Enhancing the quality of service-learning implementation: instruments and use experiences

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The Pontifical Catholic University of Chile has been implementing the service-learning methodology since 2004 through the creation of the Service-Learning Program. As a form of experiential learning, service-learning integrates community service activities into the academic curriculum, with students applying academic content and tools to meet community-identified needs (Furco, 1999). To achieve service-learning's objectives, the services provided must meet certain minimum quality criteria. Consequently, the Program worked collaboratively with academics and community partners to define these quality criteria and to design a rubric to support the evaluation of service quality during the process and at the end of the service. This instrument has evolved to be an important contribution during course planning and service planning. Additionally, it has enabled students to become familiar with the pedagogy of service-learning and is a valuable resource for reflection. The basic structure of the rubric and its use experiences are described, aiming that this instrument can be adapted by other institutions to their own settings to improve the quality of Service-Learning experiences in higher education.

Keywords: experiential learning, service-learning, rubric for quality of service-learning projects.

Service-Learning Methodology and its Relevance in the Social and Academic Field

The service-learning methodology is based on educational sciences that emerged in the 1970's with regard to discussions on how to improve teaching/learning processes. This methodology also developed as a response to the growing need to promote civic engagement and active participation of students within the community (Bringle, Phillips & Hudson, 2004; Eyler, 2009).

Although there are various definitions of service-learning, key components of its theoretical structure are based on learning by doing, experiential learning and meaningful learning. The Pontifical Catholic University of Chile (UC) adopted the definition of Andrew Furco, who describes service-learning as an experiential teaching methodology, which can be defined as the integration of community service activities in the academic curriculum where students use academic content and tools in response to genuine needs of a community (Furco & Billig, 2002).

Service-learning addresses simultaneously three objectives:

- To enhance the quality of students' academic learning.
- To develop a quality service that meets specific needs of a community.

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- To promote values education in the context of curricular activities.

Today, service-learning has become more prevalent due to new requirements of society toward higher education. First, the concept of knowledge society involves new dynamics characterized by the rapid growth, greater complexity and a tendency towards rapid obsolescence of knowledge (Tunnermann & De Souza, 2003). Secondly, on a social level, new phenomena of exclusion have emerged. In Latin America, universities have begun to question the increasing rate of social injustice, poverty, and other social inequalities (Carrizo, 2004). This situation demands another way to develop and use the production of scientific knowledge and to urgently rethink universities' educational role while faced with these social realities.

In this regard, the Delors Report states that "universities should also be able to speak out on ethical and social problems as entirely independent and fully responsible institutions exercising a kind of intellectual authority that society needs to help it to reflect, understand and act" (1996, pp. 39). Accordingly, most of the countries of Latin America and the world have prompted reviews of their higher educational systems. The new challenges of these reforms include the debates on the relevance, social responsibility, and role with which the university must participate in order to incorporate growth with equity (Benettone et al., 2007). In this context, service-learning has had an important development, leaded by the Latin American Center for Service-Learning (CLAYSS).

The UC has been attentive to these new challenges and has demonstrated its wish to develop an academic activity leading to the education of professionals adept in academic integrity, entrepreneurism and solidarity. The UC also aims to generate a basic understanding of these relevant social issues in order to contribute to their solution. Consistently, the service-learning methodology was formally implemented into the UC during 2004, when the University created the Service-Learning Program.

Service-Learning Mode Implemented by the UC

The Service-Learning Program is part of the Centre for Teaching Development of UC. This Program offers to academics support services that include an analysis of the plausibility of incorporating service-learning in a course, support in the coordination with community partners, training, as well as advice and assistance during the design, implementation and evaluation of the methodology. Therefore, the Service-Learning Program has encouraged academics to develop progressively the necessary tools to implement the methodology with quality. The academic development process involved in the implementation of the methodology has been outstanding since service-learning represents a paradigm shift in higher education: it strengthens the role of students as constructors of knowledge and, in turn, changes university teacher's role from the center of an educational activity to a facilitator role, inspiring students' learning that continues beyond the classroom (Bringle, Phillips & Hudson, 2004). This involves a major challenge for academics (specialists in the technical content of the subject they teach) because they tend to ignore the educational resources necessary to ensure that students become greater role-players in their learning.

