Construction and validation of an instrument for evaluating the quality of university service-learning projects using the Delphi method

Construcción y validación de un instrumento para la evaluación de la calidad de proyectos de aprendizaje-servicio universitario a través del método Delphi

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Abstract:

Service-learning has spread significantly in higher education in recent decades. Its effects in the academic field (students and teachers) and in the community (disadvantaged groups at risk of social exclusion and socio-educational partners) are backed by research. However, few works have considered the evaluation of these projects, and there are few instruments available for guiding their development and for assessing their quality. The aim of this study is to develop criteria to evaluate university service-learning projects. To do so, we used the Delphi method with three rounds of expert consultation. The result is a university service-learning, indicator matrix with 9 dimensions and 43 indicators. We conclude that, as well as evaluating the quality of service-learning projects, this instrument could also be valid for validating social innovation from the educational sphere. The principal limitations to overcome are the still-ex-

isting welfare perspective and difficulties with involving the recipients of the service.

Keywords: service-learning, Delphi method, evaluation, instrument, quality of programs, higher education.

Resumen:

El aprendizaje-servicio ha tenido un importante impulso en las últimas décadas en la docencia universitaria. Sus efectos, tanto en el ámbito académico (alumnado y profesorado) como en el comunitario (colectivos desfavorecidos en riesgo de exclusión social y entidades socioeducativas), han sido avalados por la investigación. Sin embargo, son escasas las referencias a la evaluación de estos proyectos, y son limitados los instrumentos disponibles tanto para orientar su desarrollo como para valorar su calidad. El objetivo de este estudio

ha sido la construcción de unos criterios para evaluar los proyectos de aprendizaje-servicio universitario. Para ello, se ha empleado el método Delphi, realizándose tres rondas de consulta a personas expertas. El resultado se concreta en la elaboración de una matriz de indicadores denominada aprendizaje-servicio universitario, formada por 9 dimensiones y 43 indicadores. Se concluye que este instrumento, además de evaluar la calidad de los proyectos de aprendizaje-servicio, también podría ser válida para verificar la innovación social desde el ámbito educativo. Las limitaciones principales han sido superar la perspectiva asistencialista todavía existente y la dificultad para implicar a las personas receptoras del servicio.

Descriptores: aprendizaje-servicio, método Delphi, evaluación, instrumento, calidad de programas, educación superior.

1. Introduction

University service-learning (USL) is an educational focus that combines social commitment with learners' development of competences. It involves experiential learning, in which learners apply the knowledge they acquire through their education (Álvarez-Castillo et al., 2017; Galván et al., 2018), and at the same time it aims to respond to the needs of a disadvantaged group in a position of need or to a social challenge that affects the community (Batlle, 2020). The reflection processes that feature in these educational initiatives enrich the link between learning, and social and ethical commitment, making sense of

the experience per se (Dolgon et al., 2017; Santos-Pastor et al., 2021b).

This type of educational initiative has spread rapidly in recent years at all educational levels, inspiring considerable interest among professionals from different disciplines (García-Romero & Lalueza, 2019; Lucas, 2021). These experiences connect very directly with the idea of social innovation promoted by the European Union (2013), which defines it as:

the development and implementation of new ideas (products, services and models) to meet social needs and create new

social relationships or collaborations. It represents new responses to pressing social demands, which affect the process of social interactions. It is aimed at improving human well-being. Social innovations are innovations that are social in both their ends and their means. They are innovations that are not only good for society but also enhance individuals' capacity to act. (p. 7)

The two parts of this educational focus — learning and service — must be integrated into a process constructed with the deliberate aim of creating mutual benefit for all participating agents (Chiva-Bartoll & Fernández-Río, 2021). This provides students with a real learning situation and leaves a mark in the community that receives their service and in the bodies or agencies with which they participate (Mtawa & Wilson-Strydom, 2018). This innovative pedagogical focus brings into play a range of academic and community-based resources, enabling participating agents to help solve problems and become partners from a horizontal outlook (Furco & Norvell, 2019).

In this vision of collaborative work by a variety of socio-educational agents, the university, as an institution, must respond to the various community challenges (Menon & Suresh, 2020). Accordingly, authors such as Choo et al. (2019) consider that the mission of the university is constantly changing and the sensitivity required by growing social needs is important at present. Martínez-Usarralde et al. (2019) indicate that the social responsibility mission of universi-

ties seeks to give back part of what it receives from society, taking the concept of citizenship into account. Therefore, the focus with which universities "contribute" coexists with a perspective of "repaying a debt". This perspective is key to understanding that the service is built on social and civic ethics. It does not have elements of altruism or charity, but rather "the free response that we give to recognising another person's dignity, which leads us to take on an attitude of service, care and responsibility" (García-Gutiérrez & Ruiz-Corbella, 2022, p. 169). USL contributes to this mission, as it involves an educational initiative that combines various institutions and agents in a shared effort to create a beneficial change in the community. So, the *Guide to social innovation* (European Union, 2013) suggested going a step further and calling for projects to be designed with the community rather than a service to the community that would mask a welfare focus.

