

Service-Learning and soft skills in higher education: a systematic literature review

Service-Learning e soft skills nell'istruzione superiore: una revisione sistematica della letteratura

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Abstract

The study presents a systematic literature review on Service-Learning (SL) and soft skills in higher education. The findings are presented according to three macro-areas: the first explores the reasons for universities to support SL in the development of students' soft skills by analysing the theoretical frameworks and definitions used; the second area investigates the SL contexts and application models, the impact scale, the quality standards and the main challenges for the actors involved; finally, the third area explores the current state of the art of the research reporting on the methods and procedures as well as any findings and relevant challenges. This study provides insights on how SL reduces the gap between significant dichotomies in higher education.

Keywords: Service-Learning; soft skills; higher education; systematic literature review.

Sintesi

Lo studio presenta una revisione sistematica della letteratura su Service-Learning (SL) e soft skills nell'istruzione superiore. I risultati vengono presentati in relazione a tre macro-aree: la prima esplora le ragioni che spingono le università a sostenere il SL per promuovere lo sviluppo delle soft skills negli studenti universitari, analizzando i quadri teorici e le definizioni fornite; la seconda area analizza i contesti e i modelli di applicazione del SL, la scala di impatto, gli standard di qualità e le principali sfide per gli attori coinvolti; infine, la terza area esplora lo stato dell'arte della ricerca su SL e soft skills, riportando metodi e strumenti utilizzati, gli esiti e le sfide più rilevanti. Lo studio permette di evidenziare in che modo il SL riduce il divario tra importanti dicotomie nell'istruzione superiore.

Parole chiave: Service-Learning; soft skills; istruzione superiore; revisione sistematica della letteratura.

¹ The first author is credited with designing and conducting the study, analysing the data, drafting the contribution, editing and revising the work. The second author is credited with collaboration in conducting the study and the editing.

1. Introduction

The need for a systematic literature review on Service-Learning (SL) and soft skills comes from a desire to bring back the topic of the holistic education of the person to the foreground, while also rethinking the role of educational institutions in the contemporary scene. On a theoretical level, SL is defined as an educational approach that places the development of the person in all its dimensions at the centre of its structure, enhancing the empowerment of the subject who actively contributes to the construction of him/herself and the community in which he/she lives (Selmo, 2018). In practical terms, according to the European Association of Service-Learning in Higher Education (Easlhe, www.Easlhe.eu): “Service-Learning 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 [...]”. Nowadays, this educational proposal – that can be found in several universities around the world – has its roots in the civic concern of the North American educator and philosopher John Dewey as well as in the concept of the South American educator and philosopher Paulo Freire of transforming the world through reflection and action (Selmo, 2018). These two *giants*, on whose shoulders current pedagogical thinking stands, have generated innovations and favoured the birth of a multiplicity of experiences that have prepared the ground for SL, even if they have never explicitly theorized it (Fiorin, 2020). Currently, the widespread dissemination of SL is associated with the recognition of its benefits at both the individual (Page & Stanley, 2014) and collective levels (Bryer, 2014) as well as the recognition of the new role that educational agencies are called upon to play in the 21st century society (Hernández-Barco, Sánchez-Martín, Blanco-Salas, & Ruiz-Téllez, 2020). In contemporary educational debates, there is a need to pursue a change in international higher education policies to promote an education that focuses not only on technical and academic skills, but also on the development of the whole person in terms of behaviours, attitudes and values (High Level Group of Modernisation in Higher Education, 2013). Universities should train meta-competencies and personal (social and civic) skills, also known as soft skills, to help students fully integrate into ever-changing societies, where knowledge and skills rapidly become obsolete (ibidem). According to Hernández-Barco et al. (2020), this is an educational scenario far removed from the current reality, as universities, instead of focusing on the development of personal and social skills, propose content-based transmission curricula. In this paper, soft skills are intended as “a dynamic combination of cognitive and meta-cognitive skills, interpersonal, intellectual and practical skills. Soft skills help people to adapt and behave positively so that they can deal effectively with the challenges of their professional and everyday life” (Arnold, Cinque, Uggeri & Mazalu, 2020, p. 60; Culcasi, Russo & Cinque, 2022a)².

2. Method

The systematic review was conducted in line with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (Figure 1). The method developed by Montù (2015) was followed to guide the development of the review. It consists of six steps: definition of the research questions; identification of possible studies and source selection;

² This definition was developed in the European projects eLene4work (2015–2018) and eLene4Life (2018–2021).

data collection and research quality assessment; re-definition of the objective and research questions; data synthesis; results presentation.

