Teaching Social Entrepreneurship in Higher Education: Active Pedagogy in a Deweyan Perspective

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Abstract

Social entrepreneurship education has achieved academic recognition as a subject matter and field of research. However, there is no consensus about how this subject should be taught. The paper explores the potential of active pedagogy for social entrepreneurship education, presenting a Deweyan perspective focused on reflection and ownership of learning. It draws on a three-year interinstitutional project that aimed at disseminating active pedagogy among in-service teachers in Latin America, and it presents the case of a Brazilian university, where the project was implemented. Findings show that reflecting on concrete cases regarding local social issues triggered students' empathy and fostered proactive attitudes. By using reflection-based active pedagogy, participant teachers developed a higher level of awareness about their need for constant self-assessment. The paper concludes that social entrepreneurship education can benefit from a stronger focus on empowerment, as a first step for social change.

Keywords: social entrepreneurship; active pedagogy; higher education; Dewey; Brazil.

Introduction

With a long trajectory starting in 1945 at Harvard University, entrepreneurship education has achieved academic recognition as a field of study (Mwasalwiba 2010), as a policy tool in many countries (Rae et al. 2014) and as a subject matter with potential to contribute to local community growth (Bravo 2016; Steiner et al. 2018). However, due to a very broad range of objectives, learning goals and teaching methods, there is no consensus about how this subject should be taught (Alberti et al. 2004; Bennett 2006).

The objective of this study is to contribute to this discussion by presenting a Deweyan perspective on active pedagogy, which sees reflection as the core element of social entrepreneurship education.

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Literature has broadly mentioned 'active pedagogy' as salient element to foster students' entrepreneurial attitude (Olokundun et al. 2018), entrepreneurial intention (Mukesh et al. 2019), and ability to perform their tasks outside the limits of what is taught in formal courses (Kember and Leung 2005). As entrepreneurial learning is related to real-time problems and requires a pragmatic approach (Neck et al. 2014), active pedagogy is generally understood as a tool to enhance not only students' active participation in learning but also actual concrete behaviours for societal change (Mello 2019).

Research has shown that active and problem-oriented teaching methods have an impact on students' reasoning skills and deeper understanding (Ball and Pelco 2006; Zaring et al. 2021), dialogic communicational processes (Robertson 2018) and motivational dynamics (Pischetola and Heinsfeld 2018). Not only active pedagogy contributes to the reorganization of classroom spaces (Park and Choi 2014), but also it fosters attitudes such as entrepreneurial self-efficacy and intention (Mukesh et al. 2020).

Despite the extensive and growing body of studies in higher education supporting active pedagogy, research has rarely examined it in a critical way (Dall'Alba and Bengtsen 2019). Based mainly on constructivist models, active pedagogy is often seen as a range of techniques that engage students in the learning process (Prince 2004) or aim in a generic way 'to get them actively involved' (Keyser 2000). Most constructivist studies underline the collaborative aspects of active learning in peer and small-group activities (Felder ad Brent 2009) and propose efficient taxonomies to align teaching with learning outcomes (Biggs and Tang 2011). A critical perspective would show that an increasing focus on engagement and student-centered activities can lead to empty active pedagogy of its main element, reflection.

John Dewey (1910, 1938) used to describe reflection as the very dawn of learning and several studies are drawing on this consideration when analysing active pedagogy. Pischetola and Miranda (2019) alert for a reductive use of active pedagogy as a one-size-fits all tool, which fails to reflect on the uniqueness and complexity of a situated educational context. Viteritti and Landriscina (2016) stress that teaching should not be turned into 'performing', as teachers might experience vulnerability in pedagogical choices that require risk-taking. In the same line of thought, Kember and Wong (2000) notice that the label 'active' has been often associated with 'innovative' as opposed to a 'passive' attitude of students towards learning. However, the authors highlight, traditional teaching not always overlaps with transmissive teaching. Whenever the teacher is capable to keep students' attention and interest alive, lecture-based teaching could also be

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considered an active form of pedagogy and turn into a form of 'storytelling' (Pischetola and Miranda 2019). Based on these insights, it can be valuable for social entrepreneurship to centre active pedagogy around the key concept of 'reflection' proposed by Dewey (1910).

In a Deweyan perspective, not every experience produces learning and "there is no education when ideas and knowledge are not translated into emotion, interest, and volition" (Dewey 1938, 189). Thus, active pedagogy should focus on meaningful experience, that is, an experience that is able to spark among students a reflection about 'being enterprising' (Pepin 2012). According to Pepin (2018), this entails for students not only acquiring knowledge in entrepreneurship and developing specific skills, but also evolving in terms of personal 'entrepreneurial' characteristics for life in general.

Once defined this theoretical standpoint, and with the purpose to contribute to the overall investigation about how to teach social entrepreneurship effectively, the study addresses the following question:

> *RQ What can reflection-based active pedagogy achieve in social entrepreneurship education?*

The article presents empirical evidence from a case study of a Brazilian university, which was part of an international and interinstitutional project named *Students 4 Change*, between 2016 and 2019. The project was funded by the European Erasmus+ framework and aimed at implementing and disseminating active pedagogy to teach social entrepreneurship education in ten universities of Latin America. By focusing on specific activities that triggered reflection in students, the study analyses what are the outcomes of working with active pedagogy in a Deweyan perspective.

