cultural functions (theatre, cine, libraries)	Greenspaces	Health care	Other *

Urban features (yes or no/* specification)

Roads* (main, local, pedestrian)	Public transport features *(transit stops, lanes)	Parking areas	Squares and green areas	Pedestrian areas	Unbuilt areas	Other*

Urban elements/items (yes or no/* specification)

Sidewalks	Staircases, overpasses, tunnels*	Urban furnishing* (benches, lighting, decorative items, fences)	Urban signals and signboards	Kiosks and dehors	Trees and flower beds	Other*

Type and number of barriers (yes or no/* specification)

Absent or not adequate sidewalks or other walkable spaces	traffic congestion and lack of parking spaces	Obstacle caused by urban items	Other lacks or difficulties in access to public and private spaces*

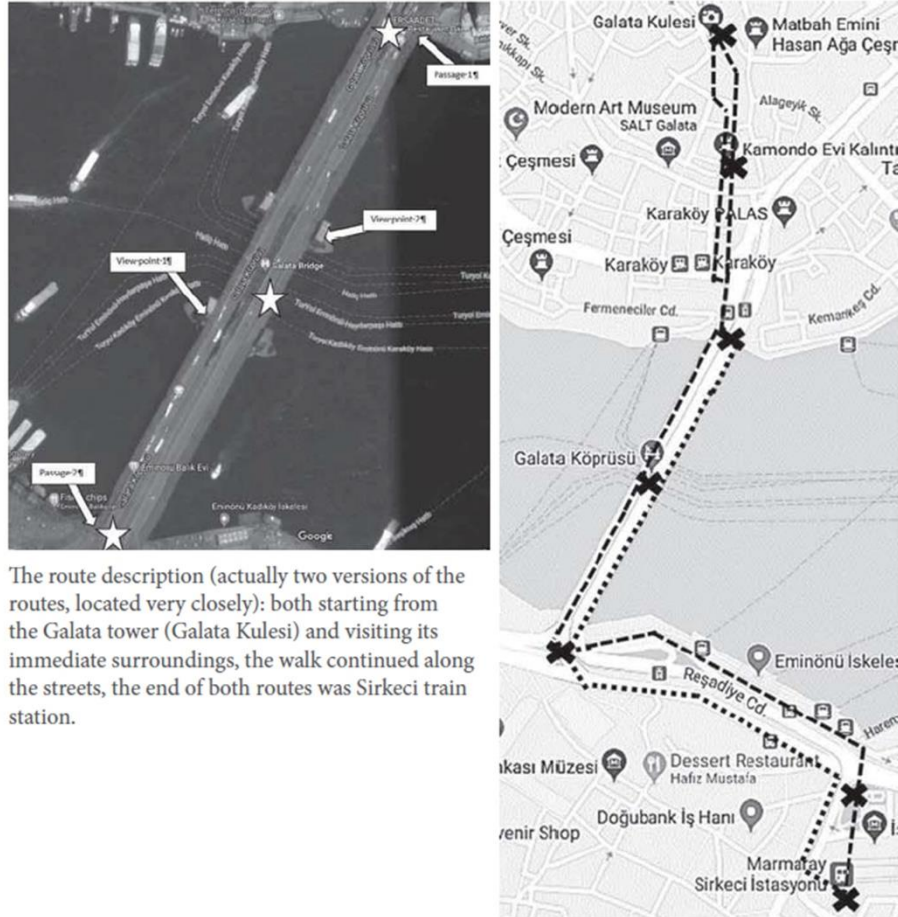
Overall accessibility rate (0 to 5):

Walking	Biking	Children	elders	wheelchair	blind	Other -

- Symptoms of crisis phenomena in the area:
- Potential stakeholders (to be involved to support possible projects):
- Proposals of interventions to improve accessibility:

Fig. 4.3. EW survey template, first page

Put here the map with the routes and node of the explorative walk. See example below



The route description (actually two versions of the routes, located very closely): both starting from the Galata tower (Galata Kulesi) and visiting its immediate surroundings, the walk continued along the streets, the end of both routes was Sirkeci train station.

Fig. 4.4. Map of the EW. Students can mark the location they visited, to identify the place afterward.



Final discussion at the end of the explorative walk

Recommendation for future explorative walks:

.....

.....

.....

.....

.....

How did you evaluate the adopted service-learning approach (0-5)? Please include some considerations:

.....

.....

.....

How was the use of digital and printed maps?

.....

.....

.....

.....

Final considerations about the study case accessibility and recommendations for accessibility improvement:

.....

.....

.....

.....

.....

.....

.....

Fig. 4.5. Final discussion sheet of the EW template

4.5. THE EXPLORATORY WALKS IN THE CASE STUDIES

Several EW were realised by four Map4Accessibility partners in their respective cities in the period September-November 2022. UNICT, ESCP, SWU and AS organised EWs in Catania (Italy), Berlin (Germany), Blagoevgrad (Bulgaria) and Lisbon (Portugal), respectively. The following sections summarize the main EW features and the emerged issues and suggestions for the definition of the facilitation guide for a SL and DM-based EW (section 4.6).

4.5.1. CATANIA

a) Local urban settings of the study case

Local case study: Catania, Italy

Walk Leaders: Silvia Galano; Cristina Leonardi; Antonino Piana; Erika Russo; Sebastiano Vitale (students from the Department of Civil Engineering and Architecture); e-mail: silviagalano2@gmail.com; crynaa.cl@gmail.com; anto.piana20@gmail.com; erika.russo5898@gmail.com; vitseb99@gmail.com

Project and Walk Representatives: ph.d.. Viviana Pappalardo; ph.d. Luca Barbarossa; assoc. prof. Daniele La Rosa, UNICT – Department of Civil Engineering and Architecture, Italy; e-mail: viviana.pappalardo@unict.it; luca.barbarossa@darc.unict.it; dlarosa@darc.unict.it

Short description

On 25 of October 2022, 15 students (10 walkers and 5 walk leaders) and 3 teachers from the University of Catania went for their Map4Accessibility EWs.

Two areas in the old city centre and other two areas in the modern neighbourhoods of Catania were explored to gather qualitative information on the urban environment and its accessibility. All areas include a range of land uses such as public or green spaces, education and cultural complex, commercial, residential, and mixed land uses. The contexts explored vary in their urban structures (buildings characteristics, road system, placement with surroundings) presenting diverse accessibility issues and attracting potentially distinct urban users. Participants were divided in small groups of two or three walkers guided by one or two leaders and a teacher and a project representative, according to the size of the urban area to be explored. Urban walkers covered all main routes crossing and/or delimiting each area and the majority of secondary routes. They particularly focused on walkability and general limitation to full accessibility of spaces for disabled, children, elderly and pedestrian or cyclist people, as well on the overall accessibility to the area by public transportation.

Results of the EWs served to open discussion on potential strategies and actions to be implemented and stakeholders to be involved.

b) Exploratory walks preparation

Steps to complete the task:

1. A seminar on urban accessibility and related concepts with focus on urban planning and design was organized for students of the Course of Land and Landscape planning and protection (Department of Agriculture, Food and Environment), invited to participate to the EWs,

2. Students from the Department of Civil Engineering and Architecture (Course of Building Construction and Architectural Engineering) with spatial planning and urban design background were informed about the project and invited to participate as walk leaders for the EWs, to tutor younger students of the Course of Land and Landscape planning and protection,
3. All students were informed about the purpose of the walk, the areas selected for the exploration, the detailed structure of the survey to be filled in, and the supporting documents provided (printed maps of the areas),
4. The walk leaders and their groups explored the areas, discussing accessibility issues according to inputs provided by the survey and suggestions by the project representatives. By means of the printed maps and digital maps (google earth, google maps, Open Street Map), and the survey, the groups gathered qualitative and detailed information in about three hours.
5. In addition to general considerations on the accessibility of the assigned case study, the wrap-up of the EW, for each group, included discussion on the adopted service-learning approach and the use of digital and printed maps as well as recommendations for future similar initiatives.

Time for each EW: 3 hours

Participants: 15 students (young adults aged 20-25) and 3 adults (35-50)

Routes/Areas:

Area 1 (Figure 1 and Figure 2)-oldcity core: Orange routes and 3 major nodes (main urban functions: public area with cultural hotspots)

Area 2 (Figure 1 and Figure 2)-old city core: Yellow routes and 4 major nodes (main urban functions: public area with cultural hotspots and university sites)

Area 3 (Figure 1 and Figure 3)-modern neighbourhood: Yellow routes and 1 major nodes (main urban functions: public area with café and shops)

Area 4 (Figure 1 and Figure 3)-modern neighbourhood: Orange routes and Y major nodes (main urban functions: urban green area, school and parking area)

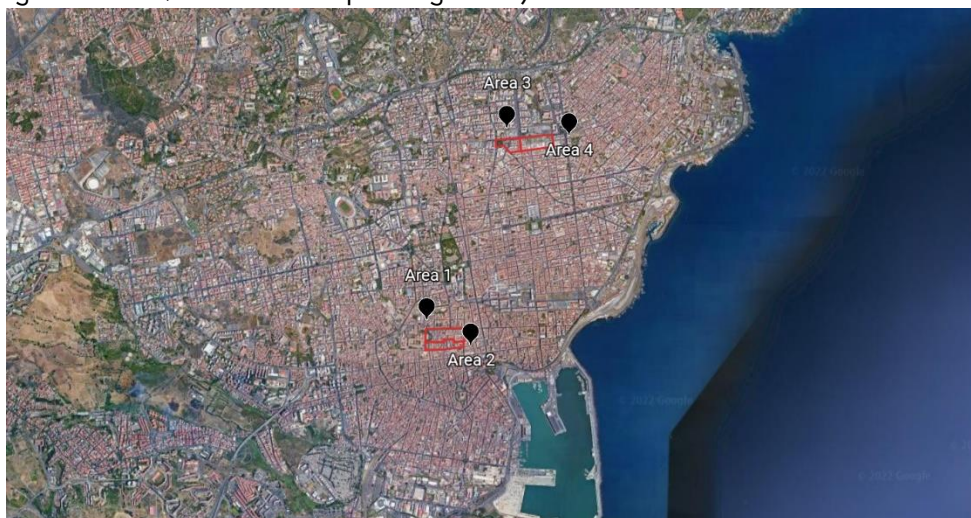


Figure 1- Case studies location in Catania, Italy



Figure 2-Routes and principal points of interest of the EWs in selected areas of the Catania old city core

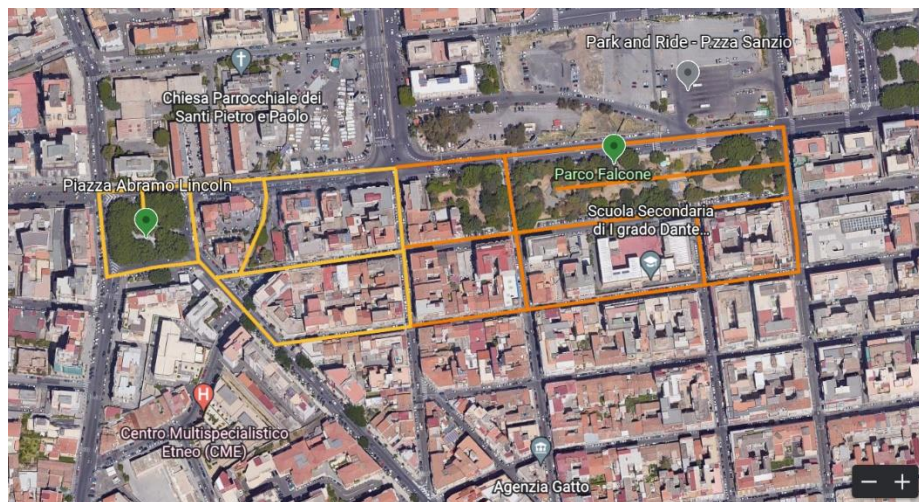


Figure 3-Routes and principal points of interest of the EWs in selected areas of the Catania modern neighbourhoods

c) Issues linked to and suggestions for future exploratory walks

Involvement of community organizations and stakeholders

Following the analyses of urban functions, features, elements, and barriers to accessibility characterizing the case studies, participants discussed on proposals of interventions to improve accessibility and potential stakeholders to be involved to support possible projects. All groups recommended that the Municipal Department/Office for town planning and mobility and office for service and infrastructure maintenance could take part in the prospective debate. Participants also agreed on the necessary involvement of local commercial activities and public transport companies. According to site specificities, the University, the Municipal Police, the primary School and local associations were indicated as potential interested stakeholders. Indeed, the EWs served to also collect

ideas for planning the future participation of the identified stakeholders and other community organizations.

Student engagement

Students of the “Building Construction and Architectural Engineering” and “Land and Landscape planning and protection” courses of two Departments of the University of Catania (UNICT) were involved and trained on topics of the Map4Accessibility project.

