

Article

Transforming people through service-learning. An experience in higher education

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Abstract: Service-learning activities are effective in higher education programmes. During the COVID-19 period, universities have implemented this methodology and students have improved their social and practical skills. The purpose of this article is to analyse the role of higher education in the process of adapting teaching based on experiences designed for students to serve the community. This research presents the results of a specific service-learning experience of 35 students from the Teamworking programme during the academic years 2020–21 (online) and 2021–22 (face-to-face), in collaboration with the San Juan de Dios Foundation in Madrid, which provides care for people with disabilities. Students evaluated the experience through a quantitative study based on a questionnaire previously developed by Folgueiras (2013), divided into four dimensions. Students also provided some feedback, explaining that this experience changed their perception of people with disabilities, considering the personal value of contributing to social inclusion through service learning. The results show that through the Folgueiras model, students have strengthened their social skills and competences, and through an applied training project that offers the opportunity to build a real relationship through different activities, where learning was at the centre of the interaction between students and young people with disabilities. In conclusion, although the evaluation was positive in terms of the students' professional and human development, this project requires continuous improvement in the long term, since the subjectivity of human relationships follows a dynamic course with variables that are sensitive to time and individual experience.

Keywords: service-learning; higher education; skills; competencies; social impact

1. Introduction

One of the challenges in Higher Education is to reconcile academic experience with practical training in the education path of its students. Service-learning is presented as a teaching methodology that places students in front of the challenges and demands of the local community, encouraging them to seek solutions within their expertise, enhancing, through practice, different important skills needed to meet the demands of the 21st century, such as creativity, communication, empathy, leadership. The ability to deal with the unexpected, teamwork, critical thinking, among others (Barth et al., 2014; Bowie and Cassim, 2016; Fullerton et al., 2015). Thus, universities can integrate service-learning with different objectives to connect theory and practice as an efficient method of learning concepts in different disciplines (Geller et al., 2016; Rutti et al., 2016; Thu, 2023).

1.1. Service-learning experience

In this paper, the experience of service-learning with undergraduate students is developed through different actions impacting people with disabilities in a positive manner. The experience consisted of a series of activities prepared by the lecturer of the teamworking course during 2020–2021 and 2021–2022, together with the education foundation managed by the Hospitaller Order of San Juan de Dios in Madrid (Spain), which is a non-profit and sustainable institution. The aim of these actions is to improve the quality of life and dignity of people with health, social, and educational needs.

This project was developed to investigate learning activities with a social purpose to reinforce the students' specific competencies. On one hand, students acknowledged at the end of the activity that the learning method followed had a positive impact from both an academic and a personal perspective, with no significant differences in the mode of delivery (in-person and online). On the other hand, they also identified some key areas for improvement to apply in future experiences.

1.2. Service-learning, CSR and sustainable development

Service-learning (SL) has received attention from scholars in recent decades as an effective way of student learning in higher education. We can define it as the activity of learning by applying practical skills. In fact, the service-learning method has been integrated into all academic disciplines in the subject of teamworking developed during the third year of the higher degree digital marketing global during 2020–2021 and 2021–2022 (Francisco and Miravet, 2010; Geller et al., 2016; Rutti et al., 2016). These studies have shown that SL can be integrated into higher education in different ways, such as class projects, research, and social projects, among others.

According to other authors, SL has several benefits for academia, students, and the community, such as providing broader learning through students' practical experience (Meyer et al., 2016; Royo et al., 2019); reinforcing the relationship between students and the community (Olberding and Hacker, 2015); enhancing social responsibility and civic leadership among students (Weiler et al., 2013); improving community life by developing problem-solving skills (Del Pozo et al., 2018; Geller et al., 2016); and positively impacting students' overall learning outcomes (Celio et al., 2011; Yorio and Ye, 2012). In SL projects, students can acquire different skills, such as communication skills, teamwork, critical thinking, problem-solving skills, social awareness, and a sense of civic responsibility (Barth et al., 2014; Bowie and Cassim, 2016; Fullerton et al., 2015) when they get involved in projects that connect them with society.