Active pedagogy in a Deweyan perspective

A wide range of educational philosophies, with different and sometimes contrasting beliefs (Pischetola 2020), can be adopted by teachers to underpin the pedagogy undertaken in entrepreneurship education (Bell 2021). The theoretical stands of any pedagogical practice should always become explicit to the teachers, in order to seek coherence with their pedagogical purposes and related activities (Kakouris and Morselli 2020). In light of this, this section of the paper will present a philosophical underpinning

of active pedagogy rooted in pragmatism, and specifically in the work of John Dewey. In the theoretical systematisation proposed by Bell (2021), this perspective would be included within the category of 'humanism'.

Dewey (1910) theorised that the learning process occurs through discovery, thereby valuing emotions, the body and movement as essential elements of active learning. Dewey's thinking is based on the conception of experience as the relationship between man and the environment, under which man is not a passive spectator, but rather interacts with his surroundings. According to the author, individuals' thinking is born out of meaningful experience, so education must pave the way for new occurrences and strengthen the relationship between curriculum content and everyday life (Dewey 1938). Based on this perspective, the acquisition of knowledge starts with a problem, leads to a reflection that raises queries and encourages investigation, the objective of which is to answer, at least partially, the initial questions. Several scholars build a model of active pedagogy for social entrepreneurship around the Deweyan framework.

Pischetola and Martins (2019) draw a model in three steps, which constitutes the backbone of active pedagogy for social entrepreneurship education, and which refers to the Deweyan theoretical frame. The first step is a presentation of a theoretical or practical problem, which aims to engage students in a discussion. It is particularly useful to use concrete social phenomena that seek a collective construction of solutions, which translate into 'generative learning' (Osborne and Wittrock 1985). The subject learns to the extent that he or she is able to associate a learned concept with a previous experience and based on association. As an example of this learning process, Savery (2006) cites the Business Model Canvas (or BMC), which has established itself over the last few years as a support strategy in the classroom, leading to most entrepreneurship teachers adopting it in detriment or in addition to the traditional Business Plan. The initial challenge gives students the chance to learn not only about the project that is being developed, but also about the group process and about managing differences in opinions, expectations, and engagement.

Subsequently, time is dedicated to individual reflection on the proposed problem. This second stage aims to encourage critical thinking and open new paths of personal investigation (Grant and Zeichner 1984). Together or after this, active pedagogy always provides for a moment of dialogue between peers, to share ideas for the fulfilment of the task and the expansion of individual knowledge. In social entrepreneurship education, the transformation of the way of thinking occurs mainly due to an actual impossibility of

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predicting the future, which made the movement towards active pedagogy consider a new factor: that learning depends on an iterative process, in constant dialogue with the real world (Blank 2013).

Lastly, the activity reaches a stage in which proposals to solve the initial problem are presented to the community. The educational context becomes a space for co-creation and shared ideas, which overflow out of the classroom, in the real world, where the hypotheses included in the business model will be validated. It is assumed that, in this final stage, students have managed to develop a certain degree of autonomy, to continue in their individual research process on the subject, with new questions and queries.

Neck, Greene and Brush (2014) propose that entrepreneurship education can be divided into five practices: (1) play; (2) empathy; (3) experimentation; (4) creation; and (5) reflection. They argue that entrepreneurship should not be considered as a linear process with a beginning, middle and end, but as a method, a way of thinking and acting. The possibility of playing allows for questioning reality, thereby stimulating the generation of innovative ideas, and the possibility of assuming that everything can be transformed and recreated. Empathy is necessary to the extent that every enterprise is built for a specific audience. Understanding the audience's view is essential for the business proposal to create a solution that meets demands and solves specific needs. The possibility of experimenting allows to test, validate and improve what has been created. Lastly, as the central practice that permeates all others, reflection is what ensures constant learning throughout the course of action.

In his model of 'learning to be enterprising', Pepin (2018) stresses that reflection can be found at each stage of entrepreneurial actions: planning, implementing, and assessment. The purpose of reflection is different at each level, but this aspect permeates the whole learning process. Explicitly referring to Dewey, the author considers the initial step in entrepreneurship education as an 'impulse' (or pre-action reflection) that moves a person or a social group to action. The second step is implementation: here, reflection-in-action consists mainly in a process of 'inquiry' about obstacles, problems, and opportunities that the experimental activity is proposing. Finally, 'taking a look back' is what allows students to draw conclusions and assess the whole process. However, Pepin underlines that in Deweyan terms post-action reflection is not an ending of the learning experience. On the contrary, it is a new start for a future impulse to action, as "being enterprising is closely bound up with action" (Pepin 2012, 810).

Trying to consider the contributions of the authors mentioned in this section, we propose a visual summary of the elements that constitute an effective pragmatist model for active pedagogy in social entrepreneurship education (see Figure 1).
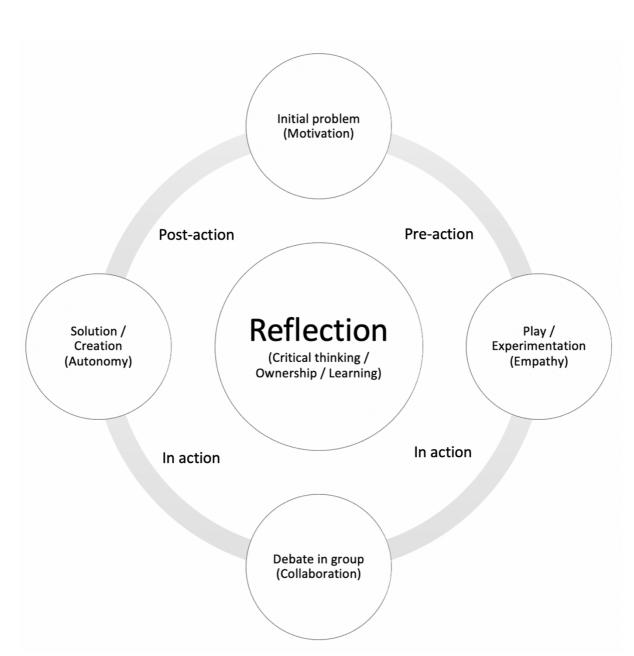
Figure 1. A reflection-based model for active pedagogy in social entrepreneurship education