To efficiently perform the EW, UNICT staff members prearranged a taught lecture on the topic of urban accessibility and a couple of meetings in order to provide details on the EW survey and the parallel use of maps. All reached and invited students took part in the walk as group member or walk leader, based on their level of knowledge and skills on urban planning and design.

Service-Learning (SL)

The applied educational approach combined formal learning sessions in the classroom on the theory and best practices of urban accessibility, the following voluntary participation in the EW and the engagement in reflection/discussion activities to deepen the students understanding of what is being taught and experienced.

Embedding SL pedagogical approach in the EW and HEI courses

The SL pedagogical approach was adopted both in the HEI courses and in the EW. During the EW, in particular, the civic engagement has been enriched by brief conversations with different urban users (cyclists, elderly and disabled, tourists and students) held during the walks.

All groups of students evaluated the service-learning approach with high scores, ranging between 3 and 5, and expressed satisfaction with the opportunity to face the challenges previously presented in theory, explore areas of the city which not all of them were familiar, approach the urban environments with a renewed sensibility and improved competences, support community development and social change.

Employment of mapping tools

All participants referred to mapping (both digital and printed) tools as fundamental for the walk in terms of orientation and barriers positioning, to highlight critical nodes and draft potential design solutions.

Walkers expressed a preference for the printed maps mainly because they give maximum flexibility to personalize and quickly store data and comments.

Furthermore, **teachers underlined the need of a common way/procedure to store gathered spatial information, for their future re-use in the forthcoming urban walks and to make the case studies in different cities comparable.**

4.5.2. BERLIN

a) Local urban settings of the study cases

Local case study: Berlin, Germany

Short description

On the 7th of October 2022, an exploratory walk was carried out in Berlin, hosted by ESCP. 13 students of the bachelor's in management course and Prof. Dr. Markus Bick were led by the walk leader Luca Laule, who is a research assistant and PhD student at ESCP. Initially the participants were familiarised with the survey which everyone had to fill in. The chosen route was one of the most visited ones by tourists. The meeting point was at Brandenburg Gate, the end was at the Television Tower. The students were divided in groups of 2 – 4 and were told to not document the same spots. This made it possible to document as many points of interest as possible. The focus was on the accessibility for people either having a motor or visual disability. Spots of interest were, for example, cafes or restaurants and the condition of the sidewalk or even temporary constructions. To map the exact position of the documented spot, the students had to mark the position on a printed route map.

Aim of the exploratory walk

The walk has several objectives:

- To rate the accessibility of a space
- Students are made aware of the lack of accessibility in urban spaces, following the service-learning approach
- The walk served as a first step to collect data about the accessibility of urban spaces.

b) Exploratory walks preparation

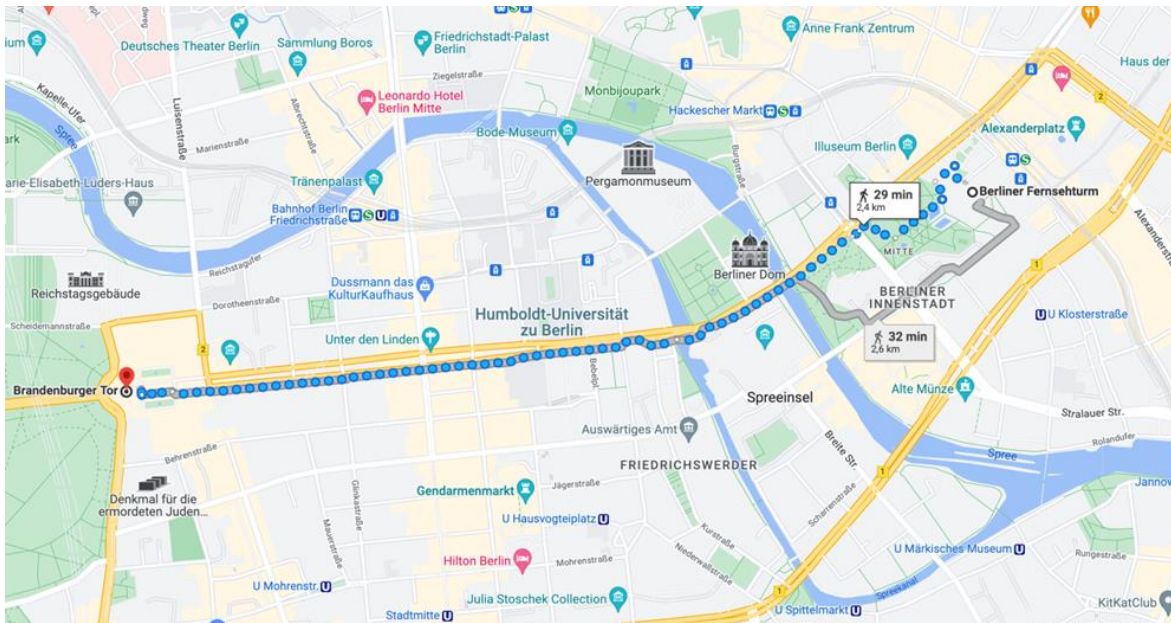
Detailed steps of the exploratory walk

1. Students were invited and were informed about the purpose of the exploratory walk and the planned activities.
2. Preparation of the materials by the walk leader. Every student received a printed survey, a pen, and a clipboard.
3. The group met and split themselves into groups of 2 – 4 people.
4. Each group of students walked the predefined route. As the street was a very big one, some students chose to use the left sidewalk, some walked in the middle of the street and some others used the right sidewalk.
5. The group met again at the Television tower about 1.5 hours later and finished the last page of the survey, where some general questions about the exploratory walk had to be answered.

Time: 1.5 hours

Description: 13 students, 1 professor and one PhD student, who acted as a walk leader

Route: The route started at the Brandenburg Gate and ended at the Television Tower. The route was 2,4 km long and would take 29 min. by constant walking. Each student had to document three points on the route.



c) Issues linked to and suggestions for future exploratory walks

Involvement of community organisations and stakeholders

The exploratory walk served as a first trial of the process of documenting the accessibility of urban spaces. The stakeholders were students, one professor, and the walk leader, who is a PhD student. The students gave the feedback that if someone having a disability would join the walk, the experience would be more tangible. One student mentioned the idea that a wheelchair was provided, and students experienced by themselves what it meant to be dependent on it.

Student engagement

The students were engaged to participate in the exploratory walk. They were very enthusiastic and looking forward to the walk, actively asking some questions on the aim of the project. They also gave some constructive criticism on points to improve.

Service-Learning (SL)

The social learning approach was conducted. The students created data while they documented the accessibility on urban areas on the route described above. Those data can be implemented in the app which is being developed which can be seen as a service to the society. On the other hand, they learned a lot about the topic of accessibility.

Embedding SL pedagogical approach in the EW and HEI courses

The students received an introduction about the topic of accessibility. They were told to take special attention on barriers on the route which decreases the accessibility for people having a disability. The students shared that they noticed a lot of little barriers they never were aware of before.

Employment of mapping tools

The students used a printed map to mark the exact position where they documented the accessibility for a specific urban area. The use of the printed map received some good feedback. The students said, it was easy to handle but they also noted that a digital map would have been easier to use, especially when GPS is implemented.

4.5.3. BLAGOEVGRAD

a) Local urban settings of the study case

Local case study: Blagoevgrad, Bulgaria

Walk Leaders: Miglena Tsvetkova-Gaberska (miglena_tsvetkova@abv.bg), Mariela Filipova (mariela_filipova@swu.bg), Faculty of Public Health, Health Care and Sports.

Short description

On 26 and 27 September 2022, exploratory walks group were held in SWU “Neofit Rilski” Blagoevgrad. Participants were selected and invited by SWU staff. A total of 37 students of the Bachelor’s of Kinesitherapy participated and were led by 2 walk leaders – assoc. prof Mariela Filipova and ch. assist. Miglena Tsvetkova-Gaberska. Several routes were covered on foot and by public transport. On the first day (26th Sep) 17 students took part in the EW, on the second day - 20. The students were divided into groups of 5 and were familiarized with the route and the checklist. A student with disability (multiple sclerosis, requiring walking aid) participated in the walk as well. All the groups had to focus on the accessibility of their surroundings along the chosen route and mark crisis points and locations. During the exploratory walk, different aspects of accessibility of a predefined route were documented on a standardized survey sheet by each student. The students had two ways to investigate the route, by walk first, and by bus, coming back to the start point. Features and issues of the urban spaces and routes, difficulties encountered and suggestions for improvement were also discussed during the exploratory walk.

b) Exploratory walks preparation

Steps to complete the task:

1. Promotional materials for the event (folders and chemicals) were prepared to be used on the day of the EW,
2. Students were invited and were informed about the purpose of the EW (they were familiar with the form to be filled in, the routes and the hours of the event),
3. The walk leader gathered all the participants and gave them promotional materials to facilitate their work and divided the participants into groups,
4. Each of the groups had to walk the designated route for about an hour,
5. The meeting of all groups was at the last point - the old town of Varosha.

Time: 1 – 1,5 hours.

Description: 37 students (young adults aged 18-25) from department of Kinesitherapy and 2 walk leaders.

Routes: Five nodal routes were defined. They were consulted with the disabled person from the Multiple Sclerosis Society who pointed out the hotspots for disabled people in the city. The routes also cover the most visited places in the town.

First route was from SWU “Neofit Rilski” to the building of the municipality of Blagoevgrad by bus to assess the accessibility of city buses for people with disabilities (15 min by bus).

Second route from SWU “Neofit Rilski” to General Hospital for Active Treatment Blagoevgrad (15 min walking).

Third route was from the building of the municipality of Blagoevgrad to Largo Mall, for the assessment of the urban environment. (10 min walking in the city centre).

Fourth route was from Largo Mall to Blagoevgrad Chamber Opera, to assess the accessibility for people with disabilities of similar type of public buildings (5 min walking in the city centre).

Fifth route was from the city centre to the old town of Varosha, where the church of St. Virgin is located (10 min walking).



c) Issues linked to and suggestions for future exploratory walks

Involvement of community organisations and stakeholders

It is recommended to include people from the municipality, architects and engineers on future EWs to provide professional ideas on how to improve the urban environment. The inclusion of the other institutions is recommended for the next walk - both from the local government and from local associations for people with disabilities.

Student engagement

The SL approach allowed students to face inclusion and accessibility issues as active actors of the process. Some topics and suggestions emerged from the conducted EW. The integration of disabled people would be most successful when the individual is considered in its entirety. Basically, students identified the needs to provide supportive measures as a package service from all institutions. Examples are:

1. The improvement of the street surface, as well as the construction of sidewalks and alleys for people with disabilities will allow them to move freely.
2. Construction of ramps and elevators in places where there are stairs and limited access, as well as in public transport.
3. Providing more parking spaces to prevent improper parking of cars that restrict free movement.

Service-Learning (SL)

The applied educational approach combined formal learning sessions in the classroom on the theory and practical skills to observe and describe the surrounding urban environment. Students had the opportunity to focus on the various barriers that prevent the free movement of people with disabilities. The students created data while they documented the accessibility on urban areas on the route described above. Those data can be implemented in the app which is being developed which can be seen as a service to the society. They learned a lot about the topic of accessibility. On the other hand, the EW was the first step in engaging and integrating the students in the upcoming activities related to the project and the implementation of practices important for the activity in HEI.

Embedding SL pedagogical approach in the EW and HEI courses

Good pedagogical approach in HEI courses is to play various role-playing games in which students are put in the role of disabled people. As well as conducting interviews and discussions with organizations representing people with different disabilities (conversations with disabled people themselves). In the second semester of the academic year, a discussion with the students on the interaction of the urban environment for people with disabilities is planned (March 2023). Various case studies and role-playing games are planned (to move in an urban environment in groups with verbal or visual perception eliminated, as well as by means of aids and wheelchair), in which students will be confronted with the challenges that disabled people face on a daily basis in our town. This will help us to see the barriers and obstacles more precisely and describe the environment in even more detail.

Employment of mapping tools

The use of maps (digital and printed) is very useful when conducting the walk because the critical spots and problem areas of the route can be accurately marked. Young people use most mobile devices and applications, which makes the use of digital maps preferred by them. Using printed maps requires the need for a folder and pen, as well as a place to stop to write, while a mobile device makes annotating a digital map quick and easy, as well as summarizing the information received. Also using applications such as Google Earth and Google Maps they can very easily follow the chosen route, mark the critical points with specific details, as well as upload the necessary photo material and description of the problem.

At a later stage, this would help to summarize the information more quickly and precisely, especially when the number of participants and routes is bigger.

4.5.4. LISBON

a. Local urban settings of the study case

Local case study: Lisbon, Portugal

Walk Leaders: Joana Gorgueira, project manager of accessibility area in Associação Salvador and Igor Raevchi, ambassador of Associação Salvador, who is a person with physical disability.