Regarding the implementation mode of service-learning within the UC, it is incorporated into undergraduate courses by academics who voluntarily decide to implement this methodology. The service-learning projects are usually developed from one discipline or area of knowledge (see examples in appendix). Currently, the Service-Learning Program is promoting the methodology in postgraduate courses, thesis and internships. In addition, the Program expects

to encourage projects developed through collaboration of various courses and disciplines, fostering interdisciplinary experiences, increased learning, and better quality of services.

Scope of Service-Learning at the UC

Since 2005, service-learning has been implemented in 165 undergraduate courses within UC (Table 1, Figure 1). Consequently, more than 11,000 students have developed service-learning projects related to the learning objectives of their course, under the guidance of their lecturers.

Table 1: UC Service-learning Program Indicators from 2005 to 2010.

Academic Units	Courses	Participating Professors	Participating Students	Service Projects	Community Partners
27	165	179	11,241	283	58

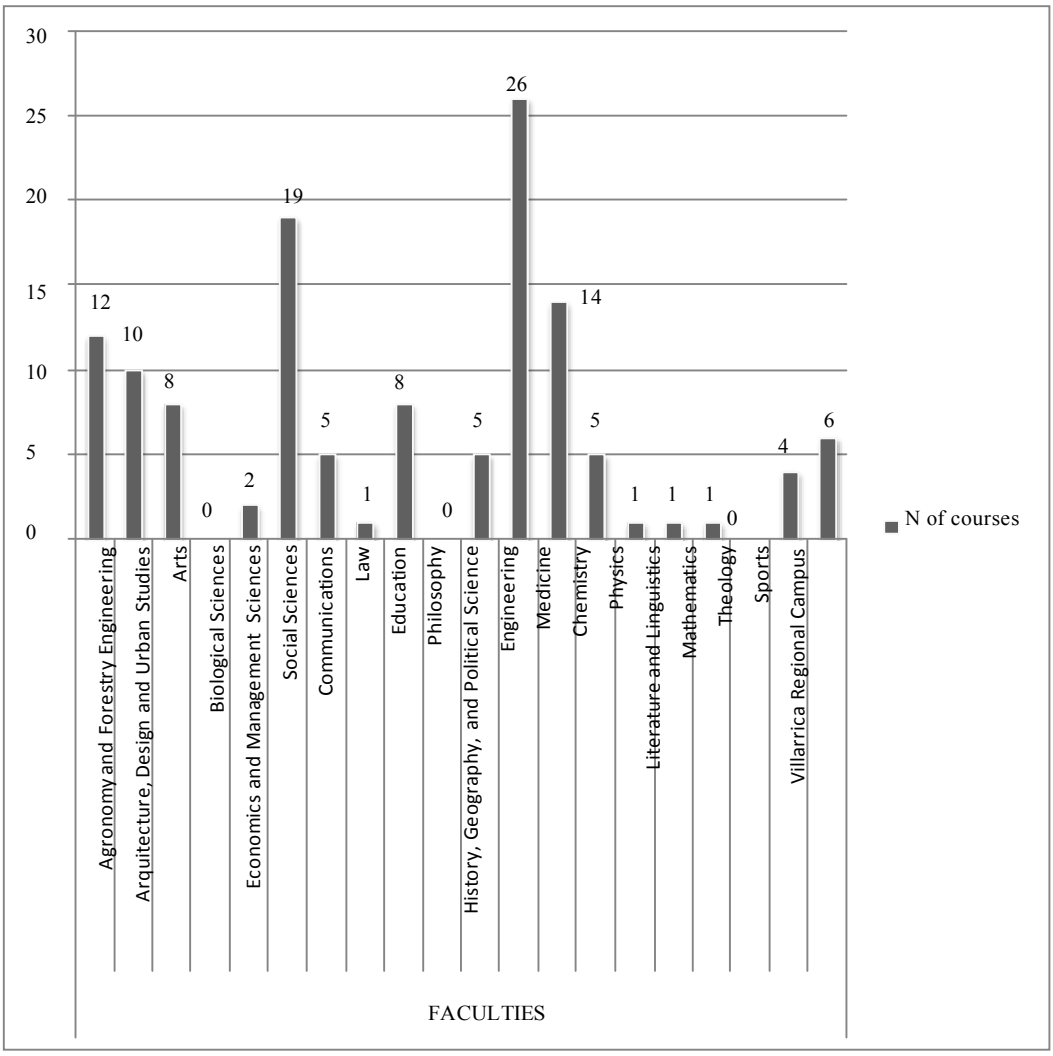

Figure 1: Number of courses implementing service-learning within Faculties, 2005 to 2010.