Initial problem
(Motivation)

Post-action

Pre-action

Solution /
Creation
(Autonomy)

Reflection
(Critical thinking /
Ownership / Learning)

Play /
Experimentation
(Empathy)

In action

In action

Debate in group
(Collaboration)

It is crucial to underline that reflection, which is at the core of the model, is constantly related and entangled with all the activities that are proposed around it. This is a way to summarise the Deweyan solution to solve the tension between material, practical, and

concrete experience on one side, and reflection on the other. He considered *non-reflective* experience based on habits as the most common kind of human experience of the world. The reflective experience "grows out from inadequacy and contradictions of the habitual experience and ways of action" (Miettinen 2000, 61). In this sense, this article takes distance from Kolb's (1984) model of 'experiential learning', as Dewey points out that not every experience is a vehicle for learning. This is also a way of not devaluing active pedagogy methods to mere tools or techniques for students' engagement. Dall'Alba and Bengtsen (2019) stress that it is always important to plan *about what matters* students are to be active, and *to what end*. These allows us for teaching beyond learning outcomes and towards an 'ownership of learning' (Niemi 2002). Not only the student is at the center of the learning process, actively engaging in problem solving, but he/she is also finding the process of learning *meaningful*. This subjective element of purpose is what can change the focus of active pedagogy and its use in social entrepreneurship education. If students assume the responsibility of an attitude that is meant to generate the growth of a community, it is of crucial importance that they feel the ownership of learning.

Social entrepreneurship education in Brazil

For the purposes of this article, social entrepreneurship will be understood as an initiative with the imperative to drive social change, transforming society in a positive and lasting way (Martin and Osberg 2007). According to this definition, social entrepreneurs focus on an underserved, neglected or disadvantaged population that, for some reason, does not have resources to drive transformation on their own, and/or create direct and sustain change into a new equilibrium. Social entrepreneurship can be considered as a transversal competency, that is, not exclusive to a specific disciplinary field (García-González and Ramírez-Montoya 2020). In this sense, it can be seen as a meta-competency characterised by both cognitive and attitude competencies (Lackéus 2015) which vary according to the local context and situation (Austin et al. 2006).

In Brazil, the adoption of active pedagogy in social entrepreneurship education is still happening gradually (Mello 2019). In 2012, at one of the main national entrepreneurship education events, the *Rodada de Educação Empreendedora*, with participants from a wide range of public and private universities, it was possible to notice that most of the entrepreneurship programmes at universities were still restricted to the preparation of business plans, cases, and visiting small businesses (Melhado and Miller 2012). In 2016,

research by Endeavor found that most universities still had limited offer of entrepreneurship programs as a career option and only 6% of the offered courses helped students build on their own business idea.

Adding the teaching methods to the equation, Schaefer and Minello (2016) state that entrepreneurship education rarely offers an interdisciplinary view, which is truly oriented by action and experience, in a cooperative way. The authors argue that it should be a more dynamic and interactive subject matter. In the same line of thought, Silva and Pena (2017) suggest that entrepreneurship education classes in Brazilian universities should increase their focus on challenging students through practical activities, enabling real life experience, making them experience the 'reality of the entrepreneur'. They especially find a lack of learning activities such as visiting companies, participating in business incubators/accelerators and Junior Enterprises, playing games and simulations, and engaging in research and extension projects. The authors note that traditional lectures are the most popular method in Brazilian higher education programs and argue that teachers should be encouraged to find alternative formats for their lessons.

At the *Rodada de Educação Empreendedora* event in 2017, leaders from different universities discussed the need to make students 'act on', rather than just 'think about' social entrepreneurship. As Randall Ussery - professor at Babson College, one of the main references on the topic - said, there is an urge to innovate in education, making classes more interactive and provocative, aiming at developing socio-emotional competencies such as resilience. In this sense, universities would serve as a space that promotes social change, building connections between people.

Andrade and Torkomian (2001) suggest that entrepreneurship education needs to focus not only on opportunities of discovery and reflection, but also on developing an entrepreneurial spirit for social and cultural change. Shumar and Robinson (2019, 154) call entrepreneurship a "dynamic process of becoming", one that enables the creation of a new social world or, said otherwise, 'agency'. This progressive view of entrepreneurship understands the production of value beyond economy and can contribute not only to a definition of social innovation as worldmaking, but also to a "revitalization of universities" (Shumar and Robinson 2019, 155) with the inclusion of a transformation-oriented active pedagogy. Brazilian universities have embraced this focus on awareness for social consciousness, but still lack programs with active pedagogy promoting social innovation through practice (Oliveira et al. 2016).

