

Methodologies to enhance innovation competencies in social work education

M. Tereza Leal Cavalcante, Paco López Jiménez and Lisette Navarro-Segura

Facultat d'Educació Social i Treball Social Pere Tarrés. Grup de Recerca en Innovació i Anàlisi Social (GIAS), Universitat Ramon Llull, Barcelona, Spain

(Last accepted version of Leal Cavalcante, M.T., López Jiménez, P. & Navarro-Segura, L. (2021) Methodologies to enhance innovation competencies in social work education, *Social Work Education*, 40:3, 367-382, <https://doi.org/10.1080/02615479.2019.1674801>)

ABSTRACT

Social workers are constantly called on to respond to social demands arising from new social realities. Innovation competencies are critical for social workers, and various training programmes adopt methodologies aimed at preparing future social workers to innovate and design a sustainable future for social work practice. The objective of this paper is to present some tested teaching and learning methodologies in order to promote and enhance critical social innovation competencies among social work students. Different techniques encourage the development of innovative ideas for social intervention, some of them offering experimental experiences in which students approach the innovation process through 'inspiration', 'ideation' and 'implementation'. Students identify challenges and opportunities that motivate the search for solutions. They build and share visions, test ideas and plan actions to take social innovations into real life. These methodologies have been tested and assessed, and are replicable in different social work education contexts. The results of their application are discussed in terms of the acquisition of the expected innovation competencies.

KEYWORDS

Social work; social innovation; design thinking; education; competency

1. Introduction

Social workers engage in the challenge of responding to new demands that emerge from an ever-changing social reality. The complexity of this challenge has increased in recent decades due to accelerating social transformations that, combined with the effects of local and global economic crises, call into question the appropriateness and adequacy of certain traditional models of social intervention (Caride, 2003; Gimeno, 1987; Sáez, 1997; Úcar, 2006). All this now requires us to review the role and skills of social workers (Riberas & Vilar, 2014).

The aforementioned state of affairs is not exclusive to the social work professions. In this global world, young people grow up under the expectant gaze of their elders, who expect from them, more than ever, capacity for innovation and engagement to build a better society for all. To meet such expectations, universities include the goal of contributing to the formation of real agents of change in their strategic planning (Alden, Armellini, Maxwell, Allen, & Durkin, 2015). The capacity to innovate in general, and the ability to do so in response to social needs (social innovation), seem to form part of what we might call a stated universal curriculum.

However, general agreement with regard to this training need does not translate into a shared definition of what we understand by social innovation. A recent study of the question (Edwards-Schachter & Wallace, 2017), in which the authors reviewed 252 definitions of the term, concludes that, although social innovation is a subject that has been present in various branches of the social sciences as far back as the first half of the twentieth century, we can safely state that we have seen its introduction as a concept of analysis in certain academic areas (including, particularly, sociology, business management and community psychology) in the last fifty years. Over this period, complementary visions of what social innovation means have coexisted. These visions vary according to the type of actor involved (government, third sector, companies and so on), the degree to which civil society is involved, the perspective taken by the analysis (macro, meso or micro), the role of technology in innovation processes, and the type of goals or expected results, or their scope (from more transformative visions of social innovation to others that are more instrumental or procedural). This diversity of narratives with regard to social innovation

continues to exist. Despite this fact, however, the authors of the aforementioned study suggest an inclusive definition, one that we also share: according to this definition, social innovation is 'a collective process of learning involving the distinctive participation of civil society actors aimed at resolving a societal need through change in social practices that produces change in social relationships, systems and structures, contributing to large socio-technical change' (Edwards-Schachter & Wallace, 2017, p. 10).

A naïve view of social work could lead one to believe that social innovation is implicit in training and professional practice merely due to the fact that social work focuses on improving people's living conditions and the contexts in which interventions take place. In fact, social work can be a source of innovative practices in social enterprise as new ways of tackling social problems are designed and implemented, involving stakeholders from the community, government, the world of business, etc. Social workers can also be drivers of change and innovation within their organizations if they act as intrapreneurs, enabling the implementation of improvements to their teams' organizational and collaborative processes.

However, competencies for innovation by social workers are developed unevenly at university. While this training usually includes work aimed at developing the ability to make a critically analysis of reality in order to build collaborative relationships involving different actors or to engage in finding responses to the problems of specific groups, other competencies that are also necessary in social innovation process, such as the ability to process data and manage technological resources or to anticipate and plan for factors that may affect the future development of projects are less present in study plans or receive less coverage as training needs (Nandan, London, & Bent-Goodley, 2015).

As a result of this, teaching methods and social intervention methodologies are being reviewed and new resources are being incorporated. Examples include gamification techniques, design thinking tools, coaching, mentoring, mindfulness, service learning experiences and new participatory methods. Content and methodologies are combined into proposals that encourage students and professionals to innovate. On the other hand, it is not so clear whether consensus exists regarding the professional competencies necessary to meet the challenges of social innovation. The managerial discourse on social innovation determines content and methodologies, but there is little discussion about current trends concerning the professional profile and design of new professional skills.