Along with supporting these various projects, the Service-Learning Program implements final evaluation instruments with students and community partners in order to know individual perceptions of the service-learning experience. This information has been systematically analyzed every semester since the Program's inception. The main findings are consistent with the literature on the impact of service-learning, indicating that this methodology promotes more meaningful learning; facilitates the connection between academic and the community, enhancing the applicability of students' knowledge; it develops skills such as communication and teamwork skills; it stimulates creativity in solving problems; and it increases student motivation.

After six years, the impacts of the Service-Learning Program have inspired several faculties and academic units to implement service-learning formally into the curriculum, leading to an expansion of this methodology within the University as reflected in the following figure.

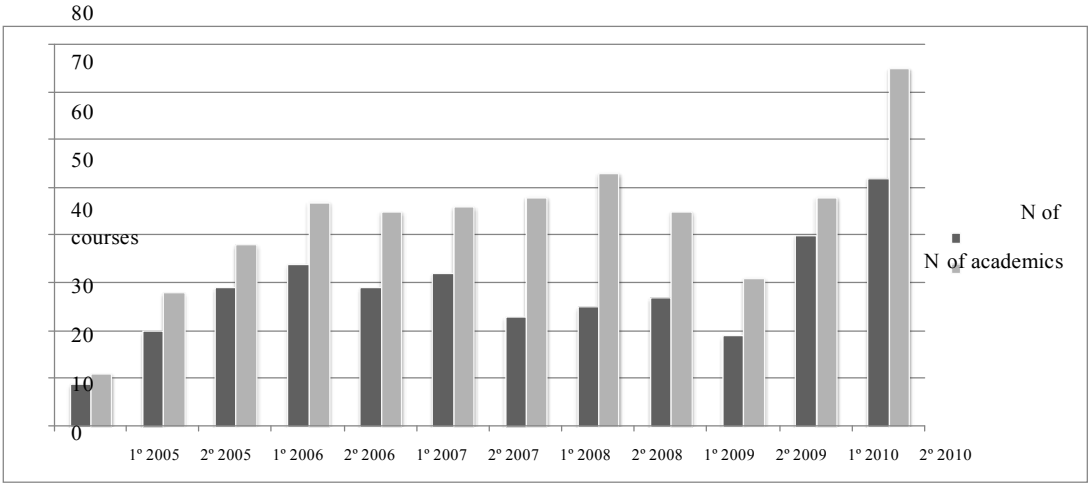

Figure 2: Number of courses and respective academics per year.

Relevance of the Quality of Service: Defining Minimum Quality Criteria

The service-learning methodology has three main objectives: significant learning, quality service and values education. These three pillars of the methodology are closely linked in a way that standing alone they cannot be truly understood. Tapia (1997) asserts that in service- learning projects a "virtuous circle" is established in which the application of academic knowledge improves the quality of service within the community. Moreover, community actions impact students' educative process, stimulating new production of knowledge. Consequently, the quality of service is vital to improve student learning; it facilitates the development of values and it redefines academic work attending to real social problems.

Until 2008, there was no existence of an agreed conceptualization of the quality of service among those who participated in the implementation of service-learning within the UC. Therefore, the Service-Learning Program realized that it was first necessary to define "quality", along with minimum criteria for evaluating projects in order to improve services. Consequently, staff members of the Program began a dialogue with academics and community partners in order to define these criteria. From this process, along with an extensive literature review, the "Rubric for

Quality of Service-learning Projects" was designed (Casas Cordero, 2009).

In order to create a definition of service quality, it was necessary to make a distinction between the process involved in the service and the product. The process was conceptualized as all the elements that are brought into play in generating the product: the procedures, the working methodology, as well as the relationship between the persons involved in the service. On the other hand, it was agreed that the result should not be understood only as the final product -tangible or intangible- that is generated through the service project. The result involves as well the extent to which the purpose of the service is addressed, the possible use of the product by the community partner, and the community partner's level of satisfaction with the service provided. This distinction is important because it highlights that not only the final product presented to the community should be of high quality. The quality of the process is in itself essential to meet the objectives of the methodology.

