

Intergenerational service-learning, Sustainability and University social responsibility: A pilot study

Asier Arcos-Alonso^{a *}, University of the Basque Country UPV/EHU, Applied Economics I department, Calle Comandante Izarduy 23, 01006, Vitoria-Gasteiz, Spain, email: asier.arcos@ehu.eus, Tlf: 945 01 4440, <https://orcid.org/0000-0001-8737-5531>

Ángel Elías Ortega^b, University of the Basque Country UPV/EHU, Department of Business Law and Civil Law, Barrio Sarriena, s/n, 48940, Leioa, Spain, email: angel.elias@ehu.eus, <https://orcid.org/0000-0002-7927-8835>

Ander Arcos Alonso^c, Nazioarteko Elkartasuna-Solidaridad Internacional, development cooperation and education area, Calle Conde Mirasol 7, 48003, Bilbao, Spain. <https://orcid.org/0000-0002-1896-1550>

Suggested Citation:

Arcos-Alonso, A., Elías-Ortega A., & Arcos Alonso, A., (2020). Intergenerational Service-Learning, Sustainability and University Social Responsibility: A Pilot Study. *Cypriot Journal of Educational Science*. 15(6), 1629-1641. <https://doi.org/10.18844/cjes.v15i6.5322>

Received from July 15, 2020; revised from September 19, 2020; accepted from December 26, 2020.

Selection and peer review under responsibility of Prof. Dr. Huseyin Uzunboylu, Higher Education Planning, Supervision, Accreditation and Coordination Board, Cyprus.

©2020 Birlesik Dunya Yenilik Arastirma ve Yayıncılık Merkezi. All rights reserved.

Abstract

This paper presents a study of university social responsibility (USR), carried out through an innovative educational action. The students of the studied classrooms in the University of the Basque Country (UPV/EHU) collaborated with a social entity Emmaus Social Foundation dedicated to environmental sustainability, social justice and the social and solidarity economy to provide community services through a service-learning methodology. Using a mixed method approach, we combined the practical experience of the social entity with an active student-centred teaching methodology in order to foster the acquisition of general and specific competencies related to sustainability and social justice. The aim was to create learning connections between members of the university community and links with the environmental and social reality of the Basque Country. This pilot study was carried out in the first term of the 2018–2019 academic year. This work allowed (a) critical knowledge to be generated by incorporating and hybridising discussion elements of social justice, such as sustainability; (b) intergenerational participation processes to be generated between elders, university students and social organisations in order to acquire general and specific learning competencies and (c) social and environmental needs to be addressed through community services.

Keywords: Higher education, intergenerational learning, service-learning, teaching innovation, university social responsibility.

* ADDRESS FOR CORRESPONDENCE: Asier Arcos-Alonso, University of the Basque Country UPV/EHU, Calle Comandante Izarduy 23, Vitoria-Gasteiz (Álava) 01006, Spain
E-mail address: asier.arcos@ehu.eus / Tel.: 945 01 4440

1. Introduction

We live in an increasingly complex and changing society, known variously as the society of information, risk and complexity. In this society, the extent of the development and variation of communication has led to certain social groups, such as elderly people, being displaced and excluded. It is also key to carry out activities of intergenerational coexistence that favour mutual learning between people of different ages (Aldana, Garcia & Jacobo, 2012).

González, Lucas, Franco and Rodríguez (2019, p. 184) stated that ‘universities are both public and educational institutions. Therefore, they cannot be left out of the challenges posed by these new contexts. What’s more, they must take the reins in the implementation of the 2030 Agenda in the universities themselves to work on sustainability in a transversal manner at different levels’.

According to Gaete-Quezada (2011, p. 116), university social responsibility (USR) presents a transformational perspective: ‘The university social responsibility allow achieving a more equitable an fair society with special attention to a sustainable development’. At the same time, special attention is paid to the USR approaches that assign a more active role to claiming and proposing characteristics of universities. These contribute to the development of solutions for the main problems and social needs that presently exist, as well as to building more sustainable development in the future. Thus, a university must go beyond educating professionals; it has the duty to train citizens with an ethical conscience and civic commitment, linking sustainability to this training (Michelsen, 2015).

In the context of the University of the Basque Country, this requires the development of innovative teaching experiences in the framework of the model of UPV/EHU ‘Ikaskuntza kooperatiboa eta Dinamikoa—Cooperative and Dynamic Learning’ (IKD) and the application of inclusive pedagogies. The IKD model has various objectives, and these goals have encouraged the search for methodologies such as service-learning (SL) and current themes such as sustainability.