Some authors place the emphasis on the capacity of social stakeholders to promote problem-solving and creative thinking. Murray, Caulier-Grice, and Mulgan (2010) suggest a common framework in which to think about how to support innovation systematically in the social sphere. Without rejecting linear creative processes, they suggest stages that take place in a spiral model in which the ideas that arise at different times during the course of the creative process gradually alter the course of the innovation (see Figure 1).

The objective of this paper is to present some tried-and-tested teaching and learning methodologies to promote and enhance critical social innovation competencies among social work students. The paper describes a teaching experience related to the first three steps in Murray, Caulier-Grice and Mulgan's scheme: prompts, proposal and prototypes (Figure 1). The methodologies used are experience-based and replicable in different social work education contexts.

The paper focuses on an experience implemented in a Social Innovation mandatory subject for third year students at the Pere Tarrés Faculty of Social Education and Social Work at Ramon Llull University (Barcelona, Spain)¹. In a context in which classical intervention models are insufficient to address new social needs, this teaching experience pursues the goal of encouraging problem-solving and creative thinking among students. More specifically, the training is aimed at improving students' competencies for innovation, generating useful ideas for implementing improvements at social entities or the community and teaching a participatory methodology that future social workers can include in their toolbox for intervention.

A premise behind this training is that social workers should go beyond traditional ways of promoting social action and delivering social services, and to this end the programme fosters innovation and creativity. The subject encourages the development of innovative ideas, providing an experimental experience in which students develop ideas or intervention models for partner institutions where they are already doing their social work internships.

The methodology is based on the Community Service-Learning framework, an educational approach that integrates, in a single project, academic content and practical service in the community. Accordingly, as they learn, students provide a service that enables them to acquire new learnings (Puig, Gijón, Martín, & Rubio, 2011). This dual dimension is particularly useful in the case of social workers, understood as social action professionals whose training involves various stakeholders, including the university, the social entity itself, other workers, and the beneficiaries of social services. Community service learning implies a degree of identification with the beneficiary: learning to put oneself in another's place, developing empathy, increasing the ability to think and feel as others do (Campos, 2010).

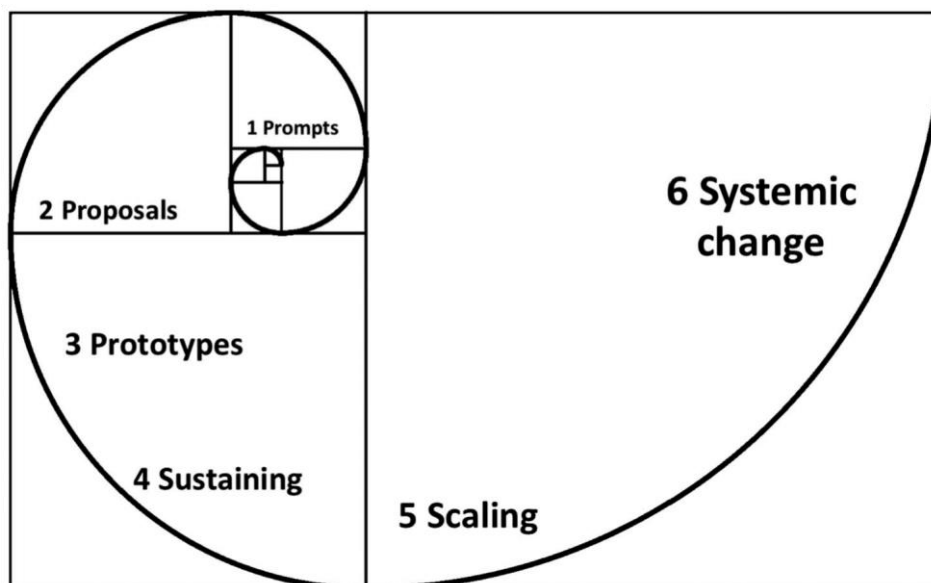


Figure 1. Stages of the innovation process (Source: Murray et al., 2010).

2. Methodology

The experience is based on applying an educational methodology for the development of ideas or models for intervention at social and educational institutions and organizations. The data analyzed corresponds to the second semester in the 2016–2017 academic year. The participants in the experience were 112 students in the third year of their Social Work degree course, who developed innovative ideas for 33 social organizations active in Barcelona or nearby towns. The experience was then evaluated by the teaching team, social workers at the participating institutions and the students themselves. There follows a description of the training strategies adopted and the tools used for evaluation by the three groups involved.

Description of the training strategies studied

As mentioned, the training strategies described below focus on the development of the initial stages in the innovation process as established in Figure 1 (prompts, proposals and prototypes), using specific techniques to encourage creativity and the design and planning of social innovations. The ideas generated may be for new services, products, technologies, work processes, intervention models or even concepts related to uncovered social needs.

The first four sessions are devoted to presenting theoretical content on social innovation. The concept is framed by reference to its main critical aspects, such as the overestimation of management discourses or the primacy of technological solutions (Alonso & Fernández, 2011). The students are invited to reflect on two questions: what innovations in the social field are; and why they are necessary. Particular use is made of Mulgan's concept (2007), which defines social innovations as new ideas to meet uncovered social needs. A study is made of the differences between the various concepts associated with innovation, such as entrepreneurship, interpreneurship, social innovation and creative thinking. Finally, we focus on the major foundations and institutions that promote innovative ideas.