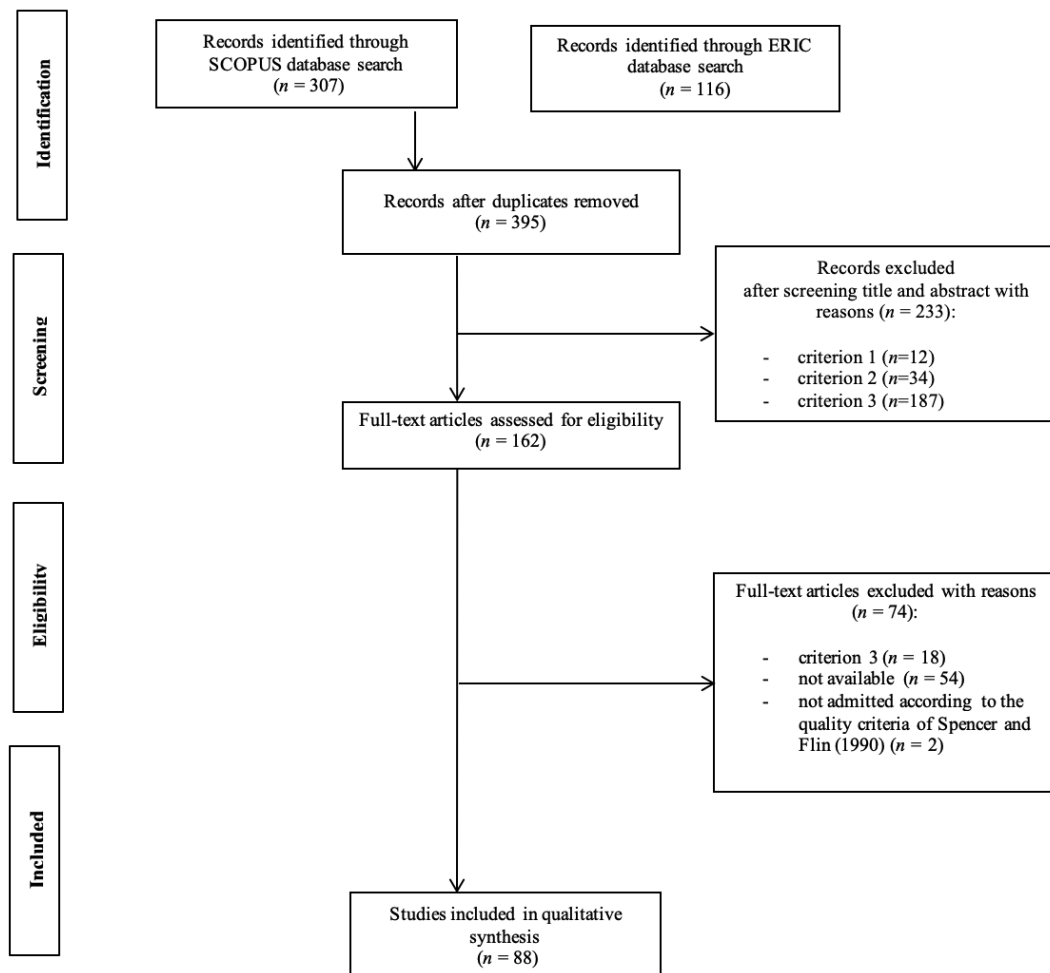


Figure 1. Flow diagram detailing the PRISMA application.

2.1. Research questions and objectives

The aim of this study was to provide a comprehensive picture of the evidence on the role of SL in promoting the soft skills development of university students by addressing the following questions:

1. What motivates universities to promote soft skills development through Service-Learning?
2. How is Service-Learning applied and what are the quality standards and main challenges?
3. How is the impact on soft skills measured and what are the research challenges in the Service-Learning field?

Being a systematic review investigating the effectiveness of an intervention, the PICO Model was used for the formulation of the objectives and research questions (Figure 2). By answering the first question, the aim is to explore the educational reasons for the SL implementation and to analyse the theoretical frameworks and definitions of SL and soft

skills used. This question concerns the area of analysis: *educational reasons and theoretical framework*. The second research question explores the geographical contexts in which SL is applied, the disciplinary fields, the implementation models, the social impact achieved, the quality standards and the main implementation challenges of the actors involved. This question regards the *implementation analysis area*. The third question studies in further detail the *area of analysis of research and impact*, considering the methods and tools, the outcomes in terms of soft skills development and the challenges for the research in this area.

(P) Population: which subjects are considered?	University students
(I) Intervention: what type of intervention is considered?	Service-Learning projects
(C) Comparison: is there any type of comparison?	Context, field, quality standard, challenges...
(O) Outcomes: What are the outcomes related to the effectiveness, or ineffectiveness, of the considered interventions?	Soft skills development

Figure 2. PICO Model.

2.2. Resources and identification

Electronic databases such as Education Resources Information Center (ERIC) and SCOPUS were used to carry out literature searches with related relevant queries to focus the information selection. Figure 3 shows the implemented queries built with the aim of maintaining a balance between *sensitivity* (considering all research in the given area) and *specificity* (considering only the results of relevant studies).

ERIC	service learning SU Descriptors AND skill development TX All text AND higher education TX All text
SCOPUS	TITLE-ABS-KEY ("service learning" OR "service-learning") AND TITLE-ABS-KEY ("soft skills" OR "Life skills" OR "Transversal skills" OR "Key competences for lifelong learning" OR "Key competencies for lifelong learning" OR "Non-cognitive skills" OR "Socio-emotional skills" OR "21st century skills" OR "Key competences" OR "Key competencies" OR "Transferable skills" OR "Future work skills" OR "entrepreneurial skills") AND TITLE-ABS-KEY ("higher education" OR "university" OR "college" OR "academ*" OR "universities" OR "bachelor" OR "master") AND (LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2018) OR LIMIT-TO (PUBYEAR, 2017) OR LIMIT-TO (PUBYEAR, 2016) OR LIMIT-TO (PUBYEAR, 2015) OR LIMIT-TO (PUBYEAR, 2014) OR LIMIT-TO (PUBYEAR, 2013)) AND (LIMIT-TO (DOCTYPE, "ar") OR LIMIT-TO (DOCTYPE, "re"))

Figure 3. Research query.

2.3. Screening

To achieve the objectives of this study, several inclusion and exclusion criteria were established. These were defined by type of participant, area of analysis, outcome, language and type of resources (Figure 4). Only articles in English, Spanish and Italian were selected for review based on the language competences of the authors. As a timeframe, studies

published from 2013 to 2020 (July) were selected, since the first report of the High-Level Group was published in 2013. This document is crucial for the renewal of the 21st century universities' educational mission because it underlines the importance of promoting an education that, through experiential learning practices, can facilitate the empowerment of students both individually and socially. Each study was assigned a numerical code, respectively from one to 423 which were manually recorded in an Excel file. A preliminary screening was performed by first removing any duplicates and then applying the inclusion and exclusion criteria by reading the abstracts. Studies were included in the analysis when they met all the established criteria. Otherwise, the criterion that was not met was made explicit.