Short description

On 16 of November 2022, an exploratory walk group was held in Carcavelos, West part of Lisbon, with Nova School of Business and Economics. Students were recruited through Nova Business School's volunteering platform, called Role to Play, where they showed interest in taking part in this initiative.

b. Exploratory walks preparation

Steps to complete the task:

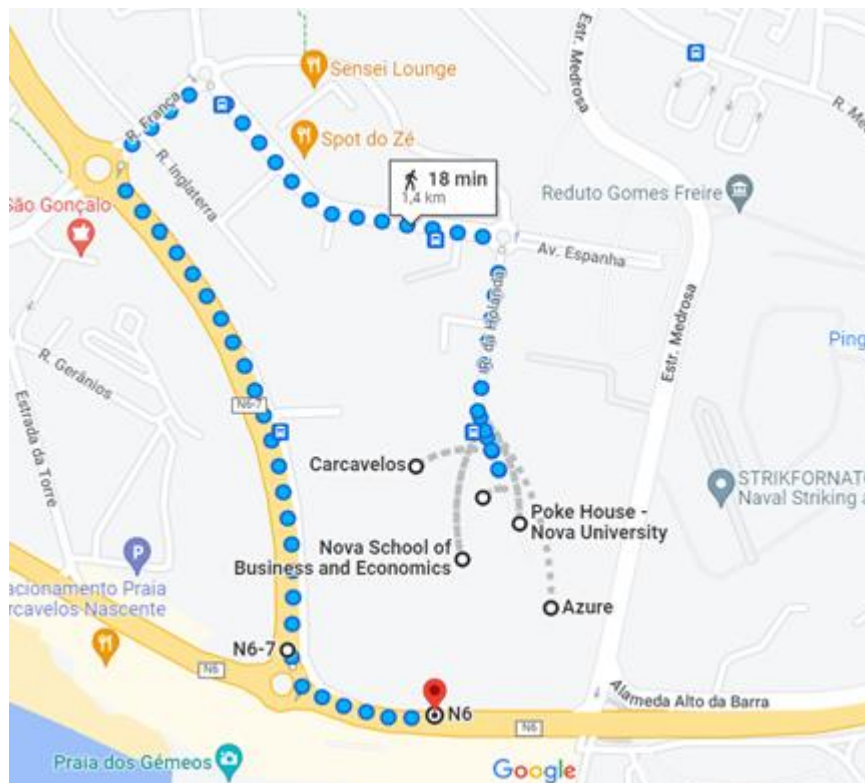
The initiative began with a presentation of who Associação Salvador is, the journey of each of the leaders. Next, accessibility problems were presented such as the main barriers that people with disabilities face in their daily lives. Students' involvement was realised by direct questions as: have you thought about where you went yesterday, was it accessible?

Furthermore, discussions were on the understanding of the best approach, which classes could be involved, how students see the volunteering and social aspect, how everybody play an active role in this issue. The chosen route for EW emerged from the discussion. Indeed, all participants decided that before going to historic, tourist areas, it would have been interesting to evaluate the local streets where students live and study. Thus, the EW started at the university.

Time for exploratory walk: 2 hours

Participants: 20 students

Route: The route covers the way from the NOVA School of Business and Economics and the seafront.



c. Issues linked to and suggestions for future exploratory walks

Involvement of community organizations and stakeholders

Discussions concluded that it is very important that these types of initiatives should have a greater involvement by the university, including all students or several classes at the same time.

Student engagement

Students were very motivated by the issue of accessibility. They reported that undoubtedly, these types of initiatives are important for students to think about the topic. "On a daily basis, we don't stop to think about the country's lack of accessibility".

Service-Learning (SL)

The SL approach was not presented in this EW, but the fundamental principles were adopted. See the active role of student for the choice of the route. SL approach will be presented in other walks.

Embedding SL pedagogical approach in the EW and HEI courses

The opinion of AS can be reported as an NGO involved in inclusion and accessibility issues. Nowadays, in universities, there is a lot of information about social responsibility and how companies can really play an important role in this matter. It doesn't make sense for social responsibility issues to be treated separately, but rather that they form part of the companies' core business. The same in universities and the way in which young people must be involved in these issues and the work that must be developed.

Employment of mapping tools

Participants declared that it is increasingly important to count on the technological development that allows us to give access to information from accessible and non-accessible places. Mapping all areas of the city is essential so that people can know where they can and cannot go.



Fig. 4.6 Some pictures of the EWs done in the four study cases of Map4Accessibility

4.6. THE FACILITATION GUIDE FOR THE ORGANIZATION OF EW IN HEI

The facilitation guide reports a list of points studied to guide an effective organization of EW. The facilitation guide is based on six fundamental questions reported on fig. 4.7. The guide is based on a literature review and the experience from the EW realised in Map4Accessibility (section 4.5). The facilitation guide has a general character and can be used to build EW for different urban contexts and issues with a Service-Learning (SL) approach.

Facilitation Process

1. The teacher presents the general objectives of EW to students following the Service-Learning pedagogical approach (WHY),
2. The teacher organises the discussion on the other Question Words (WHAT, WHERE, WHO and WHEN): make the choice of EW really born from the student,
3. The teacher provides participants with materials or (preferably) leaves students producing and organising their materials (HOW),
4. At least one walk leader is defined for each EW. If necessary, the teacher can be the walk leader or a co-walk leader,
5. The walk leaders lead the walk with selected stops determined in advance and listed. At each stop the participants consider how safe, connected, accessible, walkable, and attractive the node is for specific groups of students and citizens (e.g., disabled, children or the elderly),
6. If the weather is bad, the number of stops and the amount of information to be recorded can be reduced and the discussion periods moved in a sheltered area. Alternatively, the EW can be shifted or anticipated in other day or time,
7. A conversation at each node is realised to discuss the principles of good design – e.g., observed physical or digital barriers. Participants can rate the node on a scale of 1-5 (5 being the most adequate) on different criteria (e.g., accessibility by walking, wheelchairs, or biking). The walk leader controls the registration of participants observations at each node on the survey,
8. Once the EW is completed, participants' experiences are discussed. The walk leader asks a few open-ended questions to encourage discussion around additional community improvements (e.g., which node the participants felt the least/ most accessible and why),
9. Do not focus only on negative aspects (what can be improved) during the EW but also on what people like in the area,
10. Do not limit the participants in their recommendations (let them be creative),
11. Do not let people monopolize the discussion,
12. Use social media (e.g., Facebook) or local media to promote the experience and the active role of walkers,
13. Make the walk fun but make sure the walkers take it seriously,
14. Ensure a follow up for a long-lasting engagement in case of a successive urban walk,

15. The walk leader collects all the participants' surveys and writes a final report with the collaboration of all students.
16. The teacher and the walk leaders disseminate the outcomes of the EW in the proper channels, as identified by students, and an evaluation of impacts on communities and territory is done (see section 3.4.2 and 3.4.3).

SIX QUESTIONS FOR EXPLORATORY WALKS

- I. **WHY**
 - Determining the symptoms of crisis phenomena in the area of revitalization
 - Identifying the potentials of stakeholders in the revitalization process
 - Determining the areas and directions of revitalization activities
 - Making students the actors of change following the Service-Learning approach
- II. **WHAT**
 - Issues related to attractiveness, security, accessibility, walkability, and connectivity of the urban landscape (see section 4.2).
 - The investigated issue can be part of an argument related to a specific HEI course or project.
- III. **WHO**
 - Around 10 HEI students and at least 1 walk leader (preferably student) for each EW. The teacher can check the activities and guide students when required.
 - The number of participants can vary based on the purpose of the EW and urban area characteristics. Groups of 2-4 people can properly explore an area, but a larger group can allow for a more fruitful and lively interaction. A larger group requires additional efforts for walk leaders, preliminary training, and final reporting.
 - Specific experts for the scheduled EW (e.g., technicians from the urban planning department of the city hall)
 - Be aware that the presence of elected officials can shift the focus on politics.
 - People with different disabilities or belonging to disadvantaged classes are very welcomed to experience and report real barriers and issues.
- IV. **WHERE**
 - Central, popular locations
 - Areas or routes where the issue(s) are keenly felt by citizens and/or the students
 - Important urban services are present
 - Students can complete an EW within a maximum of 90/120 minutes (Make EW with achievable objectives)
- V. **WHEN**

The majority of participants are available

The investigated process happens (e.g., during serious traffic congestion time)

During lesson time as an activity linked to an exam

The weather is good (or it represents a typical condition for the area)

VI. HOW - Materials needed for walkers

Clipboards/smartphone/tablet

Maps with nodes displayed (printed and/or digital)

Pens or pencils

Smartphones/digital camera to take pictures and make videos

Participants can use wheelchairs, noise-isolating headphones, masks or similar tools to experience tangible difficulties and actual barriers for disabled people.

A survey template (see section 4.4)

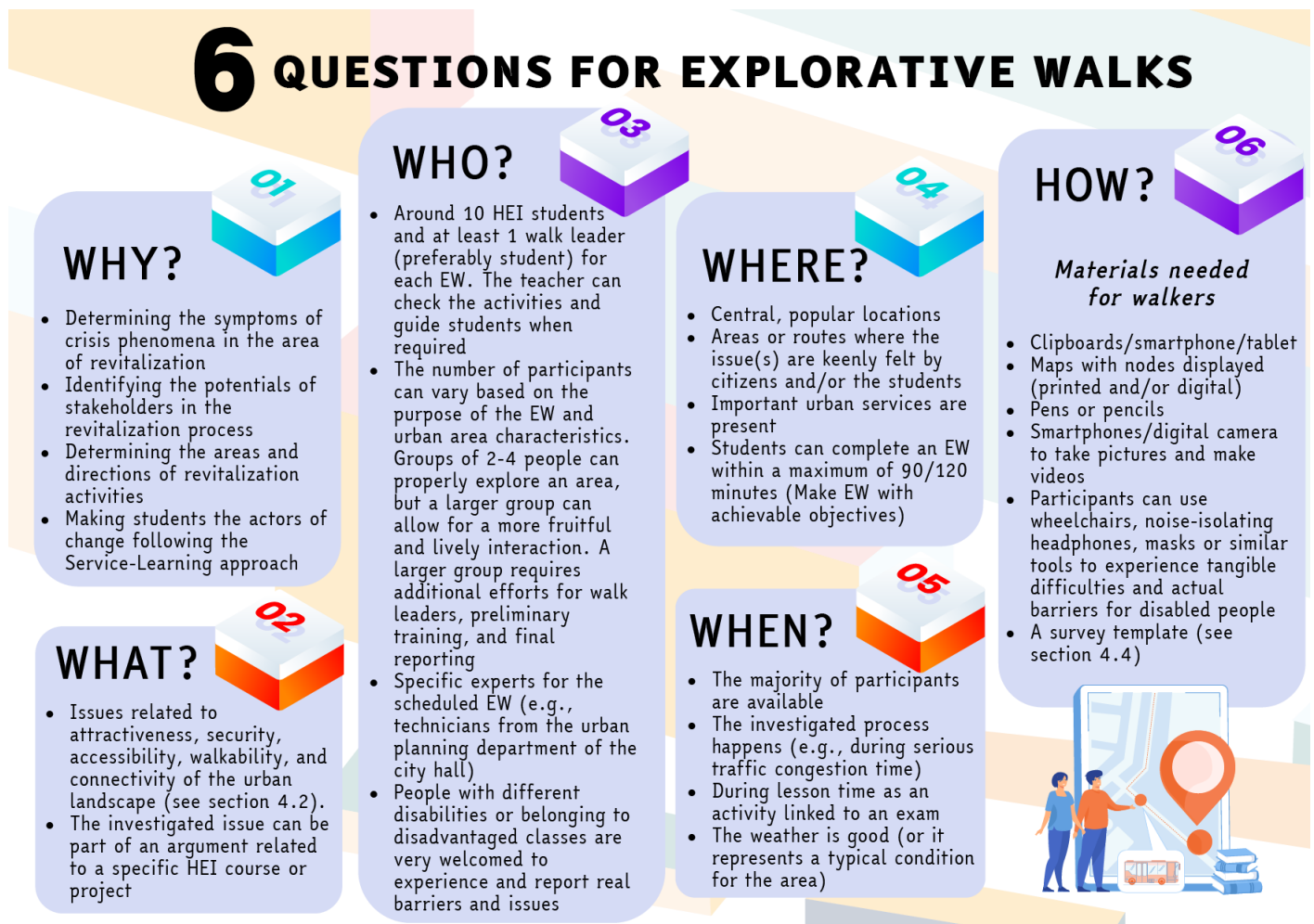


Fig. 4.7 Six questions for EWs

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5.3. EXPLORATORY WALK

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APPENDIX A - SL EUROPEAN PROJECTS IN HEI

Source <https://www.eoslhe.eu/>. Update May 2022

1. PROJECTS IN FINLAND

Project name	Religion and Values in Urban Challenges and Well-being
Year	2017
Institution	University of Helsinki
Person in charge	Henrietta Grönlund
No. of students	18
Interaction with beneficiaries	Face-to -face
Academic Degree	Masters' Degree
Discipline(s)	Theology
Community Service Area & ODS	Sustainable cities and communities Good health and well-being Reducing inequalities
Purpose:	Students can analyse the interconnections of urban contexts, social challenges and religion and values. They can apply research-based knowledge into a practical situation or challenge, and understand work and working methods which aim in influencing urban social challenges. The students develop their abilities to use their expertise on influencing a real world problem.