The S4C project: active pedagogy in Latin America

Between 2016 and 2019, the Project Students 4 Change – Social Entrepreneurship in Academia (S4C) was funded by the European Commission under the action *Erasmus+: Capacity Building in the field of Higher Education* (CBHE). The project was among 18 projects selected within this programme to be implemented in Latin America (EACEA Report 2020). The partnership was proposed by the Instituto Tecnológico de Estudios Superiores de Monterrey (Mexico), one of the most innovative higher education institutions worldwide, and the first non-European institution to lead an intercontinental initiative under this programme (Mello 2019). The other partner institutions were five European universities – based in Germany, France, Portugal, and Spain – and nine Latin American universities – based in Mexico, Costa Rica, Brazil, Chile, and Colombia, for a total of 15 partner institutions (see Table 1 below).

Table 1. Partner institutions of the S4C project

Country	Institution
Brazil	Pontifícia Universidade Católica do Rio Grande do Sul (PUC-RS)/ Pontifícia Universidade Católica do Rio de Janeiro (PUC-Rio)
Chile	Universidad de Talca (UTalca)/ Pontifícia Universidad Católica de Valparaíso (PUCV)
Colombia	Corporación Universitaria Minuto de Dios (UNIMINUTO)/ Universidad de Caldas (UCALDAS)
Costa Rica	Universidad de Costa Rica (UCR)/ Instituto Tecnológico de Costa Rica (ITCR)
France	Université Grenoble Alpes (UGA)
Germany	Technische Universität Dortmund (TUDO)
Mexico	Universidad de Colima (UCOL)/ Instituo Tecnológico y de Estudios Superiores de Monterrey (ITESM)
Portugal	Universidade de Aveiro (UA)
Spain	Universitat Politècnica de *València (*UPV)/ Euskal Herriko Unibertsitatea (EHU)

The network of universities was built following the criteria of the Erasmus+ CBHE Programme: participant partner countries in Region 8 (Latin America) would present 'disadvantaged backgrounds and fewer opportunities compared to their peers' (EACEA Report, 2020, 4). European partners were selected based on intra-regional or cross-

regional cooperation previously established with countries in Latin America and a strong focus on international cooperation. All the academics involved at European higher education institutions mastered either Spanish or Portuguese language, which has facilitated the exchange along the three years of the project. The main objective of this collaboration was to foster 'peer-to-peer knowledge transfer from Europe to the partner countries' (EACEA Report, 2020, 14). Moreover, the collaboration would seek the institutional development of higher education institutions in partner countries, the modernisation of their curricula and study programmes, and the strengthening of academic capacities in teaching.

Based on these general objectives, joint and strategic actions were organized so that all the consortium partners had to develop Work Packages in pairs (a European partner was always paired with a Latin American partner), aiming at:

(1) Preparing a monitoring and evaluation model for the development of social entrepreneurship skills in academic curricula.

(2) Developing and implementing institutional processes aimed at academic promotion of social entrepreneurship at participant universities.

(3) Strengthening relations with the social incubators at the universities where they are present, thereby increasing their relationship with the curricular programmes.

(4) Building partnerships between Latin American and European universities that seek to promote strategies to improve social entrepreneurship education.

The project was implemented in four phases, which will be described below.

Phase 1 – Students' competencies definition

In the first year of the project, the teams from the 15 partner universities came together to define the core elements of entrepreneurial competencies for social innovation, to be developed by students at each involved institution. The project targeted undergraduate students as potential actors who can make a difference in their social contexts, when encouraged and motivated in their classes to carry out innovative micro-actions of social change in their own local community. Three clusters of competencies were defined as crucial for social entrepreneurship: organizational, behavioral, and functional competencies. The following phases of the project aimed at achieving the development of these competencies among the students of Latin America.

Phase 2 – Teachers' professional development

In the second year, the project focused on in-service teachers, who were perceived as the first and main lever for social change in the university context. Active pedagogy was introduced within a vast range of subjects taught in the ten Latin American participant universities, which were broadly related to entrepreneurship education (e.g. group management, leadership and organization, social work, etc.). Each university selected five in-service teachers, based on their interest in knowing and learning about a portfolio of resources designed to promote and support changes in the curricula of their courses.

In the first half of 2018, 50 in-service teachers attended a blended training course, designed to include 8 online sessions and a one-week face-to-face workshop held in Brazil, for a total of 45 hours. The online sessions were conducted via asynchronous webinars and recorded lessons including presentations, discussions, and interviews about a specific topic. For each session, relevant material was developed by a different participant institution, building on outputs delivered in previous Work Packages (e.g. state of the art, social innovation cases, competencies toolkit). An important part of this professional development course was the idea that all universities should bring an analysis of ongoing social entrepreneurship projects. This information would be a starting point for active pedagogy addressed along the course, with the purpose to work with concrete examples from Latin America. Table 2 below shows a general overview of the course structure, contents, and supporting materials.

Table 2. Overview of teachers' professional development course content.

