



Research paper

Service-learning in physical education teacher education: A retrospective exploratory study to examine its challenges

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ABSTRACT

This work is a qualitative retrospective exploratory study that aims to problematize service-learning to identify the challenges this pedagogical approach may entail in teacher education. Drawing on the narratives of 175 pre-service teachers and the data gathered by 14 teacher educators/researchers who have been applying service-learning (9 meetings - 608 min), we encountered six interconnected categories of findings (i.e., individual participants' dispositions, complex working conditions, pedagogy, logistics, subject, other agents), within which we identified different interconnected tensions. The findings show that service-learning is complex and challenging, and we provide some suggestions to deal with the issues it entails.

1. Introduction

Service-learning (SL) is a pedagogical approach built upon social justice and promoting inclusion (Martínez-Usarralde & Chiva-Bartoll, 2020) that seeks to develop academic and personal skills in the participating students while meeting a social need. As a result, SL programs may be a valuable component of teacher education, given that pre-service teachers engage in a hands-on experience in an area that is potentially outside their comfort zone (Chambers & Lavery, 2022).

For over a decade, the members of the Endavant research group from the Jaume I University, in eastern Spain, have worked in the field of teacher education, applying and researching SL. Research on this topic has given us a perspective regarding the impact of the programs carried out. In our analyses, we have focused on uncovering how pre-service teachers developed academic, personal, inclusive and critical thinking skills (i.e., Gil-Gómez et al., 2015; Chiva-Bartoll et al., 2020; 2021), among others. This background has even received a recent international award for promoting inclusion and equity through SL research. However, we acknowledge that there have been challenging experiences, since education is a complex scenario (Strom & Martin, 2017), and SL entails, among other issues, attending to a number of factors (Chambers & Lavery, 2022). In this sense, as teacher educators and researchers committed to fostering inclusion and social justice we were caught in a dilemma because, despite obtaining promising results, we felt that there was room for improvement in our programs. In addition, as teacher

educators/researchers, we struggled throughout the process and had to cope with a number of issues when applying SL.

There are no panaceas in education, and no pedagogical approach, including SL, can be considered a magic recipe that will be appropriate for every single learner and/or teacher. In fact, in the literature there are calls for future research to explore the problems that may arise when implementing SL in order to better understand this approach and take better decisions regarding its use (Dunbar & Yadav, 2022; Salam et al., 2019). Consequently, as many teacher educators before us, who have interrogated and problematized teacher education practice (Flory & Walton-Fisette, 2015; North, 2017; Ovens, 2014), we decided to research our teaching. This investigation, thus, aspires to transform our SL practices to make them more impactful, sustainable, just and inclusive. Identifying the challenges that can arise when applying SL may be a foundational step to bolster efforts to integrate or strengthen SL in other teacher education settings. Therefore, this investigation aims to problematize SL by analyzing the ideas and experiences of pre-service teachers who have participated in our SL programs as well as our own perspectives as teacher educators/researchers.

As a consequence, the present research consists of a qualitative retrospective exploratory study of the reflective diaries produced by pre-service teachers, focusing specifically on the challenges we have found in their narratives. In addition, we, as teacher educators/researchers, engaged in discussions critically examining the downsides of our programs. This paper, therefore, contributes to the discussion regarding SL

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in pre-service teacher education by providing an account of the pitfalls and improvable aspects of this pedagogical approach. To do so, we focus on our previous practices when using it in an attempt to give voice to all participants, learn from their and our experiences and try to improve our (and hopefully other teacher educators') SL programs.

1.1. Service-learning in teacher education

SL is a widespread pedagogical approach, particularly in higher education (Chambers & Lavery, 2017), given that it can be a way to bridge the gap between theory and practice (Resch & Schrittmesser, 2021). It aims to combine course content and social needs by generating a synergic interaction between students and community in such a way that the service improves academic learning and academic learning can meet the needs of the community (Cervantes & Meaney, 2013). Consequently, appropriate SL is expected to equally address the needs of both the students and the social community. In this way, SL is built on the premise of promoting social justice and inclusion and, according to the literature, its impact on these two issues may be far-reaching (Curtis, 2020; Lapidot-Lefler & Kais, 2021).

Even though there are a variety of definitions of SL in education, Chambers and Lavery (2022) identify several factors that underpin it: investigation (of a problem or issue); preparation and planning; action; reciprocity; and reflection. In addition, SL has been claimed to foster experiential learning (Dewey, 1938), according to which learning occurs when students are able to connect it with their cultural and social context.

SL may be employed in many academic disciplines, including teacher education (Salam et al., 2019). In fact, research has found SL to be a powerful tool in this context (Márquez-García et al., 2020) because this approach is seen to better equip pre-service teachers to function in challenging situations and ever-changing contexts (Tietjen, 2016). Furthermore, according to Valencia-Forrester et al. (2019), SL holds the potential to overcome the constraints of traditional approaches to education by offering opportunities for pre-service teachers to engage and establish direct connection with the social community.

In the teacher education arena, experiences based on SL usually aim to provide pre-service teachers with hands-on practice in an unfamiliar context, helping them enhance their skills in the classroom and develop "readiness" to teach (Salter & Halbert, 2019). Research shows that the integration of SL in teacher education may come with multiple benefits for pre-service teachers. Professional skills, which may be related to aspects such as teacher identity, teacher motivation, teaching knowledge, the teacher's professional culture and awareness of broader issues in education, have been demonstrated as some of the outcomes of this pedagogical approach (Carrington et al., 2015; Dvir & Avissar, 2014; He & Prater, 2014; Ramsaroop & Petersen, 2020). Regarding the academic field, effects have been reported in terms of conceptual learning as well as skills related to improvements in self-efficacy (Hollingsworth & Knight-McKenna, 2018). These benefits are attached to the practical experience that pre-service teachers gain when taking part in SL.

In addition to these, SL holds the potential to promote other improvements in pre-service teachers, given that it helps them become committed citizens. For example, SL seems to have an impact on pre-service teachers' critical thinking capacity (Chiva-Bartoll et al., 2020; García-Rico et al., 2021; Nelson, 2021), cultural understanding (Daum et al., 2021), practice and acquisition of values (Iyer et al., 2018) and awareness of social justice (Adarlo & Pelias, 2021).

1.2. Contextualizing the inquiry

Recent systematic reviews show that there is ample research on SL, and many studies associate it with a variety of benefits (Compare & Albanesi, 2023; Francisco-Garcés et al., 2022; Salam et al., 2019). Nevertheless, SL may pose a series of challenges (Chambers & Lavery, 2022; Salam et al., 2019). For example, Dunbar and Yadav (2022) found

that teachers struggled when they tried to implement SL that worked for every learner. In this sense, each person is different, as is their way of learning (Chickering & Kuh, 2005; Strom & Martin, 2017); therefore, not all students are expected to engage in SL to the same extent.

In addition to this, SL entails shifts in the teaching/learning process that may emerge as a complex undertaking for teachers who venture to apply it. For example, Ramsaroop and Petersen (2020) identified some problems when applying SL related to groupwork, which was an inherent part of the program they examined. In addition, SL involves a lot of preparation for teachers (Peters, 2011), and it may be challenging to facilitate proper interaction between all participants (Toporek & Worthington, 2014). These are interesting and necessary ideas that every teacher intending to use SL should be aware of. In fact, Salam et al. (2019) assert that it is imperative for academics across different disciplines to understand the limitations of SL implementation. Therefore, it is necessary to specifically examine the challenges that SL may entail in the teacher education context.