The IKD model has recently been updated to align with the European pedagogical guidelines. Thus, it now attempts to respond to the great challenges affecting humans and the planet in the 21st century. These are included in the 2030 Agenda for Sustainable Development. The result is IKD i3 (‘i to the power of three’: learning × research × sustainability, which means multiplying learning by research and by sustainability).

Thus, the programme presented in this article hybridised innovative teaching at the university with the acquisition of social justice values, especially those related to sustainability. This was undertaken through the SL methodology, which combines learning processes and community service (Puig, Batlle, Bosch & Palos, 2007) in an intergenerational manner and in real. This study aims to respond to a real need and a theme that requires improvement or transformation. Additionally, this work promotes a form of training for a more active citizenry.

The relevance of the SL to the field of economics and sustainability (Cabedo, Royo, Moliner & Guraya, 2018) is due to the fact that it can be applied easily to solve real problems and to link the classroom with the local community. It is also applied in education related to teaching and implementing concepts related to sustainability in construction education. Education is usually associated with developing a responsible and ethical citizenship, with an awareness of the main challenges of sustainable development (Diez-Palomar, Flecha & García-Carrion, 2018). According to Clevenger and Ozbet (2013, p. 1) ‘overall findings were mixed but suggest that significant learning about sustainability can occur using SL as a teaching technique in construction education despite [and perhaps because] students question the value of what they have learned and how to implement it. Specifically, students report

increased appreciation of the challenges as well as benefits related to sustainability'. The academic literature gives us clues about how to apply SL in projects that involve sustainability. According to Pearce and Manion (2016, p. 57), in SL projects (in their case, relating to sustainable construction), certain conditions must be met, including a balanced mix of technical, financial, organisational and political aspects. 'The extent to which risk can be shared among stakeholders, including both client and university, is an important consideration in choosing and implementing successful SL projects for sustainability'. SL is a real and viable methodological alternative oriented towards society, social transformation and the development of sincere relationships. It is a teaching tool that can be used in conjunction with other effective teaching practices to enhance students learning outcomes (Hervani & Helms, 2004). The hybridisation between SL, sustainability learning and building on the framework of an intersectional analysis of reality in the university is an opportunity to develop the university–society connection with an important impact on university education and social development.

SL is an active and transforming methodology that focuses on the learning of the students, with the requirement that such learning must serve society—i.e., it must have a social impact. Thus, it is linked to USR (Gezuraga, 2014). It is also inclusive, since it is created through projects with and for others that tackle relevant social issues, thus developing feelings of belonging and equity. Therefore, it is understood that learning contributes to the personal and social development of both students (in our case, university students) and society.

Learning experiences are related to one or several subjects and/or modules of the curriculum, and they are carried out in collaboration with a social entity. This relationship grants significance to both university teaching, in our case, and the work of such entities.

This is a type of methodology that generates benefits in university teaching, since it offers a better practical education and, at the same time, it updates the content related to social reality and to the new social needs. Moreover, it provides an education based on values, thus developing capacities in the students and promoting their participation in both projects and other contexts (Folgueiras, Gezuraga & Aranburuzabala, 2019). It also favours the professional development of faculty members, motivating and making sense of their teaching performance. Lastly, this methodology responds to real social needs, thereby connecting the university with society (Puig et al., 2007).

SL with older adults is a field that has been explored in other countries, such as the United States and the United Kingdom, in different contexts related to community service (Lewis, 2002), usually focusing on young people (Penik, Fallshore & Spencer, 2014). The aim of such previous programmes was to work on the way older adults are perceived (Brown & Bright, 2017). However, experiences similar to the one presented in this study, i.e., focused on older adults in a university context, were not easily found in the scientific literature.

Similarly, SL meets the requirements of the European Higher Education Area and has an ethical dimension that is fundamental to university education of future professionals. It also responds to the social responsibility of the university (Gezuraga, 2014; Razquin, 2017) and to educational innovation (Agrafogo, Garcia & Jato, 2017).

The contribution of SL is contemplated in the IKD model, which therefore relates this proposal to territorial and social development. It can be asserted that this interdisciplinary project of SL is strongly committed to the social and community environment. Thus, it has a public and transversalising vocation of social justice criteria, and it aims to sensitise students to values of environmental sustainability, solidarity and equity.