This reciprocal relationship lays the necessary foundations for participating in a quality project that can address the needs of the recipients or the community and, in parallel, promoting meaningful learning in learners, making connections with their prior knowledge, positioning itself in real practical settings, and favouring voluntary participation and a predisposition towards competence development (Lorenzo et al., 2019). With regards to the competences they acquire in their learning process, the literature principally lists ethical, social, and citizenship ones (Bringle & Clayton, 2021;

Chambers & Lavery, 2022; Puig-Rovira, 2022; Salam et al., 2019). These are transversal and help establish systems of social values in university students, seeking "peaceful coexistence in a globalised and multicultural system" (Maravé-Vivas et al., 2022, p. 2), one of the current challenges in higher education (McIlrath et al., 2019). These competences also coexist with the acquisition of many other specific affective, professional or academic ones (Chambers & Lavery, 2022), as USL is developed through the subjects in the syllabuses of the different university programmes, seeking to create and evaluate specific knowledge, while at the same time pursuing integral development of the students involved in these projects (MacPhail & Sohun, 2019).

From the perspective of the horizontality and reciprocity of the agents participating in USL, we should note the benefits for the communities and individuals that receive the service (Tryon & Stoecker, 2008). According to the literature we reviewed, these vary greatly depending on the types of groups or needs that the projects seek to resolve or improve.

This type of educational initiative requires very specific phases and actions for its development, such as preparation, planning, execution, and assessment-recognition (Billig & Waterman, 2014). Agents with specific roles and functions can be identified in each of these phases (Santos-Pastor et al., 2021a). A USL project should also consider specific quality indicators (starting with the social need

or problem, determining learning and service objectives, tailoring the action plan, producing reflection processes, evaluating results, recognising, and celebrating etc.). Furthermore, it must integrate assessment of the learning, the service, and the experience in the process, as well as considering outreach and dissemination of results. For her part, Patrascu (2022) notes that, despite the upturn in social innovations and the implementation of USL projects, it is necessary to design and develop systems to evaluate the effects and impact of these projects. We have found research from recent years that tackles this question (Darby & Willingham, 2022; GREM, 2015; Redondo-Corcobado & Fuentes, 2020) and attempts to respond to some of the questions concerning the assessment of USL projects and to elucidate a series of criteria that help to develop quality projects to be established. However, there are few instruments for directing and guiding the processes of preparing and developing USL projects.

In this sense, the present work sets out to pinpoint the quality criteria that provide the foundations for the elaboration, follow-through, and assessment of USL projects. To do so, we constructed a matrix of indicators called *IM_USL*.

2. Material and methods

To fulfil the aim of this study, we consulted experts using the Delphi method, in accordance with the model proposed by López-Gómez (2018). This technique allows us to pinpoint the key elements

(dimensions and indicators) that would comprise the *IM_USL* with which to define, specify, and direct the quality of USL projects. The initial *IM_USL* design comprised nine dimensions with 58 indicators. The first five dimensions referred to the phases of a USL project (diagnosis, design, intervention, assessment, and reflection), while the final four focussed on the agents involved (recipient group or social challenge, students, teachers, and partners) (see Graph 1).

GRAPH 1. Dimensions of the *IM_USL*.

[**USL** = Service-Learning University]
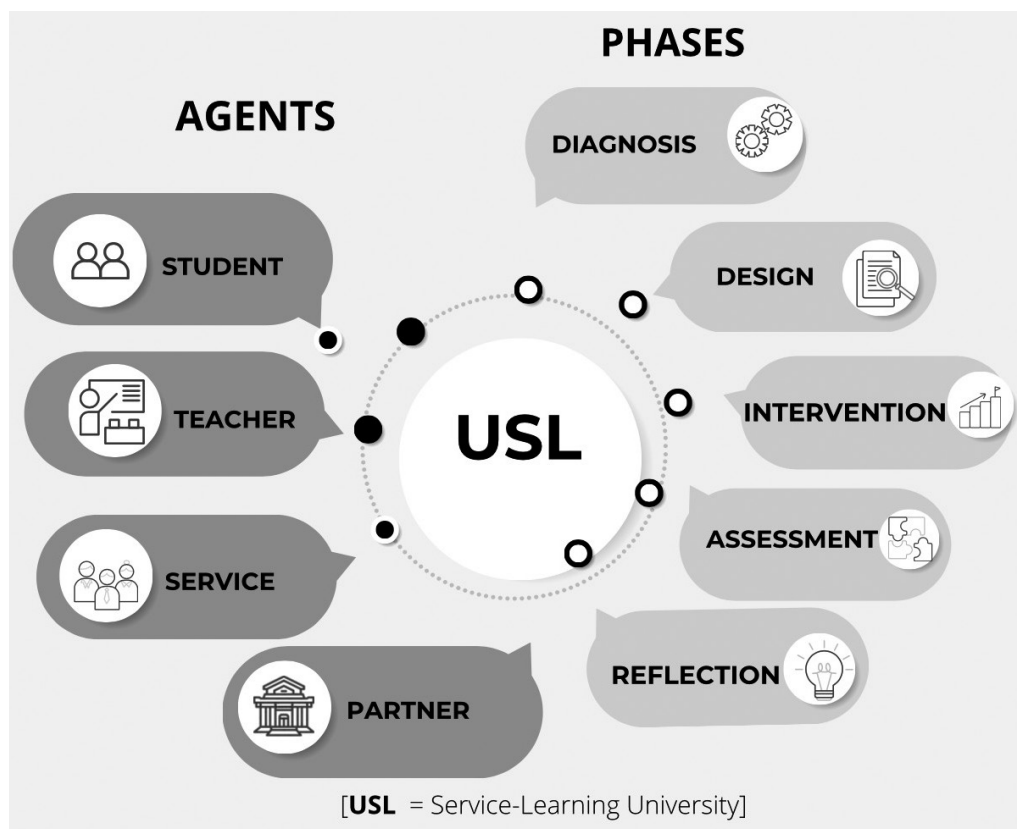
In the Delphi consultation method, a group of experts is formed to review the instrument in successive rounds (two-three) and evaluate the adequacy of all of the indicators and dimensions. The number of consultation rounds is decided by when a consensus is achieved. This particular process included three rounds of consultation.