Criterion	Eligibility	Exclusion
Type of participants setting	Higher education students	High school, primary school, kindergarten students
Subject Area	SL and soft skills	It is not about SL and soft skills
Outcome type	SL' impact on soft skills development	SL's impact on other aspects
Language	English, Spanish, Italian	Other languages
Type of resources	Empirical, conceptual and theoretical studies	None

Figure 4. Inclusion and exclusion criteria.

2.4. Eligibility

After the screening, the full-text of the remaining articles was read. The data were extracted through a descriptive process to systematize any analytical information on the main aspects of each study included. This phase used a set of predetermined categories, each having sub areas of interest for data extraction, for a total of 33 interpretation categories to be applied to the studies included. To ensure that only the most reliable and relevant research is used to draw the conclusions of the systematic review, the tool developed by Spencer and Flin (1990) was also used: a set of eleven questions to assess the quality of the studies. As a result of this process, there were 30 articles from ERIC and 58 articles from SCOPUS. At this stage it was not considered necessary to extend the corpus of analysis, as it was assessed as saturated.

3. Results

88 articles were included for the data synthesis. These studies were published between 2013 and 2020, with a higher publication rate in 2018-2019 (Figure 5). 57.6% of the studies were conducted in the United States (Figure 6), with a higher percentage in the following fields: Social Sciences (42.9%) and Business, Management and Accounting (7.9%). A systematic narrative approach to report the findings was used due to the high degree of heterogeneity with respect to research aims, methods and outcome classification of the articles. Narrative synthesis has adopted a textual approach using graphics as well, with the aim of providing a bigger picture of the examined topic. PRISMA statements for reporting systematic literature reviews were followed. Compliance with these guidelines was ensured by completing the PRISMA checklist. The results are presented below according to the three

analysis areas previously described.

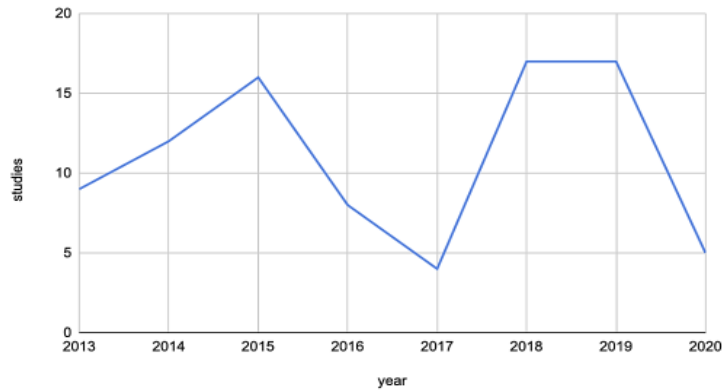


Figure 5. Studies per year.

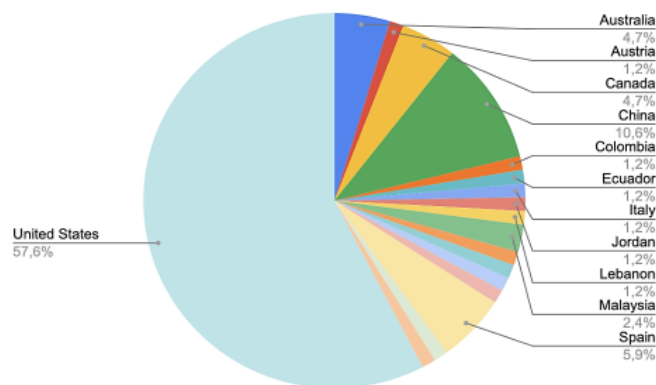


Figure 6. Studies by county.

3.1. Educational reasons and theoretical framework analysis area

The first analysis area explores the educational reasons for SL implementation and analyses the theoretical frameworks and definitions of SL and soft skills. Based on the articles, there are three main reasons why universities promote the soft skills development of their students through SL:

1. *a person's integral education*: it is based on the role of education in a way that the student is not only guided on the development of his/her technical-professional skills but is also trained to have a social and emotional skill set. This is also referred to as holistic education, which leads students to actively participate in society, not only becoming highly qualified professionals but also socially responsible and committed citizens (Lozano, Merrill, Sammalisto, Ceulemans, & Lozano, 2017). Moreover, this decision addresses the need to develop a skill set that helps students create the right environment to achieve self-accomplishment as well as a general sense of well-being, while also obtaining a meaningful existence and careers (Finley, 2016);
2. *students' employability*: this principle is based on universities' efforts to reduce the gap between the discrepancy of students' skills and those required by the job market. Employability is meant as a multifaceted and multidimensional idea,

including both the practical and soft skills set. Therefore, employability is thought to be strictly related to students' personal and intellectual development, which should be the education system's main goal (Deeley, 2014). The work to prepare competitive graduates for their careers lies in maximum exposure to experiential learning opportunities; SL integrates both hard and soft skills in a real-world environment (Hart, Vroman, & Stulz, 2015);

3. *university civic engagement*: is linked to the universities' civic mission, whereby academia engages with reality through the commitment of faculty and students. Universities have a moral and ethical obligation to give back to the community the support they receive (Wensing, Wensing & Virgo, 2018). This civic mission has deep roots in the philosopher's Aristotele educational vision of the good citizen (Ahmad, Said, Mansor, Mokhtar, & Ghani, 2014). Moreover, it is related to the concept of individual empowerment for the common good collectively defined and realized (Bryer, 2014). From different perspectives, community engagement is at the core of the educational premises of SL, understanding community engagement as all the initiatives and processes through which universities apply teaching and learning to address relevant issues in their social environment (Council on Higher Education, 2004).