Session	Content description	Supporting material + providing institution
1	Overview of S4C objectives, partners' network, context, and priorities. S4C view on innovative curricula for Social entrepreneurship education (SEE), and the role of HE Teachers. Overview of S4C Teachers Training/Qualification, rationale, objectives, format, roles and responsibilities.	• Session webinar/stream record • Project description (pdf or slides presentation) • Teachers' Training course description (pdf or slides presentation) **(ITSM)** • Description of course timeline and supporting platform (pdf or slides presentation) **(UA + PUCV)**
2	Shared view on SEE in the context of S4C. Inspirational testimony of SEE impact/change in society.	• Session webinar/stream record • S4C Handbook State of the Art & **(UA)** • Cases in SEE and materials useful for this course **(UA)**

3	Role and competencies of HE Teachers to promote SEE. Understanding local contexts and assessing HE students' competencies for SEE.	• Session webinar/stream record • Description of scale for assessment of students' competencies for SEE (pdf or slides presentation) **(UA)** • Online form for assessment of students' competences for SEE **(UA)** • Students' Testimony **(PUCRS + UCaldas)**
4	Tools and methods for active learning and for promoting SEE (Toolkit).	• Session webinar/stream record • Description of Toolkit for active learning and Social entrepreneurship education **(UPV/EHU + PUC-Rio)**
5	Practices and experiences with active learning tools (Toolkit).	• Session webinar/stream record) **(UPV/EHU)** • Application of an online form for Toolkit selection features **(UA)**
6	Innovative syllabus for promoting SEE. Presentation of an innovative existing course.	• Session webinar/stream record • Description and examples of innovative curricula for the development of SEE (pdf or slides presentation) **(UTalca)** • Online form for description of innovative course curricula to the filled by participants **(UTalca)** • Course presentation "Mujeres Construyendo un futuro mejor" **(UCR)**
7	Presentation of an active learning lesson and tools relevant for participants to use in their real context.	• Demonstration of a real lesson being taught with active learning methodology **(UA)**
8	Overview of results from the assessments of competence priorities for SEE in participant contexts and the Toolkit selection.	• Session webinar/stream record • Presentation of results from the assessment of competence priorities for SEE in participants context and Toolkit selection **(UA + PUCV)**

The first two encounters with teachers were introductory of the S4C project and its main purposes. The third session was specifically focused on the role of students' reflection in the active pedagogy process proposed in the project. Teachers should consider what kinds of challenges and obstacles could be faced in the implementation of active pedagogy in the context of their teaching. From the fourth to the seventh session, teachers were offered an overview of the tools that they could use in their teaching, and invited to reflect on their real context, to adapt these tools to their needs. Finally, in the eight session a model for assessment was presented, based on the competencies that the project wanted to achieve.

Phase 3 – Pilot courses at each university in Latin America

In the second semester of 2018, which runs from August to December in the southern hemisphere, the 50 in-service teachers who had previously participated to the professional development course implemented active pedagogy in their courses. A monitoring committee was established by the leading institution of the S4C project, to hold observation in classes, interviews with participant teachers, and focus groups with students.

Phase 4 – Students' and teachers' final meeting

Finally, undergraduate students from pilot courses were selected at each Latin American university to participate in the final event of the project, which was held in Bogotá in April 2019. In this occasion, the students presented posters with their ideas for social innovation with the purpose to discuss common challenges and possible solutions from Brazil, Colombia, Mexico, and Chile. Two academics from each of the 15 universities also participated at the meeting, discussing ideas for future projects and new collaborations.

Case study: S4C in a Brazilian university

This section of the article focuses on the case of one of the partner universities where the S4C project was held between 2016 and 2019, the Brazilian university Pontifícia Universidade Católica do Rio de Janeiro (PUC-Rio). Evidence is presented from *Phase 3* and *Phase 4* of the project, described above: active pedagogy implementation in pilot courses, and final meeting in Bogotá. In *Phase 3,* four participant teachers applied active pedagogy in pilot undergraduate courses at PUC-Rio (one teacher changed his affiliation after *Phase 2*). Table 3 below summarizes the four courses involved and the Departments they belonged to. A total of 140 (95 female, 45 male) undergraduate students were involved in these pilot courses.

Table 3. Pilot courses participating in the S4C project at PUC-Rio.

Subject	Department
Social planning and social entrepreneurship projects	Business Administration
Entrepreneur attitude and behavior	Psychology
Project development	Arts and Design
Group management	Education

In *Phase 4*, four students and one teacher from PUC-Rio participated to the last event in Bogotá, presenting their posters with the outcomes of the S4C project.

Research design and methods

In *Phase 3*, during the implementation of active pedagogy in pilot courses, two monitoring visitors from a Chilean partner institution in the S4C completed the assessment and evaluation of the project at PUC-Rio through semi-structured interviews with the four teachers of the pilot courses and focus groups with students (one focus group with five participants at each pilot course). Participant students were selected based on their interest and availability to discuss active pedagogy with the two visitors. The focus groups were held at the Instituto Genesis, the social projects incubator at PUC-Rio, during or after the regular class with the respective teachers. Ethical clearance was guaranteed by the monitoring visitors beforehand, and all the participants were informed about the purposes of data collection and data storage through a written document to be signed. In the final report of the project, teachers and students' data was anonymised.

The script of the interview with teachers comprised three questions/topics: (1) What changes are you experiencing in your teaching with the introduction of active pedagogy? (2) What are the main achievements of the S4C project? (3) How will you give continuity to the S4C proposal of working with active pedagogy after the project ends?

The focus group was organised in a similar way, following three topics of discussion: (1) What are the main learning outcomes from the use of active pedagogy? (2) Among the teaching strategies applied along the course, which one(s) you consider more effective? (3) What changes are you experiencing in your learning process?

This set of data was collected with the sole purpose to compile an official report of the S4C project for the European Commission about the effectiveness of the project

implementation in the participant universities. The focus of the questions and topics of discussion is mostly on teaching and learning transformation, which was expected to follow the introduction of active pedagogy in pilot courses. The final report presented to the European Commission underlined benefits and challenges related to the introduction of active pedagogy in social entrepreneurship education, with a close-up on students' attitudes and achievements.