We established the following inclusion criteria to select experts to participate in the validation of the instrument:

1. A background in and experience of USL. We defined the following more precise considerations:

- The range of geographical locations where the USL projects are implemented.

- Having led, coordinated, and tutored USL projects.

- Gender parity.

- We also took into account:

  Prior experience: having taken part in USL projects, for at least two academic years.

  Research: having disseminated/published on USL.

2. Availability to participate in the review process. We also considered whether the participants were willing and available to be involved in the validation.

Based on these criteria, we drew up a list of experts from which we considered those who could have a prominent role in USL projects (teachers and people in charge of the entities). First, we checked their availability and interest in participating in the validation process. To do this, we sent them a form asking whether (or not) they would be willing to join the panel of experts. This form also asked them to decide whether they met the following requirements: willingness and interest in participating in the study, availability, level of experience relating to the subject matter, and knowledge of the subject matter. Once they had agreed to participate in the study and we had checked that they fulfilled the criteria, we sent out a letter setting out in detail the aim and objectives of the consultation, the estimated phases and their timings, as well as the conditions of the consultation and the participation agreements (characteristics of the consultation, reports on responses, anonymity of participants, informed consent, etc.). Along with the letter, each expert was sent the consent form to take part in this research. We asked them to sign and return it. We also provided a withdrawal document in case anyone decided to stop participating in the research at any stage in the process.

TABLE 1. List of participating experts.

Experts	First Round (women/men)	Second Round (women/men)	Third Round (women/men)º
Physical activity and sports teachers (Total = 9)	3/6	3/5	3/5
Teachers from other areas (Total = 3)	3/0	3/0	2/0
Partners (Total = 2)	1/1	1/1	1/1
Total	14	13	12

In accordance with the initially proposed criteria, we invited a total of 42 people, of whom 14 agreed to participate (seven female and seven male). However, after the first consultation, one expert (male) withdrew from the process, and so the group of experts in the second consultation round comprised 13 participants (Table 1).

In relation to the number of consultations to perform, we used what the literature establishes as the criterion (López-Gómez, 2018), prioritising the search for consensus in the construction of the *IM_USL*. Each consultation round had a response time of one week. We allowed a period of three weeks between the consultations so that the research team could draw up a final report, summarising the analysis of the answers given by the experts. The following consultation round was then designed based on this report. Each round, apart from the first one, drew on the results from the preceding consultation (Graph 2).

GRAPH 2. Consultation process using the Delphi method.
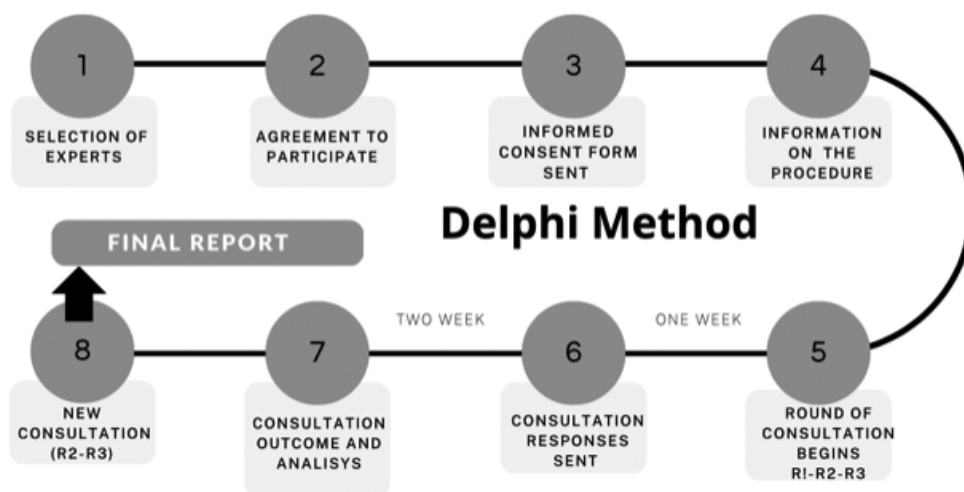
During the process, we sent the *IM_USL* to the group of experts as an Excel file, listing the dimensions and indicators with descriptions of them. We provided a template with a Likert scale (1, not at all relevant/clear - 4, very relevant/clear) to evaluate each of the indicators and dimensions that made up the *IM_USL*. There were also open questions so that the experts could explain their answers, stating why they believed that a dimension and/or indicator was not appropriate or pertinent, and also add any other observations they considered necessary. This gave a quantitative assessment and another qualitative assessment from the different participating experts.