2. PROJECTS IN LITHUANIA

Project name	Support for Local Gymnasium to Ensure Effective Feedback on the Quality of Education
Year	2018
Institution	Vytautas Magnus University
Person in charge	Lina Kaminskiene
No. of students	17
Interaction with beneficiaries	Face-to-face
Academic Degree	Master
Discipline(s)	Education
Community Service Area & ODS	Quality education
Purpose	Implementation of a new bilingual curriculum in the school in Lithuania. A survey system has been designed and implemented as tools of the feedback mechanism and to have a more systematic, complete and reliable feedback channel to collect data from stakeholders.

3. PROJECT IN UKRAINE

Project name	The Serving University
Year	2018-2019
Institution	Ukrainian Catholic University (UCU)
Person in charge	Taras Dobko
No. of students	115
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate Master
Discipline(s)	Social Work Law Computer Science
Community Service Area & ODS	Reducing inequalities Good health and well-being Decent work and economic growth
Purpose	UCU aims not only to educate people for academic and professional life. It also tries to translate Gospel message into a faith- or value-inspired action by getting students of all programs involved in service to the mentally handicapped, homeless, orphans, poor, displaced, abandoned.

Project name	Creating an Asset-map for Veterans of the Joint Forces Operation in Ukraine
Year	2019-2020
Institution	Ukrainian Catholic University
Person in charge	Yuliia Kokoichuk
No. of students	20
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Fundamentals of social and legal protection Social Work Communications
Community Service Area & ODS	Quality education Peace, justice and strong institutions Partnership for the goals
Purpose	To establish a network of contacts of these institutions and create an accessible platform for finding up-to-date information, e.g. the nearest existing organizations providing specific services to veterans and their families.

4. PROJECT IN ROMANIA

Project name	Day of Human-Animal Interaction
Year	2018-2019
Institution	BABEȘ-BOLYAI University
Person in charge	Alina Simona Rusu
No. of students	120
Interaction with beneficiaries	Mixed

Academic Degree	Undergraduate
Discipline(s)	Psychology Biology Education
Community Service Area & ODS	Good health and well-being Quality education
Purpose	Community-oriented event -aims to promote responsible ownership, prevention of cruelty towards animals, and optimal human-animal interactions. It involves cooperation between university, students and local NGOs in the field of animal protection and social veterinary medicine
Description	Incomplete

Project name	ENGAGE STUDENTS – Promoting Social Responsibility of Students by Embedding Service Learning into Education Curricula
Year	2018 – 2021
Institution	University Politehnica of Bucharest
Person in charge	Gabriel Dima
No. of students	N/A
Interaction with beneficiaries	N/A
Academic Degree	N/A
Discipline(s)	N/A
Community Service Area & ODS	N/A
Purpose	<ul style="list-style-type: none"> to explore the existing methodology of service-learning and other forms of community-related learning and research to develop a methodological toolkit and a pedagogical workbook to be used by teachers to build the critical mass of knowledge and resources in partner HEIs in order to foster the use of service learning and other community-related learning methodologies.
Description	Partially incomplete

5. PROJECT IN ALBANIA

Project name	Social Services in times of crisis: Responding to post-earthquake needs and connecting service outcomes with learning outcomes
Year	2019 – 2020

Institution	University of Tirana
Person in charge	Edlira Gjoni
No. of students	25
Interaction with beneficiaries	Face-to-face
Academic Degree	Master
Discipline(s)	Social Work Sociology Psychology
Community Service Area & ODS	Good health and well-being Partnership for the goals Peace, justice and strong institutions
Purpose	“Social Services in times of crisis: Responding to post-earthquake needs in Durres” – a student engagement case, responding to the community needs in times of the natural disaster, after the 6.4 earthquake in Albania in November 2019. Service outcomes were intricately linked with learning outcomes.

6. PROJECT IN SLOVAKIA

Project name	Game for the Planet
Year	2018-2019
Institution	Matej Bel University
Person in charge	Alžbeta Brozmanová Gregorová
No. of students	10
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate Master
Discipline(s)	Education Social Work
Community Service Area & ODS	No poverty Climate action
Purpose	to point out the dimension of interconnectedness and context in the given topics and to reflect on how each of us has an impact on others and also on the environment. At the same time, we have created space for a discussion that none of us has no responsibility. We consider it important for Matej Bel University students to be educated in active citizenship and thus contribute to the creation of a democratic and sustainable society at both local and global levels.

7. PROJECT IN AUSTRIA

Project name	Volunteering@WU
Year	2010 – 2019
Institution	WU – Vienna University of Economics and Business
Person in charge	Stefanie Mackerle-Bixa
No. of students	1.200
Interaction with beneficiaries	Face to face

Academic Degree	Undergraduate Master PhD
Discipline(s)	Open to different disciplines Sociology Psychology
Community Service Area & ODS	Quality education Reducing inequalities
Purpose	The Volunteering@WU program works with kids from socially disadvantaged backgrounds, supporting them in their educational career and also benefiting student helpers by encouraging social responsibility and volunteering activities.

Project name	L.E.V. – Lernen Engagement Verantwortung (Learning Service Responsibility)
Year	2019-2020
Institution	Private University of Education, Diocese of Linz
Person in charge	
No. of students	120
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Education
Community Service Area & ODS	Quality Education
Purpose	The project is determined by inclusion – The students get to know new fields and gain experience in areas (outside of school) with which they have not yet had any contact. This opens up perspectives for a diversity of conditions of lives.

8. PROJECT IN CROATIA

Project name	Kruzej – Kroz muzeje jednaki (Cruiseum – Equal Through Museums)
Year	2017-2018
Institution	Faculty of Humanities and Social Sciences, University of Zagreb
Person in charge	Nives Mikelic Preradovic
No. of students	40
Interaction with beneficiaries	Face-to face
Academic Degree	Master
Discipline(s)	Information and Communication Sciences
Community Service Area & ODS	Quality Education

Purpose	to increase the interest of high school students in museums and other heritage institutions and secondly, to enable high school students to critically engage and address the idea of equality (gender, race, income, religion, health and disability).
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Project name	Early Stimulation of Developmental Capacities of Children without Parental Care Aged 0 to 7
Year	2018-2019
Institution	University of Banja Luka
Person in charge	Slavica Tutnjjevic
No. of students	15
Interaction with beneficiaries	Face to face
Academic Degree	Undergraduate Master
Discipline(s)	Psychology Education
Community Service Area & ODS	Quality education Good health and well-being Reducing inequalities
Purpose	to provide activities for enhancement of physical, motor, cognitive, social, emotional and language capacities in children aged 0 to 7 based at a home for children without parental care.

Project name	Students & Community-Based Participatory (Evaluation) Research
Year	2007 to present
Institution	University of Rijeka, Faculty of Humanities and Social Sciences, Department of Education
Person in charge	Bojana Culum Ilic
No. of students	30
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Open to different disciplines Education
Community Service Area & ODS	Partnership for the goals.
Purpose	Each academic year there is an agreement signed with certain community organisation or more of them (e.g. NGOs, schools, kindergartens, museums), whose project(s) is/are then evaluated over the next three months (one semester) of the course length. Course combines theoretical background with extensive field work. Every step of the course is both planned and delivered in close collaboration with partners from the community and therefore tailored to meet their particular needs.

9. PROJECT IN ITALY

Project name	S-L 395 Social Action Seminar
Year	2017-2019
Institution	IES Abroad Milan
Person in charge	Elyse Resnick
No. of students	70
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Open to different disciplines
Community Service Area & ODS	Reducing inequalities. Peace, justice and strong institutions. Quality education
Purpose	The interdisciplinary seminar will support student placements by providing context to deepen their understanding of current social justice issues. Particular focus will be given to the impact of immigration on Italian society. It will cover the historical events that led to the protection of human rights and the right to seek asylum, the subsequent legal framework that developed and how it impacts the migrants arriving in Italy today. It will give students a historical perspective on Italian contemporary society and look at concepts such as collective identity, place identity, regionalism, multiculturalism and integration.

Project name	Community Research Service Learning Program
Year	2014-2015
Institution	University of Verona
Person in charge	Roberta Silva
No. of students	200
Interaction with beneficiaries	Face-to-face
Academic Degree	Master
Discipline(s)	Education
Community Service Area & ODS	Quality Education
Purpose	<ol style="list-style-type: none"> 1. to promote learning as a service for the classroom in which the students are engaged in their apprenticeship; 2. to make students able to develop an educational research starting from the significant problems posed by the contexts.

Project name	Service-Learning and Community Engagement Lab
Year	2019

Institution	Alma Mater Studiorum University of Bologna
Person in charge	
No. of students	20
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate and Master Degree
Discipline(s)	Open to different disciplines areas
Community Service Area & ODS	Quality education
Purpose	The course includes the following activities: Illustration of principles, concepts and methods of service learning; community engagement, service, experiential learning; Meeting with community stakeholders and illustration of the service learning opportunities available in the community; Service Learning, experience in the field

Project name	Service-learning for democratic culture
Year	2004 to present
Institution	Siena Italian Studies
Person in charge	Lavinia Bracci
No. of students	1500
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate, Master
Discipline(s)	Languages and Literature, Sociology, Education
Community Service Area & ODS	Cultural diversity, Sustainable cities and communities, Quality education
Purpose	Since the beginning all service-learning projects at Siena Italian Studies have been complemented by reflection classes that had the function to link the service activities to classes content and the overall intercultural experience. Reflection classes journal served as a starting point to develop an assessment tool, RICA (Reflective Intercultural Competence Assessment) through which about 100 journals were assessed.

Project name	I'M LIKE YOU
Year	2019-2020
Institution	LUMSA University of Rome
Person in charge	Irene Culcasi
No. of students	3
Interaction with beneficiaries	Virtual
Academic Degree	Undergraduate

Discipline(s)	Psychology Anthropology Arts
Community Service Area & ODS	Quality education Reducing inequalities Good health and well-being

Purpose	The students started investigating the topic of cyberbullying through the analysis of the video database of the Scholas Occurrentes Foundation. Their aim was to create workshops to take to schools to raise awareness among children.
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Project name	SUNDAY TOGETHER
Year	2019-2020
Institution	LUMSA University of Rome
Person in charge	Irene Culcasi
No. of students	1
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Economics Business Communication
Community Service Area & ODS	Climate action Sustainable cities and communities Responsible consumption and production
Purpose	This Bottom-up Service-Learning project was designed by a LUMSA Economics and Marketing student who wanted to help a small café inside Villa Borghese Park, in Rome, to restructure its offer by creating eco-sustainable pic-nic boxes. The project was also born in order to valorize the Villa Borghese park in Rome, as a meeting place for young people and a place to take care of its green spaces.

Project name	"HOPE project – build your future: personal and professional development for Unaccompanied Foreign Minors"
Year	2018-2019
Institution	LUMSA University of Rome
Person in charge	Irene Culcasi
No. of students	35
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Psychology Education

Community Service Area & ODS	Reducing inequalities Quality education Good health and well-being
Purpose	The project – entitled “Hope: Build your future: personal and professional development for Unaccompanied Foreign Minors” (MSNA) – was aimed at young foreigners from 14 to 18 years old and was designed to promote their social and cultural integration and to provide them with personal and professional tools suitable for a more effective, rapid and sustainable integration into the world of work.

Project name	SLEEP AND COVID-19: LET’S GET OUR DREAMS BACK
Year	2019- 2020
Institution	LUMSA University of Rome
Person in charge	Irene Culcasi
No. of students	5
Interaction with beneficiaries	Virtual
Academic Degree	Undergraduate
Discipline(s)	Psychology Statistics Theology
Community Service Area & ODS	Good health and well-being Sustainable cities and communities
Purpose	Learning objectives were: putting psychometric knowledge into practice (SPSS software); learning how to interact with institutions. Services objectives were: evaluate the psychological consequences of Covid-19; raise awareness of sleep disorders resulting from Covid-19; spread solutions to this problem. The project lasted 50 hours and included: motivation activities, diagnosis, planning, service activities, reflection, evaluation, and celebration.