In the second stage, the students are invited to develop a social innovation project, an assignment that occupies the following eleven sessions. At this stage, the students organize themselves into groups of four or five and choose a social organization to work with. This organization may be the institution where they work as interns or some other entity that they are familiar with. They must ensure that the institution agrees to cooperate with the completion of an academic assignment, and the teaching team must provide all necessary information about how the methodology is implemented. A letter of invitation and a proposal for an agreement are sent out. The agreement also establishes that the students undertake to submit the results from their work to the institution, and that the institution will evaluate these results. Evaluation by the institution is an important methodological requirement in

accordance with the criteria established for Community-Service Learning. The social workers in charge of monitoring the students at the institution participate in academic evaluation, awarding up to 10% of the final score.

In this phase, ethical issues are discussed with the students as they will be dealing with interviews and institutional information. They are advised that ethics must be considered in the design of innovations that could impact on sensitive issues for users, such as privacy or confidentiality.

Students are warned that, as an academic exercise, the generation of new ideas and its future development are under protection of the University policy on ownership and intellectual property.

The students are now informed that they are going to experience the stages in the innovation process based on Murray, Caulier-Grice and Mulgan's model. Below is a description of the techniques used, organized into three stages: (a) Inspiration and diagnosis; (b) Proposals, ideas and prototyping; and (c) Planning.

Phase 1: inspiration and diagnosis

At this stage, the students are asked to identify the problem or opportunity that motivates the search for innovation. They are encouraged to think about all the factors concerned with the need for innovation, such as the persistence of critical situations, budget cutbacks, the dissatisfaction of the stakeholders involved, new emerging situations, uncovered demands and so on. At this stage, it is essential to correctly frame the questions that can be used to identify both the symptoms and the factors that create and perpetuate the problems and, therefore, the possibilities for improvement. Besides focusing on the issues to be resolved or the factors that require strengthening, the participants also engage in a search for inspiration and to explore the innovation process itself.

This phase, which occupies four sessions, centers on analyzing the situation at the institutions where the participants wish to work. Here, the key methodologies are 'Appreciative Inquiry' (Cooperrider & Whitney, 2001) and certain design thinking resources selected from the Design Thinking for Educators toolkit (IDEO LLC, 2012).

The students conduct three or four interviews at the institution, guided by the Appreciative Inquiry framework and aimed at identifying peak performance moments at an organization. To this end, they draft the interview script in class, taking as their reference the guidelines set out in *The Art of Powerful Questions* (Vogt, Brown, & Isaacs, 2003). It is emphasized that this is not a diagnosis focused exclusively on identifying shortcomings, problems or difficulties; rather, the students are encouraged to make a positive diagnosis which also stresses the strengths, potential and resources of the organization concerned.

Having conducted the interviews, the students present, in class, a summary of their main findings. In this activity, each group enters the content of their interview onto a flip chart, which represents in graphic form the opportunities for innovation detected at the partner institution. Techniques such as storyboard or free design may be used in this activity. Once these graphic elements are ready, the students present the content to the other groups, describing the narrative revealed by the interviews in an activity known as 'storytelling'.

Phase 2: proposals, ideas and prototyping

At this stage, the methods used are designed to help generate insights into possible innovations that can be developed. A prototype development process is also simulated, during which ideas are refined and tested. The techniques used are: the Golden Circle (Sinek, 2009); narrative-building; and prototype-building.

This stage begins with time devoted to in-depth consideration of the motivations for innovation. Simon Sinek, a British consultant in innovation and leadership, argues that real leaders generate changes, not through the innovative ideas that they suggest, but through the beliefs and motivations that are implicit in their proposals. Successful innovators connect with their potential clients or beneficiaries through a system of beliefs. According to Sinek, this is what ensures that an innovation achieves greater diffusion. People adopt an innovation because they share its ideals or beliefs. From this perspective, before proposing an innovative idea in the social sphere—an intervention, a new process, a concept or a social technology—it is necessary to clarify the reason for which we believe it should be implemented ('WHY'). Following this, Sinek then invites innovators to describe in what way their innovation would change things, with reference to methods, forms and resources ('HOW'). Finally, the innovative product or process is described ('WHAT'). This structure is codified in a visual that Sinek calls the Golden Circle. In it, 'WHY' occupies the center, with 'HOW' and 'WHAT' in the outer rings. This process follows a logic that is the opposite of what, on many occasions, we see in professional practice. In it, processes begin with proposals focused on actions or solutions ('WHAT'), after which methods are defined ('HOW') and, finally, the decisions taken are justified and framed. Sinek cite the quotation usually employed to explain this shift in

perspective: in his inspiring speech, Martin Luther King did not begin with the words ‘I have a plan’, but with the proclamation ‘I have a dream’ (Sinek, 2009).

In practice, the dynamic revolves around the graphic representation of the Golden Circle (see Figure 2). Based on the diagnosis made at the previous stage, the students use figures to reproduce the three dimensions, ‘WHY’, ‘HOW’ and ‘WHAT’, and create a collage. Each group makes its own collage in silence, without sharing their individual opinions.

Once they have made their collective collage, each member of the group narrates their vision of the three dimensions to the others. This exercise enables the group to reach agreement and construct a narrative around the intrinsic motivations for innovation, the methodologies to be used, and the products or services to be developed.