The analysis of the information collected in each of the consultations took into account the responses regarding the relevance of each dimension and/or indicator

(1 to 4), as well as the observations-contributions made regarding their relevance and clarity. We used the SPSS statistics software package for the quantitative analysis, calculating the descriptive results (mean, standard deviation, percentiles). We also analysed the content of the qualitative data by reviewing the comments made by the experts in the observations section. These data were set out in a separate document, which helped to organise and contrast the qualitative information deriving from the contributions of the experts.

3. Results

This section shows the quantitative and qualitative results obtained during the various rounds of expert consultation. The quantitative results are structured according to the rounds that were carried out to validate the instrument. A total of three rounds were carried out, with the content of each consultation gradually being reduced and what is considered relevant clarified.

The qualitative results have been structured according to the dimensions and indicators of the *IM_USL*, so that the results obtained from the three rounds are grouped and summarised.

3.1. Quantitative results

3.1.1. Results from the first round

To validate the instrument, we asked the group of experts about the relevance and clarity of its dimensions and indicators, presenting nine dimensions and 58 indicators to them.

A descriptive analysis was performed based on the answers that the experts gave. The acceptance criteria established were linked to the means and the percentiles. Following George and Trujillo (2018), the dimensions and indicators were taken to be valid if the mean was 3.5 or higher. We established different criteria based on the percentiles. The first criterion matches the one used by López-de-Arana et al. (2021), as all of the dimensions and indicators that were rated as "very relevant and clear" by at least 75% of the experts were kept. Furthermore, the qualitative information provided by the group of experts was revised when 50%-75% of them rated the dimensions or indicators as "very relevant and clear". Finally, we eliminated indicators and dimensions where fewer than 50% of the experts described them as "very relevant and clear".

Table 2 shows the results. As it shows, no dimensions were eliminated, with all nine being maintained. Nonetheless, according to the experts' answers, the definitions of two dimensions had to be reformulated (diagnosis and reflection). Of the 58 indicators defined in the initial instrument, it was apparent that it was necessary to eliminate two indicators, reformulate 19, and accept 37.

All of the dimensions include indicators that were validated and ones that were reformulated, apart from the *teacher* dimension, where all of the indicators were validated apart from the one that was eliminated.

TABLE 2. Results obtained through the first consultation round performed.

Dimension	Indicators	Mean	Standard deviation	Percentile	Decision
DIAGNOSIS mean: 3.64; standard deviation: 0.63; percentile: 71.4; decision: Reformulate	Systematic	3.54	0.66	61.50	Reformulate
	Participatory	3.38	0.87	61.50	Reformulate
	Realistic	3.62	0.65	69.20	Reformulate
	Reflexive	2.85	1.21	46.20	Eliminated
DESIGN mean: 3.86; standard deviation: 0.36; percentile: 85.7; decision: Validated	Objective (Aligned)	3.71	0.61	78.60	Validated
	Negotiated	3.50	0.76	64.30	Reformulate
	Programmed	4.00	0.00	100.00	Validated
	Sustainable	3.93	0.44	92.90	Validated
	Link with curriculum	3.64	0.27	64.30	Reformulate
INTERVENTION mean: 3.86; standard deviation: 0.36; percentile: 85.7; decision: Validated	Defined	3.29	1.07	64.30	Reformulate
	Coherent	3.64	0.84	78.60	Validated
	Reciprocal	3.64	0.93	85.70	Validated
	Transference	3.5	0.76	64.30	Reformulate
	Planned	3.64	0.84	78.60	Validated
	Committed	3.54	0.66	61.50	Reformulate
	Flexible	3.77	0.44	85.70	Validated
ASSESSMENT mean: 3.86; standard deviation: 0.36; percentile: 85.7; decision: Validated	Planned	3.75	0.62	83.30	Validated
	Aligned	4.00	0.00	100.00	Validated
	Sustainable	3.83	0.39	83.30	Validated
	Integrated	3.25	1.05	58.30	Reformulate
	Participatory	3.54	0.77	69.20	Reformulate
	Competence	3.62	0.77	76.90	Validated
	Inclusive	3.79	0.58	85.70	Validated
	Diagnosis	3.21	1.12	57.10	Reformulate
	Formative	3.92	0.29	91.70	Validated
	Summative	3.50	0.80	66.70	Reformulate