To the best of our knowledge, to date, there are no specific studies in the field of teacher education that attempt to reflect upon and learn from well-established SL programs. According to Cochran-Smith and Lytle (2015), educational research should lead teachers to better understand and transform their teaching. In this sense, professional reflection may be instrumental in solving the messy problems that teacher educators face in the 'swampy lowlands of practice' (Fendler, 2003). Consequently, we decided to critically analyze our teaching practices in order to identify the challenges that have arisen.

To do so, the present study aspires to trouble the positivist arguments, quantitative representations and structuralist logics that have often been brought to the foreground in previous research on SL. In this vein, quantitative and mixed-method approaches tend to focus on generalized results and leave on the sideline those ideas that are not prevalent. Although qualitative approaches to SL research are on the rise (Francisco-Garcés et al., 2022), even these studies may have disregarded or ignored negative experiences or viewpoints when presenting their results (Márquez-García et al., 2020). The present research is therefore based on the ideas shared by Taylor and Bayley (2019, pp. 6-7), who claimed that by "seeking out those 'and yet's', those escapes, being open to them when they arise, riding on them and with them, co-creating them, giving them space to happen, attending to them (...), we can attend in more nuanced ways to what matters (and how and why and to whom and when)". Consequently, we aim to problematize SL to identify challenges that, according to Loughran and Northfield (1998), may be perceived as 'problems', 'tensions' and 'dilemmas'. That is to say, we aspire to look at the other side of SL in order to detect the pitfalls of our previous programs. Based on the perspective of educational research as a way to transform teaching practice (Cochran-Smith & Lytle, 2015), our goal is not simply to interpret what has happened, but to understand these tricky issues in order to address them and refine our future programs. These outcomes aspire to be instrumental in enhancing the theory, research and practice of SL in the teacher education context.

2. Methodology

This work is a qualitative retrospective exploratory study that sets out to answer the following research question:

- What are the challenges (i.e., problems, tensions and dilemmas) that derive from our SL programs according to the perceptions of participating pre-service teachers and teacher educators?

Qualitative research "aims at producing intelligibilities, explanations, and arguments by attending to the richness, depth, nuance, context, multidimensionality and complexity to explain how things work in particular contexts" (Mason, 2002, p. 1). Therefore, this study does not search for verifiable facts, objective truths or universal laws but rather, we aspire to delve into the experienced realities, felt truths and

collective understandings of the participants (Lather, 2007). In addition, we adopt a critical approach to SL research (Chiva-Bartoll et al., 2020), given that the findings and main conclusions of this study are expected to transform our future programs, which may eventually be insightful for other teacher educators applying SL.

2.1. The service-learning programs

Overall, more than 1000 pre-service teachers and 300 children with special educational needs (SEN) have been involved during the more than a decade that our SL programs have been carried out. These programs have evolved and changed over the years in order to fit the specific context in which they were applied. This study focuses on the latest versions of our program. In the two last editions, the program has been applied in a subject of physical education. The program consisted of designing and leading physical education sessions and had two purposes: (1) to improve the pre-service teachers' teaching skills, and (2) to promote inclusion among children with SEN.

Pre-service teachers worked in small groups (4–6 students) and had to investigate a community problem (lack of inclusion of children with SEN) and develop a solution linking the contents of the subject. The program was based on the Chiva-Bartoll & Fernandez-Rio's (2022) model of SL in physical education. Pre-service teachers therefore designed physical education sessions (at least eight) for a specific group of children with SEN. First, they implemented the sessions at the university with their classmates to reflect on and improve their planning. They subsequently put them into practice with the group of children. Finally, the pre-service teachers had to complete a reflective journal to share their experiences, feelings and learnings (Deeley, 2022). Specifically, they had to focus on two main topics by answering several questions relating to (1) learning and training (i.e., What teaching abilities have been put into practice? How may the experiences you had during the program guide or shape your identity as a teacher?), and (2) personal feelings (i.e., How did you feel during the program? What problems did you encounter during your participation?).

2.2. Participants

This study included two types of participants: pre-service teachers and teacher educators/researchers. Regarding the former, we considered pre-service teachers who voluntarily participated (they signed an informed consent form) in one of the two last editions of the program ($n = 123 + 52$).

Moving now to the teacher educators/researchers, the participants in this study were 14 members of the Endavant research group (including the four authors) who had directly applied SL as teachers and/or researchers. At the time of this study, six of us were associate professors, three were assistant professors, one was a predoctoral fellow, three were PhD students and one was an undergraduate student. We all have different experience regarding SL application and research. In addition, during the years we have been applying and researching SL, we have occupied different roles such as adjunct professors, postdoctoral fellows, predoctoral fellows and PhD students. Our identities and experiences as teacher educators/researchers have the potential to shape our actions (Stenhouse, 1975); therefore, we want to highlight our own subjective positionality within this study. In this sense, we all consider that teaching and research are inherently intertwined, given that research informs (and transforms) our practices and ourselves. Likewise, we all share a firm commitment to promoting social justice and perceive SL as a line of flight to foster it through our teaching.

2.3. Information sources

On the one hand, in order to incorporate participatory data (Ellingson & Sotirin, 2020) from pre-service teachers, we used 175 reflective journals that they completed while engaging in SL. This type of journal is

a widely used strategy not only in teacher education (Fendler, 2003) but also in SL (Chiva-Bartoll et al., 2021; Deeley, 2022; Eutsler et al., 2023) given that 'the act of writing facilitates deeper analysis of the experience by assessing and articulating it' (Pavlovich, 2008, p. 284). In this sense, the second part of the journal, which focused on students' personal feelings, asked pre-service teachers about the problems they had encountered when participating in the SL program, among other aspects. This information allowed us to consider pre-service teachers as an integral part of the present study, since they recorded and expressed their perspectives and experiences so that they could be taken into account.

On the other hand, the participating teacher educators/researchers carried out a series of formal and informal meetings aimed at critically reflecting on previous SL programs and preparing a new one for the current semester (spring 2023). These meetings enabled us (authors) to make use of ourselves-as-data (Ellingson & Sotirin, 2020), since all participating teacher educators/researchers shared personal narratives through self-introspection and emotional reconstruction. The collective dialogue within these meetings let us debate and share our personal beliefs (Cochran-Smith, 2002), helped us better understand our practice (LaBoskey, 2004), and will eventually (and hopefully) guide the reframing of our practice (Loughran, 2004).

Nine meetings were held over a three-month period to exchange personal perspectives and feelings, critically assess previous editions of the SL program, discuss relevant literature and plan future lines of action, among other aspects. Table 1 shows some features of the meetings carried out. Meetings 2, 4, 5, 7 and 8 were recorded and transcribed by the first author immediately after the meeting to keep all the nuances that characterized these moments and take advantage of the knowledge gained from being in the situation. This was necessary to engage in a process of embodied transcription and undertake it as a "translation" from oral speech to written language (Ellingson & Sotirin, 2020). Later, the rest of the participants carried out a member check of the written data. During meetings 1, 3, 6 and 9, we wrote researcher memos and, when each of them had finished, we wrote a summary of the key points of the meeting. Online meetings were carried out through synchronous online technologies (i.e., Google Meet). Hybrid meetings were held face-to-face, but some participants attended virtually. An overview of the research is displayed in Fig. 1.