In general, one of the advantages of SL is that it allows the application of theoretical concepts in real situations in the students' community, creating an opportunity for students to solve real needs in their environment (Hart, 2015). As a result, SL allows students to better understand the concepts learned in the classroom (Butler and Christofili, 2014) when they connect with people and know their real problems (Fair and Delaplane, 2015; Penick et al., 2014). Thus, through the activities, they change their perspective and develop civic responsibility (Marshall et al., 2015). Moreover, Service-Learning bridges the gap between academia and communities,

preparing students for the workplace and achieving social development goals (Alexander et al., 2014; Craig et al., 2016; De Moraes et al., 2024; Meyer et al., 2016; Tijmsma et al., 2020). SL also promotes the ability to create innovative solutions to social problems (Salam et al., 2019), working in a collaborative environment and providing practical skills to students. Since Service-Learning is based on the real participation of students, it is essential to align the course objectives with the needs of communities and corresponding learning objectives (Bringle, 2017; Musa et al., 2017; Whitley and Walsh, 2014) by working in collaboration (Sandoval-Perez, et al., 2021).

In addition, some studies connect Corporate Social Responsibility and Sustainability with SL activities in students' curricula (Aramburuzabal and Cerrillo, 2023; Farooq et al., 2018; Salam et al., 2019). Furthermore, service-learning fulfils the general objectives of higher education in terms of contemplating the Sustainable Development Goals (SDGs) promoted by the United Nations (Ribeiro et al., 2023). Likewise, SDGs represent a guide for teachers to select social projects and their impact, following the specific goals of the 17 SDGs and connected to social needs, such as poverty, inclusion, and equity, among others, and especially SDG 4, quality education, and its objective of transforming people through education, (Farnell, 2020). Previous experiences have shown that higher education includes the SDGs in teaching praxis through the service-learning methodology, contributing to different goals, considering competencies and skills in students for sustainability (Farnell, 2020). In general, higher education can promote the SDGs in the classroom in several ways (Pan and Zhang, 2020; Pan and Pee, 2020) impacting positively on society.

Some of the implications related to the development of this methodology in university classrooms are related from a broader perspective, considering SL not only as a learning tool but also as an activity of Social Responsibility, which at the same time is part of the educational model of the institution and that also serves as an instrument for the integration of teaching and academic research (Manzano-Arrondo, 2010; Tapia, 2008) and measuring results is needed to evaluate the real impact of these activities.

As early as 1986, the First World Conference on Health Promotion, held in Ottawa, Canada, emphasised the need to integrate life skills and competencies into educational processes as transversal elements of educational programmes and actions (WHO, 1986). Competencies for life and well-being are defined as those abilities to adopt appropriate and responsible behaviours that help to successfully face the daily challenges of life in all its dimensions, whether personal, professional, family, social, etc. These competencies are usually also related to achieving adaptive objectives. Consequently, the development of service-learning actions encourages training in I) Decision-Making. II) Search for help and resources. III) Active, participative, critical, responsible, and committed citizenship. IV) Emotional well-being. V) Flow (Bisquerra, R., 2003).

Thus, service-learning has proven to be an educational initiative in which, through pedagogical practices, both active and reflective, aims to promote learning opportunities and the acquisition of life skills (Puig et al., 2007).

Service-learning actions have the potential to transform students' perspectives (Gaete, 2011; Filho et al., 2024) since they create a context that prepares them for the social reality they will encounter, favouring their development as responsible workers

and enabling the acquisition of professional skills that will increase their future employability, making their time in university classrooms an integrated experience. However, global challenges expressed in the agenda 2030 invite institutions to accelerate their actions. This issue is defined in target 4.7 of the 2030 Agenda for Sustainable Development, which focuses on ensuring that all learners acquire the knowledge and skills needed to promote sustainable development. This includes education for sustainable development and sustainable lifestyles, among others.