There is no singular definition of the term soft skills, with them being interpreted differently from country to country. Within the body of analysis, 17 different denominations have been identified:

1. soft skills;
2. generic skills;
3. transversal competencies;
4. twenty-first century skills;
5. non-cognitive behavioural skills;
6. professional skills;
7. interpersonal skills;
8. sustainability competencies;
9. vocational skills;
10. employability skills;
11. practical skills;
12. social skills;
13. skills for sustainable development;
14. skills;
15. competencies;
16. capabilities;
17. abilities.

Some articles make explicit the theoretical frameworks behind the denomination. For example, among the studies mentioning sustainability competencies, Kricsfalusy, George and Reed (2018) refer to Education for Sustainable Development (ESD) promoted by Unesco (2017). Unesco identifies the following learning and skills areas for the achievement of the Sustainable Development Goals (SDGs): the cognitive domain (including the knowledge and thinking skills needed to better understand the SDGs and the related challenges in achieving them); the social-emotional domain (including the skills that allow students to collaborate, negotiate, and communicate in order to promote the

SDGs); and the behavioural domain, which describes action skills. Another example is the study of Coyer, Gebregiorgis, Patton, Gheleva and Bikos (2019) that mentions the global competencies framework related to global learning outcomes: global self-awareness, cultural diversity perspective, personal and social responsibility, understanding global systems, and the knowledge application to contemporary global contexts.

Service-Learning is also exposed to a multiplicity of interpretations. Analysing the articles, 77 definitions were identified, clustered into three main categories:

- *experiential learning*: is the largest category in terms of studies included. Many of these quote Barbara Jacoby who in 1996 defined SL as “a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development. The advantages to be gained by community organizations may be direct or indirect” (p. 5);
- *philosophy of education*: SL, in addition to being a program, is also a philosophy, a way of understanding human development, of explaining the social bonding processes; it is a way of building more equitable human communities, capable of managing coexistence (Escofet & Rubio, 2019);
- *reciprocity-based learning*: it refers to reciprocity as an essential part of the educational proposal. The hyphen between Service and Learning explicitly states that ideally all the parties involved should benefit from each other and experience an evolutionary change (Hampshire, Havercroft, Luy, & Call, 2015).

As far as the pedagogical matrices of this educational proposal are concerned, 69 articles study in greater detail its theoretical roots. A substantial number refer to the educational theories of John Dewey, Paulo Freire and David Kolb. As Butler and Christofili (2014) state, these roots are related to the experiential learning and learning communities that were first carried out by John Dewey in the 1920s and then by Paulo Freire in the 1970s. According to Cheng (2018), SL originates from these theoretical concepts to be placed in the broader context of Kolb’s Experiential Learning Cycle. In this sense, effective learning has been defined as having a concrete experience, followed by observation and reflection on that experience resulting in the development of conceptual notions to be applied to the real world (Lester, 2015). Other studies (Nunn & Brand, 2013) link SL to the theories of the educational psychologist Benjamin Bloom, who developed a taxonomy that articulates a growing hierarchy of cognitive skills: remembering, understanding, applying, analysing, evaluating and creating. Going back a century, in the 1800s there are Lev Vygotskyj’s theories of social constructivism which assert that all cognitive functions, such as learning, originate in human social and collaborative interactions and therefore must be explained as products of social interactions. New knowledge is not simply assimilated through cognitive memory, but also through integration into a community in which the learner creates subjective meaning from his or her experiences through collaborative human interaction (Goslin, Van der Klashorst, Kluka, & Van Wyk, 2016). Vygotskyj’s theories anticipate what would later be developed in the social and natural sciences in terms of the centrality given to the concept of relationship. It is not surprising that other studies (Ahmad et al., 2014) refer to Bandura’s social theory. Social learning theory presupposes that within educational institutions, within a relationship, effective learning and the acquisition of new behaviours derive from the use of modelling stimuli in practical, verbal and symbolic teaching. Finally, some studies refer to situated cognition theories (Rincón & Castillo-Montoya, 2018) which emphasizes that knowledge is acquired in the ‘ordinary practices of culture’. The authors explain that the situation in which the knowledge and skills would

naturally be applied is the community (ivi, 2018).

3.2. Implementation analysis area

The second analysis area explores the geographical contexts in which SL is applied, the disciplinary fields, the implementation models used, the social impact achieved, the quality standards and the main implementation challenges of the actors involved. Starting from the SL contexts and fields, the article analysis shows how SL was conceptually formulated in the late 1960s/early 1970s. In the 1990s, it became a popular teaching-learning strategy in America, when the National and Community Service Act legislation was approved during the presidency of George H. W. Bush (Ahmad et al., 2014). In Latin America, one of the first examples of SL appeared in Mexico at the beginning of the 20th century with the university extension movement that promoted social service activities for students (Díaz, Ramia, Bramwell, & Costales, 2019). Over the years, SL has been further developed and reached out to many other countries, even if the record of research and studies remains in North America. As far as the disciplinary areas of application are concerned, the most common academic field is Historical, philosophical, pedagogical and psychological sciences (Figure 7). Interdisciplinary SL appears only in 11 projects, showing low interactions among disciplines.