The research presented here constitutes a separated qualitative study elaborated by the authors of this paper, based on the available collected data of interviews and focus groups, complemented by the analysis of the following documents:

1. Pilot courses teaching plans, based on the S4C theoretical framework and definitions.
2. Self-assessment reports produced by in-service participant teachers along the final year of the project and delivered to the central administration at the Instituto Tecnológico de Monterrey.
3. Posters created by students of the four pilot courses and presented at the final event.

This study explores how active pedagogy can be a trigger for reflection in students' learning process. It pursues the broader scope of understanding what a reflection-based active pedagogy can achieve in social entrepreneurship education. For this purpose, interviews and focus groups were coded by using concepts of Deweyan philosophy of education and the above-mentioned literature on the uses of reflection in social entrepreneurship. Moreover, to ensure an iterative process of analysis, data reorganisation and representation occurred in overlapping phases (Roulston 2014). Ravitch and Carl (2016) stress that an iterative and recursive process of data analysis enhances a critical approach to the corpus of data. Their suggestion is to approach data analysis in a structured yet fluid way, to assure a stronger connection between data collection, analysis, and findings. The authors also remind us that in qualitative analysis, subjectivity is deeply embedded in data collection and interpretation. Available collected data was interpreted considering its bias, given the fact that interviews and focus groups were held by monitoring visitors, with different perspectives and goals in mind than the ones presented in this paper.

Cohen and collaborators (2007) stress the importance of recognising possible biases that may be presented by different purposes of the document, which were not supposed to be used in research initially. Reliability is an important aspect, which depends on several characteristics of the document: authenticity, credibility, representativeness and meaning (Scott 1990). To guarantee this last aspect, and in the effort to offer an integrative

approach to data triangulation (Ravitch and Carl 2016), the four course plans and self-assessment reports were categorised independently by the two authors of this paper, and later compared in a further collaborative analysis. To ensure intercoder reliability, the two researchers agreed on categories of analysis based on the reviewed literature about reflection-based active pedagogy in social entrepreneurship:

- Reflection as a method (Neck et al. 2014)
- Reflection as an aspect that permeates the whole learning process (Pepin, 2018)
- Reflection as the achievement of a certain degree of autonomy (Pischetola and Martins 2019).

Further material data analysis was carried out following Cohen's et al. (2007) suggestions of approaching documents with a comprehensive series of questions, regarding the context, the writer, and the researchers' involvement in reading/interpreting the document. The following questions were used as a heuristic tool for such analysis: (i) What are emerging reflections among teachers and students in the unfolding of pilot courses and active pedagogy implementation? (ii) How to relate reflection with a possible transformation of teaching and learning practices? (iii) Is there coherence in these documents with what has appeared in interviews and focus groups?

Finally, images from posters were analysed through a context-sensitive interpretation and multi-layered analysis (Cohen et al. 2007), to complement the information gathered through other documents.

Findings

The four participant teachers applied extensively the active pedagogy methods that they had learned throughout the project in their pilot courses. Before the semester started, in the teacher professional development course (Phase 2 of the project), they were invited to put *reflection* at the core of their activities, as a goal to achieve with their students at every stage of the learning process. Moreover, they were asked to present a concrete case study from their field of expertise whenever starting the activity with students. The case studies chosen by teachers to trigger students' reflection regarded the following topics:

(1) The presence of homeless people in the surroundings of PUC-Rio.

(2) The social and cultural representation of minority groups in the city of Rio de Janeiro.

(3) The rights and social inclusion of people with disabilities.

(4) The high rate of drop out students in Brazilian public schools.

From these initial problems, students had the task to find possible solutions along the semester. A wide range of active pedagogy methods were used to achieve this task. A model was provided for each method in a project document called Toolbox, but teachers were free to adapt it according to their subjective ideas and interpretations. Among the 39 tools that they could find in the Toolbox, they especially used Design thinking (3 teachers), Problem tree process (3 teachers), Persona mapping (all 4 teachers), Minimum Viable Product (2 teachers), Project planning with canvas support (3 teachers), and Storytelling (2 teachers).

In the interviews, teachers were asked to define what aspects make these methods suitable to achieve the development of three clusters of competencies targeted by the project: organizational, behavioral, and functional (Aristizábal et al. 2019). Their answers below show that the application time of one semester was insufficient to evaluate a real impact in terms of competencies development.

> The project's goals are too ambitious, in my opinion. It is not realistic to measure a real *change* in competencies in one semester of a pilot course, even more so when we think that these methods are new to us (Teacher from the Dep. of Education).
>
> I mean, I can tell you that I see learning happening, yes. I do see my students reaching a more and more complex way of thinking about a topic, but this always happens in my courses, it is hard to relate such a result to these specific methods (Teacher from the Dep. of Psychology).
>
> Competencies development? Well, I don't think we can talk about competencies development in the space-time of one semester! I think it was fun, and I learned a lot, but it is difficult to measure competencies in such a rigid way (Teacher from the Dep. of Arts and Design).

On the other hand, the interviewees expressed positive evaluations of the development of students' social entrepreneurship attitudes in terms of 'becoming part of the project', and they acknowledge that the proposal to work with active pedagogy supported this process. In several moments during the interview, the teachers stressed students' proactivity and critical reflection as key elements that emerged during lessons.