10. PROJECT IN GERMANY

Project name	Learning aids for disadvantaged children, adolescents and young refugees in Nuremberg
Year	2019-2020
Institution	Nuremberg Institute of Technology Georg Simon Ohm
Person in charge	
No. of students	35
Interaction with beneficiaries	Face-to-face
Academic Degree	
Discipline(s)	Open to different disciplines

Community Service Area & ODS	Quality Education Reducing Inequalities
Purpose	As a part of a practical assignment, students (mostly students from technical courses) accompany children and adolescents as well as young refugees in Nuremberg. They provide help with school problems in subjects such as mathematics and German, design leisure programs or support the organization of full-time offers.

Project name	SENSE Center for Civic Engagement and Responsible Management Education
Year	2019 – 2020
Institution	Karlshochschule International University
Person in charge	
No. of students	55
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Economics Political science
Community Service Area & ODS	Reducing inequalities Responsible consumption and production Climate action
Purpose	Il SENSE Center consente agli studenti e alle organizzazioni della società civile, nonché alle scuole, di attuare congiuntamente un progetto pratico. In questo modo, gli studenti imparano a conoscere il lavoro nella società civile e il sistema educativo e sperimentano cosa significa assumersi la responsabilità della società.

Project name	Sub-section Service-Learning and Civic Engagement
Year	2021-2022
Institution	University of Tübingen
Person in charge	
No. of students	400
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate Master
Discipline(s)	Open to different disciplines
Community Service Area & ODS	Sustainable cities and communities Good health and well-being Quality Education
Purpose	the sub-section Service-Learning and Civic Engagement supports the integration of voluntary community involvement into academic studies by promoting the innovative Service-Learning pedagogy.

Project name	Workshop Series on Service Learning
Year	2019-2020
Institution	Hochschulnetzwerk Bildung durch Verantwortung
Person in charge	
No. of students	100
Interaction with beneficiaries	Virtual
Academic Degree	Undergraduate Master
Discipline(s)	Open to different disciplines
Community Service Area & ODS	Quality Education Reducing inequalities Sustainable cities and communities
Purpose	workshop on: Civic engagement at universities – examples for good practice in urban development (with guests from Responsible Research and Innovation RRI Hub of RWTH Aachen as well as from the project RegioTransform of the university Bayreuth), Engagement with and through digitalization (guests from the organisation Balu & Du and Corona Schools) as well as Civic engagement at changing/evolving universities; tools to implement Service Learning.

Project name	Personal Challenge and Experience through social Engagement Persönlichkeitsentwicklung durch gesellschaftliches Engagement (200155)
Year	2018 (regularly every Winter- and Summerterm)
Institution	Christian-Albrechts-Universität zu Kiel
Person in charge	Wibke Matthes
No. of students	12
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate Master
Discipline(s)	Education Languages and Literature Computer Science
Community Service Area & ODS	Reducing inequalities Sustainable cities and communities
Purpose	job-relevant skills such as communication skills, conflict skills and teamwork are required and trained in the engagements. The participants take on social responsibility through the opportunity to immerse themselves in foreign worlds of life. They strengthen their personal profile.

Project name	Learning through the Assumption of Social Responsibility: Social Inequality, Poverty and Housing
Year	2019-2020
Institution	Ruhr-University Bochum, Department of Geography
Person in charge	
No. of students	18
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Human geography Sociology Economics
Community Service Area & ODS	No poverty Reducing inequalities Gender equality
Purpose	a concept of accompanying teaching and learning research will be developed as part of the requested project funding, which should accompany the individual learning process of the students from an educational and psychological perspective and evaluate objective achievement. Semi-standardised surveys and the conduction of accompanying qualitative interviews at four points during the teaching research project are planned. In particular, the achieved value derived from bringing together the research-based teaching and learning and the service-learning approach in higher education should be clearly illustrated

Project name	Service Learning in the Course: "Didactical Planning, Analysis, Teaching, Evaluation of Learning Situations"
Year	2010/2012 – Present
Institution	University of Duisburg-Essen
Person in charge	Dr. Cornelia Arend-Steinebach
No. of students	60
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Education
Community Service Area & ODS	Cultural diversity Reducing inequalities Quality education
Purpose	The curricular learning goal is, that students learn about didactical planning instruments and theories. Also it is set up as a project course, where students should act in a didactical situation and use the didactical theories and reflect on them. There is a wide range of Service Learning Projects in the course realized with community partners.

Project name	UNIAKTIV Centre for societal learning and civic responsibility
Year	2017-2018
Institution	University of Duisburg-Essen
Person in charge	
No. of students	400
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate Master
Discipline(s)	Open to different disciplines Education Psychology
Community Service Area & ODS	Sustainable cities and communities Partnership for the goals Quality education
Purpose	UNIAKTIV offers services and innovations for the cooperation between campus and community. UNIAKTIV supports faculties as well as the Rektorat with the development and implementation of ideas and projects which combine research & teaching with civic engagement. The main operational focus of UNIAKTIV is on Service Learning. Additionally,
Description	Incomplete

11. PROJECT IN SWITZERLAND

Project name	IMPULS Facilitating Service Learning for Sustainability
Year	2019-2020
Institution	University of Basel
Person in charge	
No. of students	100
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate Master
Discipline(s)	Open to different disciplines. <i>The goal of IMPULS is to reach as many students and from as many disciplines possible to educate them to become agents for change</i>
Community Service Area & ODS	Not apply
Purpose	to enable students to become change agents for sustainability.

12. PROJECT IN NETHERLANDS

Project name	Community Service and Community Engagement in Higher Education
Year	2019

Institution	Utrecht University
Person in charge	Jeroen Vermeulen
No. of students	30
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Business Education Sociology
Community Service Area & ODS	Decent work and economic growth No poverty Cultural diversity
Purpose	The aim of the project is to develop practices of community service and engagement in academic education at Utrecht University. We mean to develop forms of education in which students from various disciplines by working together with community partners contribute to local social issues in neighbourhoods in the city of Utrecht.
Description	Incomplete

Project name	Learning by Doing: Consulting to Social Entrepreneurs
Year	2019-2020
Institution	Rotterdam School of Management, Erasmus University
Person in charge	
No. of students	30
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Business Open to different disciplines
Community Service Area & ODS	Not apply
Purpose	This project will provide insight into a number of issues relating to management, including entrepreneurship, the non-profit sector and interaction between market, governments and civil society and trends within the community. Students will also develop their consultancy skills while having the experience of working for a real organization as part of a team of consultants. Students will also make an active contribution to their client organization (and the community) in the form of doing actual research and making valuable recommendations.

13. PROJECT IN BELGIUM

Project name	The Neighbourhood as a Learning Community
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Year	2017-2020
Institution	AP Hogeschool Antwerpen
Person in charge	
No. of students	15
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Open to different disciplines
Community Service Area & ODS	Reducing inequalities No poverty Cultural diversity
Purpose	The project wants to explore, facilitate, enhance and expand collaboration opportunities with work field organisations in the neighbourhoods surrounding the new campus through community-based learning.
Description	Incomplete

Project name	Service-Learning trajectory Master Sociology Master Social Economics University of Antwerp 'Social economy in the city of Antwerp'
Year	2019-2020
Institution	University of Antwerp
Person in charge	Andere organisatie
No. of students	42
Interaction with beneficiaries	Face-to-face
Academic Degree	Master
Discipline(s)	Sociology Economics Business
Community Service Area & ODS	Reducing inequalities Decent work and economic growth Good health and well-being
Purpose	The central question of this project was whether we can solve the problem of the exclusion of significant groups from the regular labour market through entrepreneurship in the social economy. Via the actual experience of actually working alongside social vulnerable actors and via critical (personal and academic) reflections – both by group conversations and personal diaries and many debates between organisation-student and docent, our students questioned the existing structures regarding subsidies, target group policy and regulation as well as the (personal) value of work for people with a social vulnerability.

Project name	IngénieuxSud
Year	
Institution	Université catholique de Louvain

Person in charge	Jean-Pierre Raskin
No. of students	120
Interaction with beneficiaries	Face-to face
Academic Degree	Undergraduate Master
Discipline(s)	Engineering and technology Earth sciences Business
Community Service Area & ODS	Clear water and sanitation Affordable and clean energy Decent work and economic growth
Purpose	During one full academic year, UCLouvain students, in collaboration with students from universities in Southern countries, are looking for appropriate and sustainable technological solutions to the problems identified by local communities. Students adopt a holistic approach throughout the project. They realize the impact of the technology on the way of living and the organization of the society.

Project name	Master Thesis on Vulnerable Women with Science Shop
Year	2018-2019
Institution	Vrije Universiteit Brussel
Person in charge	
No. of students	1
Interaction with beneficiaries	Face-to-face
Academic Degree	Master
Discipline(s)	Psychology Agogic Sciences Education
Community Service Area & ODS	Good health and well-being
Purpose	The student developed a workshop with and for vulnerable women about sexuality.
Description	Incomplete

Project name	Reason and Engage
Year	2019 – 2020
Institution	Vrije Universiteit Brussel
Person in charge	Linde Moriau
No. of students	48
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate Master
Discipline(s)	Open to different disciplines
Community Service Area & ODS	Partnership for the goals Sustainable cities and communities

Purpose	Reason and Engage invita esperti di diverse discipline a condividere risultati e opinioni con gli studenti e il pubblico in generale. Con le nostre lezioni, dibattiti, workshop, visite guidate... vogliamo facilitare il dialogo e la riflessione tra studenti, ricercatori, professionisti e cittadini attivi su alcune delle sfide più urgenti del nostro tempo. Tutti gli eventi si svolgono in varie località di Bruxelles. Sono gratuiti e aperti a tutti.
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Project name	service-learning-for-democratic-culture-
Year	2017-2018
Institution	Siena Italian Studies/Brussels
Person in charge	Arianna Giorgi
No. of students	6
Interaction with beneficiaries	Face-to-face
Academic Degree	Master
Discipline(s)	Sociology, Political science, Anthropology
Community Service Area & ODS	Cultural Diversity, Peace, Justice and Strong Institutions, Gender Equality
Purpose	Along these lines Siena Italian Studies has created a multi-destination experience with the goal of enhancing students' learning process through a Full-immersion program that relies heavily on Service-Learning. Students start their journey in Siena, Italy and end it in Brussels (Belgium), the capital of Europe

Project name	Service-Learning for Web Technology: Educational Games for Children with Disabilities
Year	2018-2019
Institution	KU Leuven
Person in charge	Joost Vennekens
No. of students	20
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Computer Science
Community Service Area & ODS	Reducing Inequalities
Purpose	The students interacted with the non-profit WAI-NOT to develop a set of online exercises to help children with disabilities master basic computer skills (e.g., clicking, dragging, moving the mouse pointer, ...).

Project name	Service-learning in a Chinese context: connecting encounters
Year	2019
Institution	KU Leuven
Person in charge	
No. of students	13
Interaction with beneficiaries	Face-to-face
Academic Degree	Master degree
Discipline(s)	Languages and literature
Community Service Area & ODS	Not apply
Purpose	Students of Chinese Studies undertake a service-learning course of 12 credits during their year abroad in China. They contribute to a local Chinese societal organization (needs are articulated by the organization) and reflect upon their experiences on a academic, personal and societal level.

Project name	Community Service Learning in Teacher Education
Year	2019-2020
Institution	Odisee University College
Person in charge	Ann Martin
No. of students	1000
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Education
Community Service Area & ODS	Quality education Reducing inequalities Cultural diversity
Purpose	The experiences are always linked to theoretical background knowledge and reflection practices. The aim is to widen their perspective and broaden their minds through empathy with vulnerable people in less fortunate circumstances

Project name	VUB Chair of Social Entrepreneurship The Circular Economy Challenge
Year	2019-2020
Institution	Vrije Universiteit Brussel
Person in charge	Philippe Eiselein
No. of students	40
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate Master PhD
Discipline(s)	Business Sociology Engineering and Technology

Community ODS	Partnership for the goals Sustainable cities and communities Clear water and sanitation
Purpose	The Circular Economy focuses on the reuse of materials, where waste is seen as raw material. According to the United Nations, “large social gains can be realized from improving resource circularity in multiple sectors”. The VUB Chair of Social Entrepreneurship, together with its partners, wanted to stimulate the creativity of students, entrepreneurs, and employees to develop innovative solutions for the circular economy.

Project name	Hands On Learning in the Local Community: a Hyperlocal Journalism Experiment
Year	2018-2019
Institution	Vrije Universiteit Brussel
Person in charge	
No. of students	22
Interaction with beneficiaries	Mixed. Written output, published in the media outlets of the partner organisations (print and online).
Academic Degree	Undergraduate
Discipline(s)	Open to different disciplines Languages and Literature Arts
Community ODS	Good health and well-being Cultural diversity Historic / Cultural preservation
Purpose	students of a Brussels journalism programme collaborated with a local media organization and with a community centre in the area of the university. They produced journalistic stories which were published in the media outlets of the partner organizations.

