Research

Service-learning: experience of teacher-tutors in the nursing career

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Abstract

Introduction

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The learning process demands appropriate and effective strategies. Furthermore, the service-learning methodology implies significant challenges for both the student and the teacher-tutor.

Objective

To reveal the experience of community-based teacher-tutors work with nursing students from the Austral University of Chile, using the service-learning methodology.

Method

Descriptive and exploratory qualitative research through an intrinsic case study. Non-probabilistic and intentional sample of cases by criteria and convenience. Five teachers from the Austral University of Chile Nursing Institute hired by the university were interviewed. They fulfilled the role of teacher-tutor after signing the informed consent. The information was obtained through semi-structured interviews, and the analysis was carried out through the data reduction methodology, which considers the analysis of results at three levels. The Scientific Ethics Committee of the Austral University of Chile School of Medicine approved the study.

Results

At level 1: One hundred and seven (107) units of meaning were identified, grouped into five descriptive categories. At level 2, three meta-categories were formed: "opinion of the tutor-teachers on working with the service-learning methodology", "factors that influence working with the service-learning methodology" and "ge-

neric competencies developed with the service-learning methodology. Finally, at level 3, two qualitative domains were identified: "Teacher-tutors appreciation for the development of the service-learning methodology" and "Contributions of the service-learning methodology for developing generic competencies".

Conclusions

The efficient implementation of the methodology requires training and motivation of tutors, teachers, students and community partners.

Key messages

- The permanent evaluation of the implemented methodologies allows the optimization of the teaching-learning processes. This research was developed under this logic, which reveals the viewpoint of teacher-tutors regarding the use of the service-learning methodology with nursing students at the Austral University of Chile.
- The results show the relevance they give to the motivation of students, community partners and teacher-tutors. They also emphasize the training that the latter should have so that students achieve the expected learning.
- The service-learning methodology strengthens values and promotes the development and consolidation of generic competencies relevant to professional training.
- Regarding the limitations of this study, the results can not be generalized since they correspond to the opinion of teacher-tutors who used the service-learning methodology with nursing students working with community groups in the city of Valdivia.

Introduction

Higher education is a space that enables social transformation and value learning through active methodologies. Among these methodologies, service-learning gives social meaning to academic knowledge and contributes to training in terms of social responsibility¹. Service-learning is defined as a teaching style and experiential learning that, using academic content and tools, allows students to work in response to community needs².

It is an experiential, critical and transformative learning methodology based on a socio-political perspective that encourages students to become aware, sensitized and critically analyze reality. Its purpose is to meet the real and felt needs of the community through fraternal and unselfish action. The students lead service-learning in all stages. Likewise, it consists of linking solidarity practices with the learning contents included in the curriculum through planned, systematic and conscious teaching³⁻⁶. A wide variety of situations bring new and unpredictable experiences⁷, being a highly contextualized practice from a national and cultural perspective⁸.

Projects can be developed in different areas, such as support for people with special needs, the elderly, development cooperation, health, safety, and environmental and animal initiatives. It is important to note that these initiatives should be planned in the context of networking and institutional level support⁹. A service-learning project consists of five stages:

- 1) Motivation.
- 2) Diagnosis.
- 3) Design and planning involve the definition of objectives, activities, responsible parties, resources, and a timetable.
- 4) Execution.
- 5) Closing of the activity.

It is also composed of five cross-cutting processes: reflection, recording, systematization, communication and evaluation or monitoring³.

This methodology allows the acquisition of tools for personal development such as self-knowledge, self-esteem, autonomy, commitment, responsibility, effort, perseverance, self-efficacy, empowerment, leadership, frustration tolerance and resilience. It also fosters interpersonal qualities, including communication, expression, social perception, empathy, dialogue, conflict resolution, community sense of belonging, prosociality and habits of coexistence. It also strengthens critical thinking and project execution¹⁰; it generates interest,

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personal and civic commitment, autonomy, self-discovery that leads to facing fears, and knowledge of reality that encourages reflection from a social perspective, generating significant learning and work satisfaction¹¹.