> One of the most notable contributions I perceived during the development of the course was the shift of attitude of students and an improvement in their relationships and confidence. I think that access to new tools allowed the development of skills that were meaningful for their learning process. They had to take time and think to solve a problem, which was often one of complex solution. By spending time on this critical thinking, they experienced more in depth what it means to put yourself in other people's shoes (Teacher from the Dep. of Business Administration).

For the students, the most important element of change and improvement perceived during the S4C program was experiencing the sense of cooperation of the proposal and being able to carry out interventions in spaces to improve conditions of living in their community. I think that this is the most innovative proposal of this project (Teacher from the Dep. of Psychology).

Reflecting on their own change during the pilot course, teachers expressed their perception of a rather positive outcome from the S4C project in terms of integrating the proposed methods in their teaching. The principles of active pedagogy were not totally new for most of them, but before the project they were using these methods mostly to achieve students' engagement. Therefore, it was a challenge to think reflectively all along the pilot course. The fact that the teachers were somehow 'forced' to apply the learned strategies made them change and adapt their lesson plans more frequently than usual sometimes even twice weekly. This allowed for extra self-assessment and reflection by participant teachers, and two interviewees mentioned that it was an interesting process. The main challenge was to find a constant matching point between subject contents and active pedagogy focused on inquiry, during the step of reflection-in action (Pepin 2018). The following excerpt from an interview clarifies this aspect:

Being able to link theory with practice was valuable, as it allowed students to see a real model in line with the contents of our subject (…). At first when I planned the course, I thought about them [active pedagogy methods] separately, as an add-on, but then they were suddenly 'mixed' with the contents, they became kind of part of the content itself, right? That was a great learning for me, it was interesting to notice how theory and practice are…I'd say, tied together (Teacher from the Dep. of Education).

When asked about what challenges they experienced in introducing active pedagogy in their practice, teachers mentioned two elements. First, they had to adapt to new settings and unknown activities, which made them uncertain about the outcomes. For example, one teacher mentioned in the self-assessment report that during the pilot course, both she and her students were sustained by a mutually reinforcing effect of feedback and dialogue, which inspired adaptation from both sides. Second, teachers underlined a general lack of institutional support. The following excerpt shows the discomfort of one teacher.

Among the challenges that I see at our university is that teachers are overloaded with administrative tasks and find it difficult to invest their time in networking and mutual exchange with colleagues..which, I think, is very useful. We benefit greatly from talking to each other, get inspired..So far, there is too few opportunities of exchange in terms of pedagogy and teaching practices (Teacher from the Dep. of Business Administration).

All teachers in their self-assessment report stated that they wished to collaborate further with the colleagues met through the S4C project, and that this collaboration could foster a long-term interdisciplinary approach regarding social entrepreneurship education. One teacher also expressed this thought during the interview:

> I appreciated the fact that I could learn about the experience of other universities, as well as being able to discuss how other academics here at PUC work in a creative way. I think that it is important to experiment teaching with other strategies that might optimize students' performance (Teacher from the Dep. of Arts and Design).

In the focus groups, students in some ways reflected teachers' perceptions, adding new details to previously collected information. In table 4 below, a few main outcomes are presented, based on the collected data. For the purposes of this paper, two categories for analysis of students' evaluation of the pilot courses were selected: active pedagogy methods, and perceived general achievements. Among the achievements, they stress 'direct experimentation with social projects', a feeling of 'transformative capacity' and 'influence on real life', as well as a clearer understanding of what their 'role in society' can be.

Table 4. Main outcomes of focus groups with students

Pilot course	Active pedagogy methods	Perceived achievements
Social planning and social entrepreneurship projects	Students consider that teaching-learning strategies effectively manage to contribute to their training, especially strategies associated with Brainstorming, Storytelling and the Problem Tree.	Students were curious to study social entrepreneurship using different mechanisms and strategies. They value especially the **direct experimentation with social projects**; the application of contents in concrete help and cooperation with the participating institutions, and **the transformative capacity generated by the formulation of social projects**.
Entrepreneur attitude and behavior	Many different strategies were applied. Students mentioned: case studies, Mind Map, the FOFA/SWOT methodology, and Brainstorming, among others. According to the students, this type of methodologies improved the	Students report that what is important is the collaborative sense of the social entrepreneurship attitude. They consider it as an innovative proposal, which is able to **influence real life aspects that go beyond the theoretical**

	training process because it is possible to extrapolate an experience of a classroom to real life and to relate the contents to other disciplines.	**contents**. The course provided tools to face new situations, takes aspects that have to do with internal changes, which are related with achieving to work with others, to understand other people's reality.
Group management	The course is developed according to the syllabus, addressing the issues associated with managing groups and people. Theory and practices in the classroom favor the consolidation of the fields of Entrepreneurship and Social Innovation. The methodology connected the theories studied with different dynamics carried out in class.	Positive changes and improvements are seen by students in relation to the development of communication, empathy and autonomy. The mentioned aspects are development of competencies, relationship between theory and practice in an integrated way, and ability to **become aware of the roles that can be performed**.
Project Development	The teaching-learning strategies used in the subject allowed to engage and involve the students. The teacher proposed challenges to be applied not only in projects, but in activities in general. Students highlight the Client's travel map. From this exercise not only was the relevance of the final problem understood, but also all the processes that are combined in this result.	One of the main changes and improvements perceived by students was the **principle of proactively undertaking planning with listening and flexibility**. A significant aspect was the ability to **get out of the comfort zone** dealing with real challenges and the construction of a project, with awareness of its social impact.