Project name	VUB Chair of Social Entrepreneurship The Circular Economy Challenge
Year	2019-2020
Institution	Vrije Universiteit Brussel
Person in charge	Philippe Eiselein
No. of students	40
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate Master PhD
Discipline(s)	Business Sociology Engineering and Technology

Community ODS	Service Area &	Partnership for the goals Sustainable cities and communities Clear water and sanitation
Purpose		The Circular Economy focuses on the reuse of materials, where waste is seen as raw material. According to the United Nations, “large social gains can be realized from improving resource circularity in multiple sectors”. The VUB Chair of Social Entrepreneurship, together with its partners, wanted to stimulate the creativity of students, entrepreneurs, and employees to develop innovative solutions for the circular economy.

Project name	VUB Social Entrepreneurship Chair	
Year	2019-2020	
Institution	Vrije Universiteit Brussel	
Person in charge	Philippe Eiselein	
No. of students	150	
Interaction with beneficiaries	Mixed	
Academic Degree	Master	
Discipline(s)	Business Economics	
Community ODS	Service Area &	Quality Education Partnership for the Goals Peace, Justice and Strong Institutions
Purpose		The main objective of this chair is to bring together both academia and business, NGO’s and public organizations in search of sustainable business models of social entrepreneurship. Our mission is to become a center of excellence for social entrepreneurship in Belgium and abroad. We want to support social entrepreneurs in their ambition to develop entrepreneurial and innovative approaches for resolving the sustainability issues of our society. We would like to realize this by developing an interdisciplinary network.

14. PROJECT IN UNITED KINGDOM

Project name	Community Engaged Learning Service	
Year	2019-2020	
Institution	University College London	
Person in charge	Marie Xypaki	
No. of students	200	

Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate Master PhD
Discipline(s)	Engineering and technology Human geography Education
Community Service Area & ODS	Quality Education Reducing Inequalities

Purpose	The Community Engaged Learning Service (CELS) is a consultancy at UCL that aims to enable the development of more Community Engaged Learning opportunities into teaching
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Description	Incomplete
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Project name	Self-Identity and Intergenerational Learning
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Year	2020
Institution	King's College London
Person in charge	Patricia Zunszain
No. of students	N/A
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate Master
Discipline(s)	Open to different Disciplines
Community Service Area & ODS	Good health and well-being Cultural diversity
Purpose	We aim to help reduce loneliness among students and older adults, and to improve intercultural and intergenerational communication while increasing students' self-awareness and their sense of belonging to a wider community.

Description	Partially Incomplete
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Project name	Sociology and Service-Learning
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Year	2019
Institution	Nottingham Trent University
Person in charge	Sharon Hutchings
No. of students	110
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate Master
Discipline(s)	Sociology
Community Service Area & ODS	Reducing inequalities Sustainable cities and communities Cultural diversity

Purpose	Service learning for sociology students at NTU Simply described students work on projects determined by local, not-for-profit organisations on which they reflect upon and connect to their disciplinary understandings within the wider disciplinary framework of public sociology.
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Project name	Criminology and Service-Learning
Year	2018-19
Institution	Nottingham Trent University
Person in charge	Andrea Lyons-Lewis
No. of students	Andrea Lyons-Lewis
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Sociology
Community Service Area & ODS	Sustainable cities and communities Good health and well-being
Purpose	Projects range from more traditional research projects to organising events, directly serving communities and political action.

Project name	Learning from the Lives of Others
Year	2019-2020
Institution	University of Edinburgh
Person in charge	
No. of students	10
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Sociology Medicine and Health Open to different disciplines
Community Service Area & ODS	Good health and well being Reducing inequalities No poverty
Purpose	The heart of the course for students is practical experience through assisting or engaging with people who are facing challenges which compromise their health. Thus students simultaneously make a contribution to the quality of others' lives in our local community and enhance their own understanding of situated individual experience and its consequences for health and daily living.

15. PROJECT IN IRELAND

Project name	Limerick Inside Out: Environment and Well Being
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Year	2019-2020
Institution	University of Limerick
Person in charge	Anne Warren-Perkinson
No. of students	27
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Open to different disciplines Engineering and technology Business
Community Service Area & ODS	Reducing inequalities Quality education Cultural Diversity
Purpose	The aim of the service learning experience to enhance the students' experience of being in Ireland by working closely with local civic groups. The students on the programme leverage their own unique experiences and knowledge to real-world projects to develop transversal skills such as communication, teamwork and creativity.

Project name	Limerick Inside out: Intercultural competence for global citizenship
Year	2018-2019
Institution	University of Limerick
Person in charge	Mairead Moriarty
No. of students	32
Interaction with beneficiaries	Face to face
Academic Degree	Undergraduate
Discipline(s)	Languages and Literature Law Political science
Community Service Area & ODS	Quality education Peace, justice and strong institutions Cultural diversity
Purpose	The aim of the service-learning experience to enhance the international students' experience of being in Ireland by working closely with civic groups in addressing the needs of refugees and asylum seekers who have moved to the Limerick area.

16. PROJECT IN FRANCE

Project name	Humanistic Leadership
Year	2020-2021
Institution	Aix Marseille University
Person in charge	Shawn Simpson
No. of students	40
Interaction with beneficiaries	Mixed
Academic Degree	Master

Discipline(s)	Business Economics Management
Community Service Area & ODS	Partnership for the goals Responsible consumption and production Climate action
Purpose	These Service-Learning projects are included within the academic approach and are used to raise awareness on the responsibilities future managers have to their communities.
Description	Partially incomplete

17. PROJECT IN SPAIN

Project name	Test reviewing as service-learning
Year	2019-2020
Institution	Universitat Autònoma de Barcelona
Person in charge	Carme Viladrich
No. of students	332
Interaction with beneficiaries	published reports
Academic Degree	Undergraduate
Discipline(s)	Psychology Education
Community Service Area & ODS	Quality education
Purpose	Based on the Spanish review model for evaluating test quality (http://www.cop.es , evaluation tests) we designed a service-learning project for providing independent reports on the quality of the tests available at the Psychology Test Library of the Universitat Autònoma de Barcelona while teaching psychometrics at undergraduate level.

Project name	Gender and technology: promoting new technological vocations
Year	2019-2020
Institution	University of Barcelona
Person in charge	Núria Vergés Bosch
No. of students	7
Interaction with beneficiaries	Face-to face
Academic Degree	Undergraduate
Discipline(s)	Sociology Engineering and technology Education
Community Service Area & ODS	Gender equality Reducing inequalities
Purpose	Sharing Ideas is a Service-Learning project in which undergraduate and master's degree students from the University of Barcelona (UB) prepare lecture-workshops on interesting topics related to their studies and teach these in high schools which the university visits. Specifically, our experience consisted

of teaching and accompanying our university students who study sociology of gender to carry out a lecture workshop on gender and technology at secondary/high schools.

Project name	INèDITnet
Year	2020-2021
Institution	Universitat de les Illes Balears
Person in charge	Francisca Negre Bennasar
No. of students	34
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate Master PhD
Discipline(s)	Education Medicine and health Engineering and technology
Community Service Area & ODS	Quality education Good health and well-being
Purpose	INèDITnet has two main goals: on the one hand, generate active learning and awareness scenarios for university students to enable them to improve their academic skills and training process; and, on the other, offer a Service Platform to respond to the psycho-pedagogical needs of children and young people in a situation of illness, especially a Rare Disease.

Project name	Service- Learning project between Physiotherapy students and the Balearic Association of Families with children with rare diseases
Year	2016-2017
Institution	University of the Balearic Islands
Person in charge	Berta Paz Lourido
No. of students	44
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Medicine and health Education Philosophy
Community Service Area & ODS	Reducing inequalities Good health and well-being Quality education
Purpose	The learning objective of this service-learning project is to sensitize students to the true needs of families of children with rare diseases, beyond the necessary but insufficient focus on the child's disease. Understanding the meaning of health equity in a real situation is also a key objective in this project.

Project name	S-L experience with Plataforma per la Llengua (Balearic Islands), the Catalan language NGO
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Year	2021-2022
Institution	Universitat de les Illes Balears
Person in charge	Alvaro Calero-Pons
No. of students	1
Interaction with beneficiaries	Virtual
Academic Degree	Undergraduate
Discipline(s)	Languages and Literature Education Sociology
Community Service Area & ODS	Cultural diversity Reducing inequalities Quality education
Purpose	Plataforma per la Llengua (Pro-language Platform), the Catalan language NGO, is a well-established organisation in the Catalan-speaking territory that works to promote the Catalan language as a social cohesion tool. The student closely collaborated with the technicians at the Balearic Islands delegation, prepared a report on her project results, and presented it to the whole group class

Project name	Transformative Communication & Cultural Efficacy Festival
Year	2019-2020
Institution	Universitat Jaume I
Person in charge	
No. of students	45
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Communication Education Social Justice
Community Service Area & ODS	Gender equality Cultural diversity Peace, justice and strong institutions
Purpose	The main goal is to strengthen social awareness, ethics, and critical thinking in future media professionals through their engagement in the process of developing with a social partner an action on Communication for Social Change. Students work in a group as an agency to prepare a Service-Learning campaign for a real organisation.

Project name	Design and disability
Year	2018-2019
Institution	Universitat Jaume I
Person in charge	Luis Cabedo Mas

No. of students	120
Interaction with beneficiaries	Face-to face
Academic Degree	Undergraduate
Discipline(s)	Engineering and technology. Economics.
Community Service Area & ODS	Good health and well-being. Reducing inequalities
Purpose	Our students together with the center, work during two semesters within two mandatory courses in designing and creating prototypes of pieces of equipment for these special end-users. Every year we chose a different center and the students work in a different object.
Description	incomplete

Project name	Meeting Science
Year	2018-2019
Institution	Escuelas San José Instituto Politécnico
Person in charge	Tono Benet Marzal
No. of students	20
Interaction with beneficiaries	Face-to-face
Academic Degree	Higher Vocational Training Certificate (HNC)
Discipline(s)	Education Engineering and Technology Physics
Community Service Area & ODS	Peace, justice and strong institutions Quality education Reducing inequalities
Purpose	<ol style="list-style-type: none"> 1. Special education students with learning difficulties can understand on an experiential basis the magnitudes of: WEIGHT and MASS. 2. Strengthen numerical knowledge and major/minor concepts. 3. Initiate students in the tutoring and accompaniment processes for second-year students of Higher Level Vocational Training of the specialty of Electrotechnical and Automated Systems. 4. Learn to design practical activities that can be carried out in small teams: (1 Vocational Training student together with 2 Special Education students).

Project name	Service-Learning in the Initial Training of Education Professionals: Degrees in Social Education and Pedagogy, Master in Secondary Teacher Training and Doctorate in Education.
Year	2019-2020
Institution	University of Valencia

Person in charge	150
No. of students	M. Pilar Martínez-Agut
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate Master PhD
Discipline(s)	Education
Community Service Area & ODS	Quality education No poverty Peace, justice and strong institutions
Purpose	Nearly 150 students have participated in working and cooperative groups, which choose their themes of intervention from Education for Development, Education for Sustainability, the Sustainable Development Goals (SDGs) and Human and Children's Rights, World Campaign for Education (GCE) and World Week for Education (SAME) fundamentally.

Project name	SAPs ODS PARA LA JUSTICIA SOCIAL? DO YOU KNOW SDG FOR SOCIAL JUSTICE?
Year	2019-2020
Institution	University of Valencia
Person in charge	María-Jesús Martínez-Usarralde
No. of students	100
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate Master PhD
Discipline(s)	Education Psychology
Community Service Area & ODS	Quality education Peace, justice and strong institutions Cultural diversity
Purpose	The innovation project aims to use critical service-learning (CSL) methodology in a longitudinal way during three academic years in the Social Education Degree. Through this learning process of advocacy service learning, citizens are directly challenged to "land" the SDG together with associations, organizations... related to the SDG that the class group of the UV's Social Education Degree wishes to develop.

Project name	EcoApS-Educa
Year	2017-2018
Institution	Universitat de València
Person in charge	Marcos López Zunzunegui
No. of students	45
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate A Primary School and a High School were also involved in the project

Discipline(s)	Earth Sciences Biology Education
Community Service Area & ODS	Life on land Climate action Quality education
Purpose	From the beginning, it was established as main objective of the experience the design of a project following a “food chain” structure in which every participant was able to learn something and teach to other people. In order to achieve this, the project was divided into several phases.

Project name	Los arrecifes de coral
Year	2018 -2019
Institution	Universitat de València
Person in charge	Marcos López Zunzunegui
No. of students	25
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduated A High School was also involved in the project
Discipline(s)	Earth sciences Biology Education
Community Service Area & ODS	Life below water Climate action Quality education
Purpose	From the beginning, it was established as the main objective of the experience the design of a project following a “food chain” structure in which every participant was able to learn something and teach to other people. In order to achieve this, the project was divided into several phases.