2.4. Data interpretation

The analytical process involved both traditional techniques (phase 1) and more complex and relational methods (phase 2) (Salvador-García, 2023; Strom & Martin, 2022). The procedure was based on the data analysis spiral method (Creswell & Poth, 2018), which is a process of moving in analytic circles rather than using a fixed linear approach. In any case, it may be divided into the following analytical actions: (1) managing and organizing data, (2) reading and memoing emerging ideas, (3) classifying codes into themes, (4) developing interpretations, and (5) representing and visualizing the data. We relied on inductive reasoning, given that our intention was to construct knowledge that emerged from the data gathered. This means that we adopted a bottom-up approach to data analysis by searching for patterns within our data in order to avoid limiting the analysis to "prefigured" ideas (Creswell & Poth, 2018).

The first, second and third authors organized and prepared the data in order to engage in three rounds of reading. First, the data were read from start to finish. Second, we reread the data while making notes and highlighting significant key phrases. Inductive reasoning enabled us to search for the problems that appeared in the data, which were described as individual doubts, perplexities or concerns put forward by one of the participants. Finally, we reread all the data again through a circle of readings and interpretations by going backwards and forwards, and used open coding and constant comparison to compile a written list of statements exemplifying problems (i.e., "reflection must be enhanced

Table 1
Overview of the research group meetings.

Month	Meeting number and type	Type of communication	Participants	Prompt	Length of meeting
Nov. 2022	1- Informal	Face-to-face	6 (AP1, AP2, AP3, AP4, aP1, aP2)	How can we improve our SL program?	120 min.
Dec. 2022	2- Formal	Hybrid	9 (AP3, AP4, AP5, AP6, aP1, aP2, aP3, PhD1, PhD2, US)	Who is going to be involved in the next SL program and how?	140 min.
	3- Formal	Hybrid	5 (AP2, AP3, AP4, aP1, aP2)	How can we organize the next SL program?	62 min.
	4- Formal	Online	2 (AP4, aP2)	What can we learn from our experience in previous SL?	26 min.
	5- Formal	Face-to-face	2 (AP5, aP2)	What can we learn from our experience in previous SL?	31 min.
Jan. 2023	6- Formal	Online	8 (AP3, AP4, aP1, aP2, PF, PhD1, PhD2, PhD3)	How are we going to organize the research of the SL program?	90 min.
	7- Formal	Online	2 (aP1, aP2)	What can we learn from our experience in previous SL?	23 min.
	8- Formal	Face-to-face	2 (AP3, aP2)	What can we learn from our experience in previous SL?	28 min.
	9- Formal	Online	5 (AP3, aP1, aP2, PhD2, PhD3)	What are the last decisions to be made to start the SL program?	88 min.
Total	9	3 Face-to-face 2 Hybrid 4 Online	14 (different people)		608 min.

Note: AP = associate professor; aP = assistant professor; PF = predoctoral fellow; PhD = PhD student; US = undergraduate student.

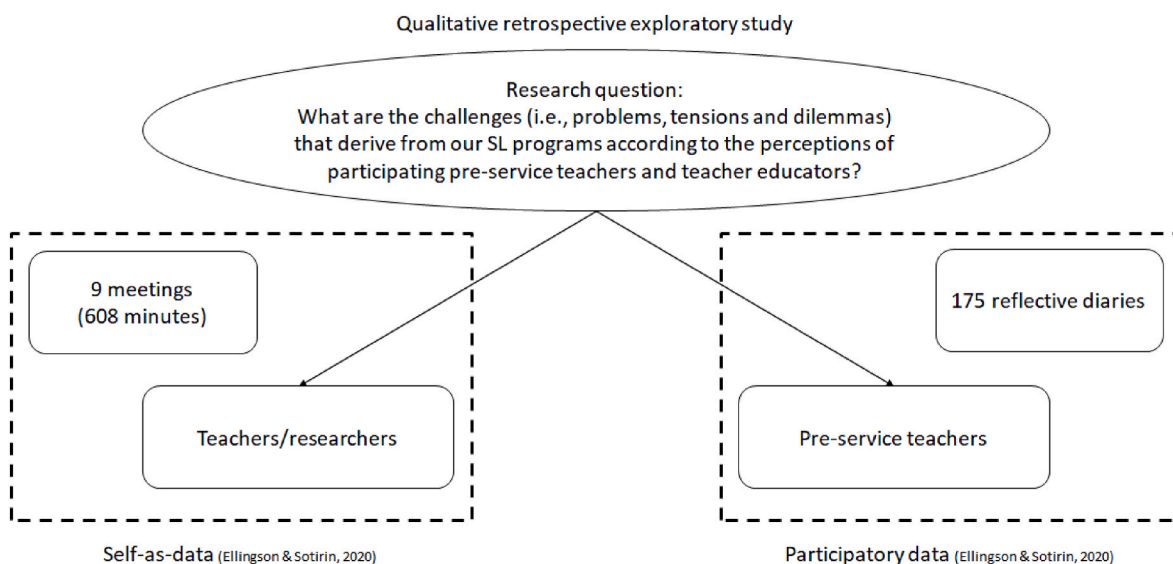


Fig. 1. Qualitative retrospective exploratory study design.

for learning gains to be acquired”).

These statements were organized into broader tensions (themes). Tensions were described as similar perceptions of inner turmoil experienced by different participants (i.e., “reflection must be enhanced for learning gains to be acquired” was included in the tension revolving around “reflection”). Tensions were checked against the whole dataset until saturation occurred. To be classified as tensions, these ideas had to represent some level of patterned meaning within the dataset considering a type of participant (Braun & Clarke, 2006). The process of naming and grouping tensions was performed by the first author and crosschecked with the second and third authors, and all disagreements were resolved through discussion.

Furthermore, we aimed to establish connections between the perceptions of the two groups of participants as well as the multiplicities drawn from each of the tensions to better understand their links. Given that assembling data in this way is characterized by rhizomatic configurations, generative messiness and entanglement (Ellingson & Sotirin, 2020), we engaged in a process of “thinking with theory” (Jackson & Mazzei, 2012). This way of “doing” qualitative inquiry enabled us to

leave behind the imperatives that inhibit the inclusion of previously unthought information, thus limiting interpretation, analysis and meaning making. This analysis allowed questions to emerge and new meanings to be built, as well as opening up to new thoughts. As a result, broader categories binding together different tensions were created (i.e., the category of “pedagogy” included, among others, the tension regarding “reflection”). Their limits are vague and, in fact, different categories and tensions affect each other. Therefore, these categories are interconnected. Regardless of this, thinking with theory enabled us to identify a dilemma within each category. These dilemmas share competing concerns that emerged when trying to align beliefs and actions within a set of tensions. Again, this process of naming and grouping categories and identifying dilemmas was performed by the first author and crosschecked with the second and third authors.