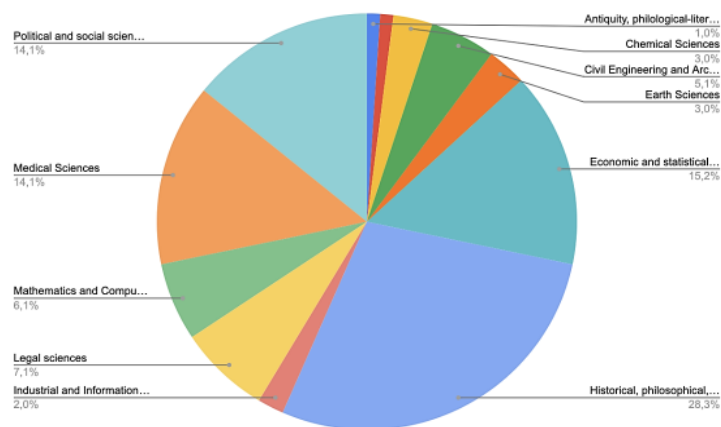


Figure 7. SL implementation fields.

There are three SL implementation models: Top-down, Bottom-up and Mixed. Each typology ideally places students at a different stage within the design SL process, giving them a more or less central role in the choices of social issues, partners and service and learning objectives (Figure 8). In the top-down SL model (77% of the SL projects), the university offers a pre-structured project in collaboration with a community partner, in which students can participate and be directed in service activities that already have curricular connections to their degree courses. In the bottom-up model (14%), students choose both the social needs and the activities they want to focus on and contact community partners in order to carry out their project. In the mixed model (9%), the university provides students with different possibilities of community partnerships that they can choose according to their interests. Students define their specific service and learning objectives with the selected partner. The articles could be analysed according to the SL type, i.e. Direct, Indirect, Advocacy and Research-based (Berger, 2003): the most consistent category was Direct SL (74%), followed by the Research-based SL (18%); next the Advocacy SL (5%), and lastly the Indirect SL (3%). The average implementation time of the projects is one

academic semester (65% of the projects) and the maximum duration found is one academic year (35% of the projects), while the minimum is one week (2% of the projects)..

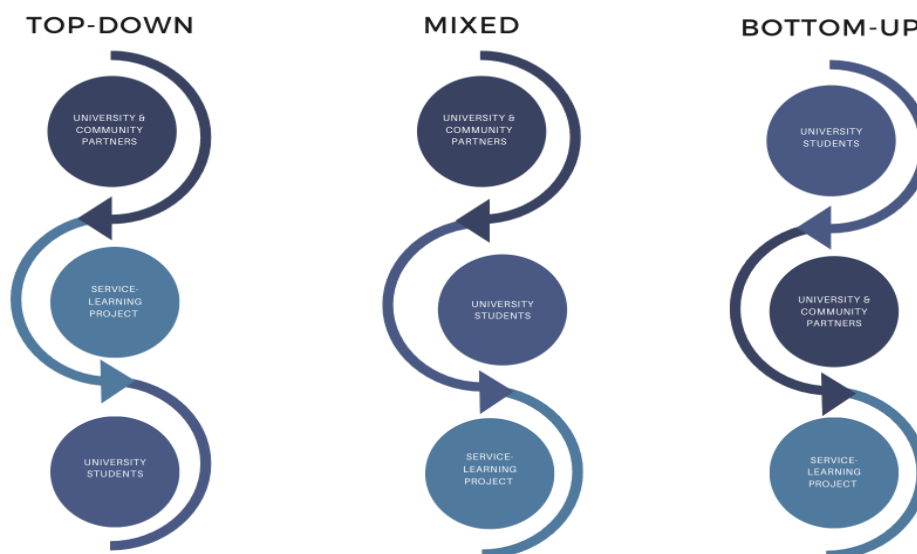


Figure 8. SL implementation models in comparison.

Regarding the projects' social impact (Figure 9), 53% of them generated a local impact, 42% a national impact and 5% an international one. Analysing the studies, it could be observed that when the projects' impact area gains an international dimension, it is because they are carried out as a full immersion activity in a foreign country (e.g., Sparkman, Vajda & Belcher, 2020) or because they are articulated in fundraising campaigns for international associations (e.g., Blewitt, Parsons, & Shane, 2018).

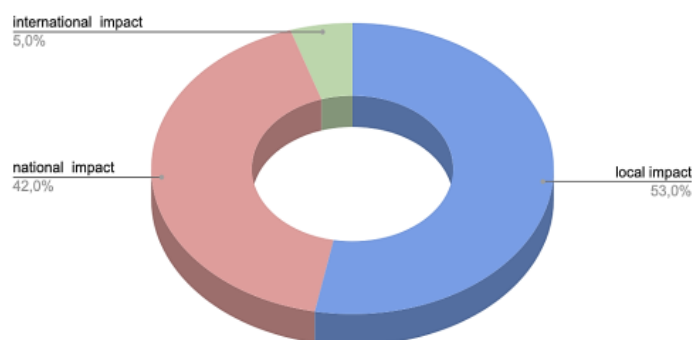


Figure 9. SL projects' impact area.

However, the inclusion of SL in the university per se does not guarantee the generation of social impact nor the development of skills. For this reason, it is important to focus on quality standards which are a set of indicators (measurable statements that allow to assess whether or not the associated criteria are being met) to be used in evaluating the outcomes of both learning and service (e-SL4EU Erasmus + K2, 2021-2024). Analysing the articles, seven quality standards emerged:

- *structured reflection* (mentioned in 29 studies): reflection is designed to help practitioners understand the meaning and impact of their efforts by linking what

they have learned to what they have done (Lester, 2015). Effective reflection should have the following components: a clear connection between the service experience and the learning objectives; stimuli regarding the expectations and evaluation criteria of the project; ongoing feedback from the faculty; furthermore, it should be articulated at various stages during the project, so that everyone can practice and it should provide opportunities to explore, clarify and modify one's beliefs and values (Wensing et al., 2018);