2. Methods

2.1. Context

2.1.1 General data

This innovative teaching programme was carried out in the first term of the 2018–2019 academic year. Table 1 shows that a total of 57 participants were involved: 2 faculty members of UPV-EHU, 17 older students, 40 young students and 1 technician from the collaborating social entity. Specific competencies were tackled in the generation of knowledge and with respect to social benefits. There were two defined groups of students: one group of students over 55 years who carried out the SL process and another group of 40 social work students.

The participation of this second group of students was secondary to the research, and limited to activities complementary to the development of the SL. However, they were important to the process by making intergenerational activities possible.

The SL process was conducted in the framework of the optional subject ‘Current Matters of Social Protection’, taught in the experience classrooms of Bizkaia (Basque Country, Spain). As previously mentioned, the IKD model focuses on the students and their learning. Consequently, it is important to change the teaching–learning methodologies (Alonso, Arandia, Martinez, Martínez & Gezuraga, 2013)

The ‘experience classrooms’ project of the UPV/EHU aims to expand the university culture to include the whole of the Basque autonomous community (CAPV) (See: <https://www.ehu.eus/es/web/esperientzia-gelak-bizkaia>). It offers a university degree in Human Sciences with four teaching courses, in addition to other complementary training courses. The students must meet two basic requirements: (1) being over 55 years of age and (2) being either retired or a housewife/househusband.

The profiles of the participants are summarised in Table 1.

Table 1. Distribution by sex and age

	Total	Women	Men	>55	<55
Students	57	32	25	17	40
Faculty members and collaborating social entity personnel	3	1	2	1	2
Percentage	100	56.1	43.9	29.8	71.2

Source: own elaboration.

The socioeconomic profile of the student sample was medium–high; in their employment history, they had worked in management, syndicates, banks, teaching or industry, among other areas.

2.1.2. Collaborating social entity: Emaus Social Foundation

The Emaús Social Foundation (ESF) Group is a group of social and labour integration companies. It is a non-profit organisation that allocates its assets to the realisation of purposes of general interest. The purpose of the foundation should be lawful, serve a general interest and benefit non-individually determined persons. The main objective of ESF is to promote and guide transformative processes, both individually and collectively, in social, economic and environmental fields. Its goals are achieved via the following:

- Sustainable education and development cooperation projects.
- Programmes for social and labour inclusion.

ESF's activity is focused on the autonomous region of the Basque Country. The staff and participants of the socio-labour integration centre, 'Bitartean', located in the municipality of Gamiz Fika, participated in the current study.

2.2. Methods

The nature of this Intergenerational Learning-Service programme is innovative, participatory and transformative in social terms. As an active methodological proposal, it gives prominence to student learning by performing a service to society and collaborating, in our case, with the ESF.

The service consists of the following:

- Developing social communication actions using social networks aimed at an elderly audience.
- To develop political advocacy or protest actions through open letters to local authorities.
- To facilitate the exchange of knowledge between young university students and people in situations of social exclusion where knowledge was related to issues of environmental sustainability and social justice.

A mixed method research was used in this study (Creswell & Creswell, 2009, p.106). According to Cameron (2011), 'Mixed methods researchers need to be versatile and innovative with a repertoire of research skills that exceeds those needed for single mode research'.

Study results were based on quantitative and qualitative data collection. Such a combination of different methods yields results which in turn provide feedback. In addition to Hammersley's (2008) study, as well as combining different methods, it is possible to combine the same observations but in different environments (in this case the university classes and the environment in which the collaborating social entity usually works).

In the present study, therefore, participant observation was used to collect qualitative data. In participant observation, the researcher participated in the activity s/he observed in order to gather information. Observations were conducted in different teaching environments where field notes were collected. The process was evaluated through field notes and the revision of the designs was presented in each session. Furthermore, papers and exit interviews contributed to the documentation of student development through the learning cycle.

On the contrary, quantitative information was collected through a semi-structured questionnaire. Quantitative data were collected and organised in a database. They were then analysed to obtain quantitative information for triangulation.

2.3. The SL experience

2.3.1. Objectives, competencies and learning results of the SL

The objectives of the SL proposal are as follows:

- To assess the impact of the SL methodology on learning sustainability issues in higher education;
- To reflect on intergenerational participatory processes for sustainability learning;
- To provide the keys to USR from a community perspective related to sustainability.