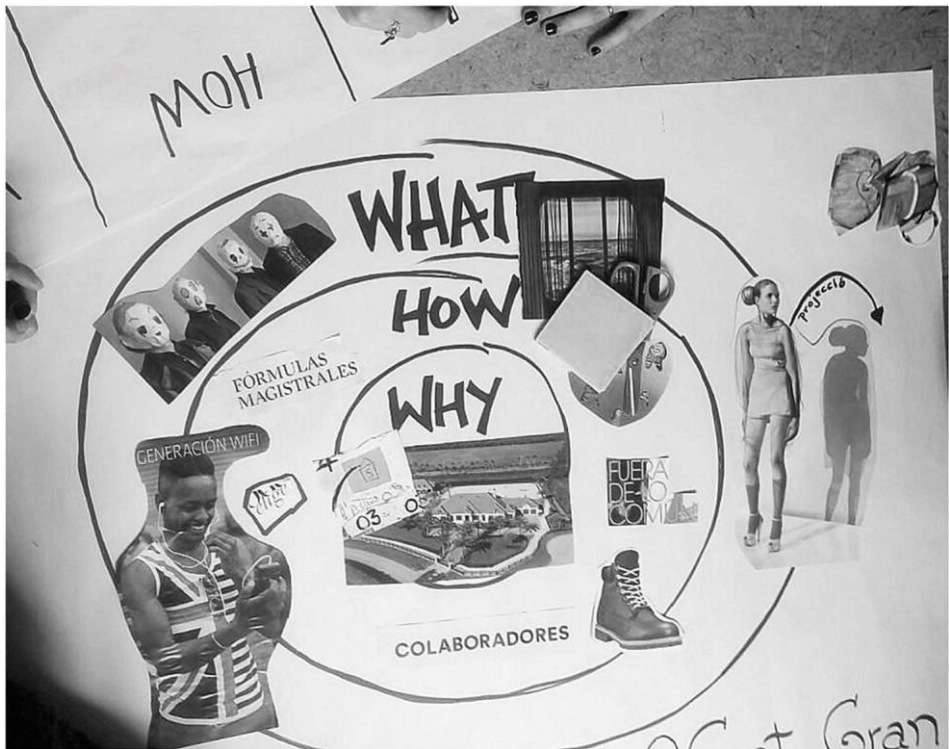


Figure 2. Example of a graphic representation of the golden circle (Source: The authors).

As the product of this stage, the participants can be invited to hand in the written description of the three dimensions of the Golden Circle agreed by the group members. Another option is to ask each group to present their narrative using various interpretive resources.

By this time, all the groups should have a clear idea of the innovation that they want to develop. The dynamic now focuses on prototypes, as the groups physically construct the operational functionality of their innovations (see example in Figure 3). Accordingly, the participants are asked to make models of their ideas at this stage. In this, they can use different creative resources: Lego, toys or other materials. At this modeling stage, the students should also take their narrative into consideration, imagining how they would put their innovation into practice and how they would interact with workers, beneficiaries of the service, the organization and the community. This exercise, which serves to perfect the narrative previously constructed at the Golden Circle stage, enables participants to rethink some of the operational elements, particularly as regards methodologies, forms of participation, work processes, communication channels and access to the services provided.

Stage 3: planning

This stage revolves around planning and defining the actions necessary to translate the innovation from project to the real life of people and organizations. For this purpose, a reverse planning technique known as ‘backcasting’ is used. Backcasting is a scenario analysis approach frequently used in sustainability studies (Holmberg & Robert, 2000).



Figure 3. Representation of a decentralized intervention model at a youth center (Source: The authors).

As defined by Robinson (2003), the term ‘backcasting’ describes an approach to future studies involving the development of normative scenarios aimed at exploring the feasibility and implications of achieving certain desired end-points. While forecasting studies are aimed at providing the most likely projection of future conditions, backcasting is an approach used to analyze alternative futures.

In conventional planning, all the actions necessary for a project to be finally implemented in the near future are defined. These actions are: present situation—necessary actions—project implementation. The backcasting technique suggests a reversal of this order. It proposes that we should first think of a future situation and then follow the path from that point back to the present in order to decide on the actions necessary. This gives us the following model: desired future—present situation—necessary actions.

Needless to say, even though the initial logic is reversed, the current situation and necessary actions can be later reflected in a diagram. However, the starting-point is the vision of the future that the participants describe during the earlier stages. To this end, a diagram is used (see Figure 4), and the students are given guidance to complete this diagram according to the order provided by the key.

This stage of developing the project can be completed by using a mind mapping tool called Manual Thinking.2 This tool consists of a large sheet of paper, which acts as a folding whiteboard. Using removable labels in different shapes, colors and sizes, the participants can describe their ideas in writing or drawing and arrange them on the sheet in an orderly way, with the results resembling a mind map. The advantage of this tool is that it enables the participants to move the information around visually, in an orderly way, making as many changes as necessary.

At the end of the three stages, the groups present their innovations, summarizing their diagnosis, the creative process, the innovation itself, and its functionalities and planning. They can use different techniques to present their work, including video, performance, role playing and oral presentation supported by multimedia resources.