In this process, higher education institutions, together with their students, have a responsibility to provide learning activities that solve social problems. In this sense, service-learning activities represent an opportunity to develop students' skills, but it is necessary to measure the impact on students when they develop projects to solve social problems and to bridge the gap between academic objectives and community service in order to prepare students for the workplace in a responsible way, linking them to real needs in society.

The aim of this paper is to bridge this gap by measuring the impact of a service-learning experience with a group of students evaluating the process using a qualitative and quantitative methodology. As a result, we can understand in what sense this experience has improved students' skills and how teachers can assess the real impact on learning in the long term by evaluating service-learning activities in different academic years, improving some aspects each year, especially if teachers can compare the results with previous academic years. In other words, this study provides teachers with a model for evaluating student learning outcomes in the long term.

The structure of the paper is as follows. After discussing service-learning experiences based on the literature, the next section provides information on the methodology, using a questionnaire adapted from Folgueiras (2013). We also describe the sample and validation of the model. The results are then summarised, followed by a discussion section. Finally, the paper presents some conclusions and limitations of the study.

2. Methods

2.1. Methodology

The methodology of this service-learning project works in three strands: the first, analyzes the degree of satisfaction of the students participating in the Service-Learning activities through the questionnaire developed by Folgueiras (2013). The second, generates contributions to the improvement in the application and development of the project for its possible future expansion. The third, implements service-learning in a specific discipline, teamworking, with the aim of applying the concepts learned in the classroom in a practical way and through a real experience. The essence of this method is knowledge and ascribed intention (Folgueiras et al., 2013). In addition, it refers to the degree of knowledge about the participation of the students themselves in the service-learning project about what they do and why they do it to better understand the connection between knowledge and practice.

The activities are proposed by the students, who were supervised on time, both by the coordinators, that is, the teachers of the teamwork discipline at ESIC University and by the Foundation's technicians. The planning of the actions is recorded in a

didactic guide of the discipline, in which the activities were evaluated through the Continuous Evaluation System. This document explains the dynamics of the project and guides the service-learning activities. Attendance at the teamwork discipline was a mandatory requirement. At the end of each school term, the university students involved in the project filled out the opinion questionnaire previously elaborated by Folgueiras (2013).

This study is based on a comprehensive diagnostic study developed as a research project about Service-Learning that had to be adapted to the hybrid system due to the global pandemic caused by COVID-19. In the 2020–2021 academic year, training activities were carried out in online and face-to-face mode and in 2021–2022 the students were able to carry out the activities in person, which included interaction with the technical staff of the San Juan de Dios Foundation, in order to better understand the daily routine of the disabled attendees. The social area of the residence is intended for the care of people with disabilities, serving a total of 71 people. Within the Foundation's areas, service-learning is described in the volunteering and awareness section and features more than 3000 interventions in different activities, such as video calls, accompanying family members in palliative care, therapeutic walks, classification and distribution tasks in the solidarity wardrobe, accompanying Eucharists for inpatients, workshops in the therapeutic garden, and artistic activities.

As stated in the San Juan de Dios Foundation report for the 2020 period, due to the Covid-19 pandemic that affected the Community of Madrid, Spain, they were forced to stop all outpatient activities (in-person classes at school, day centres, early care, rehabilitation sessions in the water therapy unit, and other ward therapies) to fully focus on caring for hospitalized patients.

2.2. Questionnaire

The instrument Folgueiras (2013) aimed to evaluate the actions of the project. This instrument, it is made up of demographic questions whose objective is to obtain the profile of the sample and 10 items of the Likert scale with 5 levels of responses measured according to the degree of satisfaction, such as 1 dissatisfied, 2 somewhat satisfied, 3 satisfied, 4 very satisfied, 5 excellent.