The competencies and learning results pursued are as follows:

- To learn to learn: searching and selecting information in different sources and developing curiosity and reflection.
- To learn to do: acquiring knowledge, critical capacity and commitment in compliance with the sustainability and social benefits, and summarising and expressing one’s own opinion.
- To learn to be: developing empathy as a way of facing conflicts of interest and revising values and attitudes, as well as potentiating criticism and self-criticism;

2.3.2. The SL process

The SL methodology was selected based on the fact that it offers several elements of interest: (1) it is an innovative educational methodology that fits within the scope of experience classrooms; (2) it allows different social groups to be brought together, such as the elderly, young university social work students and personnel of collaborating entities (in the case of Emmaus, people in a situation of social exclusion); (3) it can be developed in a planned and intentional manner; (4) it is an educational activity that allows evaluation and correction at any time during the process and at the level of its content, impact and transfer; (5) it facilitates participation and interaction of students and (6) it allows the combination of human, technical and technological resources for the achievement of the objectives.

The proposal connects with several of the elements contained in the Basis for Curricular Development of UPV-EHU, as it is an active methodology that allows the use of new information technologies (e.g., the e-learning platform). Similarly, it has an active and dynamic learning approach that allows responses to the new training needs of a constantly changing society. It also links directly to the new IKDi3sustainability strategy of the university.

In the development of the experience, we followed a classical SL scheme based on three blocks (preparation, realisation and evaluation) and divided it into different phases (Batlle, 2015).

Table 2 shows, in chronological order, the phases and actions that were conducted during the SL.

Table 2. Phases and actions conducted

Block	Phase	Action conducted
Preparation	I	a. Development of the idea and scheme of the project, contrast and agreement between the faculty members who taught the subject.
		b. Contacting different social entities and explanation of the proposal and approach of the possibility of carrying out a SL project in the framework of the subject. Initially, we aimed to ask five entities; eventually, two were contacted. In the end, the entity that showed the greatest interest and commitment was the one that collaborated throughout the entire process.
		c. Contacting the social entity to define the project and its visibility.
		d. Approval by the social entity.
		e. Contrast and supervision of the project by the team of the social entity and the faculty members.
Realisation	II	f. Interviews, presentation and agreement on the document describing the SL project to be carried out.
	III	g. Initiation and realisation of activities. A presentation about the process was given in the classroom, explaining the objectives of the experience, the participating agents, the steps to follow and the possible services to the entity, inviting the students to participate in and incorporate ideas for services. In later sessions, debates were held on the proposed topics; the book by Rutger Bregman [2017] Utopia for realists: In favour

		of universal basic income, the 15-hour workweek and a world without borders, was among the suggested readings. The students were told about which entities work in this area in the Basque Country, and whether those entities worked in environmental, social or economic sustainability. The Bilbao charter of values was also tackled as a reference framework regarding the role that public administrations could play. They were also asked if they believed that the Bilbao city council should adopt policies related to sustainability. In the context of the actions conducted, we also developed a space of interaction between the students of the experience classrooms and students of the Faculty of Labour Relations and Social Work, with the aim of allowing them to share their opinions and contribute to the process through active participation.
		h. Verification and supervision of the project by the team. A total of three face-to-face contrast meetings were held, as well as multiple interactions between faculty members and the social entity via e-mail and other virtual channels.
		i. End of the activities and revision of the results. The activities were terminated with the students submitting their services to the entity.
	IV	j. Contrast and supervision of the project by the team (entity and faculty members).
		k. A process report was presented and an evaluation meeting was held.
		l. Participatory evaluation and termination of the process. An evaluation of the process was conducted with the participation of the faculty members, the personnel of the ESF and the students. In addition, the participants completed a final semi-structured questionnaire about the learning conducted, with the aim of improving future processes.
Evaluation	V	

Source: own elaboration based according to the model developed by Batlle (2015).

3. Results and discussion

This process of methodological innovation had varied different tangible results, despite its relatively short duration (5 months). Working on a more global project with an impact on the community provides a change of perspective that is progressively assumed, motivating the people involved.

As an education institution for new generations, the university plays a fundamental role in society, which implies being in contact with the surrounding reality and proposing alternatives to prepare its students for the future (Cardenas & Rivera, 2004). It is necessary and desirable that a university reviews its trainer role, to transform reality and generate knowledge from a humanistic approach, where people are the beginning and the end of the educational practice, with a professionalism focused on human development and, consequently, sustainability (Monge, Mena & Gamboa, 2018). Similarly, it is necessary to work on competencies so that students acquire the skills for their future professional development (Arcos-Alonso & Alonso-Olea, 2019) and work with social entities which can enable a profound approach to learning that is difficult to obtain in other contexts.

In the next section, we describe the different aspects of the process.

3.1. About the process

The results showed that it is possible to approach an SL process with people over 55 years of age with remarkably high socioeconomic and cultural profiles and who, in some cases, had had collaboration experiences with the community and social entities. It was seen that it was possible to work on sustainability, in addition to other social and economic issues, with older people at the university.