Assessment

A non-experimental, ex-post facto, descriptive model was used to assess the training experience. Quantitative and qualitative information was gathered about the students’ experiences and performance. Several tools were designed according to the assessment criteria to be used by each group involved: the teachers, and the social workers at the institutions. A survey of the students was also conducted in order to evaluate their perceptions of the experience.

The social workers who help to guide the students at the institutions assessed the experience by using a questionnaire to evaluate, awarding points on a Likert scale, to what extent the needs identified actually

corresponded to reality, whether the ideas were really innovative, whether proposals could actually be implemented and whether the actions described in the plan were consistent and feasible.

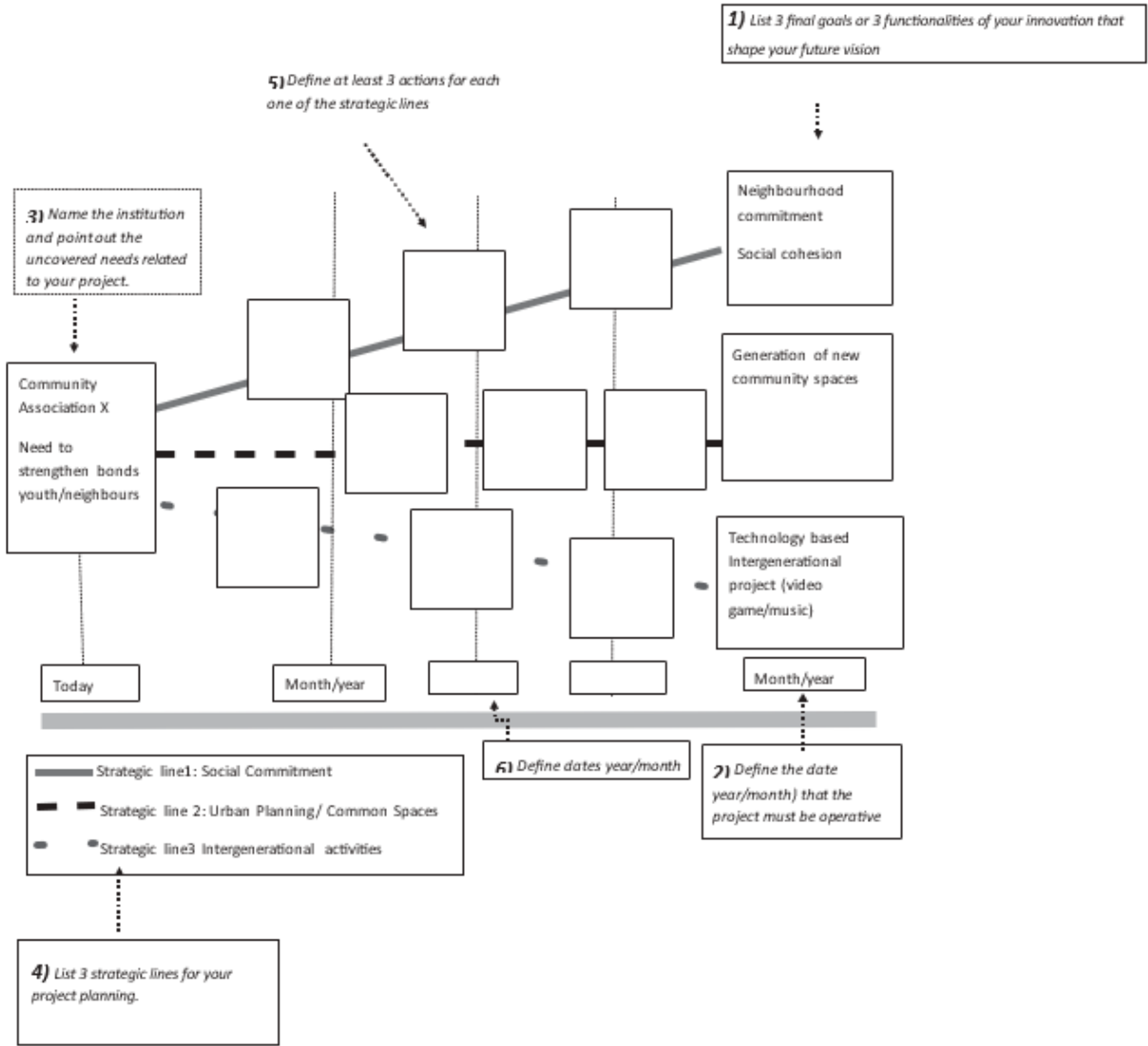


Figure 4. Planning flow diagram based on the backcasting technique (Source: The authors).

The teachers assessed the students’ work by using a rubric to evaluate whether all assignments were completed correctly and presentations successfully delivered, whether the project was useful and the innovations were easily recognizable, whether it was possible to trace the creative process consistently throughout all the tasks and whether the project was feasible and replicable.

The students evaluated the experience by completing an online questionnaire about their learning. This questionnaire, also based on a Likert scale, sought to determine how much the subject had enabled the participants to develop skills related to creative thinking, problem solving, visualizing different scenarios, understanding what social innovation is and so on. The students were also asked at which stage of the innovation process they had felt most comfortable and about their perceptions of their ability to innovate in social work. Besides quantitative evaluation, moreover, open questions were also included to enable subsequent qualitative analysis of certain aspects of the training process.