The dissemination of the questionnaire has been carried out by the teamworking teacher with the students enrolled during the 2021–2022 academic year, in the higher degree in digital global marketing, during the regular classrooms of the subject.

The questions were elaborated considering three main aspects: i) the Service-Learning project and the design of actions to be developed in practice; ii) the educational context in which the project is developed, which constitutes a basic reference framework for the analysis of students' responses; iii) the context of the Fundación Hospital Instituto San José.

The instrument collects the students' perception that:

- a) Integrate this activity into the curriculum; in this case, within the scope of the 'teamworking' course, taught during the 2nd year of this degree in global marketing.
- b) Provide a service to the community.
- c) Collaborate with a partner/institution, San Juan de Dios, in the civil society that

has been working with people with disabilities for more than 3 years.

The model is adapted from Folgueiras, 2013 including 4 dimensions and eliminating Q6. These dimensions are: 1) Knowledge and attributed about student; 2) Valuation of attributed for activity; 3) Evaluation of the process; 4) Recognition support about university, as shown in **Table 1**.

Table 1. Dimensions and items of the questionnaire.

Dimensions	Items
D1. Knowledge and attributed about student intent	1. How likely are you to recommend the activity to a friend or colleague? 3. To what extent has it been useful to attend?
D2. Valuation of attributed for activity	2. How would you rate the learning and service activity? 7. How would you rate your teamwork experience? 4. How would you rate the content discussed in the service-learning activities?
D3. Evaluation of the process	5. How would you rate the organization of the service-learning activities by the institutions involved? 9. How would you rate the pace of the activity?
D4. Recognition support for university	10. How would you rate the supporting documentation provided by the organizations? 8. Did you have the opportunity to share thoughts or experiences, with other colleagues?

Source: Self-elaboration.

The first dimension analysed was Knowledge and attributed about student intent, which refers to the degree of awareness about the students' own participation in the service-learning project, regarding what they do and why they do it. The pedagogical intention for the acquisition of the objectives listed in the teaching guide is observed, as referenced by some authors (Furco, 2003).

The second dimension, Valuation of attributed for activity, refers to the students' perception of the learning and service they provide in the project (Furco, 2003; Rodriguez and Rovira, 2006). In this case, the variable responds to the perception of learning related to the concepts studied in the classroom, as well as the learning that the users of the San Juan de Dios Foundation acquired and the personal learning that each participant had outside the classroom. Moreover, it considers the perception of learning from both students and users, seeking to understand the students' perception of their contribution to the project, the types of learning identified and the type of service provided to the community.

The dimension evaluation of the process assumes the level of involvement that students have with the service-learning project, the relationship between classroom theory and practice, and the workshops developed at the Foundation. Furthermore, it considers aspects such as the satisfaction of carrying out activities outside the classroom, students' reflection on the activity, as well as the level of support from the involved agents, both from the university and the Foundation.

This variable invite reflection on the theoretical-practical relationship and the return to the experience to examine it more carefully and enhance knowledge and skills (Dewey, 1989), since reflection is a fundamental principle in any service-learning

program (Holland, 2001; Páez Sánchez and Puig Rovira, 2013). It includes the involvement of students, faculty, entities, and the relationship between student, teacher, entity, and self-assessment.

The fourth and final dimension, Recognition support for university, is understood as the analysis that students make of the actions being carried out; that is, their opinion regarding social usefulness and how the project influences their teamwork within a certain social sphere, identifying the needs of this group. The social utility of the proposed actions identifies the usefulness of the social actions they perform. In sum, it reports on the awareness of the project and its social commitment (Rodríguez, 2002).

The validation of the instrument was carried out through statistical analysis in which the open access JASP computer program, version 18.1, supported by the University of Amsterdam, was used. Excel software was used to encode the data. As part of the exploratory and confirmatory factor analysis, the model was adjusted, verifying the correlation between the items and dimensions and confirming the agreement with the theoretical construct.