The process allowed the realities of people of very different ages and socioeconomic and educational levels to be brought together while discussing sustainability and social justice issues. Similarly, it

provided a remarkable opportunity to bring the university and its students closer to social entities, such as the one that is collaborated in this project, which works with people in social and employment insertion programmes in the territory of the Basque Country. During their familiarisation and collaboration with the social entity, the students acquired knowledge of the reality of people in situations of exclusion, their problems and the causes of their situations and personal circumstances, and related that knowledge to the systemic and environmental crisis. Therefore, the process demonstrated the field work of a social entity, which is based on sustainability, solidarity, reciprocity, cooperation, redistribution and social justice. Moreover, these learnings are linked to the relevance (or irrelevance) of approaching a debate on universal basic income at the social level in the Basque Country and in the Spanish territory as a tool for social and environmental justice.

The faculty members also underwent a significant learning process. The planning, implementation and evaluation of the educational project of applying the SL methodology posed a challenge to faculty members, since they lacked experience in this type of process. Furthermore, it was the first time that such a process was put into practice in the experience classrooms of UPV/EHU. Very few studies could be found in the scientific literature about the application of SL with older adults in a university context that could be used as a reference for its implementation. This resulted in the need to adapt the methodology, see the process with flexibility and experiment with new teaching methods, transforming them into a constant source of discussion between educators and students (Kane, 2004). In turn, this enriched the process, making it more complex, since it provided a process of learning that can be used in future implementations. The effort to hybridise this methodology with environmental and social justice issues may open the door to future actions within the framework of USR.

Among the learning of the faculty members, it is worth highlighting (a) the need to adapt the temporal dynamics to the different needs of the older adults; (b) the importance of approaching the problems to be debated in an open, collected and calm manner, establishing times longer than those established for the younger students and (c) the great importance of establishing mechanisms that help to bring the solidarity entity closer to the students faster, with the aim of consolidating early bonds of understanding and trust (field visits, activities performed with the entity, familiarisation in the classroom, etc.).

During the process, transforming elements were identified. The development of the receptor role of the students to take on the new role of leaders was not immediate, nor was it properly conducted by them until the first part of the term was over. The relationship that the students had with the technician of the social entity, which occurred through the mediation of the faculty members, was key to their acquisition of the leader role.

3.2. About community services

The social entity prioritised the following two matters as social needs to be made viable by the students:

- Communication and social networks. The aim was to transmit to the citizens, in a brief, concise and close manner, messages related to the work carried out by the social entity related to environmental and social issues, and the situations of the people who were being helped by this entity. The students created messages on sustainability, social justice and other topics worked on in the course; thus, this work produced a series of brief messages (tweets). These tweets were spread in social networks by the social entity and shared with the students. It is worth highlighting the value of these tweets, since they helped to transmit the message of the work

conducted by the social entity in a 'language' understandable to elderly people through dissemination channels used by young people (Instagram, Twitter, Facebook, etc.).

- Regarding the citizen impact, the students proposed writing a letter to the mayor of Bilbao about the compliance with the Bilbao charter of values. During the term, in the classroom debates, students identified the lack of such compliance by the city hall. Thus, an open letter was written to the city hall denouncing the matters that, according to the students, had not been complied with and which had to be solved.

3.3. *Opinions of the students and evaluation*

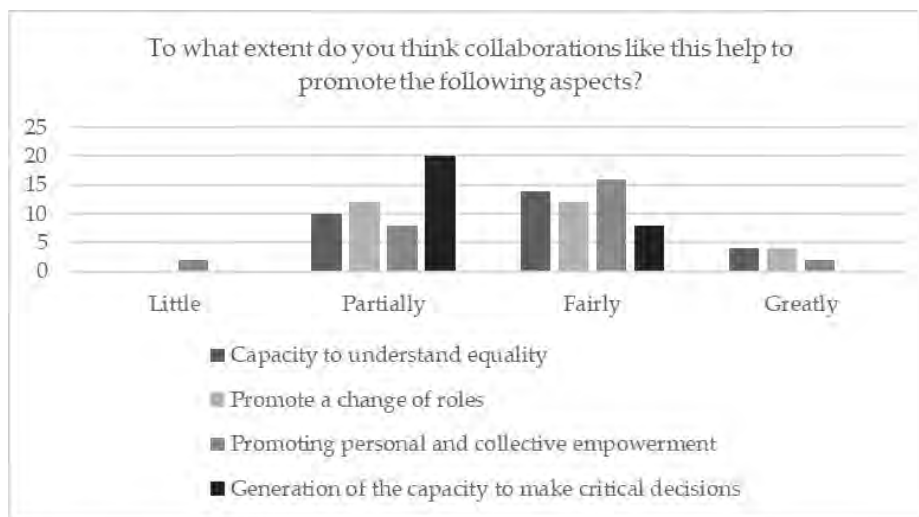
Throughout the process, the students acquired knowledge and competencies that were shared in the classroom through comments. Critical knowledge was generated through the interaction with the social entity and the debate on topics related to social and environmental issues. With respect to the distribution of wealth, a student commented that: 'The distribution is more efficient when it is both social and economic. Citizen awareness', 'Accumulation of wealth ... that is horrible!'. An aware, critical and empowered citizenry was associated with the power of transformation. 'How are we going to achieve a sustainable world?' 'But ... if the earth provides ... why is human intelligence unable to distribute it?'. The students defended education as the fundamental axis of change: 'Education is fundamental. Teaching values contributes to generating environmental and social awareness'.