Teachers who had the opportunity to work with this methodological strategy identified that it contributes to the development of socioemotional competencies such as awareness and empathy through reality contact, technical skills from the articulation of theory and practice, and organizational skills evidenced in the accompaniment and follow-up required by the projects, fostering teamwork and leadership¹². Moreover, this strategy allows experiencing the interdependence of people, living beings and inert elements from a holistic conception. Each system element can impact the whole in this conception, enhancing critical analysis and systemic reflection¹³.

This methodology increases student academic commitment through a greater understanding, dedication and engagement to service-related tasks. In this way, it demands effort and energy, causing high levels of pride and satisfaction¹⁴. Students report a positive evaluation with the experience and learning. In this line, they also highlight the autonomy and connection with the practice, generating greater motivation and ownership of the project, enhancing the work with multidisciplinary teams, favoring social and cooperative skills. These skills include dialogue, consensus, negotiation, critical thinking, active listening, empathy, respect, commitment and solidarity with the population, improving the personal, social and academic spheres^{8,15,16}.

Related studies indicate that, through this methodology, nursing students recognize the development and consolidation of generic competencies such as project design and management, leadership, oral communication, problem-solving, interpersonal skills, criticism and self-criticism. In addition, they perceive that it favors processes such as self-improvement, applying knowledge to practice, teamwork, organization and planning¹⁷. Likewise, teachers identify the benefits linked to the development of communication skills, reflection, ethical attitudes, civic responsibility and value formation. In this way, recognition by the community for the work done, knowledge integration and the possibility of putting it into practice are made possible. In all, this increases student self-esteem, security and personal growth¹⁸.

The teacher-tutor has a transcendental role in developing these activities: he/she acts as a mediator of the teaching-learning process of interdisciplinary work, plans the academic and service objectives, motivates and guides the different actions needed. This requires characteristics such as empathy, active listening and positive reinforcement^{3,14}. It also encourages reflection, avoiding indoctrination and allows students to reconfigure their learning, giving meaning to their experience¹⁹, which implies valuing, questioning, critically analyzing and becoming aware of the experience, generating instances for feedback in each stage of the process. For this, the teacher must have guidelines to develop disciplinary competencies and value learning. In this way, the student can assign personal meaning to the action he/she is performing²⁰.

There is a perception that this methodology contributes to significant learning, personal, professional and service growth and allows to establish national and international networks. This aspect is especially relevant, considering the current context of virtualization. It is necessary to promote non-face-to-face learning experiences that contribute to developing ethical and civic competencies and strengthening collaborative ties with the community. These processes generate in the tutor a greater dynamism, motivation, personal satisfaction, expansion of teachers collaborative networks, incorporation of value aspects to their usual pedagogical practice, closer relationships with students, commitment to the course and teaching, feeling of overcoming difficulties and feelings of having been a significant contribution to the student training^{15,18,19,21,22}.

The teaching responsibility to promote reflection as a form of critical analysis of reality is a fundamental aspect since it allows the articulation between theory and practice, deepens learning, raises awareness, motivates and commits students to be transcendental agents on their projects in favor of social justice^{4,13}. In addition, it should generate a climate of trust with students and foster a learning environment that offers adequate conditions for a sincere and equal dialogue^{15,16}.

Carrying out this methodology in the university context has shown difficulties. These are related to implementation required time, the need for training and advice from specialized teams, and support for teachers and students²³. They have also been related to lack of specific training for project development, non-academic aspects such as socio-emotional deficiencies, organizational and technical skills, lack of institutional support, and difficulty accessing communities¹². On the other hand, students have pointed out as a problem the time allocated to project development, which becomes insufficient. Thus, students have to resort to free periods to respond to commitments related to community work because most tasks require a thorough organization at a curricular level¹⁷.