Table 1 contains a summary of the process adopted, including both training and assessment activities.

4. Results

Thirty-three studies containing proposals for innovation were submitted. Of these, fourteen were participatory and community-based in nature, focusing particularly on the fields of art and sociocultural intervention. The most outstanding among these were proposals for spaces for participation and the development of methodologies for collective creation involving various vulnerable social groups. Another six proposals submitted proposals for innovation in family intervention, focusing on the provision of shelter and improving family support methodologies. Six more papers developed ideas related to the use of technologies to support care monitoring processes or to enable communication processes between workers and users. Another five interesting studies proposed innovations for reviewing pedagogical models, such as reforming different educational services in the light of the theory of multiple intelligences. Other interesting projects centered on more inclusive participatory processes, with proposed interventions focused on the beneficiaries of care services. Finally, two projects focused on the field of health, proposing ideas for therapeutic processes and interventions to promote health among young people.

Table 1. Techniques and literature support used in each phase of the training (Source: The authors).

Sessions	Innovation process	Techniques	Literature support and resources
1-4	Conceptualization: Social Innovation, Innovation Process, Critical Review	Literature review, reading and discussions	Murray et al., 2010 Mulgan, 2007 Alonso & Rodriguez, 2011 Other references on Social Innovation
5-8	Inspiration and diagnosis	Interviews using Appreciative Inquiry Drawing and Storytelling	Cooperrider and Whitney (2001); Vogt, Brown, & Isaacs (2003). IDEO LLC, 2012. Activity Guideline
9-12	Proposals, ideas and prototyping	Golden Circle Narratives Prototypes	Sinek, 2009 IDEO LLC, 2012. Lego and other materials to construct prototypes Activity Guideline
13-14	Implementation	Backcasting	Robinson, 2003 Manual Thinking, 2012 Working Diagram (Figure 4) Activity Guideline
14-15	Final Presentations Assessment by institutions, students and teachers	Videos Oral presentationa Role-playing	Activity Guideline Assessment criteria for institutions Assessment criteria for teachers Assessment Survey for students

The assessment made by the social workers at the institutions was, generally speaking, highly positive, with an average final score of 85% (the results are presented in percentages to enable comparisons to be made between different data sources). However, the scores awarded to some projects were particularly low, surprising the students, who had expected a more positive reception for their innovative ideas. The aspects of studies that received the lowest scores concerned the potential for implementing innovations in view of the situation at the institutions. Low assessment rates did not have a direct relation to the field of the project, but rather to the kind of resources it required.

The teachers' evaluations of the projects show that the students completed their assignments in a highly satisfactory way, and that the groups became fully engaged in the dynamics of creativity proposed. Having monitored the entire creative process, the teachers gave the assignments an average score similar to that awarded by the social workers (85%).

As regards the students' opinions of the subject, 60 responded to the evaluation questionnaire (53% of the total). Of these, 91% felt that the techniques applied would be useful in professional life and 86% showed a highly positive response to the applied work of creating social innovation at an institution.

The most highly valued techniques were the Golden Circle and prototype-building, with more than 70% returning favorable opinions. As regards the competencies involved, 80% stated that they had improved their creative thinking and 60% that they believed they had developed their problem-solving skills.

Turning now to assessment of the different stages, the levels of satisfaction of process were: 87.4% at the inspiration and diagnosis stage; 88% at the proposal and prototypes stage; and 88.8% at the implementation planning stage, though, at the third stage, lack of available time limited the possibility of reaching the desired levels of completion. The most highly appreciated aspect was the promotion of exchanges between participants, with a 97.7% satisfaction rate.

With regard to qualitative assessments, the most highly rated elements included experimentation, creativity and the possibility of transferring learning to real life. The students particularly valued the opportunity to experiment with methods and combine them creatively. Some participants stated their intention to continue implementing the steps toward bringing their ideas to fruition, while others decided to develop their projects in their final dissertations.

The students also shared a particularly positive appreciation of techniques that involved handling objects or materials. In this respect, they rated the prototypebuilding stage especially highly. The initial difficulty of translating the social projects they had conceived into objects or mechanisms, given that the connection with them was more conceptual or metaphorical than real, finally proved a powerful source of innovation for the design of proposals.

Another interesting point is the importance of reasons for innovation, apart from their practical implementation. 'If you know why, you find how', was one of the sayings most repeated among the students, who also rated the Golden Circle technique very highly.

According to the teachers' assessments, the strong points in the learning include particularly: the participants' motivation to design innovative interventions; their mastery of the different techniques; the solution-based approach adopted; and the generation of new ideas for interventions. The techniques used generated discussion, participation and engagement among all participants, and helped to maintain or improve the work environment and relations in the groups.

As regards limitations, critical aspects and so on, although these opinions were not generally expressed, some participants had hoped that the innovations would be generated more by the experience of the educators than by the work of the groups. From this standpoint, it was believed that the teachers should have given more direction (even though this might, at times, come into conflict with the logic of the innovation).