With respect to the contributions that the students felt they could make, students identified their role in the society and their will to help from experience: 'Share experience and spread knowledge for the sake of culture change and demonstrate values for the near environment', 'Recover many things from the past to improve the future'. Lastly, some people showed their predisposition to collaborate with social entities: 'Debate with the environment, sensitise those around you. Transmit other opinions and possibilities...', 'Collaborate with NGOs, the Red Cross'.

Students were asked whether they believed that collaborations such as the one conducted with the social entity, following the SL methodology, contributed to promoting aspects related to (a) the capacity to understand equality between different people; (b) changes of collective and personal roles; (c) the promotion of personal and collective empowerment and (d) the generation of the capacity to make critical decisions.

Figure 1 shows the results of the evaluation survey conducted at the end of the study. Most of the participants 'partially' or 'fairly' agreed that these collaborations contributed to changing these aspects. They 'slightly' agreed about the potential of personal and collective empowerment, and 10% of them considered that collaboration could 'greatly' promote a change of roles and the understanding of equality.

Figure 1. Results of the evaluation survey conducted at the end of the study.



Source: own elaboration

Lastly, the students were asked to state whether, after collaborating in this process, they would be willing to collaborate in any type of solidary/social volunteering activity. In Table 3, the results of the survey are reflected. The results showed a remarkable willingness to do so, especially considering the profile of the students. They were offered a choice from among 14 collaboration categories. Those who stated a willingness to collaborate were especially interested in topics related to the promotion of intergenerational activities (over half of the surveyed people), education on environmental and social justice values (46%), and, to a lesser extent, the sensitisation of sustainability and prevention of poverty. It is worth highlighting that the students saw themselves in activities related to their own condition (intergenerational actions) or to education on values, where they could transmit the knowledge, they had acquired throughout life based on their own experience.

Table 3 Solidarity/social volunteering activities proposed and the number and percentage of surveyed people who showed their interest in them.

Collaboration category	Interested people	% of the total
Promotion of gender equality	2	12%
Time banking	3	18%
Promotion of intergenerational relations	9	55%
Refugees	4	24%
Homeless people	1	5%
Environment and sustainability	6	35%
Prevention of poverty	5	30%
Sensitisation of sustainability	6	35%
Immigration	2	12%
Drug prevention	4	24%
Education on environmental and social justice values	8	46%
Minors	7	42%
Experiences of other countries	0	0%
None	0	0%

Source: Own elaboration.

3.4. Limitations

At the beginning of the process, there was rejection and reluctance among some of the students to collaborate with social entities, and towards the role that they could play in terms of community service. As the process advanced, this refusal diminished, although the final evaluation showed a resistance of some people to this type of activity, in which a leading role is played by the students and a more proactive attitude is required from them. The image of the university as a place of knowledge transmission, where those who know are the faculty members and students must listen, is deeply integrated with the social imagination of elderly people. It is part of the culture of older adults and unlearning it is much more difficult for them than for younger people. On the other hand, it is also much easier to work with them when they understand the significance of the teaching–learning process and they see its usefulness.

Since this activity was proposed within the framework of a curricular subject, the time that could be dedicated to SL was sometimes very short.

4. Conclusion

Despite being a completely innovative experience in the target context for the participating population, there was a remarkable acceptance and involvement by the students, although the appropriation of the process and methodology proposed was gradual.