The analytical procedure is summarized in Fig. 2. This process was influenced by our double identity (researchers and participants) as we were part of data, analysis and interpretation (Ellingson & Sotirin, 2020; Koro-Ljungberg et al., 2017). Given that mapping affords opportunities to read data as complex, connected networks rather than as sets of

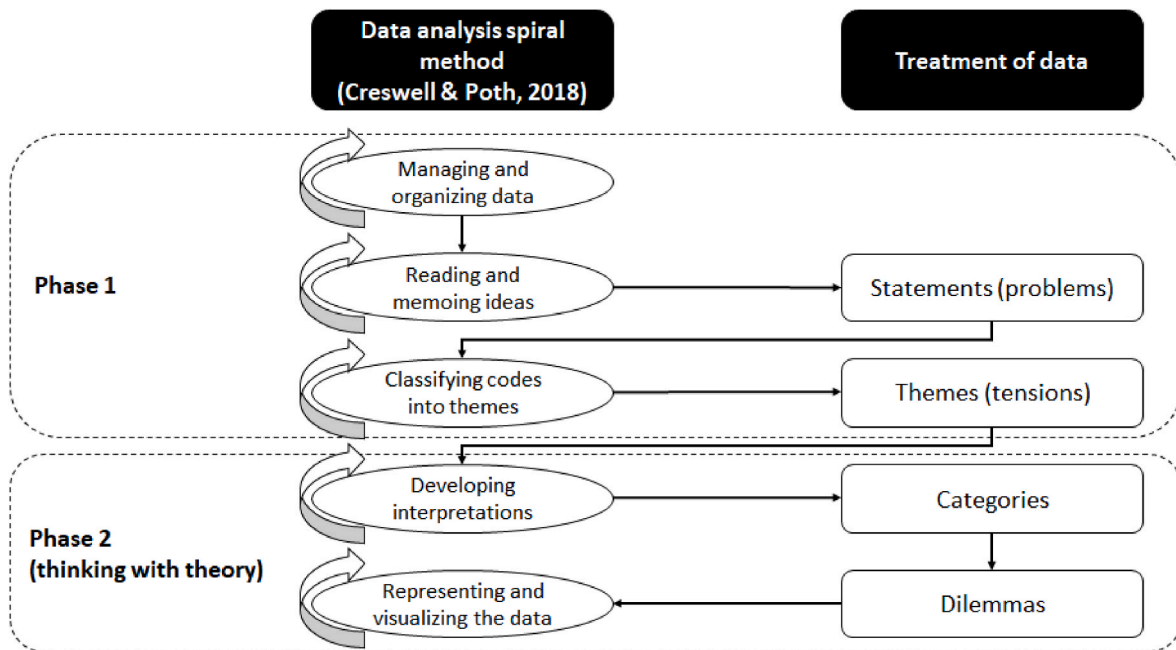


Fig. 2. Analytical procedure.

discrete relations between and among variables (Martin & Kamberelis, 2013), we designed a general visual network of findings to show the links between categories, and one for each category to show the connections between its tensions (Miles et al., 2014).

2.5. Rigor and quality criteria

We addressed issues related to rigor and quality within qualitative research following the ideas proposed by Smith and Sparkes (2019). In this sense, the participants of this study recognize that the findings do agree with their perceptions and our experience in this field supports confirmability of the findings. Moreover, a description of the program, the participants and the processes we have followed have been presented bearing in mind the indications of Carson and Raguse (2014). The data have been anonymized and codes have been given to the extracts presented in the findings section (i.e., RJ + number of the reflective journal + number of the quote within the journal, and M + number of the meeting + number of the quote/idea within the meeting). The quotes presented in the results section are representative extracts of the participants' ideas used as examples (they were translated from Spanish to English and checked by a professional translator). Our (authors) voice throughout the paper represents the collective voice of the participating teacher educators/researchers, however we present it from an external perspective in the results section to make reading easier to understand. Regarding triangulation, we gathered data from different moments and places and included different participants (Denzin, 1988). Moreover, we used multiple analyst triangulation, as three researchers were involved in the data interpretation process and constantly discussed their interpretations until they were free from internal contradictions (Lavery, 2003). Furthermore, the recognition of ourselves as agents in the meaning-making process contributes to the trustworthiness and transparency of the analysis (Aguinis & Solarino, 2019). This study was approved by the Deontology Commission of our university.

3. Results

We aspired to delve into the challenges (i.e., problems, tensions and dilemmas) that SL entails according to participating pre-service teachers and teacher educators/researchers. Six broad categories of findings were

encountered (i.e., individual participants' dispositions, complex working conditions, pedagogy, logistics, subject, other agents), which emerge from a set of tensions and derive in a dilemma. For an overview of the findings, Fig. 3 shows these categories and the connections that may be established between them and the ideas they encompass (Miles et al., 2014; Saldaña, 2013).

Subsequently, we present each category to illustrate the links between its related tensions and the emerging dilemma. A visual network is presented below each subheading, together with a narrative description and some examples. Although each tension (theme) appears within a specific category, their limits are vague and may be connected to other categories. Since the relationship between findings is non-linear, their

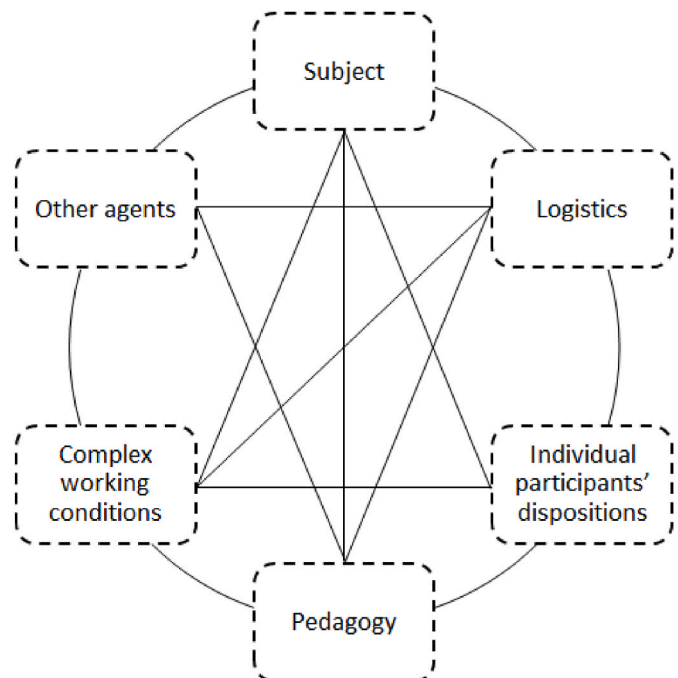


Fig. 3. Network of categories.

presentation may not follow an ordinary sequence (left-right and top-down).

3.1. Individual participants' dispositions

One of the categories we encountered was that referring to the problems and tensions related to individual participants' dispositions (Fig. 4).

- Demotivation

According to both the participating teacher educators/researchers and pre-service teachers, *demotivation* may generate tensions when applying SL. Participating teacher educators/researchers felt “frustrated when we realized that some pre-service teachers did not want to participate or did not realize all the work and effort we were putting into making the SL program work” (M7-3). In addition, there is growing concern, given that

“Current pre-service teachers are increasingly distant from the value and the meaning of everything we are doing. Previously, I think they were more mature and really valued the opportunity to work directly with children. Ten or 12 years ago, I mean ... Nowadays, students probably don't have the same motivation” (M4-21).

Participating pre-service teachers supported these ideas in their reflections. According to one of them, “several of my groupmates, who did not understand why they had to carry out these practices, did not make an effort to make the sessions work properly” (RJ18-1).

- Difficulties

Also, participating teacher educators/researchers and pre-service teachers mentioned several difficulties. For example, among other causes of discontent, some pre-service teachers argued that it is difficult to participate in the SL program if they have a job or complex personal situations. As one pre-service teacher explained, “when the teacher told us about it [the SL program], it did not really appeal to me. Usually, I am very busy and I thought it would limit and hamper my daily life” (RJ73-3). Participating teacher educators/researchers recognized that there are a myriad of personal situations, and “we know that some students may like SL while others may not” (M2-13). “Pre-service teachers are spending their spare time on the program (...) not everyone may be willing to do this. They tend to prefer a PowerPoint presentation and an ordinary lecture” (M2-6). All in all, all the participants agreed that SL may entail difficulties for pre-service teachers.