Moreover, the teaching team noted that some of the proposals for innovation presented did not suggest significant medium- or long-term advances in resolving the social problem that they were designed to address. Rather they were limited to responding to a one-off demand for social intervention.

5. Discussion, limitations and conclusions

The goal of the training experience assessed was three-fold: to improve students' competencies for innovation; to generate potentially useful innovative ideas for social organizations or the community; and to train future social workers in participatory methodologies that they can include in their toolboxes for professional intervention.

Generally speaking, the results confirm the positive impact of the methods used as regards teaching competencies related to creative thinking and changes in perspective that enable the design of new responses to social needs. However, the second goal was achieved only partially. There is no evidence that the innovations proposed by the students are being implemented in projects by the partner organizations.

Regarding the third goal, the students valued positively the use of participatory methodologies in the training process, although follow-up will later be needed to confirm whether they transfer the methods and techniques used to their future professional practice.

The educational proposal studied here includes pedagogical criteria that produce valuable results and could be used training generally for training social workers in other contexts. This claim appears to be supported by the experience of the teaching team in applying similar training methods with workers and groups of elderly people in the community. The following four pedagogical criteria are particularly important:

- The systematic practice focused on the process of creating new responses to a particular social challenge, helping to demonstrate that inspiration or the ability to generate change is closely linked to professional competencies and includes technical or methodological components that can be practiced and learned.
- The ability to make sense of the professional activities has as much value in training social workers as is mastering certain techniques for generating ideas or planning professional activities based on them, and vice versa.

- In a world dominated by virtual relationships, direct, tangible experience continues, nevertheless, to be an important ingredient in learning processes. In the experience studied, this is true in at least in two specific aspects. The first is the direct interaction with people and organizations in the community. The second is the work with prototypes, handling objects. The students mention both activities as key elements in the learning process.
- Appropriate pedagogical management of limits or errors can help students to discover the realism that is necessary in professional practice, and can be a source of improvement in learning processes, enabling them to successfully overcome challenges that require social transformation processes. Many of the students' proposals were evaluated negatively with regard to their potential for implementation or generalization. This critical aspect of evaluation was useful in helping the students to understand how limitations can be seen as conditioning factors in innovation, but it was also valuable for increasing their capacity for anticipation and to generate alternatives. No doubt a more participatory model, including social workers and beneficiaries in the innovation design process, would have helped them to make adjustments to increase the possibilities of implementing their projects.

Both the training experience studied and the method used are subject to certain limitations:

- The training ends with a planning exercise based on the backcasting technique, and does not advance into the implementation stages of the actions designed. As mentioned previously, the training framework does not enable participants to complete and oversee any project implementation processes that might take place in final stages of the training. This limitation is due to the insufficient number of sessions and the format of the subject, which does not allow for monitoring implementation. Moreover, some of the projects submitted were fully developed in end-of-degree dissertations. As we can see, then, the training enables participants to design an end-of-degree preliminary project, but this is an aspect that depends more on the student's decision than on the design of the subject itself.
- Another important aspect that requires improvement is achieving greater involvement by social work professionals, who should go beyond their participation in evaluation to assist with the design of the innovations. The points of view of beneficiaries should also be taken into account at the inspiration, diagnosis and design stages. The students learn, in theory, that social innovation requires the effective participation of members of the community. However, the role that these play in the training experience is mediated by workers at the participating organizations. Experience suggests a future line of action: the creation of hybrid training environments in which students, social workers and members of the community share learnings and real innovation projects that respond to social needs.
- Some projects, though interesting, were not particularly innovative, but rather reproduced the logic behind current interventions and did not suggest solutions to problems that are currently contributing to the collapse of certain social action services and programmes.
- Limitations also exist regarding the mechanism used to evaluate the training experience. The introduction of ex-ante evaluation, gathering preliminary information on such aspects as the students' expectations, creativity and capacity to generate new responses to certain social challenges, would have enabled more reliable results on the impact of the subject in improving innovation competencies to have been obtained. Greater uniformity among the evaluation tools used with the three groups involved (students, teaching staff and social workers) would also make their respective assessments easier to compare.

Finally, as noted at the start of this paper, the diversity of opinions regarding the meaning of social innovation can also be extended to social work training processes. There is a risk of confusing social innovation with creative ability or process management and planning, or with the use of certain technologies to address societal problems. Training real agents of change, workers capable of generating systemic transformations that have palpable impact on the lives of beneficiaries and contribute to building fairer, more inclusive societies, requires much more than learning how to generate new ideas and plan their implementation. However, this type of learning, which is sometimes explored to greater depth in other professional fields, can also provide an appropriate ingredient to add to social workers' toolbox of competencies. From this perspective, the methodology used in this teaching experience and the techniques tested constitute a contribution to promoting and enhancing critical social innovation competencies among social work students.

Notes

1. There are in Spain two professions engaged in what can be identified as what is called 'social work' in other countries: social work and social education. Since, in other international contexts, the two professions are merged into the same training and professional framework, we shall use the term 'social work' as a general way of describing the profile of all participants.
2. © 2012 Manual Thinking. Luki Huber SL Manual. Thinking Studio. Barcelona.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This paper was produced with support from 'la Caixa' Foundation under Grant no. [2017-URLIR2Q-014.].