REFLECTION mean: 3.71; standard deviation: 0.47; percentile: 71.4; decision: Reformulate	Systematic	3.93	0.27	92.90	Validated
	Committed and critical	3.86	0.36	85.70	Validated
	NEEDS oriented	4.00	0.00	100.00	Validated
	LEARNING oriented	4.00	0.00	100.00	Validated
	Connected (needs–learning)	3.46	0.97	69.20	Reformulate
	Shared	3.93	0,27	92.90	Validated
STUDENTS mean: 3.93; standard deviation: 0.27; percentile: 92.9; decision: Validated MODIFY TO LEARNERS	Predisposition	3.64	0.74	78.60	Validated
	Cooperation	3.85	0.37	84.60	Validated
	Social empathy	3.79	0.58	85.70	Validated
	Critical Thinking	3.46	0.97	69.20	Reformulate
	Proactive–problem-solving behaviour	3.86	0.53	92.90	Validated
	Commitment	4.00	0.00	100	Validated
TEACHER mean: 3.86; standard deviation: 0.36; percentile: 85.7; decision: Validated	Reflection	3.08	0.95	46.20	Eliminated
	Initiative–autonomy	3.77	0.44	76.90	Validated
	Accompaniment	3.77	0.44	76.90	Validated
	Institutional coordination	3.85	0.37	84.60	Validated
	Civic–prosocial	3.77	0.60	84.60	Validated
	Curriculum connection	4.00	0.00	100.00	Validated
	Groupwork	3.75	0.62	83.30	Validated
SERVICE mean: 3.69; standard deviation: 0.75; percentile: 84.6; decision: Validated MODIFY TO Receptor Group/ Social Challenge	Need	3.62	0.87	76.90	Validated
	Planned	3.62	0.87	76.90	Validated
	Altruistic	3.62	0.65	69.20	Reformulate
	Recognition	3.69	0.63	76.90	Validated
	Reciprocal	3.38	0.87	53.80	Reformulate
	Mobilisation	3.38	0.87	61.50	Reformulate
	Relevant	3.83	0.39	83.30	Validated
PARTNERS mean: 3.86; standard deviation: 0.36; percentile: 85.7; decision: Validated	Partnerships	4.00	0.00	100.00	Validated
	Responsibility	3.43	0.75	57.10	Reformulate
	Collaboration	4.00	0.00	100.00	Validated
	Commitment	3.71	0.61	78.60	Validated
	Value	3.79	0.43	78.60	Validated
	Interdependence	3.50	0.94	71.40	Reformulate

3.1.2. Results from the second round

As in the previous round, to validate the instrument we had created, we asked the group of experts about the relevance and clarity of the reformulated dimensions and indicators, two dimensions and 19 indicators in total. It should be noted that, following the qualitative comments from the previous round, one indicator was added to the learners dimension (competence). Consequently, a total of 20 indicators were reviewed in this second round.

We performed a descriptive analysis using the same acceptance criteria as in the previous round. The indicators were taken to be valid if the mean was 3.6 or higher. The percentile criterion was the same as the one used in the previous round, maintaining the dimensions and indicators that achieved a valuation of "very relevant and clear" from 75% or more of the experts. Ones that obtained a valuation of "very relevant and clear" from 65%-75% were reformulated in accordance with the qualitative information and, finally, dimensions or indicators that had a valuation of "very relevant" from under 65% were eliminated.

Table 3 shows the results. As can be seen, when the *diagnosis* and *reflection* dimensions were redefined, the level of consensus on them being "very relevant and clear" increased, and so both were kept with the nine dimensions proposed from the start being accepted. Of the 20 indicators defined, it was apparent after the second round that seven had to be eliminated, two reformulated, and 11 accepted. Among the indicators eliminated and the ones that were validated, most of the dimensions were validated in this second round (*design, intervention, assessment, reflection, learners, receptor group-social challenge*). However, two dimensions (*diagnosis and partners*) included indicators that required a final consultation, as they did not meet the percentile criterion for acceptance, although they did meet the mean criterion.

3.1.3. Results from the third round

To complete the validation of the instrument, in this third and final round we asked the group of experts if they believed that the two indicators that had not reached the minimum agreement percentage required in the previous round should be included or excluded because, although they had not been considered sufficiently relevant, no comments calling for them to be modified one way or another, or clear arguments for their removal had been made.

For this final analysis, we set the criterion that 90% of the experts had to be in favour of (or against) including these indicators in order to keep (or eliminate) them (Graph 3).

After the validation process, the instrument finally comprised nine dimensions and 43 indicators (Graph 4). The complete structure of the validated USL matrix of indicators can be accessed at the following link ([IM_USL] https://view.genial.ly/645e0beea5818f0017a7c8b0/interactive-content-copia-ingles-metodo-delphi-indicadores-aps).

TABLE 3. Results obtained through the second validation round performed.