2.3. Sample

The sample consists of 35 respondents, 22 students, between 20 and 23 years old, from the ESIC University of Madrid, who participated in the virtual modality during the 2020–2021 academic year and 13 students who joined the project in the face-to-face modality during the following academic year (2021–2022). All respondents are enrolled in the degree in global marketing and are over 18 years old.

Their participation was voluntary, so that, among the 38 students enrolled in the Teamworking course in the 2020–2021 academic year, only 58% decided to collaborate with the instrument. In the second academic year, only 59% of those who participated in the service-learning activities completed the questionnaire. The others chose to be evaluated in the discipline through a final exam instead of following the Continuous Evaluation system, because they had not been involved in the service-learning activity. This percentage is in line with the average number of undergraduate students who typically choose this alternative system of assessment at ESIC University.

Regarding gender aspects, in the first academic year (2021–2022), there were a total of 22 participants, of which 19% were women and 81% men. In the second year, the number of participants was also 22, with a distribution of 12 men (54%) and 10 women (45%).

2.4. Validation

In order to verify the reliability of the extracted answers, it was necessary to evaluate some important parameters that attest to the good fit of the model. This is part of the validation stage of the instrument that was carried out here through a statistical procedure.

Appreciating the correlation of the items allows you to evaluate the fit of the model in 4 dimensions, as well as its ability to explain the planned hypotheses. The correlation between the items was significant, since the sphericity test presented a value lower than 0.05, indicating that the data are not spherical. Item 6 of the

Folgueiras’s questionnaire (6. How would you rate the use of teaching material in service-learning activities?) was eliminated from the model because it did not present a significant correlation with any other item evaluated. The weights of each item were extracted using the OBLIMIN oblique rotation technique that identifies the dimension of each item by maximizing its values, summarized in **Table 2**.

Table 2. Matrix of rotated components.

Dimensions/Items	D1	D2	D3	D4
D1/1	0.579	-0.113	0.072	0.073
D1/3	0.6	0.27	0.018	0.058
D2/2	0.074	0.615	0.194	0.044
D2/7	0.046	0.819	-0.071	-0.004
D3/4	0.03	-0.079	0.811	0.018
D3/5	0.279	0.034	0.54	-0.083
D3/9	-0.086	0.309	0.516	0.042
D4/8	0.015	-0.014	-0.01	1.002
D4/10	-0.083	0.241	0.431	0.257

Source: Self-elaboration.

The global index of the Kaiser-Meyer-Olkin test (KMO) also showed that the correlations between the items are sufficiently high, with all items presenting a value above 0.7 and an overall value of 0.793, indicating the continuity of the analyses.

Table 3 shows important characteristics of the dimensions. Eigenvalues close to and greater than 1 reveal the ability to extract information. The percentage of variance explained by the model was higher than 40%, indicating once again that the model is satisfactory, with an explanatory potential of 58.1%. It is also observed that the distribution of the percentage of variance of the rotated factors was equitable, ranging from 0.057 to 0.096, indicating again that the model, with the four dimensions established, is satisfactory.

Table 3. Characteristics of the factors and average variance extracted.

Dimension	Eigenvalue	Rotated solution			Extracted mean variance
		Sums of loads squared	Proportion of variance	Acum.%	
D1	3.714	1.652	0.184	0.184	0.431
D2	1.065	1.486	0.165	0.349	0.668
D3	1.038	1.166	0.13	0.478	0.459
D4	0.879	0.926	0.103	0.581	0.488

Source: Self-elaboration.

The Varianza Media Extractada also reveals the satisfactory fit of the model, since the dimensions absorb a percentage of variance capable of satisfactorily explaining what it proposes. It is not expected that any questionnaire will fully explain its theoretical construct, since the limitations that exist in the whole process of construction and application of the instrument are inevitable. The Extracted Mean

Variance is equal to the sum of the squares of all the standardized coefficients divided by the number of indicators in the domain, Hernández (2014).