In addition, there is evidence of problems such as the lack of critical analysis of the political, social, economic and cultural context, therefore, limiting deep and comprehensive learning. It is necessary to ensure that awareness of the local reality is strengthened and to glimpse to what extent service-learning projects contribute to community partners with ethics, value and cultural perspective that allows them to generate social commitment and strengthen their professional identity²³.

The service-learning methodology is part of the strategies used since the beginning of the nursing career at the Austral University of Chile. However, it is necessary to analyze the experience from the protagonist's perspective critically. In this opportunity, such analysis is carried out from the teachers-tutors point of view to deepen and learn from practice. This aspect makes it possible to ensure a continuous improvement of the training processes. The general objective of this study was to reveal the teacher-tutors experience of community work with nursing students of the Austral University of Chile, using the service-learning methodology. As for the specific objectives, these correspond to revealing the appreciation regarding the development of the methodology, investigating factors that affect the development and discovering the competencies developed from the service-learning methodology.

Method

The research is framed within the qualitative paradigm. Therefore, it seeks the understanding of phenomena; it studies people in their own frame of reference and the purest humanistic tradition, is conducted in natural settings and is viewed from a holistic perspective²⁴. We performed an intrinsic case study since we were not interested in learning about other cases or general problems but rather learning from a particular case²⁵.

The universe consisted of 16 teachers belonging to the Nursing Institute. The non-probabilistic or directed theoretical/intentional sample^{26,27} was made up of five female academics, who met the following inclusion criteria: teacher-tutors who worked with servicelearning for at least two semesters during 2015 and 2016, who had a current contract with the university at the time of the interview and who agreed to participate voluntarily in the research by signing the informed consent form.

Data collection was performed through the semi-structured in-depth interview technique²⁸, using a guideline with questions defined according to the research objective. Each interview was documented through an audio recording, which allowed to be faithfully transcribed. The data were collected until the saturation point was reached, i.e., repetition of ideas²⁹.

The data analysis was performed following the constant comparison scheme. According to the comparative method, this scheme consists of a manual progressive reduction, establishing data categories³⁰. Three levels were determined: data reduction, data presentation, design and conclusions verification. The last level involved the identification and narrative segmentation, construction of meta-categories, and finally, the identification of qualitative domains. This process was carried out simultaneously with the categorization since by grouping the units in parallel, they were reduced to a single meaning. The same method was used to establish meta-categories³¹.

The rigorous quality of the methodological research was guaranteed by the rigor criteria: credibility (truth value), transferability (applicability), dependence (consistency) and confirmability (neutrality)³². It is worth mentioning that triangulation was performed per researcher.

The ethical aspect was safeguarded by the Scientific Ethical Committee of the Faculty of Medicine of the Austral University of Chile. Through this work, aspects to be evaluated, analyzed, transferred or modified in other schools in the health field may be reflected, generating a significant value in the academic, community and social spectrum with the comprehensiveness required for health professionals training³³.

Researchers focused on understanding the experience of the teachertutors when working with the service-learning methodology. Due to their background, they also worked with the methodology in the



past, which is why they considered it pertinent to investigate the educational phenomenon to obtain answers to multiple questions, thus optimizing the future experience.

Results

The profile of the key informants corresponds to five teacher-tutors, whose ages range from 35 to 50 years old and who have more than five years of uninterrupted teaching experience in the nursing career. The data analysis derived from the interviews followed a scheme that progressively reduced the information, following the study objectives.

Level 1

Identification and segmentation of 107 meaning units of the textual narratives provided by the key informants and grouping into descriptive categories. At the end of the process, 107 meaning units were revealed and grouped into five emerging descriptive categories:

 Suggestions for the development of the service-learning methodology: proposals to optimize the community work experience.

Table 1. Emerging categories with meaning units frequency.

- Facilitating factors for the development of community work under the service-learning methodology: opinion regarding students, teachers-tutors and organizational elements that favor this educational strategy.
- Competencies developed through the service-learning methodology: skills, knowledge and attitudes achieved by students working with community groups.
- 4) Perception of the service-learning methodology process: impressions regarding the development of the methodology during community groups work.
- 5) Hindering factors for the development of community work under the service-learning methodology: appreciation regarding circumstances, components and/or intrinsic or extrinsic factors that influence community work.