Project name	“Clase Mágica-Sevilla”. An experience of SL and Identity Transformation
Year	2018
Institution	Pablo de Olavide University
Person in charge	
No. of students	65
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Psychology, Pedagogy, Sociology, Anthropology
Community Service Area & ODS	Quality Education
Purpose	Students participate in a Public school sited in a marginal area of the city, where mainly attend children from Roma families in a situation of social exclusion. This is a school set up as a learning community (Elboj and Oliver, 2003). The participation of university students makes possible the formation of interactive

groups, where children learning cooperatively in small groups, and students from university serve as learning guides.

Project name	Huelva Educa Program
Year	2012-2015
Institution	University of Granada
Person in charge	Mirian Hervás Torres
No. of students	300
Interaction with beneficiaries	Face-to face
Academic Degree	Undergraduate
Discipline(s)	Education Psychology Social Education
Community Service Area & ODS	Quality education
Purpose	During the program University students training previously, who participated as mentors, conducted interventions with students of Compulsory Education (e.g., social skills, personal and professional guidance, etc.), during a scholar course, with the aim of increasing their school performance, climate school and personal, social, school, and family adaptation, where weekly after school activity during 90 minutes mentors reinforce the content in a collaborative way.
Description	incomplete

Project name	An ethical perspective of the company: Social Economy from the financial, governance and equality dimensions
Year	2019
Institution	University of Santiago de Compostela
Person in charge	
No. of students	36
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Business Economics Education
Community Service Area & ODS	Reducing inequalities Partnership for the goals Gender Equality

Purpose	The project seeks to improve students' transversal skills. In addition to the improvement in information management, teamwork and skills in interpersonal relationships, the project focuses particularly on the ethical sense of business activity and on providing students with sensitivity to social and environmental problems, as well as the sense of gender equality.
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Project name	LEARNPHYSICS AND HAVE FUN
Year	2020-2021
Institution	UNIVERSIDADE DA CORUÑA
Person in charge	ANA ISABEL ARES PERNAS
No. of students	71
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Physics Engineering and technology Plastics
Community Service Area & ODS	Reducing inequalities Quality education Responsible consumption and production
Purpose	In the project, students prepare workshops on Physics and Responsible Consumption aimed at people with functional disabilities or at risk of social exclusion. We work with 7 different entities, the objectives of the service being different in each case.

Project name	Integrating Service-Learning and ICT to support rural female entrepreneurship: academic results in university students
Year	2019-2020
Institution	University of León
Person in charge	Almudena Martínez-Campillo
No. of students	50
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate Master
Discipline(s)	Business Engineering and Technology
Community Service Area & ODS	Sustainable cities and communities Gender equality Quality education
Purpose	This study aims to assess the educational impact of an SL experience that consisted of multidisciplinary groups of university students of different subjects of Graduate and Postgraduate courses in the field of the Business put into practice the knowledge acquired in class to advise a group of rural female

entrepreneurs, using ICTs to facilitate University-Society communication.

Project name	ASPACE BIZKAIA FILMA
Year	2019-2020
Institution	UPV/EHU
Person in charge	Aintzane Pagadigorria Ruiz
No. of students	35
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Audiovisual communication Social Science Audiovisual Contest
Community Service Area & ODS	Reducing inequalities Quality education Partnership for the goals
Purpose	This experience fulfills a double objective, to promote the inclusion of disability in the world of artistic creation and to sensitize students about the reality of cerebral palsy. Thanks to the ASPACE BIZKAIA FILMA project, students have had the opportunity to develop Curriculum competencies, but also ethical and social competencies, thus incorporating Sustainable Development Goals (SDGs)

Project name	Service-Learning in Schools with Poor Readers Primary Children
Year	2017
Institution	University of Deusto
Person in charge	Eduarne Goicoechea
No. of students	36
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Education Psychology Languages and Literature
Community Service Area & ODS	Quality education No poverty
Purpose	This S-L program requires the student to carry out the tasks of a teacher with a specialization in teaching and evaluating literacy in public schools with great needs for specialists in this area to attend to the diversity of children they shelter.

Project name	Loiola Law Clinic: Service-Learning for Social Justice
Year	2019-2020
Institution	University of Deusto
Person in charge	24
No. of students	Aitziber Mugarra
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate Master
Discipline(s)	Law Political science Business
Community Service Area & ODS	Peace, justice and strong institutions Reducing inequalities Gender equality
Purpose	<p>Develop service-learning projects with a mainly legal approach.</p> <p>2.-Extend and enrich the training curriculum of students in Law Degree.</p> <p>3.-Networking with social entities and non-governmental organizations, putting ourselves at their disposal.</p> <p>4.-Collaborate in the construction of social justice.</p> <p>5.-Build a new way of transference to community as part of the mission of university.</p>

Project name	Social Participation and Values (SPV)
Year	2020-2021
Institution	University of Deusto
Person in charge	Iciar Elexpuru
No. of students	150
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Education Open to different disciplines
Community Service Area & ODS	Cultural diversity Quality education Good health and well-being
Purpose	<p>The service consists of carrying out tasks mainly based on providing educational support and leisure activities for persons in a situation of or at risk of social exclusion due to a variety of personal, academic or social circumstances. The tutors, provided by the social organisations, supervise and guide the students, giving them opportunities to contribute to the work in hand. They also engage in a regular dialogue with the university teachers.</p>

Project name	Internertships in Social Work Degree
Year	2020-2021
Institution	University of La Rioja
Person in charge	Neus Caparrós
No. of students	70
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Social Work
Community Service Area & ODS	Peace, justice and strong institutions Partnership for the goals Quality education
Purpose	The purpose of the practices is student learning and service to society, through the development of projects in two modalities of diagnostic study and social intervention. The development of the practices is carried out with the teaching-learning methodology of service-learning, as a means for its institutionalization, since it is framed in the Study Plan of the Degree in Social Work.

Project name	Guide on Activation for the Employment of Women with Disability.
Year	2018-2019
Institution	Comillas Pontifical University
Person in charge	Carlos Ballesteros
No. of students	5
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduated
Discipline(s)	Business
Community Service Area & ODS	Gender equality Reducing inequalities Decent work and economic growth
Purpose	Achieve an understanding of the real situation of women with disabilities in the labour market. 2. Analyse public policies in Spain to promote the employment of women with disabilities within the framework of EU. 3. Develop a practical theoretical guide to the activation of women with disabilities in the labour market

Project name	Domestic Economy Course for Vulnerable Families
Year	2019-2020
Institution	Comillas Pontifical University

Person in charge	Carlos Ballesteros
No. of students	5
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Business
Community Service Area & ODS	No poverty Quality Education Gender equality
Purpose	We want students to be able to detect what needs families have in this area, so that they can design the contents and material to work, to help families to better manage the resources with which they have.
Description	incomplete

Project name	Friendly senior living in cities. Madrid case study
Year	2021-2022
Institution	Universidad Politecnica de Madrid
Person in charge	Ester Higuera
No. of students	10
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Space sciences Urban Planning
Community Service Area & ODS	Sustainable cities and communities Good health and well-being Climate action
Purpose	We have worked with a focus on the elderly to think about new forms of social and care community life (co-living and co-housing) as well as to design safe, attractive urban itineraries adapted to the cognitive conditioning factors of the elderly in a city like Madrid.
Description	incomplete

Project name	The service-learning experience in the bioclimatic design of public spaces in Madrid
Year	2021-2022
Institution	Universidad Politécnica de Madrid
Person in charge	Emilia Román López / Rafael Córdoba Hernández / Ester Higuera García
No. of students	450
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate

Discipline(s)	Urbanism and Architecture Engineering and technology Earth sciences
Community Service Area & ODS	Sustainable cities and communities Good health and well-being Climate action
Purpose	The chosen path is the participation and transfer of human and technical resources to increase their potential in terms of the identification, analysis and use of endogenous resources for the local development of these areas and the training of students.

Project name	Product design and 3D-printing in Health Sciences: an S-L experience in Pediatric Physiotherapy
Year	2020-2021
Institution	Centro Universitario San Rafael (CUSRN)
Person in charge	Manuel Lara
No. of students	60
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Medicine and health Engineering and technology Education
Community Service Area & ODS	Good health and well-being Reducing inequalities Quality education
Purpose	Students from the Paediatric Physiotherapy subject (San Rafael-Nebrija University) designed a product following the "Design Thinking" methodology. User's needs were analyzed from the perspective of design and pediatric assessment and then they proposed 3D printable adapted products to the user's needs.

Project name	New Ways of Senior Life in Madrid
Year	2021-2022
Institution	Polytechnic University of Madrid (ETSAM)
Person in charge	Ester Higuera García
No. of students	1
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Urbanism Architecture Sociology
Community Service Area & ODS	Sustainable cities and communities Good health and well-being Reducing inequalities

Purpose	In the ebook, each contribution will provide an overview of the problem, frame actions and good practices from other European contexts, and conclude by proposing an adaptation or transformation of the regulations specific to the case of Madrid.
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Project name	Development and evaluation of a Service Learning project for vulnerable children
Year	2018-2019
Institution	Universidad Complutense de Madrid
Person in charge	
No. of students	11
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Education
Community Service Area & ODS	Quality Education Good health and well-being
Purpose	The objective of this project is to promote participatory values and civic-social skills in the students of the Theory of Education course taught in the Teacher Training Degrees of Early Childhood Education and Primary Education, Social Education and Pedagogy of the Faculty of Education of the Complutense University of Madrid, through the implementation and pedagogical management of a playful space aimed at children in vulnerable situations.

Project name	Working in Positive
Year	2019- 2020
Institution	Universidad Pontificia de Comillas
Person in charge	
No. of students	3
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Business Law Economics
Community Service Area & ODS	Gender Equality Reducing inequalities Peace, Justice and strong institutions
Purpose	Our experience was very enriching and grateful, we consider that everybody should collaborate with this type of organizations because by just investing some of your time you are helping many people that really need it, and you carry out activities that you can't do in your daily life and that help you develop yourself and grow as a person.

Project name		Success cases of entrepreneurial refugee women
Year		2019 – 2020
Institution		Universidad Pontificia de Comillas
Person in charge		Carlos Ballesteros
No. of students		5
Interaction with beneficiaries		Virtual
Academic Degree		Master
Discipline(s)		Business Development Migration Studies
Community Service Area & ODS		Gender equality Decent work and economic growth Cultural diversity
Purpose		The idea behind is to motivate and encourage a group of Syrian women recently arrived to Spain to start their own small businesses. We did it as part of a Master module in Economics and Entrepreneurship for development. Also, we prepared a quick guide for setting up small businesses in Spain. The students working in groups, get in touch with the women, conducted some focus group research and fieldwork and made some short videos.
Description		Partially incomplete

Project name		Data Collection on Trafficking in Human Beings
Year		2020
Institution		Universidad Pontificia de Comillas
Person in charge		
No. of students		4
Interaction with beneficiaries		Mixed
Academic Degree		Undergraduate
Discipline(s)		Statistics
Community Service Area & ODS		Reducing Inequalities
Purpose		The objective of this consulting service is to provide a diagnosis about trafficking on human beings in Spain. Specifically, the diagnosis must focus on the importance on data for making political decisions.

Description	Partially incomplete
Project name	Learning by educating: Service-learning experience of oral health promotion
Year	2019-2020
Institution	School of Dentistry, Complutense University of Madrid
Person in charge	Margarita Iniesta Albentosa
No. of students	
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Medicine and health Dentistry Education
Community Service Area & ODS	Good health and well-being Reducing inequalities
Purpose	Our main learning objective is to recognize diversity and maintain and tolerate diverse cultural contexts. Our service objective is to educate in oral health, motivating people with different abilities to promote autonomy in their oral hygiene habits. Partners: Pro-Disability Association of Aravaca and the Liceo project belonging to the NGO Achalay.
Description	Partially incomplete
Project name	Attention to Children of Mothers in Penitentiary Centers
Year	2019
Institution	Universidad Autónoma de Madrid
Person in charge	
No. of students	15
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Open to different discipline areas. Education
Community Service Area & ODS	Quality education
Purpose	The aim is to contribute to providing a stimulating and safe environment for their development, as their contact with people outside of prison is minimal. Two services are provided: playing and stimulating the children while their mothers attend training

courses (weekdays), and taking the children for a walk out of the prison on the weekends.

Project name	"JABONES DE ALEPO"
Year	2019-2020
Institution	Universidad Pontificia de Comillas (ICADE)
Person in charge	
No. of students	4
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Business
Community Service Area & ODS	Create Decent Work and Economic Growth Eliminate Poverty Enforce Gender Equality
Purpose	The aim of this project is to help, thanks to the NGO Rescue, these Syrian women to get a decent job in our country. In this way, it will be more likely that, when the situation in their country improves, they will be able to return to their homes, with their relatives, friends, neighbours, acquaintances.