As shown in other similar initiatives in which the USR has worked with the SL methodology, the students considered the integration of SL activities into their university curricula positively. The students appreciated the work of the teaching staff and supported the widespread use of these active teaching methodologies at the university. They positively valued the power to deal with environmental issues and related them to the social and economic reality, being at the same time protagonists of their own learning. This study showed the potentiality of intergenerational experiences in the university context to improve the capacity of the students to interact and communicate with creativity and knowledge of their social and environmental reality. Thus, students with such motivation, in addition to their experience and eagerness to transmit their knowledge, constitute an interesting niche in which to carry out this type of experience.

It is necessary to plan and develop future SL experiences linked to old and young students, faculty members and social entities, with the aim of generating community services and consolidating the university as a relevant space in which to transmit relevant knowledge, experience and learning related to sustainability and social justice issues.

There are significant possibilities for methodologies that involve the responsibility of both students and faculty members in the generation of critical knowledge. We worked on formative elements and debates on environmental awareness and social justice, which then resulted in tangible community services.

The familiarisation and progressively greater involvement of the entity in the formative processes of UPV/EHU are considered additional benefits. To summarise, this was a way of bringing the university closer to society and making disadvantaged situations and groups visible.

It was demonstrated that this type of process can help elderly people to overcome stereotypes of social groups in a situation of exclusion, and vice versa, by bringing them closer to each other.

Connecting elderly people with social entities and young people helps to mitigate the risk of exclusion of the former in terms of their capacities to use and interact with new communication technologies. The

possibility of being able to work together on competencies related to sustainability and social justice was highly valued. Interesting educational synergies were generated for future educational actions.

Lastly, it allowed elderly people to overcome the stereotype associated with the complexity of accessing and using communication technologies and social networks to spread environmental or social messages. In fact, they were able to 'decode' social messages and make them accessible to their social groups. This is of interest to the university and its RSU, but also to collaborating entities, such as ESF, and, in particular, to students, who acquire new learning skills.

5. References

- Agrafojo, J., Garcia, B. & Jato, E. (2017). Aprendizaje Servicio e Innovación educativa en la Universidad de Santiago de Compostela: Estrategia para su institucionalización. *Revista Iberoamericana de Aprendizaje-Servicio*, (3), 23–34. doi: 10.1344/RIDAS2017.3.3
- Aldana, G., Garcia, L. & Jacobo, A. (2012) Las Tecnologías de la Información y Comunicación [TIC] como alternativa para la estimulación de los procesos cognitivos en la vejez. CPU-e. *Revista de Investigación Educativa*, (4), 153–166. Retrieved from. <https://bit.ly/2MeYawV>
- Alonso, I., Arandia, M., Martínez, B., Martínez, I. & Gezuraga, Y. M. (2013). El Aprendizaje-Servicio en la innovación universitaria. una experiencia realizada en la formación de educadoras y educadores sociales, *Revista Internacional de Educación para la Justicia Social*, 2, 195–216. Retrieved from: <https://revistas.uam.es/riejs/article/view/379>
- Arcos-Alonso, A. & Alonso-Olea M. J. (2019). Trabajando competencias transversales en estadística mediante la economía social y solidaria. In *CUICIID 2019: Congreso universitario internacional sobre la comunicación en la profesión y en la Universidad de hoy IX: Contenidos, investigación, innovación y docencia: 23 y 24 octubre* (p. 48). Forum Internacional de Comunicación y Relaciones Públicas (Forum XXI). Retrieved from <https://bit.ly/2WHvSNu>
- Battle, R. (2015). Guía práctica de aprendizaje-servicio. *Proyecto Social*, Material fotocopiable © Santillana Educación, S. L 4, 34. <https://bit.ly/3ax4sSR>
- Brown, K. M. & Bright, L.M. (2017) Teaching caring and competence: student transformation during an older adult focused service-learning course. *Nurse Education in Practice*, 27, 29–35. doi: 10.1016/j.nepr.2017.08.013
- Cabedo, L., Royo, M., Moliner, L. & Guraya, T. (2018). University social responsibility towards engineering undergraduates: the effect of methodology on a service-learning experience. *Sustainability*, 10, 1823. doi: 10.3390/su10061823
- Cameron, R. (2011). Mixed methods research: The five Ps framework. *Electronic Journal of Business Research Methods*, 9, 96–108. Retrieved from: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.456.6853&rep=rep1&type=pdf>
- Cardenas, M. L. & Rivera, J. F. (2004) La teoría de la complejidad y su influencia en la escuela. *Revista de Teoría y Didáctica de las Ciencias Sociales*, 9, 131–141. <http://www.redalyc.org/articulo.oa?id=65200908>
- Clevenger, C. M. & Ozbek, M. E. (2013) Service-learning assessment: Sustainability competencies in construction education. *Journal of Construction Engineering and Management*, 139, 12. doi: 10.1061/[ASCE]CO.1943-7862.0000769
- Creswell, J. W. & Creswell, J. D. (2009). *Research design: qualitative, quantitative, and mixed method approaches*. Thousand Oaks, CA: Sage Publications. <https://bit.ly/3ax4mut>