The dimensions 1–knowledge and attributed about student intent, 2–valuation of attributed for activity, 3–evaluation of the process and 4–recognition support for university can explain, respectively, 43.6%, 63.3%, 46.5% and 48.55%. For an opinion questionnaire, the minimum recommended value is 40% (Verdugo-Castro et al., 2024).

To measure the fit of the model, the absence of mean square error of approximation (RMSEA) was observed, and the goodness-of-fit (GFI), comparative fit (CFI), Bollen incremental fit (IFA) and Tucker-Lewis (TLI) indices were measured and presented values greater than 1, respectively, confirming the good fit of the model.

Table 4 presents the descriptive values with the maximum and minimum values of the aggregate variables, as well as the values of mean, standard deviation, variance, asymmetry and kurtosis. The descriptive results show that the answers regarding the development of the proposed activities indicated a high degree of satisfaction.

Table 4. Descriptive statistics.

Dimensions	Min/max	Average	Stand. deviation	Variance	Asim.	Kurtosis
D1	2/5	3.971	0.707	0.499	−0.49	0.7
D2	3/5	4.143	0.601	0.361	−0.053	−0.142
D3	3/5	4.229	0.598	0.358	−0.111	−0.33
D4	2/5	4.143	0.733	0.538	−0.707	0.823

Source: Self-elaboration.

Finally, instead of Cronbach’s alpha to measure the reliability of the model, composite reliability was used because it is a more modern and less conservative resource, Shzu (2024). Thus, the dimensions 1, 2, 3 and 4 presented indices of 0.72, 0.76, 0.65 and 0.64. Although the last two dimensions present values below 0.7, their values are close to the reference values, indicating a good reliability of the model.

3. Results

As mentioned earlier, upon completing the project stages, the students filled out a questionnaire evaluating their overall experience. The results derived from the questionnaire are explained below in order to assess the extent to which the project provided students with a form of learning with tangible value. In this sense, the quantitative results are organized by dimension, where item 5.1 refers to knowledge and attributed about student intent (Q1, Q3); 5.2, valuation of attributed for activity (Q2, Q7); 5.3, evaluation of the process (Q4, Q5, Q9); and 5.4, recognition support for university (Q8, Q10) (Folgueiras et al., 2013).

3.1. Knowledge and attributed about student

Through two questions, the evaluation was conducted on how the participating students perceived the importance of engaging in the activities in relation to their intellectual and personal development. The analysis is restricted to the Spanish

academic years of 2020–2021, during which the activities were conducted virtually, and 2021–2022, when the activities were fully in-person.

Regarding the likelihood of recommending the activities to a friend or colleague, in the 2020–2021 period, 86.4% of participants responded positively; more than half of this group, 52.7%, strongly endorsed the activities. However, 13.6% of the total respondents took a neutral stance, meaning they were indifferent about recommending the activities or not. This passive group did not appear in the 2021–2022 year, when the activities were held in person. All respondents answered positively, with 46% of them strongly recommending the activities.

It is suggested that the pandemic may have influenced a more passive stance on this issue. Another important factor is the improvements that were implemented after an initial experience in executing the project. In-person activities also tend to better engage the group and motivate active participation. Thus, the differences observed between the two years studied align with expectations.

Regarding the usefulness of participating in the project in the academic year 2020–2021, 77.3% of students indicated that it was useful for them. A percentage of 17.6% of this group rated the benefits at the maximum level. Of the total, 13.6% remained neutral, and 9.1% saw no advantages in being part of the project. In the 2021–2022 year, 92.3% recognized that participating in the service-learning project was a good investment of their time, and more than half of this group, 58.3%, expressed maximum satisfaction in this regard. Although there was a 7.7% rate of neutral positions, this number decreased compared to the previous year, and the number of students who saw no usefulness in the project was reduced to zero.