It is interesting to notice that these aspects were also core elements in the students' posters at the end of the project. In the following image (see Figure 2), we can see the presence of keywords related to collaboration, group work, empathy, and togetherness.

Figure 2. Posters of students for the final event in Bogotá

Concrete solutions were proposed by students for the initial case studies, namely:

(1) A plan to support financial sustainability of a local NGO which works with homeless people.

(2) A fashion brand produced by local artists who belong to minority groups.

(3) A cooperation plan between volunteer students at PUC-Rio and a local NGO that is led by people with disabilities.

(4) A game-based workshop organized by PUC-Rio students in public schools to enhance pupils' motivation for learning.

At the final event in Bogotá (Phase 4), where PUC-Rio's students presented their posters, a new network was created, which generated later an initiative that students named

Innovation Hub (Mello 2019). The event allowed for the establishment of bonds and connections with other students for future projects and reported to have lived an 'experience of discovery' of the value of local community as an 'anchor to their social and cultural identity' (Mahfuz et al. 2019).

Discussion

The S4C proposal brought a challenge to both participant in-service teachers and undergraduate students of the four examined pilot courses.

On one hand, teachers had to consider the classroom from the perspective of 'entrepreneurial' students (even in subjects not explicitly related to social entrepreneurship), who are not only active in their learning process but also responsible for searching social innovation in their community. Following the idea that entrepreneurial learning works "through hands-on action" (Toding and Vanesaar 2018: 699) and understanding the role of reflection-in-action (Pepin 2018), the pilot courses became a place for trial-and-error processes along the semester. This perspective showed the value of a teaching-learning dynamic environment which comprises relationships and emerging learning patterns (Miranda and Pischetola 2020). At the end of the project, teachers' self-assessment stressed the value of reflection in a process of constant transformation, alongside the wish to further collaborate with colleagues from other Departments to pursue more interdisciplinarity in their courses. In line with Deweyan philosophical insights, these results show that constant pedagogical reflection and re-planning can also lead to an 'ownership of teaching', defined by risk-taking attitudes and acceptance of the unknown. The first takeaway of this study is teachers' higher level of awareness about their need for continuous self-assessment and openness towards new teaching strategies.

On the other hand, from the point of view of participant students, it was not possible to register a significant impact of active pedagogy in terms of technical, organisational, or functional skills. This result contradicted some of the expectations related to the project, as a strong focus on 'transformation' and 'change' was put in the interviews and focus groups. The answers given by participant teachers and students show that one semester is not enough time to build a transformation of teaching and learning processes. Applying a Deweyan lens to this finding shows that radical transformation is not to be expected in the short time of the project implementation. In fact, entrepreneurial skills and

competencies are subjected to longer process of learning *to be* enterprising (Pepin, 2018). What literature suggests is that change is a process (Alegre et al. 2017) which should not be idealised (Kimmitt and Muñoz 2018) and which has sustainability at its core (Kamaludin et al. 2021), rather than specific skills and competencies (Kocsev et al. 2009). Nevertheless, it is interesting to notice that both teachers and students mentioned a positive increase on what was clustered in the project description as 'social and behavioural competencies' (Aristizábal et al. 2019). In particular, participant students stressed the value of empathy, collaboration, togetherness – rather than leadership, decision making and organisation – as personal achievements throughout the project. They especially underlined the experience of feeling proactive towards a 'real social need', which would require 'getting out of their comfort zone'. The fact that they had to reflect on possible solutions of a defined social problem enabled them to inquire the real possibilities of implementation of such solutions. In a Deweyan perspective, such a process of inquiry can be considered a learning outcome by itself. Moreover, each inquiry can also be seen as an opportunity for a community (of students, in this case) to grow. This result is consistent with previous research on social entrepreneurship education which shows an increase in students' propensity to create communities of practice (Hockerts 2018; Steiner et al. 2018) for social innovation.

Conclusion

It is evident from this study that putting emphasis on real problems of the communities around higher education institutions, with the goal of reflecting about those, can lead to a greater understanding of the social and economic issues that society faces. In the case study presented in this paper, reflection and critical thinking eventually developed into planning of possible actions towards social issues, and the creation of new networks for future projects and research. This result shows that whenever reflection is involved in the learning process, students' engagement can be related to ownership of learning, as they wish 'to do more to work with others' or 'to understand people's reality'.

Rather than 'experiential learning' (Kolb, 1984), the study shows the unfolding of 'experimental thought' (Miettinen 2000), an intellectual exercise that relates deeply human beings with their environment (Dewey 1925), including social structures and material artefacts. In inequal and divided societies like the Brazilian reality, such an

experience can be the initial step towards a dialogue among individuals from different socio-economic backgrounds, and towards a recognition of otherness.

The most relevant result of the study is the starting transformation of students' mind-set towards a more active role in addressing social issues in the community in which they live. In a perspective that gives value to reflection, learning is a process that is capable to transform the subject, by involving feelings, emotions, and subsequent sense-making (Dewey 1925). Not every experience can provide such deep insights and, therefore, not every experience will entail learning. This conceptualisation of experience makes it relevant to distinguish between what is merely students' 'engagement' and what will become 'ownership' of such experience. Future European policies and programmes addressing capacity building in higher education should consider the relevance of a reflection-based active pedagogy, with an understanding of experience as an opportunity to nurture empathy, as a powerful tool to enhance students' empowerment (Pareja-Cano et al. 2020) and, ultimately, as a chance to develop students' greater autonomy in social entrepreneurship.

Disclosure statement

No potential conflict of interest was reported by the authors.

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