- Initial reluctance

In close connection to the previous ideas, participating pre-service teachers tend to show an *initial reluctance* towards SL. Although these feelings go up and down like a “roller-coaster (...), at first I felt a kind of rejection towards participating in the SL program” (RJ10-4). This may increase demotivation and complicate the start of a program.

Therefore, this category identified tensions related to individual participants' dispositions that pose the dilemma of how to adjust SL to the different characteristics, motivations and possibilities of every student.

3.2. Complex working conditions

Another category was centered on the problems and tensions connected to the complex working conditions that SL entails (Fig. 5).

- Stressful and tiring

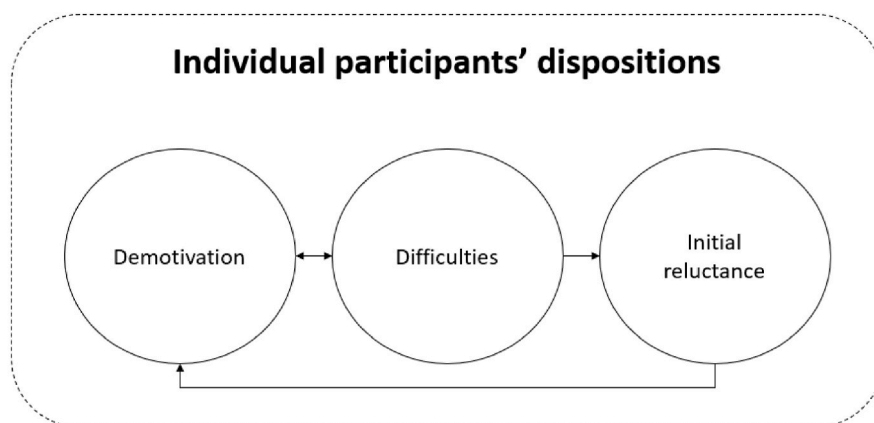
The participating teacher educators/researchers consider that carrying out SL is both *stressful and tiring*. As one mentioned in a meeting, “after 10 or 12 years, nowadays, I feel tired of repeating this process over and over” (M8-1). In addition, there are a number of agents involved in the program whom teacher educators have the duty to take care of. “The effort towards the families or the groups of people we attend, doing our best to achieve their expectations and making everything work for the pre-service teachers (...) makes the process intense, stressful and hard” (M4-4). But this overwhelming situation is probably what makes SL work because “if you are not stressed, this does not work” (M2-2).

- Research pressure

Furthermore, due to their double role (teacher educators and researchers), SL may pose additional challenges “because doing it right from a research perspective may mean doing it wrong from a teaching perspective or vice versa. There may be this contradiction” (M2-10). In this sense, there is a *research pressure* that can sometimes go against teaching quality given that “more students taking part in the SL program may be better in terms of research, while being detrimental to the quality of the program itself” (M6-1). This makes it difficult for participating teacher educators/researchers to decide how to plan an SL program and may cause increased stress.

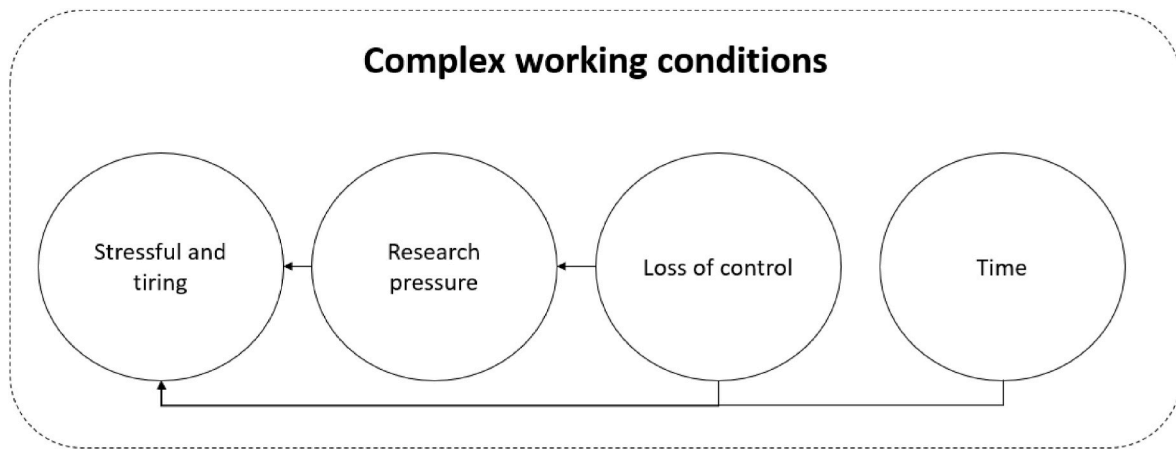
- Loss of control

In addition, the participating teacher educators/researchers



Dilemma: How to adjust Service-Learning to the different characteristics, motivations and possibilities of every student

Fig. 4. Network of findings for the “individual participants' dispositions” category.



Dilemma: How to handle a balanced approach to both teaching and research

Fig. 5. Network of findings for the “complex working conditions” category.

considered that using SL entails a *loss of control* of the situation, which may be concerning.

“There is a feeling of uncertainty or even fear (...). When too many decisions regarding the subject you are teaching are dependent on external agents or elements, you start feeling insecure, you lose control of timing, fears arise, you feel that relationships with external agents and students are not easy” (M4-1).

This, again, has an impact on stress levels and, when combined with research pressure, may even exacerbate the aforementioned tensions. Doubts arise and “when the collaborating organizations are not clear or the number of service receivers may not match that of the participating pre-service teachers, you start doubting the viability of the program” (M6-2). Therefore, participating teacher educators/researchers consider that it is difficult to control everything, and this may be related to other categories such as subject or logistics, since subject planning and program organization might be affected.

- Time

Finally, *time* emerged as an additional issue to be considered. According to a participating teacher educator/researcher, SL “requires a lot

of time to follow up the whole process, to organize everything, to structure the program ...” (M4-10). This theme is connected to stress and tiredness, as well as categories such as pedagogy and logistics, and generates further worries because

“Devoting so much time to work means that you are taking it away from your own kids. At some point you start wondering whether your job is improving your life or whether what you are doing is, in fact, making you feel worse”. (M4-14).

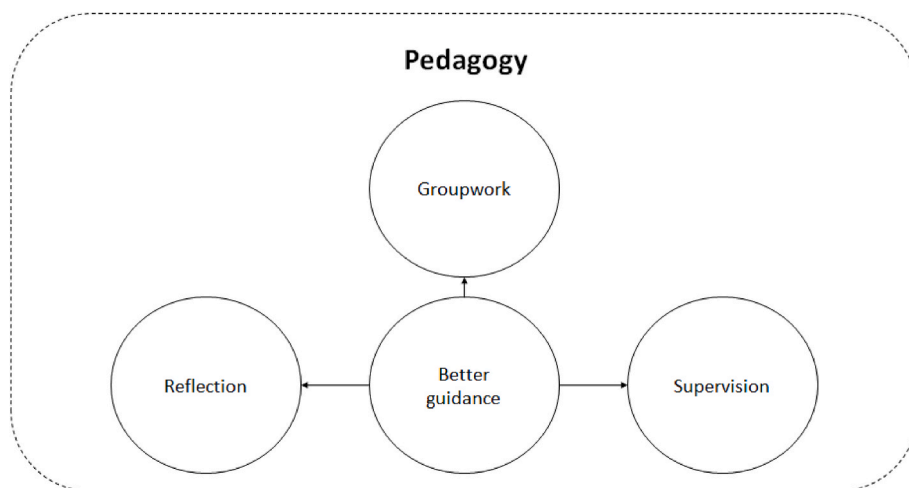
All in all, implementing SL seems to generate a number of tensions on the part of participating teacher educators/researchers, leading to the dilemma of how to handle a balanced approach to both teaching and research when applying SL.