For the full academic development of the student, it is of utmost importance that the learner finds meaning and motivation to lead and assimilate the benefits of the process involved in their professional training. Once again, it is suggested that virtual activities have a lower potential for integration and motivation compared to in-person activities.

3.2. Valuation of attributed for activity

The participants highlighted the benefits of the activities through two questions. In the first, the service-learning activities were evaluated, with 86.4% of students rating them as good or excellent in the 2020–2021 academic year, while 13.6% remained neutral. In the 2021–2022 academic year, all respondents have provided positive feedback, with 53.8% assigning the highest level of satisfaction.

Regarding the assessment of the group work experience, all participants evaluated it positively. The 2021–2022 academic year showed an 8.3-point increase compared to the 2020–2022 year, in the percentage of those who rated their experience at the highest level, that is, 53.8% compared to 45.5%. Similarly, in the year when activities were conducted in person, the level of satisfaction increased significantly.

This dimension, aimed at evaluating the learning process, consists of three questions. In the 2020–2021 academic year, 81.8% of students positively rated the content discussed in the learning and service activities; however, in 2021–2022, this number dropped to 61.5%. This occurred because, in the latter year, there was an increase in passive responses, 38.5% compared to 18.2% in the pandemic year. This

trend highlights the importance of improving the presentation of content to make it more effective and engaging.

Regarding the evaluation of the organization of learning and service activities by the institutions involved, in the 2020–2021 academic year, 68.2% of students gave positive ratings, and this number increased to 84.6% in 2021–2022. In the last year, the number of passive respondents decreased from 31.8% to 15.4%.

The pace of the activities was rated as good or excellent by 72.7% of respondents in the 2020–2021 academic year, and this percentage increased to 76.9% in 2021–2022. The percentage of people who remained neutral was significant: 27.3% in the first year and 23.1% in the second year.

The percentage of people who responded passively was significant across all variables evaluated, suggesting that efforts to improve the content, organization, and pace of activities are relevant.

3.3. Recognition support for university

The students' perception of the project and their social commitment were reflected in how they felt about sharing their thoughts and experiences with other participants. In the 2020–2021 academic year, 72.7% of respondents felt good or very good about sharing their experiences, while in the 2021–2022 academic year, this percentage increased to 92.3%. Only in the first year there was a percentage of people who reported not feeling good, 9.1%, and the percentage of those who responded neutrally was 18.2%, more than double the figure recorded in the second year, 7.7%.

The data also show that the documentation provided by ESIC University and The Hermanos San Juan de Dios Foundation was evaluated positively by 68.2% of students in the first year, compared to 83.6% in the second year. Only in the first year were there recorded instances of dissatisfaction, with 4.5% of respondents, and 27.3% responded neutrally. In the second year, the number of neutral students almost halved, to 15.4%.

3.4. Student's report

To deepen the understanding of the results of the students' experience with SL, a qualitative analysis of the students' testimonies regarding the experience of the project was included. Below are some comments on both academic years:

Academic year 2020–2021:

Student 1: "I loved helping young people with disabilities, as we make their lives easier on a day-to-day basis. Not only the children, but also the school and the parents, as we were able to help them understand how to better use technology."

Student 2: "It is an experience that can help you develop as a person and professionally. You help other people feel socially integrated and escape from their reality, in the same way, they help you feel good."

Academic year 2021–2022:

Student 3: "I developed empathy when I stopped to think about the easy life we lead and how difficult it is to be a special educator and the role that family members have with these young people."

Student 4: "Learn to be more responsible, try to manage emotions better, be more

patient, and develop problem-solving skills better.”

The responses obtained in the 2020–2021 and 2021–2022 academic years suggest that the SL activities should be considered as a reinforcement of the competencies promoted by the universities in the teaching guides, considering that it is part of the institution’s values and encourages the transformation of students through activities with a potential positive social impact.