- small-sized working groups (mentioned in eight studies): in the case of high-frequency courses, working in small groups enables effective collaboration (Nunn & Brand, 2013). Furthermore, the controlled size allows peer review work to be established and closer relationships to be developed both within the group and with the teacher;
- heterogeneity (mentioned in six studies): it qualifies a working group in terms of skills and knowledge domains (Yook, 2018). This promotes the students' capacities to work with people from different backgrounds and perspectives. According to Beebe and Masterson (2015), even if heterogeneous working groups in the early stages of a SL project are often more problematic, they produce better results with flexible solutions and broader perspectives in relation to the goals;
- follow-up (mentioned in two studies): the faculty should require weekly, monthly or project steps progress reports from students to explore their achievements and the challenges they are facing. According to Hart et al. (2015) and Yook (2018), this standard is helpful in keeping students focused on the project goals;
- Other qualitative standards are: a formal partnership between the university and community partners; a greater understanding of SL before starting a project; and the attention placed on the celebration, the final phase of a SL project to disseminate what has been done and what has been achieved, in partnership with the community.

The second analysis area ends by considering how the different SL players – in particular faculty and students – are challenged in the implementation process, by being involved in different roles. As far as the faculty is concerned (Figure 10) the major challenges are:

1. changing the course structure;
2. maintain a close connection between learning and service goals;
3. structuring or accompanying partnerships in line with the subject area;
4. adopting different assessment strategies to capture the complexity of the learning process;
5. managing students' uncertainty in facing difficulties and supporting them to achieve the objectives set (Page & Stanley, 2014);
6. balancing the community partners' expectations with the students' skills and deadlines. As Fraustino, Pressgrove and Colistra (2019) pointed out, this challenge may force teachers to choose between three not-so-positive solutions:
 - 1.1. demanding further commitment from students with limited time and energy;
 - 1.2. investing additional time and resources in adjusting the students' project and explaining these changes to them;
 - 1.3. failing to produce results for community partners on time, possibly ruining the relationship based on trust and credibility.
7. finally, maintaining the right balance between student agency and teacher support since even though it is important that students actively participate in all phases of

the project, it is equally important that teachers constantly support their efforts without falling into an overly directive leadership style (Butler & Christofili, 2014). According to Sanft and Ziegler-Graham (2018), the teacher has to be a project manager so that students can become increasingly autonomous and responsible in managing their work.

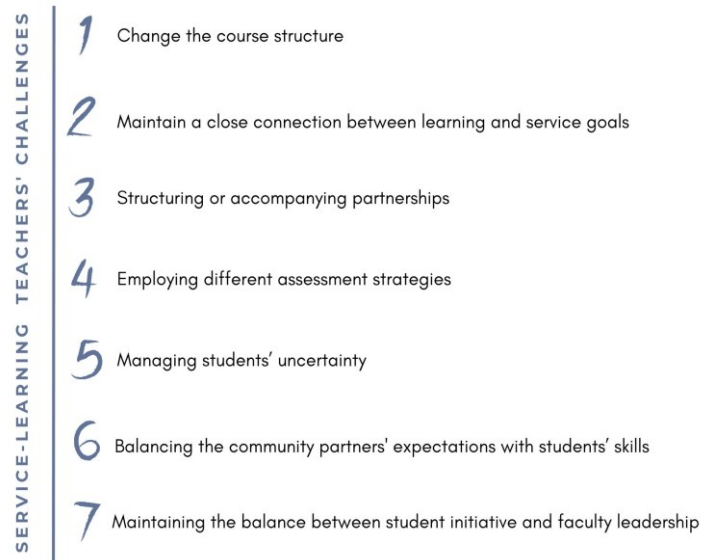


Figure 10. Seven challenges for SL teachers.

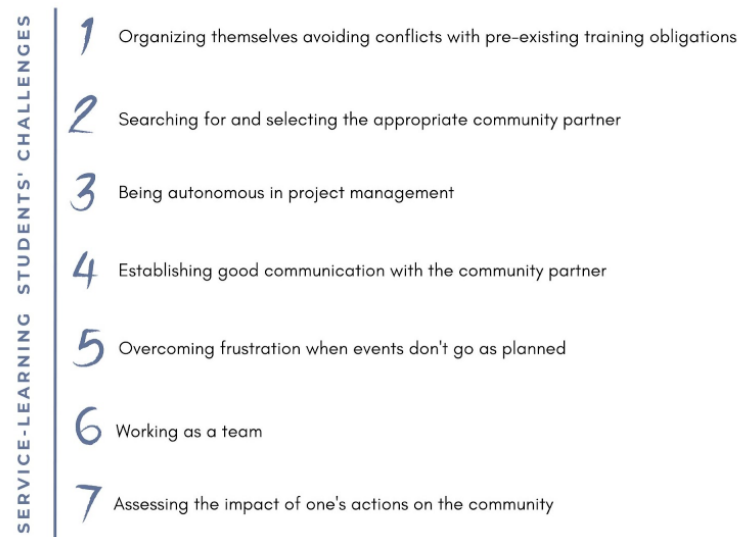


Figure 11. Seven challenges for SL student.

The main challenges for students (Figure 11) are:

1. organizing themselves avoiding conflicts with pre-existing training obligations (Schelbe et al. 2014);
2. searching for and selecting the appropriate community partner;

3. autonomously ‘jumping’ into the knowledge application without substantial guidance nor the opportunity for the teacher to review it at the time (Fraustino et al., 2019);
4. establishing good communication with the community partner;
5. overcoming any frustration and discouragement when the community partner resources and activities are not realized as planned (Nikolova & Andersen, 2017);
6. working as a team, since a successful SL project depends on being able to organize the individual resources within a group well, being able to coordinate different tasks and finding solutions to problems on the way (Popovich & Brooks-Hurst, 2019);
7. assessing the impact of one’s actions on the community.