The Rubric for Quality of Service-Learning Projects and Use Experiences

The main objective of this rubric is to assist the qualitative evaluation of the students' projects. This evaluation is conducted during the service process and once the services are finished in order to improve the quality of the overall process in the future. The rubric encompasses the various stages of the service: its design, implementation and its outcome. Each of these stages is divided in sub dimensions to be considered in the assessment (presented in figure 3), including levels of achievement.

Dimensions		**Sub dimensions or aspects to evaluate**
Process	**Design**	• Identification of community needs • Objectives design • Planning • Monitoring and evaluation • Familiarization of students • Balance between promotion and assistance
	Implementation	• Accomplishment of commitments • Contingency management • Ethical aspects of the relationship
Result		• Accomplishment of objectives • Technical Quality • Usability (in case of delivery of tangible products) • Usability (in case of brief interventions) • Community partner satisfaction

Note. From *Rúbrica para la calidad del Servicio* p. 5, by M.F. Casas-Cordero, 2009, Santiago: Programa
Aprendizaje Servicio, Pontificia Universidad Católica de Chile.

Figure 3: Dimensions and sub dimensions considered in the Rubric for Quality of Service-Learning Projects.

Although the rubric was originally proposed as part of the monitoring and evaluation system of the Service-Learning Program, once it was put into practice, it has been a

useful instrument to enhance the quality of service through several applications beyond its original evaluative purpose. Some of these applications of the rubric have been the following:

- **Planning with lecturers.** Studies have shown that poorly articulated service-learning projects, which do not integrate the service with academic curricula, make a small contribution to learning, even impairing the quality of service (Eyler, 2009). Considering the minimum quality criteria when planning a course ensures that the service will be useful to community partners while, at the same time, will help developing the skills and knowledge of students. The rubric has proven to be very useful for the development of quality services when the quality criteria have been considered at the services' inception.
- **Presentation of service-learning within a course.** When starting a service project, professionals of the Service-Learning Program present students the objectives of the methodology, contextualize the service project, and introduce them to the community partner. It has proved critical to present the quality criteria at this stage because it can answer students' doubts and therefore increase their motivation.
- **Reflection.** An essential characteristic of service-learning is the use of continuous and structured reflection. This allows students to connect what they observe and experience in the community with their academic studies (Eyler, 2001, 2009). The rubric has proved effectiveness to enhance the quality of reflection because it allows students themselves to evaluate the quality of service they provide and then analyze their academic work and learning processes. This encourages students to improve the entire body of their work as well as reflect on the important contributions that their disciplinary knowledge can make in solving real-life community problems when conducted with professionalism and quality.

From the experience of UC's Service Learning Program it is concluded that, in order to achieve service-learning objectives, it is essential that those responsible for its implementation within higher education institutions develop a deep reflection about what to expect and what to understand as a service-learning quality project. The experience of defining quality standards according to the Chilean and UC's context and of designing a rubric for its evaluation has not only allowed the Service-Learning Program to have a better mechanism to evaluate service-learning. This experience has also strengthened academic development processes and students' preparation to address more effectively the challenges involved in service-learning.

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Appendix

Examples of courses implementing service learning methodology within UC.

Course	**Chemistry in Nature and Society**	**Deterioration and Rehabilitation of Materials and Structures**
Faculty	Chemistry	Civil Engineering
Type of Course	Compulsory undergraduate course, 1st year.	Compulsory specialisation course, 5th year.
Community Partner	Public schools, south region of Santiago city.	Educational institutions with infrastructure damage caused by the
Learning Objective	To know from a theoretical and applied perspective the composition the environment, the risks of contamination and the contributions that can be made for contamination control.	1. Understand the processes of deterioration of civil engineering materials commonly used. 2. Conduct research and development in the area of durability of engineering materials. 3. Assess the integrity of materials and structures. 4. Select available prevention and rehabilitation techniques.

Service	Students design, based on a theme (air pollution, recycling, ozone layer, etc.), three sessions of experimentation and learning for children who attend schools in the municipality of Puente Alto. Children experiment with concrete materials in laboratories, learning basic concepts of the subject and then present their learning to the rest of their classmates at school.	During all the semester three groups of students classify, analyse and propose hypothesis about the causes of pathologies and their effects on structures, both in security and in its habitability. These results are presented to the respective municipality.