- Arcos-Alonso, A., Elías-Ortega A., & Arcos Alonso, A., (2020). Intergenerational Service-Learning, Sustainability and University Social Responsibility: A Pilot Study. *Cypriot Journal of Educational Science*. 15(6), 1629-1641. <https://doi.org/10.18844/cjes.v15i6.5322>
- Diez-Palomar, J., Flecha A., Garcia-Carrion, R. & Molina-Roldan, S. (2018) Pathways to equitable and sustainable education through the inclusion of roma students in learning mathematics. *Sustainability*, 10, 21–91. doi: 10.3390/su10072191
- Folgueiras, P., Gezuraga, M. & Aramburuzabala, P. (2019). Los procesos participativos en el aprendizaje-servicio. *Bordon. Revista de Pedagogia*, 71, 115–131. doi: 10.13042/Bordon2019.68479
- Gaete-Quezada, R. (2011). La responsabilidad social universitaria como desafío para la gestión estratégica de la Educación Superior: El caso de España. *Revista de Educación*, 355, 109–133. Retrieved from http://www.revistaeducacion.educacion.es/re355_05.html
- Gezuraga, M. (2014). *Aprendizaje-Servicio [AS] en la Universidad del País Vasco*. El Camino Hacia su Institucionalización. (Doctoral Dissertation, UNED) Repository. Retrieved from <https://creativecommons.org/licenses/by-nc-nd/4.0/>
- Gonzalez, S. S., Lucas, J. M., Franco, D. C. & Rodríguez, J. M. M. (2019). Responsabilidad universitaria en la implementación de los objetivos de desarrollo sostenible. *European Journal of Child Development, Education and Psychopathology*, 7, 183–196. doi: <https://doi.org/10.30552/ejpad.v7i2.119>
- Hammersley, M. (2008). Troubles with triangulation. In M. M. Bergman (Ed.), *Advances in Mixed Methods Research* (pp. 22–36). Thousand Oaks, CA: Sage Publications. London
- Hervani, A. & Helms, M. (2004). Increasing creativity in economics: the service-learning project. *Journal of Business Ethics*, 79, 267–274, doi: 10.3200/JOEB.79.5.267-274.
- Kane, L. (2004) Educators, learners and active learning methodologies. *International Journal of Lifelong Education*, 3, 275–286. doi: 10.1080/0260/37042000229237
- Lewis, M. (2002). Service learning and older adults. *Educational Gerontology*, 28, 655–667. doi:10.1080/03601270290081461.
- Michelsen, G. (26 October 2015). Policy, politics and polity in higher education for sustainable development. In *Routledge handbook of higher education for sustainable development* (pp. 64–79). Abingdon, UK: Routledge. doi: 10.4324/9781315852249.ch3
- Monge, C., Mena, P. & Gamboa, R. (2018). Resultados de la interacción con la comunidad en la formación universitaria desde el enfoque de las capacidades. Un estudio de caso en la Universidad Nacional de Costa Rica. *Revista de Extensión Universitaria*, 8, 110–125. doi: 10.14409/extension.v8i8.Ene-Jun.7722
- Pearce, A. & Manion, W. (2016). Service learning for sustainability: a tale of two projects. *Procedia Engineering*, 145, 50–57. doi: 10.1016/j.proeng.2016.04.013
- Penick, J. M., Fallshore, M. & Spencer, A. M. (2014). Using intergenerational service learning to promote positive perceptions about older adults and community service in college students. *Journal of Intergenerational Relationships*, 12, 25–39. doi:10.1080/15350770.2014.870456.
- Puig, J. M., Batlle, R., Bosch, C. & Palos, J. (2007). *Aprendizaje servicio: Educar Para La Ciudadanía*. Barcelona, Spain Octaedro. <https://bit.ly/38ra26w>
- Razquin, B. E. (2017). El ApS como respuesta a la responsabilidad social de la Universidad. *Ambio Ciencias Revista de Divulgación*, 15, 63–69. doi: 10.3232/UBR.2017.V14.N1.03