3.3. Research and impact analysis area

The third analysis area focuses on the methods, measurement scales and research conditions adopted to study the SL impact on university students and related challenges. It also analyses the results in terms of soft skills developed by learners. SL studies generally fall into one of five categories:

1. conceptual studies;
2. literature reviews;
3. normative studies;
4. studies focusing on the impression of participants in SL experiences; and
5. studies investigating the benefits of students involved in SL programs (McNatt, 2019).

Only the last two (and smallest) categories include empirical studies. Furthermore, according to McNatt (ibidem), the findings in these smallest sub-categories are sometimes inconsistent and further research is needed to verify the evidence presented. Other critical aspects relate to sample size (up to 11/16 participants), not having control groups and the uniqueness of each SL project, with characteristics that could influence the results, and thus the generalizability. In the present systematic review, due to the research questions, most of the included studies are empirical (only four are non-empirical: three conceptual studies and one literature review): 92% of the case studies of which the largest number are qualitative (57%), followed by mixed method (26%) and quantitative (17%). The sample sizes range from three participants to 2.500 participants, with a marked female participation rate. Only ten studies include control groups ranging from 16 to 345 participants.

The assessment tools, the strategies and techniques employed in the studies are analysed according to qualitative and quantitative method:

- *qualitative method and procedures*: the analysis identified the use of reflective journals (36%), interviews (29%), observations and rubrics (both 13%) and focus groups (9%). The reflective journal can be used with different frequencies, e.g., weekly or post-experience. In general, it can be free-form or based on guiding questions and the format could be paper-based or electronic, such as the e-Portfolio (Sparkman et al., 2020). Interviews can be structured, semi-structured or unstructured, depending on the range of narrative autonomy given to the interviewee. About 85% of the studies employing the interview adopted the semi-structured one. The observation types indicated in the studies are the participant

one (when the observer is immersed in the context studied) and the remote type (when the observer maintains a cognitive and emotional detachment, not overlapping the roles of researcher and member of the reality). The Focus Group has been used in the studies to study in greater detail some impact factors at the end of the SL project or as a follow-up. Finally, Rubrics are instruments based on a list of qualitative criteria for reading a SL project, such as the rubric based on Trilla & Novella's (2001) taxonomy concerning students' levels of participation;

- *quantitative method and procedures*: 17 measurement scales have been identified and organized in five macro categories (Figure 12). These are mainly Likert scales investigating different dimensions in relation to the SL impact on university students. In terms of procedures, most of the investigations use the post-test procedure, i.e., at the end of the SL experience, while only 16 studies use test-retest which can provide more substantial results (McNatt, 2019).

Scale	Purposes
Skills and citizenship	
Civic Attitudes and Skills Questionnaire (CASQ)	It measures six dimensions: civic attitudes and skills; interpersonal and problem-solving skills; political awareness; leadership skills; social justice attitudes; diversity-related attitudes.
Student Service-Learning Course Survey (SSLCS)	It measures student's civic development in three dimensions: civic knowledge, civic competence and civic engagement.
Service Learning Benefit scale (SELEB)	It measures the four dimensions: practical skills, interpersonal skills, citizenship and personal responsibility.
Global Sustainability Inventory (GSI)	It measures the cognitive and psychosocial (interpersonal and intrapersonal) dimensions of soft skills.
MR-SL Scale Survey	It investigates four dimensions in the area of SL and economics: application of knowledge; analytical/critical thinking; teamwork and reflective thinking.
Rosenberg's Self-esteem Scale	It measures the individual's self-esteem.
Social Responsibility	
Civic Attitudes Scale (CAS)	It measures students' civic attitudes towards community service.
Community Service Self-Efficacy Scale (CSSES)	It measures self-efficacy in terms of making a meaningful contribution to the community through service.
Volunteer Function Inventory (VFI)	It measures respondents' attitudes towards the value of social responsibility.
General Social Survey	It measures political attitudes, i.e. the understanding, interest and value that an individual attribute to politics and political systems in general.
Reflection	
Lambright & Lu Scale	It measures the role of reflection within the relationship between SL and students' civic development.

P-SAP Scale	It measures students' ability to reason and argue explanations that demonstrate a profound appreciation of the factors that influence social problems.
Communication	
Communication and skills survey (CSS)	It investigates three dimensions: curricular knowledge and skills; counseling and communication skills; interdisciplinary teamwork skills.
Expanded Communication Skills Confidence Inventory	It measures an individual's self-efficacy in the oral communication area.
Self-Rated Communication Competence Scale	It measures the components of effective interpersonal communication, such as empathy, listening and support.
Interpersonal Communication Inventory (ICI)	It investigates four dimensions of interpersonal communication: self-awareness, listening, clarity of expression and difficulties in managing angry feelings.
Service-Learning perceptions	
Folgueiras Questionari Aprenentatge Servei	It collects participants' opinions, beliefs and attitudes about the SL experience.

Figure 11. Scales in SL research.

In order to analyse SL benefits related to soft skills development as well as give a logical and consistent picture of the current state of the art in this area, eLene4Life Soft Skills Framework (Erasmus + K2, 2018-2021) was adopted (Figure 12).