The following tables present each of the emerging categories with their respective meaning units, which are consistent with the study objectives.

	Emergent categories		Meaning unit frecuency	
		N	%	
1	Suggestions for the development of the service-learning methodology.	29	27.1	
2	Facilitating factors for the development of community work under the service-learning methodology.	27	25.2	
3	Competencies developed through the service-learning methodology.	22	20.6	
4	Perception of the service-learning methodology process.	15	14.0	
5	Hindering factors in the development of community work under the service-learning methodology.	14	13.0	
		107	99.9	



Table 2. Frequency distribution of the meaning unit emerging categories.

Categories		Meaning units	N٥	%
		Service-learning methodology		8
	Teacher training	Group work (frustration management, motivation)		1.9
		Evaluation (process-outcome)		1.9
	Activity organization	Cautionary renewal of community groups		0.9
		To limit experience time		0.9
		More time for its development		0.9
Suggestions for the		Request written commitment with community partner		0.9
development of ser-		Continuity with the communities		0.9
vice-learning method-	Service-learning projects	Use creativity in projects		0.9
ology		Prioritize learning-by-doing strategies		0.9
ology		Intentional learning		0.9
		Strengthen value aspects		0.9
		Focus work according to the nursing role		0.9
	Curricular structure	Increased inter-level collaborative work	2	1.9
		Creation of a community work course	1 2	0.9
	Community partner	Training in service-learning methodology		1.9
	Institutional	Support for projects with service-learning methodology	1	0.9
		Commitment	5	4.6
		Have generic competencies (leadership, teamwork, social responsibility)	3	2.8
	Students	Methodology management	2	1.9
Facilitating factors for		Affective closeness with teachers	2	1.9
the development of		Time organization	1	0.9
community work un-	Teachers	Commitment	4	3.7
der the service-learn-		Support among tutors	3	2.8
ing methodology		Affective closeness with students	2	1.9
	Community partner	Commitment		2.8
	Activity organization	Geographic proximity to communities	1	0.9
	retivity organization	Work continuity	1	0.9
		Teamwork	4	3.7
		Social responsibility	3 3	2.8
	Interpersonal	Strengthening of values		2.8
Skills developed from		The affective closeness between students and teachers		1.9
the service-learning		Capacity for self-criticism		0.9
methodology		Problem solving	3	2.8
	Instrumental	Learning methodology	3	2.8
		Basic knowledge of the nursing profession	2	1.9
	Sistematic	Self-learning	1	0.9
	Teacher	Lack of training in the methodology (putting it into practice, reflection, evaluation)	8	7.4
Perception of the ser-	Teacher	Restrictive amount of activities (exhaustion)	2	1.9
vice-learning method-	Institutional	Allows linkage with the environment		2.8
ology process	Community partner	Commitment	1	0.9
	Community partice	Lack of knowledge of the methodology	1	0.9
	Curricular	Little time allocated to the community		3.7
Hindering factors in	Community partner	Scarce time availability		3.7
the development of	Teacher	Academic overload	2	1.9
community work un-		Inexperience with the service-learning methodology		0.9
der the methodology		Academic overload		0.9
der the methodology	Students	Competition among groups		0.9
		Lack of motivation	1 107	0.9
Total				

Level 2

Represents the emerging thematic cores or meta-categories that emerged from the five coded descriptive categories of Level 1. These

cores emerged through a process of inter-category comparison in which structural similarities and common elements of analysis were sought. From these, three thematic cores finally resulted, which are described below:



Table 3. Meta-categories, definition and representative speeches.