For different reasons, some areas of improvement have been identified. The first is the lack of recognition that society, in general, gives to this type of social experience linked to HE. Although this dissociation is appreciated by some students; however, the same is not true for technicians, as their work is dedication and service to this group. Therefore, they find meaning in the social and educational value of the project and in the way the values directly affect professionals and society at large. Furthermore, another improvement action would be the dissemination of the activity at the university so that other teachers know about the service-learning project. In any case, the degree of student satisfaction is quite high due to the wide level of involvement of the faculty and technicians of the San Juan de Dios Foundation who coordinate the activities.

Therefore, as a consequence of the information derived from the questionnaire responses, the proposal for improvement for the next academic years is to connect the university experience of SL with other departments to involve the faculty through an effective communication. In this regard, the project and the activities carried out can be known through specific actions of the university and institutional communication, as examples of good academic practices.

4. Discussion

Service-learning activities can impact on student’s learning in HE. As this study demonstrates, the experience of working with disabled people among undergraduates and the San Juan de Dios Foundation was positively evaluated by the participants. The main objective was to investigate the interaction between students, users, teachers and technicians who developed different activities with a social purpose. Therefore, students have reinforced their skills with hands-on experiences (De Moraes et al., 2024; Meyer et al., 2016), improving community life, and developing problem-solving skills (Geller et al. 2016), understanding their impact on learning outcomes (Celio et al., 2011; Yorio and Ye, 2012) and students’ curricula (Aramburuzabal and Cerrillo, 2023; Farooq et al., 2018; Salam et al., 2019) and transforming the student’s perspective (Filho et al., 2024).

In this case and, based on this practical experience, the teamwork objectives were adapted to the needs of the San Juan de Dios Foundation people and also aligned with the learning objectives of the course. Consequently, SL bridges the gap between knowledge and society because SL helps students to better prepare for the workplace by serving others (Alexander et al., 2014; Craig et al., 2016; Meyer et al., 2016; Tijisma et al., 2020) and taking into account the SDGs objectives (Ribeiro et al., 2023). Therefore, linking curricular activities with a service to society has, in turn, a positive impact on SDG 4, quality education, considering the global goals promoted by the United Nations. From this perspective, measuring this impact through SL activities

increases students' awareness of the needs in their local environment; in this case, it was developed favoring people with disabilities located in Madrid.

The implementation of this Service-Learning project has generated very positive effects both from the point of view of professional training and in the field of personal growth and satisfaction. The quantitative analyses and the students' feedback indicate that the degree of satisfaction of students and teachers was very high. As one of the university participants pointed out: "help them and, learning about their lives, they also help us" referring to mutual learning between those involved.

5. Conclusion

Service-learning activities act as a bridge between the classroom and society, providing opportunities to acquire different skills through learning methodologies based on the specific needs of some groups. From this perspective, the opportunity to develop activities with a social purpose benefits the people in the community and, in turn, the students who use their knowledge to enhance the learning of others. As a result, service-learning has the capacity to create powerful experiences for students, both individually and emotionally as they work with others. By combining academic learning in higher education with meaningful service, service-learning creates a dynamic educational experience that prepares students to be savvy, engaged, and responsible citizens.

This work has some limitations. One of them is the fact that it is necessary to prepare a competency-based questionnaire. In this sense, it would be necessary to have a precise measurement of each question at the end of the experiment. In addition, the activity was only evaluated over two academic years. However, its replicability comes from the fact that it was designed to be measured over time, so that this learning also affects the faculty of the discipline, adapting the experience each year to new situations (hybrid and/or face-to-face experiences).

Based on this experience, other subjects can be considered in future academic years to demonstrate that learning in HE serves to obtain social skills that improve employability, knowledge and service to society, and with the aim of humanizing education. Many disciplines meet this requirement in different university degrees. All of this will result in the social impact through experiences offered by students to serve the community in the long-term based on sustainable challenges worldwide (agenda 2030).

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