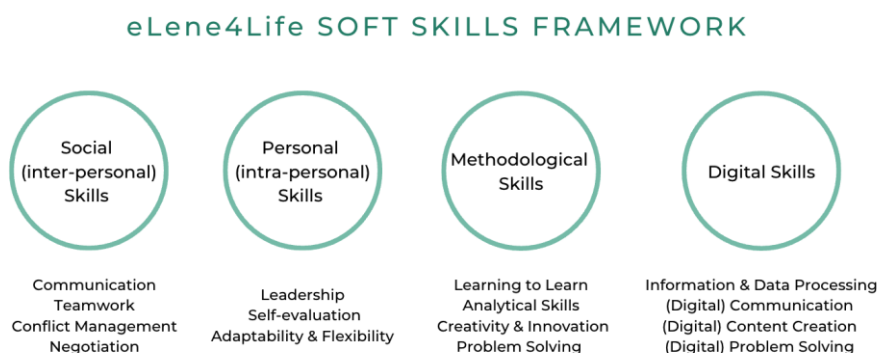


Figure 12. eLene4Life Soft Skills Framework. From Culcasi, Russo, & Cinque (2022a)

Using a defined framework to report the results of the analysed studies makes it possible to present them in a systematic way, ensuring the objectives of this review. Furthermore, not all the articles offered details on the frameworks used. This reinforced the decision to assume a uniform reading lens to report the outcomes. The eLene4Life Framework considers four clusters of skills. The results of the analysed articles are reported below, according to these four clusters:

- social (inter-personal) skills*: are the most frequently measured skills. 34% of the studies report positive outcomes in this area. These include: Communication (52%), Teamwork (40%), Conflict Management (6%), and Negotiation (2%);

- *methodological skills*: are the second most measured skills, i.e., 33% of the studies report a positive impact in this area. These include: Analytical skills (42%), Problem solving (21%), Creativity and innovation (20%), and Learning to learn (17%);
- *personal (intra-personal) skills*: 29% of the articles report positive outcomes in this area. Specifically: Leadership (51%), Self-evaluation (31%), Adaptability and flexibility (18%);
- *digital skills*: currently the least investigated area. These include: Digital Content creation (44%), Digital communication (33%), Digital problem solving (22%) and Information and data processing (not detected).

In addition to soft skills, the studies find benefits in the following areas: professional growth (44%), civic and social responsibility (33%), and future career confidence and personal growth, which are often considered together (23%).

The third analysis area ends by highlighting the research challenges in SL and soft skills. Research in this sector is essential to improve the implementation of the proposal. The effort is to move in the direction of empirical research, integrating the qualitative with the quantitative method, so as to allow for a balance in the results and therefore a long-term sustainability of the educational decisions that include the community in the curricular plans. Furthermore, as Caspersz & Olaru (2017) point out, SL components are interdependent variables in the effects generated – e.g. quality standards affect the process elements – so that research based on micro-areas is not recommended. In a certain way, the reciprocity that is intended to be achieved at the pedagogical level should also be applied at the research level. In general, research in this field is not only a way to promote improvements in the education systems, but also an opportunity to carry out learning activities that have positive effects on society (Matteucci & Aubke, 2018).

6. Discussion and conclusion

This literature review explored in detail the current state of the art of SL and soft skills in higher education, with three main focuses: *educational reasons and theoretical framework*, *implementation*, and *research and impact*. The three areas highlight the extent to which SL reduces the gap between important dichotomies of universities: in their task of providing quality education aimed at skills development, SL strengthens the link between theory and practice, classroom and reality, education and commitment.

The first analysis area highlighted the reasons why universities propose SL for the soft skills development: integral education, students' employability and university civic engagement. Regarding the pedagogical roots, most of the studies refer to Dewey and Freire, but the theories of Vygotsky, Bloom and Kolb are also cited. This creates a considerable variety of definitions that can be grouped into three areas: experiential learning, philosophy of education, and reciprocity-based learning. Similarly, there is no singular definition of soft skills (17 denominations were identified), so they are interpreted differently from country to country.

The second analysis area explored SL's application context, showing that most of the research and applications are still in North America, with only 8% of the studies being conducted in Europe (five in Spain, one in Italy and one in Austria). The studies show that the most extensive field of SL implementation is the historical, philosophical, pedagogical and psychological sciences, with an average project duration of one academic semester.

Among the implementation models that emerged, i.e., Top-down, Bottom-up and Mixed, the most widespread is the Top-down one, with Direct SL as the major service type implemented. It is interesting to note that interdisciplinary projects are still uncommon even though SL requires contamination between knowledge to address complex problems. The recent Unesco Report (2021) emphasizes how a dialogue between disciplines is essential to reflect the systemic interdependencies of the planet's challenges that can be addressed through education (e.g., SL). Regarding the social impact achieved by the projects, this is mostly local. Recent studies (Culcasi, Gregorová, & Cinque, 2022b) point out that e-Service-Learning (e-SL), especially when targeted at the web-community has a social impact area with certainly less defined but much broader boundaries. This is an area to be further explored, also in terms of impact assessment. Furthermore, there are many challenges that interpellate teachers and students: although on different levels they share the SL organizational challenge, of properly cultivating partnerships and managing uncertain project phases. The main SL quality standards identified are: structured reflection, periodical follow-up, small-sized working groups and heterogeneity in the teams. Future research should investigate how to support the processes to achieve these standards.

The third analysis area showed how the majority of empirical studies investigating SL and soft skills are qualitative and collect data through Reflective Journals, even with very small samples (three participants). There are fewer studies that use a quantitative approach and without implementing the test-retest. Research is fundamental to support SL practice. Future studies should therefore converge towards the mixed method approach, which synergistically uses qualitative and quantitative methods. Many challenges remain open in the research field due to the interdependence of different variables in generating effects, with SL being a participatory process, strongly context-anchored and with different actors involved.

In conclusion, SL is an effective educational proposal for the development of students' soft skills, particularly in the social (e.g., communication), methodological (e.g., analysis and critical thinking skills) and personal (e.g., leadership) areas. Future research should investigate SL's impact on students' digital skills, given the growth of e-SL in the Higher Education sector.

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