3.3. Pedagogy

An additional set of tensions were grouped together within the category of pedagogy (Fig. 6).

- Better guidance

A number of problems were related to the *guidance* process during



Dilemma: How to adjust guidance, reflection and groupwork during the project to avoid these processes being excessively easy or complex for pre-service teachers

Fig. 6. Network of findings for the “pedagogy” category.

pre-service teachers' participation in SL; thus, it was classified as a tension. In this sense, all the participants identified "the need to improve this monitoring process" (M7-13), as this affects the quality of pre-service teachers' reflection and groupwork. In fact, these two issues emerged as two additional tensions within the category of pedagogy.

- Reflection

Regarding reflection, participating teacher educators/researchers are worried because "reflection must be enhanced for learning gains to be acquired" (M1-3). However, they often feel overwhelmed by the situation. "Carrying out SL with so many students is tricky because we cannot properly interact with every single group. Therefore, for example, reflection loses part of its learning potential" (M8-13). Consequently, from the participating teacher educators/researchers' perspective, reflection is an essential but concerning component within SL pedagogy and, therefore, this tension may affect the issues within the categories of complex working conditions or individual participants' dispositions.

- Groupwork

Similarly, participating teacher educators/researchers consider that groupwork is a concerning issue. "There are some groups that work extremely well together, are interested in SL, share tasks, participate and help each other. However, there are some groups that do not" (M5-1). This idea was supported by participating pre-service teachers. One of them, for example, complained about it and stated that "all of us have contributed, some more than others though, much more than others" (RJ92-1); whereas another gave a possible explanation to this, stating that "obviously, different points of view, inability to reach agreements and lack of empathy [within the group] have been constant handicaps when participating in SL" (RJ58-1). Consequently, it seems that groupwork may generate tensions for all participants and it may be related to the categories of complex working conditions, because teachers aspire to enhance groupwork, and individual participants' dispositions, since poor group functioning may generate problems among students.

- Supervision

Finally, the participating pre-service teachers referred to problems related to supervision throughout the process. However, there are competing views in this respect. For example, one pre-service teacher mentioned that "if our teacher had been with us during all the sessions, he would have guided us through the challenges we encountered. We could have learned even more with him helping us during the sessions" (RJ153-2). On the contrary, another participating pre-service teacher seems to hold a different opinion, since she felt that having the teacher educators supervising increased the pressure on them. She explained that "I understand that it was necessary for the teachers to be supervising the sessions. However, having them there was bothersome. We were worried about what they might think or say about our performance" (RJ94-1). These conflicting ideas emerge as additional tensions that come with SL since there seems to be no agreement on the part of participating pre-service teachers.

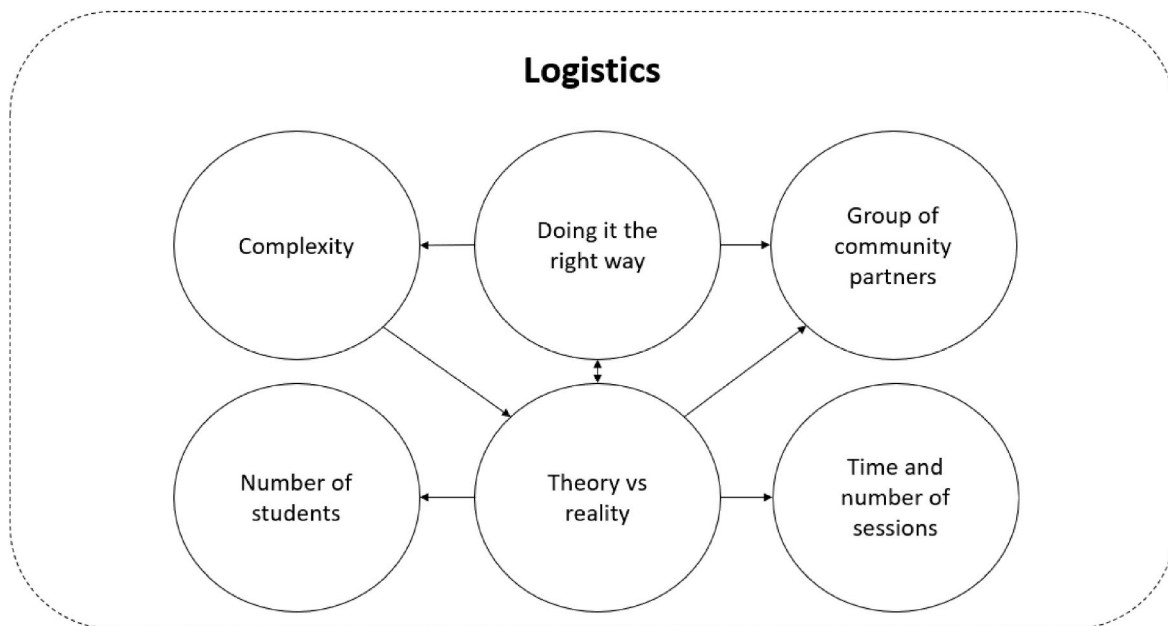
To sum up, pedagogical issues are also tainted by challenges that lead to the dilemma of how to adjust guidance, reflection and groupwork during the project to avoid these processes being excessively easy or complex for pre-service teachers.

3.4. Logistics

We move now to the category of logistics, which is composed of several interconnected tensions (Fig. 7).

- Doing it the right way

SL is a pedagogical approach that is based on a series of non-negotiable features. However, being faithful to them and, thus, applying SL in the right way is not always easy. According to one participating teacher educator/researcher, "there is a constant feeling (...) that you are never sufficiently involved. You therefore feel as if you are always doing it wrong. You are not going to be able to control everything, and that is frustrating" (M4-10). Consequently, there is constant hesitation about how to cope with the rest of the tensions within this category. Furthermore, due to its nature, this tension is



Dilemma: How to deal with the complexities and constraints of the context in which the project is carried out

Fig. 7. Network of findings for the "logistics" category.

closely connected to the category of pedagogy.

- Complexity

For participating teacher educators/researchers, SL is *complex* because “developing the program, engaging the students, getting them going, having them carrying out the sessions ... this is really complicated, it involves a lot of work” (M2-3).

“You must take on so many things that it is impossible to pay careful attention to (...) reflection, the reflective journals, promoting pre-service teachers’ critical thinking, linking everything with the curricular elements, making the most of the learning potential of SL, etc.” (M4-17).

Therefore, dealing with this complexity is necessary for teacher educators to fulfil the aims of SL and, thus, complexity may be linked to the category of pedagogy.

- Theory vs. reality

In fact, there often seems to be a disconnect between *theory and reality*, that is to say, what ought to be done and what can actually be done (i.e., phases of the program, number of hours that students are engaged in the service, number of participating pre-service teachers, etc.). For example, in the first phase of a theoretically sound program students should select the social group they want to collaborate with. However, “we [teacher educators/researchers] choose the partner associations, and this could be a mistake” (M8-10). Additional tensions derived from this theory vs. reality concern are presented below as separate themes.