	Mata astogorios	Definition	Dopresentative speeches
	Meta-categories		Representative speeches
1	Opinion of the teachers-tutors about the	Appreciation regarding the development and pro-	"() I believe that time is scarce, that we have a
	service-learning work (corresponds to the	cess of the service-learning methodology accord-	curriculum () that is very tight" ().
	descriptive categories: Suggestions for the	ing to their experience.	"() training is important when methodologies
	development of the service-learning meth-		are implemented, I believe that training that is
	odology and Perception of the service-		clear for all teachers, unified ()"
	learning methodology process).		
2	Factors that affect the work with service-	Teachers-tutors opinions on the elements that fa-	"() the commitment with students' work, the re-
	learning methodology (corresponds to the	cilitate and hinder the development of commu-	ception we received, the motivation the commu-
	descriptive categories: Facilitating factors	nity work under the service-learning methodol-	nity also had with the work ()"
	for the development of community work	ogy.	"() the student commitment is very important,
	under the service-learning methodology	07	because through that everything has been
	and hindering factors in the development		achieved, even though many times they are tired
	of community work under the service-		()"
	learning methodology).		()
2			
3	Generic competencies developed through	Teachers-tutors opinions related to the generic	"() they created networks, they felt socially re-
	the service-learning methodology (corre-	competencies: instrumental, systemic and inter-	sponsible for doing a job for them ()".
	sponds to the descriptive category: Compe-	personal, acquired by the students through the	"() generates this bond with the students that
	tencies developed through the service-	service-learning methodology.	somehow strengthens ties and help students
	learning methodology).		grow from a personal point of view ()"

Level 3

Following the sequential and cross-sectional analysis of the Level 2 meta-categories, two qualitative domains emerge:

- Appreciation of teacher-tutors for the development of the service-learning methodology: opinion evidence regarding the development and process of the service-learning methodology according to their experience and factors that facilitate and hinder the development of community work under this modality. This corresponds to the meta-category factors that affect the work with the service-learning methodology.
- 2) Contributions of the service-learning methodology to the development of generic competencies: represents the impressions of teacher-tutors about the strengthening of generic competencies with the educational methodology used. It corresponds to the meta-categories: opinion of the teacher-tutors concerning the service-learning work and generic competencies developed with this methodology.

Discussion

Regarding teacher-tutor perception, the need for training in the service-learning methodology is evident since there are application obstacles. These difficulties are linked to reflection and evaluation problems, including how to generate effective feedback, encourage self-evaluation in students, and tutor reflective practice with his/her work. This is found in previous literature. Therefore, it is necessary to provide training, advice and tutor support^{12,23}.

Mention was made of the need to restrict the number of activities and avoid overloading both the teacher-tutor and the student. The informants attributed this methodology the power to promote a link with the environment since the university establishes collaborative networks to benefit the community, which is in line with other experiences^{18,19}. Through this, community partners' commitment is also recognized. However, community partners lack knowledge regarding this teaching strategy, which may lead to false expectations regarding the students' work. The informants recognize factors that influence the development of the service-learning methodology, identifying more facilitating aspects than hindering ones. In relation to the former, the commitment of the teacher-tutor, the student and the community partner stands out, agreeing with previous literature reports^{14,15}. In this way, this commitment is the driving force for project objectives and a key aspect of overcoming any obstacles. The affective closeness of the teacher-tutor with the students and the willingness to support their peers were identified as facilitating factors. Another favorable aspect is the prior student generic competencies, such as leadership, teamwork and social responsibility. As a result of personalized interaction, this methodology allows a closer relationship with the student. The teacher-tutor motivates, directs, and positively reinforces the student, generating permanent communication and feedback that promotes experience-learning in a climate of trust, as reported in previous literature^{3,12,14,15,20}. Likewise, the organizational aspects of the activity (such as geographical proximity between communities and continuity of work with them) facilitate the development of the community experience.

Concerning hindering factors, the scarce amount of time available from the community was identified^{12,23}, which can be explained by a schedule incompatibility with students, thus, making coordination difficult. The academic overload, both from the student and the teacher-tutor, and the methodology inexperience of the latter, are in line with previous reports¹².