Dimension	Indicators	Mean	Standard deviation	Percentile	Decision
DIAGNOSIS mean: 3.93; standard deviation: 0.26; percentile: 92.9; decision: Validated	Systematic	3.79	0.423	78.6	Validated
	Participatory	3.64	0.63	71.4	Reformulate
	Realistic	3.71	0.72	85.7	Validated
DESIGN	Negotiated	3.50	0.65	57.1	Eliminated
	Link with curriculum	3.93	0.27	92.9	Validated
INTERVENTION	Defined	3.71	0.72	85.7	Validated
	Transference	3.64	0.84	78.6	Validated
	Committed	3.43	0.94	64.3	Eliminated
ASSESSMENT	Integrated	3.71	0.72	85.7	Validated
	Participatory	3.43	0.85	64.3	Eliminated
	Diagnosis	3.57	0.64	64.3	Eliminated
	Summative	3.57	0.64	64.3	Eliminated
REFLECTION mean: 3.79; standard deviation: 0.42; percentile: 78.6; decision: Validated	Connected (needs-learning)	3.79	0.42	78.6	Validated
STUDENTS	Critical Thinking	3.86	0.36	85,7	Validated
	COMPETENCE (NEW indicator)	3.93	0.27	92,9	Validated
RECEPTOR GROUP/ SOCIAL CHALLENGE	Altruistic	2.79	1.31	42.9	Eliminated
	Reciprocal	3.57	0.64	57.1	Eliminated
	TRANSFORMATIVE (previously mobilisation)	3.86	0.36	85.7	Validated
PARTNERS	Responsibility	3.71	0.47	71.4	Reformulate
	Interdependence	3.43	0.94	64.3	Eliminated

GRAPH 3. Results obtained through the third consultation round.
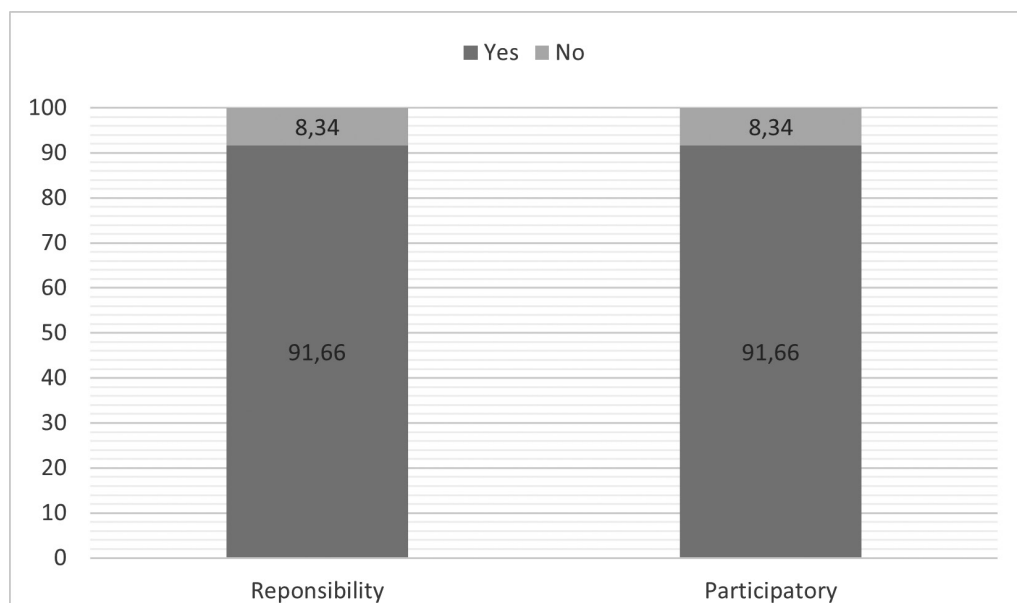
GRAPH 4. Final Structure of the *IM_USL*.

DIMENSIONS	INDICATORS					
AGENTS						
TARGET GROUP/SOCIAL CHALLENGE	NEED	PLANNED	TRANSFORMATION	RELEVANT		
PARTNERS	PARTNERSHIPS	RESPONSABILITY	COLLABORATION	VALUE		
TEACHERS	INITIATIVE/AUTONOMY	ACCOMPANIMENT	INSTITUTIONAL COORDINATION	CIVIC-PROSOCIAL	CURRICULUM CONNECTION	GROUPWORK
STUDENTS	PREDISPOSITION	COOPERATION	SOCIAL EMPATHY	CRITICAL THINKING	RESOLUTE/PROACTIVE BEHAVIOUR	COMMITMENT
PHASES PROJECT						
DIAGNOSIS	SYSTEMATIC	PARTICIPATORY	REALISTIC			
DESIGN	PROGRAMMED	SUSTAINABLE	LINK WITH CURRICULUM			
INTERVENTION	DEFINED	COHERENT	RECIPROCAL	TRANSFERENCE	PLANNED	FLEXIBLE
ASSESSMENT	PLANNED	ALIGNED	SUSTAINABLE	INTEGRATED	FORMATIVE	
REFLECTION	SYSTEMATIC	COMMITMENT AND CRITICAL	NEED oriented	LEARNINGS oriented	CONNECTED (NEEDS-LEARNINGS)	SHARED

3.2. Qualitative Results

Based on the quantitative results obtained, we analysed the qualitative data that the experts provided during the three rounds in order to better understand the coherence of the *IM_USL*. The debate surrounding the specification of the different dimensions and their indicators is set out below.