- Time and number of sessions

For example, there is the *time* issue, mentioned by both participating teacher educators/researchers and pre-service teachers. “We [teacher educators/researchers] make the first contact with the associations (...). If only we had more time, but it is not feasible” (M7-11). Moreover, as one pre-service teacher stated, “I would have loved to be able to better adapt the activities to the children’s interests, but there was no time to get to know them before we started the program” (RJ148-1).

Furthermore, according to the theory, “pre-service teachers should devote 35 h to direct service in order for SL to work, but such time is not available” (M2-9). This concern about the *number of sessions* is also shared by pre-service teachers. As one of them expressed, “I think that, for further objectives to be achieved, we would have needed more sessions with the children” (RJ131-3). Consequently, these constraints evince the difficulty of balancing theory and reality.

- Number of students

Additionally, the *number of participating pre-service teachers* tends to be too high to strictly follow theoretically sound pedagogical tenets. As one teacher educator/researcher mentioned, “there are too many pre-service teachers, and this number of students is not adequate for a pedagogical approach such as SL if there is a single teacher educator to take care of everything” (M7-12). Therefore, having many pre-service teachers participating is concerning for participating teacher educators/researchers, adds to this theory vs. reality gap and may be related to other categories such as pedagogy.

- Group of community partners

The *group of community partners* is a difficult factor to deal with. Participating pre-service teachers complain about the children’s age. For example, a pre-service teacher expressed that “I did not understand why, if I am studying a degree in Early Childhood Education, I had to work with older children” (RJ19-2). This tension increases the logistical

challenges while it may also connect to previously mentioned tensions (i.e., students’ complaints).

All in all, logistics is a broad category that may be connected to other categories such as complex working conditions, pedagogy and individual participants’ dispositions. Consequently, it poses the dilemma of how to deal with the complexities and constraints of the context in which the project is carried out.

3.5. Subject

Another category focuses on the subject embracing the SL program, and it is composed of two different tensions (Fig. 8).

- Jeopardized

SL programs are built around a specific subject and participating teacher educators/researchers are concerned about this given that it might be *jeopardized*. The university culture is used to rigid teaching guides, but SL entails approaching the curriculum from a flexible perspective in terms of timing, groupings, activities, etc., as has been mentioned in previous categories. “SL makes it harder to adjust the subject to the dynamics, the needs, the teaching guide” (M4-6). In this sense, participating teacher educators/researchers acknowledged that “when using SL, you know that you may be jeopardizing the subject, you accept this from the day you make the decision to use this approach” (M2-5). Therefore, they must be ready to adjust everything in order to remain faithful to the subject and clearly link service and learning.

- Evaluation

Evaluation represents an additional source of tension for participating teacher educators/researchers and pre-service teachers. The formers considered that “linking assessment with the pre-service teachers’ reflective journals may be reprehensible” (M2-8), and some pre-service teachers echoed this viewpoint. For example, one pre-service teacher stated that “if this is really a voluntary activity, it should seem so. The reflective journal is assessed, but we have had almost no supervision and the teacher has to rely on what I have written there” (RJ12-4). This quote, at the same time, shows how this tension is connected to that of complaints or the category of pedagogy.

Consequently, even the subject embracing SL may be impacted by this pedagogical approach, resulting in the dilemma of how to assess SL fairly without jeopardizing a teaching guide that has been established by the university. This category may be particularly related to pedagogy and complex working conditions, since evaluation is basic in the teaching and learning process.

3.6. Other agents

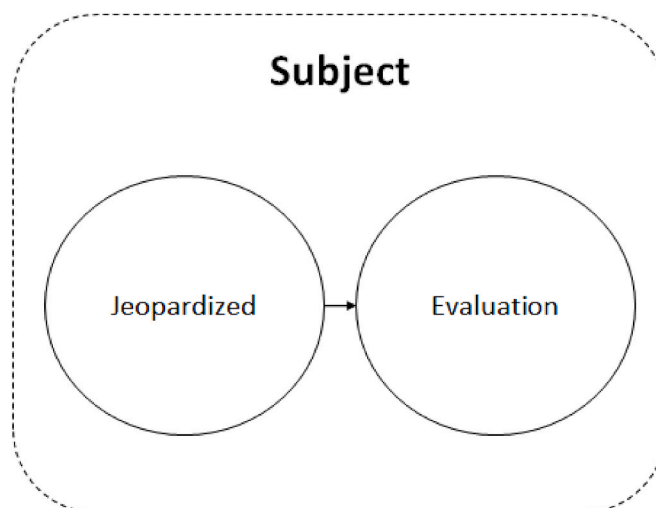
Finally, participating teacher educators/researchers felt tensions related to other agents, the last category of findings encountered (Fig. 9).

- University

It is true that institutional support has been evolving over the years. Participating teacher educators/researchers recognized that “recently, our *university* is starting to support us, and SL even appears on their electoral programs. Several years ago, just looking for insurance was a nightmare” (M8-6). In other words, “although the university’s support is starting to improve, until now it has been conspicuous by its absence” (M8-12). However, this still remains a source of tension.

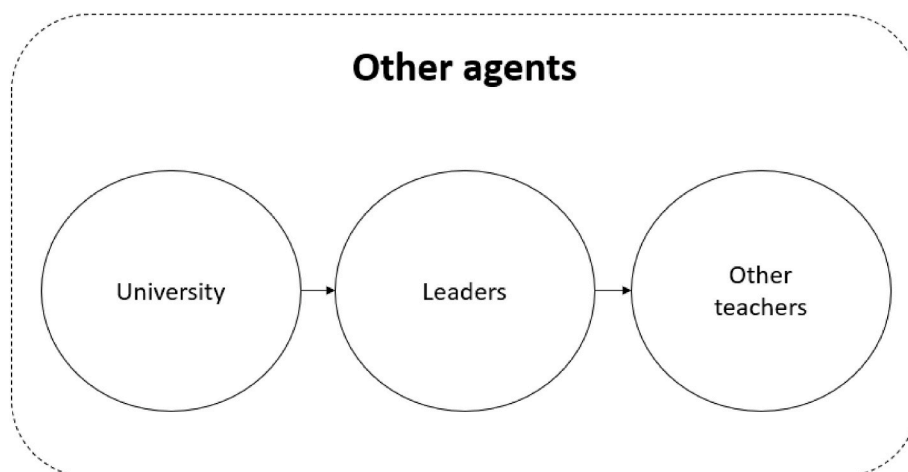
- Leaders

In addition, “there is a need to improve the culture of SL and what we are doing in our university” (M8-7). For example, in terms of the



Dilemma: How to assess SL fairly without jeopardizing a teaching guide that has been established by the university

Fig. 8. Network of findings for the “subject” category.



Dilemma: Is SL a worthwhile endeavor?

Fig. 9. Network of findings for the “other agents” category.

difficulties that some *leaders* may pose, several years ago “the vice-dean told us off because SL was something strange for him, he did not know what it was, he told us it was unregulated and that we were getting into trouble and were even risking our jobs” (M8-9). Therefore, participating teacher educators/researchers are concerned and worried when support is not given.

- Other teachers

This worrisome situation may even be increased when one does not receive support from *other teacher* educators. In this sense, “coming in for additional hours [to the university] was not acceptable for some colleagues. They did not understand what we were doing. This generated some tensions” (M8-9) not only personally, but also with these colleagues.