Notes on contributors

Dr M. Tereza Leal Cavalcante is a lecturer of social work and social education at Facultat d'Educació Social i Treball Social Pere Tarrés - Universitat Ramon Llull (Barcelona, Spain). She is member of the Research Group on Innovation and Social Analysis (GIAS). Her contributions as a teacher and researcher are focused on social innovation, public Health, intervention models, technologies and professional techniques for Social Inclusion.

Dr. Paco López Jiménez is a lecturer of social work and social education at Facultat d'Educació Social i Treball Social Pere Tarrés - Universitat Ramon Llull (Barcelona, Spain). He is member of the Research Group on Innovation and Social Analysis (GIAS). His contributions as a teacher and researcher are focused on the social and emotional competencies of social and educational intervention professionals and on the applied aspects of psycho-pedagogical counselling, particularly in everything related with health education, resilience and facing of critical situations by professionals.

Dr. Lisette Navarro-Segura is a lecturer of social work and social education at Facultat d'Educació Social i Treball Social Pere Tarrés - Universitat Ramon Llull (Barcelona, Spain). She is member of the Research Group on Innovation and Social Analysis (GIAS). She is a social educator, pedagogue and coach. Her contributions as a teacher and researcher are focused on the social and emotional competencies of social and educational intervention professionals and didactics in university settings.

References

- Alden, B., Armellini, A., Maxwell, R., Allen, S., & Durkin, C. (2015). Social innovation education: Towards a framework for learning design. *Higher Education, Skills and Work-Based Learning*, 5 (4), 383–400.
- Alonso, L., & Fernández, C. (2011). La innovación social y el nuevo discurso del management: limitaciones y alternativas [Social innovation and the new management discourse]. *ARBOR Ciencia, Pensamiento Y Cultura*, 187(752), 1133–1145.
- Campos, L. (2010). El aprendizaje servicio en la universidad como propuesta pedagógica [Service learning at university as a pedagogical proposal]. In Martínez (Ed.), *Aprendizaje servicio y responsabilidad social de las universidades* (pp. 81–92). Barcelona: Ediciones Octaedro.
- Caride, J. A. (2003). Teories, models i paradigmes en pedagogia-educació social [Theories, models and paradigms in pedagogy-social education]. In Planella, J. & Vilar, J. (Ed.), *L'educació social: Projectes, perspectives i camins* (pp. 47–72). Barcelona: Pleniluni.
- Cooperrider, D. L., & Whitney, D. (2001). A positive revolution in change: Appreciative inquiry. *Public Administration Andpublic Policy*, 87, 611–630.
- Edwards-Schachter, M., & Wallace, M. L. (2017). 'Shaken, but not stirred': Sixty years of defining social innovation. *Technological Forecasting and Social Change*, 119, 64–79.
- Gimeno, J. (1987). *Teoría de la enseñanza y desarrollo del currículo* [Theory of schooling and curriculum development]. Madrid: Anaya.
- Holmberg, J., & Robert, K. H. (2000). Backcasting — A framework for strategic planning. *International Journal of Sustainable Development & World Ecology*, 7(4), 291–308.
- IDEO LLC. (2012). Design thinking for educators toolkit. Retrieved from <http://designthinkingfor educators.com/>
- Mulgan, G. (2007). Social innovation: what it is, why it matters and how it can be accelerated. Retrieved from <https://youngfoundation.org/publications/social-innovation-what-it-is-why-itmatters-how-it-can-be-accelerated/>
- Murray, R., Caulier-Grice, J., & Mulgan, G. (2010). The open book of social innovation. Retrieved from <https://youngfoundation.org/publications/the-open-book-of-social-innovation/>
- Nandan, M., London, M., & Bent-Goodley, T. (2015). Social workers as social change agents: Social innovation, social intrapreneurship, and social entrepreneurship. *Human Service Organizations: Management, Leadership & Governance*, 39(1), 38–56.

- Puig, J. M., Gijón, M., Martín, X., & Rubio, L. (2011). Aprendizaje-servicio y educación para la ciudadanía [Service learning and citizenship education]. *Revista De Educación*, 45–67.
- Riberas, G., & Vilar, J. (2014). La praxis reflexiva: Un reto para la educación social [The reflexive praxis: A challenge for social education]. *Revista Edetania. Estudios Y Propuestas Socioeducativas*, 45, 129–142.
- Robinson, J. (2003). Future subjunctive: Backcasting as social learning. *Futures*, 35(8), 839–856.
- Sáez, J. (1997). La construcción de la pedagogía social: Algunas vías de aproximación [The construction of social pedagogy: Some approximations]. In Carreras, J.S. (Ed.), *Pedagogía social* (pp. 40–67). Barcelona: Ariel.
- Sinek, S. (2009). *Start with why. How great leaders inspire everyone to take action*. London: Penguin Books.
- Úcar, X. (2006). El porqué y el para qué de la pedagogía social [The why and for what of social pedagogy]. In Planella, J. & Vilar, J. (Ed.), *La pedagogía social en la sociedad de la información* (pp. 233–270). Barcelona: Editorial UOC.
- Vogt, E. E., Brown, J., & Isaacs, D. (2003). *The art of powerful questions: Catalysing insight, innovation and action*. California: Whole Systems Association.