3.2.1. Dimensions and indicators relating to agents

a) Receptor group/social challenge

The *service* dimension was renamed as *receptor group/social challenge* after the first round in light of the expert contributions. This dimension is defined as the starting point that motivates the community service activity, whether it be people who receive the service (receivers) or the cause/need/problem that inspires the project. In the first round, four of the seven indicators that comprised this dimension were validated (need, planned, recognition, and relevant) and three were reformulated (altruistic, reciprocal, and mobilisation) based on the experts' contributions, before moving on to the next round. The descriptions of these three indicators were changed and the "mobilisation" indicator was renamed "transformative". In this case, two experts noted in their contributions that this new name involves the transformation of consciences, discourses, actions, contexts, people, and relationships, a term that matches that proposed by other authors (Carrington et al., 2015; Deeley, 2016). In the second round, two of the indicators — "altruistic and reciprocal" — were eliminated, and the "transformative" indicator was validated. The final version of this dimension comprised the following indicators: need; planned; transformative; and relevant.

b) Learners

After the first round, the *students* dimension was renamed to *learners* following the suggestion of one of the experts. We decided to accept this change, as it did not affect the definition of the dimension, but instead enabled it to have an inclusive focus. This dimension considers learners to be figures who stand out for their active role in learning, their autonomous character when searching for information and creating new knowledge, their capacity for reflection, for applying appropriate strategies to solve any problems and challenges that occur, their cooperative disposition, and their sense of responsibility, which accompanies them in all aspects of learning (Galván et al., 2018). The first consultation round validated six of these indicators, leaving just one (critical thinking), which underwent minor changes to its wording and was redefined as follows: "analyses and evaluates reality, in different moments-actions and with different agents, reasons clearly, precisely, and with justifications, and takes appropriate decisions". In addition, with regards to the experts' qualitative comments, six of them suggested adding a new "competence" indicator, which was defined as "learners acquire specific and transversal competences (knowledge, skills, and attitudes)", competences that are underlined by the specialist literature (Bringle & Clayton, 2021; Chambers & Lavery, 2022). These two indicators went into the second round for review, where both of them were validated. The final version of this dimension comprised the following indicators: predisposition; cooperation; social empathy; critical thinking; proactive–problem-solving behaviour; and commitment.

c) Teacher

The *teacher* dimension relates to the person who guides and directs the project that the learners carry out, assisting and accom-

panying the process. The expert consultation validated all of the indicators in the first round, apart from "reflection", which was eliminated, as it already appeared as a dimension and it was also felt that it should be present throughout the process (MacPhail & Sohun, 2019) and so was regarded as transversal. This dimension, in view of these questions, was closed and deemed to be definitive after the first round, without having to continue in the following rounds. This final version of this dimension comprised the following indicators: initiative-autonomy; accompaniment; institutional coordination; civic-prosocial; connection to the curriculum; and groupwork.

d) Partners

The *partners* dimension relates to the social organisation that is geographically situated in a particular context (from an administrative institution to an ordinary classroom), that benefits from the service received. However, we should clarify that there is not always an entity, especially when the groups or social challenges are not part of an organisation/entity.

In this *partners* dimension, some indicators were accepted from the start, such as partnerships, collaboration, commitment, and valuation, questions that were already suggested in the study by Alonso-Sáez et al. (2013). Others, in contrast, raised doubts, such as responsibility and interdependence. The former was not accepted but also did not reach a sufficient percentage to be rejected and the experts did not make reflections that helped clarify

this indicator. As a result, we asked about this indicator again, obliging the experts to take a position, and they finally chose to accept it. While it is true that the concept of responsibility does not appear explicitly in the literature, some authors describe the role that partners should or could adopt when participating in the formative and transformative process (Liesa-Orus et al., 2019). The second indicator (interdependence) was rejected. This dimension eventually comprised the indicators: partnerships; responsibility; collaboration; commitment; and valuation.

3.2.2. Dimensions and indicators regarding phases

a) Diagnosis

The *diagnosis* dimension includes a systematic process of exploration and analysis of reality to understand it and act cohesively, in accordance with the needs/problems detected. This dimension was one of the most disputed ones. Although the experts maintained that this phase is indispensable in USL processes (Conner & Erickson, 2017), none of the indicators was validated from the start. Indeed, the definition of the dimension had to be reviewed. Taking into account the comments of the experts, the second round validated two indicators: realistic and systematic (Pino et al., 2016). The "participatory" indicator was not considered sufficiently relevant, but the experts made no suggestions for modifying it. In the final consultation, the experts' views seemed to align with the literature, stating that it is important to make the recipients and the

learners participants in this process of detection of needs (GREM, 2015). This dimension eventually comprised the following indicators: systematic; participatory; and realistic.