The teacher-tutors identified the generic competencies this methodology contributes. They described a predominance of interpersonal competencies such as teamwork, social responsibility, strengthening of values, the affective closeness between teacher and students, and capacity for self-criticism. Secondly, they reported instrumental competencies: problem-solving, methodology learning and basic professional knowledge. Finally, they identified self-learning as a systemic competency. This aligns with the literature, highlighting the development of generic interpersonal and organizational competencies such as teamwork. However, it is striking that the key informants did not express leadership and critical thinking^{10,12,15,17}, which could be related to the need for training, which is something they referred to. Undoubtedly, this aspect would enhance the skills needed by the teacher-tutor to apply this methodology correctly.

Regarding the tutors' suggestions to optimize this strategy application, they highlight a broad perspective appreciation, a training need for this methodology, the ability to work with small groups oriented to socio-affective skills and, finally, a process and result evaluation. Concerning project development, the use of creativity, strengthening of values, intentional learning, focusing the work according to the nursing role, and prioritizing practical learning strategies are mentioned.

Regarding the organization of the activity, contradictory points were identified, such as the disquisition between ensuring the renewal or continuity of community groups. The importance for renewal comes from the exhaustion of the beneficiaries due to the prolonged work of the student. However, this may generate a lack of continuity in the development of projects, which would make it difficult to evaluate the impact of the work. It is also recommended to allow more time for the development of the activity versus limiting the time of the experience. The latter is associated with the heavy academic load that, according to the informants, both students and teachers have and community exhaustion. Students from another study point out the need for continuity¹⁷. It is proposed to promote a written commitment with the community partner to carry out a solemn act that emphasizes the importance of a permanent disposition for the project's objectives achievement.

From the curricular perspective, it is necessary to consider creating a community work course due to its importance and because it represents and a time overload for both students and tutors.

Concerning community partners, it is recommended that they be trained in the service-learning methodology. This would ensure effective participation and understanding of their active role; and allow them to have realistic expectations, facilitating student work and learning.

From an institutional perspective, it is emphasized the need for support in developing these service-learning projects through a policy that encourages the initiatives. This is because these institutions involve multiple actors and are part of outreach activities that position the university in society. Likewise, social responsibility is a competence that gives Austral University of Chile its hallmark.

Conclusions

Finally, it can be concluded that the service-learning methodology is an experience that is developed in real scenarios and favors the development and consolidation of generic competencies: teamwork, social responsibility, strengthening of values, the affective closeness between teacher-students, self-criticism, problem-solving, methodology learning, basic profession knowledge and self-learning.

This methodology facilitates the development of the experience and the motivation of students, teachers-tutors and community partners. In addition, the implementation of the competencies previously acquired by the students during their formative process at different levels of development enhances their future work since interaction with the communities requires skills such as leadership, teamwork and social responsibility.

Finally, it should be considered that these results are not generalizable since they only correspond to teachers-tutors opinions who used

the service-learning methodology with nursing students working with community groups in the city of Valdivia, Chile.

Notes

Author contributions

JGP: conceptualization, methodology, validation, formal analysis, research, data curation, preparation of original article, review and editing, visualization, supervision and administration of the project. DAB, TRV, JSG: methodology, validation, formal analysis, data curation, review and editing, and visualization. MIP: conceptualization, methodology, validation, formal analysis, research, data curation, original article preparation, review and editing, visualization, and project management. EFG, AHD: conceptualization, validation, formal analysis, research, data curation, original article preparation, review and editing, and visualization. TVR: conceptualization, validation, formal analysis, research, data curation, original article preparation, review and editing, visualization. TVR: conceptualization, validation, formal analysis, research, data curation, original article preparation, review and editing, visualization, supervision.

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Competing interest

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Ethics

The Research Project was approved by the Ethics Committee of the Faculty of Medicine, Austral University of Chile, by 23 May 2017. The anonymity of the participants and confidentiality was safeguarded.

Access to data

The data used for the study are available on request from the corresponding author.

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