Project name	Loneliness' Solutions for Elderly People
Year	2019- 2020
Institution	Universidad Pontificia de Comillas
Person in charge	Beatriz Delfa
No. of students	4
Interaction with beneficiaries	Virtual
Academic Degree	Undergraduate
Discipline(s)	Business
Community Service Area & ODS	Good Health and well being No poverty Sustainable cities and communities
Purpose	Treating a topic such as the loneliness amongst the elderly, has helped us to widen our view about the world and our society, taking into consideration plenty of factors we didn't care about before this experience.

Project name	Federación Injucam Consulting Project
Year	2019-2020
Institution	Universidad Pontificia de Comillas
Person in charge	
No. of students	4
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Business
Community Service Area & ODS	Reducing inequalities Partnership for the goals Good health and well-being
Purpose	INJUCAM promotes the social inclusion of marginalized children by developing comprehensive and stable socio-educational projects permanently adapted to emerging needs.

Project name	"OTOP. Otro Tiempo Otro Planeta" – "ATAP Another Time, Another Planet"
Year	2018
Institution	Universidad Pontificia Comillas
Person in charge	
No. of students	5
Interaction with beneficiaries	mixed
Academic Degree	Undergraduate
Discipline(s)	Business
Community Service Area & ODS	Gender equality
Purpose	Students had to prepare a diagnostic activity report (strengths, weaknesses and points for improvement), recommendations for the improvement of internal processes and recommendations to streamline the work of the organization. Students visited the organization twice and held several meetings with the staff as well as with the beneficiaries. They also studied documents and do some field-research.

Project name	Foudation Norte Joven
Year	2019 – 2020
Institution	Univeridad Pontificia de Comillas
Person in charge	Dulce Saldaña
No. of students	5
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate

Discipline(s)	Business Economics Statistics
Community Service Area & ODS	Peace, justice and strong institutions Reducing inequalities Quality education
Purpose	The objective of this project was to help the Norte Joven Foundation and the Pombo Foundation, so that their message reaches their target audience. The public of these two foundations are young people between 18 and 25 years old who have any type of legal problem and who due to their marginal situation cannot solve it.

Project name	Standard Label Bequal
Year	2019-2020
Institution	Univeridad Pontificia de Comillas-ICADE
Person in charge	
No. of students	4
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Business, Statistic
Community Service Area & ODS	Decent work and economic growth. Reducing inequalities. Industry, innovation and infrastructure.
Purpose	With this Service-Learning experience me and the members of my team have definitively learned that things are not always what they seem to be at first sight. The organization we have been helping and working, works crediting businesses with a quality seal that means the organization covers a series of requisites that have to do with disabled people.

Project name	Fundraising Support for AMIS Entity
Year	2019-2020
Institution	Universidad Pontificia de Comillas
Person in charge	Beatriz Delfa
No. of students	4
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Economics Business
Community Service Area & ODS	Quality education Decent work and economic growth Peace, justice and strong institutions

Purpose	The project carried out by the finance team consisted of fundraising for the Amis entity. Amis Inserción Social is a non-profit organisation created with the aim of offering alternatives and opportunities to people and groups of people at risk of social exclusion, taking into account the special vulnerability of adolescents and young people, women and immigrants.
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Project name	Amis Inserción Social Marketing
Year	2019-2020
Institution	Universidad Pontificia de Comillas
Person in charge	Beatriz Delfa
No. of students	10
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Sociology Education Business
Community Service Area & ODS	Good health and well-being Quality education Decent work and economic growth
Purpose	The process of social integration is carried out in several steps, starting with the first contact through an individual interview to collect the demand and carry out an analysis / diagnosis establishing the objectives and designing the personalized itinerary of insertion with each person. In addition, to facilitate access to the different resources (training, health, employment, etc.), they provide ongoing advice.

Project name	UNHCR, lost profits from red cards
Year	2019-2020
Institution	Universidad Pontificia de Comillas
Person in charge	
No. of students	4
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Sociology Business Economics
Community Service Area & ODS	Reducing inequalities Good health and well-being Peace, justice and strong institutions

Purpose	The project consists in the elaboration of a survey to be carried out to every person who is a refugee in Spain and has access to a red card.
Description	incomplete

Project name	Design of an interdisciplinary service learning model: proposing indicators to evaluate the operational plan of the Madrid council hall against trafficking and other human rights abuses in prostitution contexts (2018-2020)
Year	2018-2020
Institution	<i>Universidad Nacional de Educación a Distancia (UNED).</i>
Person in charge	Myriam C. González-Rabanal
No. of students	5
Interaction with beneficiaries	Virtual
Academic Degree	Undergraduate
Discipline(s)	Public management/ Social Services
Community Service Area & ODS	Reducing inequalities Cultural diversity/ Peace, justice and strong institutions
Purpose	The Project aims is to cover the social need to improve efficiency in the use of public resources, as well as to complete the training of students of the UNED (National Distance Education University) of Public Management (of the Degree in Legal Sciences of Public Administrations) and of Planning and Evaluation of Social Services (of the Degree in Social Work), both belonging to the Law School.

Project name	Data Culture in Human Trafficking
Year	2019-2020
Institution	Universidad Pontificia de Comillas
Person in charge	
No. of students	3
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate / Master
Discipline(s)	Statistics / Sociology
Community Service Area & ODS	Good health and well-being /Peace, justice and strong institutions

Purpose	The main objective of our project of S-L was to raise awareness about the significance of data culture related with human trafficking; study and understand the complexity of human trafficking data and finally, providing a diagnosis of the human trafficking situation in Spain.
Project name	Effects of service-learning on migrant people and elderly in Melilla by PETE students
Year	2019
Institution	Faculty of Education and Sport Science. University of Granada
Person in charge	Pedro Jesús Ruiz-Montero
No. of students	40
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduated Mast
Discipline(s)	Physical Education and Sport Education
Community Service Area & ODS	Cultural diversity Reducing inequalities Good health and well-being
Purpose	The aim of the service-learning (SL) experience is to analyse the effects of a Service-Learning program on the prosocial behaviour and perceptions of Physical Education Teacher Education (PETE) students.
Description	incomplete

18. PROJECT IN PORTUGAL

Project name	IPVC- Inclusive School-Service Learning (Escola Inclusiva IPVC-ApS)
Year	2019-2020
Institution	Instituto Politécnico de Viana de Castelo
Person in charge	
No. of students	98
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate / Master / Escola Inclusiva
Discipline(s)	Engineering and technology Computer Science Design Environment Food Safety Gerontology Rural development
Community Service Area & ODS	Quality education Partnership for the goals Reducing inequalities
Purpose	This project aims at fostering the co-construction of in-service learning and volunteering projects to address community problems by offering alternative solutions.

Project name	Sharing Managers Gestores da Partilha
Year	2020-2021
Institution	Universidade Católica Portuguesa
Person in charge	
No. of students	11
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Business
Community Service Area & ODS	Quality education Gender equality Reducing inequalities
Purpose	Students of the Management Degree in the 3rd year enrolled in the UC Marketing, a semester course, where they study global and specific contents, related to marketing, communication, dissemination and marketing plans, will collaborate with those responsible for the Pastoral of Higher Education of Viseu for a global intervention in the field of Marketing and Communication.

Project name	Shared Value Valor Partilhado
Year	2020-2021
Institution	Universidade Católica Portuguesa
Person in charge	
No. of students	15
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Social Service
Community Service Area & ODS	Reducing inequalities Partnership for the goals
Purpose	The academic exercise consists of carrying out a participated Organizational Diagnosis and designing a Strategic Plan for sustainability, choosing an axis of affirmative and participatory action, in collaborative work between students and association leaders. The collection works are carried out remotely (with support on the zoom platform, interviews and consultation of documentation provided by the OESS).

Project name	Community Nutrition Intervention Targeted at Vulnerable Children and Youth ! Intervenção de Nutrição comunitária dirigida a crianças e jovens vulneráveis
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Year	2020-2021
Institution	Universidade Católica Portuguesa
Person in charge	
No. of students	24
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Medicine and health
Community Service Area & ODS	Good health and well-being Quality education Responsible consumption and production
Purpose	Develop an intervention within the scope of Community Nutrition with vulnerable children and young people with a view to raising awareness about the acquisition of healthy eating habits.

Project name	Educating for sustainable development goals
Year	2020-2021
Institution	Universidade Católica Portuguesa
Person in charge	Maria do Carmo Themudo
No. of students	15
Interaction with beneficiaries	Virtual
Academic Degree	Undergraduate / Master
Discipline(s)	Education
Community Service Area & ODS	Quality education/ Partnership of the goals/ Peace, justice And strong institutions

Purpose	The project “Educating for Sustainable Development Goals” has as its main objective to raise awareness among young adolescents and university students about the Sustainable Development Goals (SDGs), thus contributing to the formation of socially responsible citizens who can take the SDGs into their day-to-day future professions, thus contributing to the construction of a better, more sustainable world.
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Project name	Train to Save Capacitar para Salvar
Year	2020-2021
Institution	Universidade Católica Portuguesa
Person in charge	
No. of students	2
Interaction with beneficiaries	Mixed
Academic Degree	Undergraduate
Discipline(s)	Medicine and health

Community Service Area & ODS	Good health and well-being Quality education Peace, justice And strong institutions
Purpose	Its general objective is to train students for civic intervention, as health promoters, preventing disease and building a healthy society, where raising these experiences is also educating for citizenship with repercussions for social cohesion.

Project name	Special Smiles Sorrisos Especiais
Year	2020-2021
Institution	Universidade Católica Portuguesa
Person in charge	
No. of students	75
Interaction with beneficiaries	Mixed
Academic Degree	Master
Discipline(s)	Medicine and health
Community Service Area & ODS	Good health and well-being Quality education Reducing inequality
Purpose	The scope of this Oral Health promotion project, will carry out the diagnosis and identification of treatment needs, definition and implementation of treatment plans and actions to promote Oral Health (for users and caregivers). Users and caregivers will also be informed about their rights to support oral health and will be encouraged to take an active role in the prevention of oral pathology.

Project name	Law and Voluntary Work
Year	2009 to present
Institution	Universidade Católica Portuguesa
Person in charge	Joana Helena Cepeda Liberal da Mota Arnaut
No. of students	24
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Law Open to other disciplines
Community Service Area & ODS	Good health and well-being Peace, justice and strong institutions No poverty
Purpose	It is an optional subject worth 5 ECTS, available on the Summer Semester, for a limited number of students (currently 24, but hoping to grow). During the first half of the semester students have classes with relevant Portuguese people related to the Social Justice field and during the second, in groups of 4 they complete

a number of hours of voluntary work within an institution. During the year 2019, the groups worked with elderly people and people suffering from cerebral palsy.

Project name	InVuCaR – Intervene in Vulnerability to Empower in Network Intervir na Vulnerabilidade para Capacitar em Rede
Year	2020-2021
Institution	Universidade Católica Portuguesa
Person in charge	João Neves Amado
No. of students	9
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Medicine and Health
Community Service Area & ODS	No poverty Good health and well-being Reducing inequalities
Purpose	Cáritas Diocesana do Porto (CDP) provides various types of support to families in situations of greater vulnerability caused by social or health difficulties. Through the “+ Saúde na Família” [+Health on Family] project, the CDP intends to support the families of the diocese to take care of their weakest members, namely the chronically ill and the very elderly, providing or facilitating access to various types of support.

Project name	Centro de Aprendizagem e Intervenção na Comunidade (Pilot- Project)
Year	2018
Institution	ISPA Instituto Universitário
Person in charge	
No. of students	10
Interaction with beneficiaries	Face-to-face
Academic Degree	Undergraduate
Discipline(s)	Psychology
Community Service Area & ODS	No poverty
Purpose	At the ISPA – Instituto Universitário in Lisboa, the pilot-project of the CAIC – Centro de Aprendizagem e Intervenção na Comunidade, is intended to provide an institutional consistent and coherent body of knowledge and systematized practice of the initiatives organized by faculty, professionals or members of the Alumni community that provide the students opportunities to

acquire additional opportunities for participant observation and/or effective participation and intervention in projects and practices already being implemented with explicit pedagogic outcomes.

APPENDIX B - LIST OF MAP4ACCESSIBILITY PARTNERS

1) Università degli Studi della Tuscia (Coordinator)	UNITUS	Italy	Higher education institution (tertiary level)
2) Association de Recherche et de Formation sur l'Insertion en Europe	ARFIE	Belgium	Non-governmental organization/association
3) ESCP (Business School) Europe Wirtschaftshochschule Berlin Ev	ESCP	Germany	Higher education institution (tertiary level)
4) Università degli Studi di Catania	UNICT	Italy	Higher education institution (tertiary level)
5) South-West University Neofit Rilski	SWU	Bulgaria	Higher education institution (tertiary level)
6) Associação Salvador	AS	Portugal	Non-governmental organization/association
7) EUROPROJECT OOD	EP	Bulgaria	Small and medium-sized enterprises