b) Design

The *design* dimension refers to the preparation of a plan of action in accordance with the needs/problems detected in the diagnosis of the situation. Two of the initially proposed indicators — objective and negotiated — were eliminated after the consultation of experts as the social challenge proposed or the needs of the group must be considered earlier in the diagnosis. Furthermore, these needs must be shared and agreed upon between the agents (Case et al., 2020). The need to refer to the design as planning of the process was also explicitly mentioned, including the phases that make up a USL project (objectives, content, actions, timing, assessment, etc.). Moreover, it was deemed desirable to link the design to the competences of the educational programme in which it is framed and not restrict it exclusively to the field of the subject (Miller, 2012). This dimension finally comprised the following indicators: programmed; sustainable; and Link with curriculum.

c) Intervention

The *intervention* dimension was initially called implementation. This was changed at the suggestion of the experts as they felt that the original name was more general in character. Consequently, this dimension refers to the implementation of the plan of action designed with the aim of responding to the proposed objectives. Only the "committed" indicator was eliminated from the initial proposal, as this was held to be implicit in other indicators and dimensions. Nonetheless, the importance of making a commitment was made explicit, while at the same time the difficulty of evaluating it was noted, even though civic commitment is an explicit goal of USL (De Castro et al., 2017). Likewise, the group of experts underlined the importance of reflection processes during the course of the intervention, discussing the need to include this as an indicator (Sanders et al., 2015). Furthermore, including it as something specific or particular to the intervention was not considered, insofar as it would be contemplated in a specific dimension for reflection. In addition, the importance of considering the experimentation in this phase to propose solutions to problems and respond to the unpredictable character of any educational action was noted. This is more marked in contexts with disadvantaged groups, which vary greatly, and so flexibility in the intervention is fundamental (Conner & Erickson, 2017). This dimension eventually comprised the following indicators: defined; coherent; reciprocal; transference; planned; and flexible.

d) Assessment

The *assessment* dimension includes the process of collecting and analysing information with the aim of describing reality, making value judgements, and facilitating decision-making (Ruiz-Corbella & García-Gutiérrez, 2019). Although assessment must be a process that integrates all of the

elements of the project (process, results, and agents), this dimension refers to the assessment of the learning from the projects linked to USL (Ward & Wolf-Wendel, 2000). From this perspective, the experts regarded assessment as an important element that must continuously be integrated into all of the phases and as a process for obtaining constant feedback, which helps to make changes and produce meaningful learning (challenges and obstacles). The importance of contemplating the assessment of all actions and involving all of the agents in this assessment (competence and participatory) is underlined. Similarly, the reflection on assessment was again viewed as a primary question (Ash et al., 2005). The participatory, competence, inclusive, diagnosis and summative indicators were rejected. This dimension finally comprised the following indicators: planned; aligned; sustainable; integrated; and formative.

e) Reflection

The *reflection* dimension is understood to be the mechanism for optimising learning, making it possible to reconsider or be aware of lived experience in order to give it meaning (Ruíz-Corbella & García-Gutiérrez, 2019). The experts suggested including a new indicator (competence), but following discussion, it was decided not to as this was considered to be intrinsic to the process. Similarly, they noted the importance of considering and emphasising its pedagogical and formative character and the interest of converting it into a systematic process, specifying what, how, when and on what to reflect. Equally, they insisted on the advisability of this

being a reflection that is potentially formative and permanent over time, seeking written or narrated records of the experiences (Escofet & Rubio, 2017). The need for the reflection to be able to contribute a supportive sense and a critical outlook (social injustices) was also noted, as was the value/meaning that service contributes to learning and learning contributes to service, linking it to the curriculum and the development of competences (Furco & Norvell, 2019). This dimension ultimately comprised the following indicators: systematic; committed and critical; focussed on needs and learning; connected (needs and learning); and shared.

4. Conclusions

It is confirmed that the Delphi method is appropriate for validating the instruments (Sánchez-Taraza & Ferrández-Berrueco, 2022). Furthermore, in light of the results, we can say that the instrument developed in the form of a matrix of USL indicators is quantitatively and qualitatively validated, with the decisions agreeing with the existing literature.

Based on the dimensions and indicators developed, we can state that the *IM_USL* could be valid for verifying whether the projects respond to what is understood by social innovation in higher education (European Union, 2013), as it makes it possible to evaluate each project's capacity to respond to social needs through collaboration with other partners (Ward & Wolf-Wendel, 2000). Accordingly, it reacts to the lack of instruments for evaluating social innovations that are implemented

in the field of education (Patrascu, 2022). In relation to the discussion deriving from the qualitative data, the debate appears to be underpinned by tensions regarding the different orientations or perspectives that a USL project can have. Two types of contribution have been identified: (1) those that are close to a traditional welfare focus; and (2) those that were close to a critical focus, geared towards transformation and empowerment.

We should note that there have been significant difficulties with involving the people who receive the service. This limitation could perhaps be overcome by modifying the selection criteria for experts, thus ensuring horizontality and reciprocity among the participating agents (Clark-Taylor, 2017) and constructing or making changes with the community (European Union, 2013).

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