Lack of support at different levels, which may be related to the stressful and tiring tension, may pose further difficulties for teacher educators willing to embrace SL. Therefore, this dilemma makes one wonder whether SL is a worthwhile endeavor.

4. Discussion

It is sometimes necessary to take one step backward in order to take two steps forward. Consequently, the aim of this research was to unveil the challenges (i.e., problems, tensions and dilemmas) that come with our SL programs in order to better understand our teaching practices. The findings evince the complex structures and forces that the intricacies of this pedagogical approach entail and, as a result, enable us to suggest that SL is thorny.

As teacher educators/researchers, we were part of the data (Kor-o-Ljungberg et al., 2017), and through this study we sought a way of connecting outwardly and inwardly with the world we inhabit, a way of exerting influence in a bewilderingly complex world that often seems to be entirely out of control (Denzin, 2017; Denzin et al., 2017). Furthermore, we wanted to engage pre-service teachers and make them part of this study to learn from their viewpoints too (Ellingson & Sotirin, 2020). There are many intersections between the perspectives of participating teacher educators/researchers and those of the pre-service teachers; in fact, many concerns are shared. However, the findings evince that for

the participating teacher educators/researchers, SL is connected to more issues, probably because pre-service teachers focus mainly on their personal practice, whereas teacher educators/researchers have a broader perspective involving planning the program, establishing relationships with partners, practical application, general assessment, dealing with all the agents involved, etc. (Nduna, 2006).

Regardless of this, a clear shared concern we encountered was related to individual participants' dispositions since, on some occasions, SL participation was accompanied by demotivation and complaints as well as initial reluctance on the part of participating pre-service teachers. Previous literature has found similar outcomes in this respect. For example, students have reported challenges such as family obligations, time constraints and groupwork (Lee et al., 2018; Salam et al., 2017), while teachers considered students' negative attitudes to be a challenge (Darby & Newman, 2014). It is possible that students' perceptions of barriers decrease after participating in SL experiences (Xavier & Jones, 2021). Nevertheless, finding matches between collaborating associations' needs and timetables and the pre-service teachers' personal skills and preferences will still be difficult (Zuzovsky et al., 2022).

Bearing in mind these ideas, we may suggest that carrying out SL may entail coping with pre-service teachers who are not keen on this approach or whose personal situations are not compatible with the possibilities of the program. As teacher educators and researchers committed to responding to every single student, this is a critical dilemma. As a contribution to the field of SL research, these findings support previous literature on teacher education in general, since they let us suggest that every single pre-service teacher is different (Strom & Martin, 2017) and education is so complex that aspiring to engage all of them willingly in SL would be unrealistic. Despite these expected challenges, both pre-service teachers (Adarlo & Pelias, 2021; Chambers & Lavery, 2022; Daum et al., 2021) and the faculty staff (Camus et al., 2022; Darby & Newman, 2014) recognize the potential value of SL.

Another broad category we encountered focused on complex working conditions. In this sense, SL made participating teacher educators/researchers feel stressed and tired due to its intrinsic complexities, the research pressure that must be born, the sense of losing control or time constraints, as well as the challenges of the previous category, related to coping with pre-service teachers' concerns and demotivation (Xavier & Jones, 2021). These ideas are aligned with previous research on SL concluding that it increases teacher educators' workload significantly (Zuzovsky et al., 2022), which could eventually result in burnout (Salam et al., 2019). These ideas are relevant for every teacher educator who is considering adopting this pedagogical approach, because one must be ready to cope with all the challenges that SL can bring with it.

Despite this, there is an increasing number of teachers interested in applying SL due to its potential value (Nielsen, 2016) and many of them are willing to perform action research to examine their practices (Darby & Newman, 2014). In this vein, teacher educators who research their SL practices may face a concerning dilemma: how to achieve a balanced approach to both teaching and research. These may be conflicting at some points, even posing moral and ethical problems (LaBoskey, 2004); and every teacher educator willing to study their teaching practice through SL will have to navigate this difficulty.

Pedagogical issues formed another of the categories we encountered because SL entails a series of theoretical and technical aspects (Salam et al., 2019). Among these, reflection is one of the basic elements of SL application (Chambers & Lavery, 2022), and research findings have shown that non-reflective practice does not support pre-service teachers' professional development (Resch et al., 2022). In this sense, according to both participating pre-service teachers and teacher educators/researchers, guidance should be enhanced, given that it would be instrumental in improving not only reflection but also groupwork. This is consistent with previous literature, since students considered that conflicts between team members were potential issues during SL (Burke & Bush, 2013). This finding may also be related to the previous categories, given that it complicates teaching and generates complaints

among participating pre-service teachers. Against this backdrop, in order to cope with pedagogical dilemmas, teacher educators should be realistic, engage in proper guidance and help pre-service teachers deal with groupwork successfully, even if this means carrying out smaller SL programs or working with fewer groups/pre-service teachers.

In close relation to the aforementioned idea, we encountered that logistics may pose additional complexities for SL implementation (Nielsen, 2016). Although SL should be subject to specific theoretical and technical aspects (Salam et al., 2019), finding a way to successfully embed theory in one's reality is not easy. For example, besides the issues mentioned in the previous paragraphs, participating teacher educators/researchers have reported challenges regarding third-party involvement in SL projects (Darby & Newman, 2014). In addition, strictly following the phases of a theoretically sound SL program (Chiva-Bartoll & Fernández-Rio, 2022) might not always be realistic, posing an additional dilemma regarding the viability of having pre-service teachers selecting a partner association, for example. In this sense, many faculty members tend to act as an initiator, designing SL projects to ensure the smooth running of the programs (Salam et al., 2019). Therefore, teacher educators should be aware of the fact that the time limited boundary of an SL program embedded in a subject (lasting a single term or sometimes less) is a constraint that one must accept and cope with.

Regarding the subject through which SL is applied, a concerning issue revolves around how to assess SL fairly without jeopardizing the teaching guide of the subject that has been established by the university. This is another dilemma that participating teacher educators/researchers must deal with, and it is also concerning for participating pre-service teachers. Previous studies have reported that monitoring students' progress and tracking their experiential fieldwork is quite a challenging task (Salam et al., 2019). In fact, it appears to be increasingly challenging when attempting to assess the development of a clear connection between learning objectives and outcomes of course contents (Peters, 2011; Schoenherr, 2015). Although portfolios and reflective journals have been widely used when implementing SL (Chiva-Bartoll et al., 2020), their use as assessment tools might be confusing for some (Eutsler et al., 2023). Again, education is a complex scenario and SL increases this complexity. As a result, teacher educators willing to implement this approach will have to navigate the challenges that evaluation presents by adjusting it to their specific contexts, situations, needs and purposes.

Lastly, we move to the category referring to the problems that may arise regarding other agents, such as the university, university leaders and other teachers. In this sense, the literature reports that SL projects are in the self-interest of higher education institutions; nevertheless, the choice to implement this approach is strongly influenced by the availability of resources or other types of support (Rutti et al., 2016). In fact, Zuzovsky et al. (2022) claim that teacher education colleges should provide teacher educators with adequate assistance and support, given that a lack of these may lead to burnout among teacher educators (Salam et al., 2019).

In the context of this study, institutional support has just started to be provided, but it is yet to be demonstrated and extended to include other colleagues. In addition, all the aforementioned problems and tensions may even pose more barriers to participating teacher educators/researchers' confidence. This uncertain situation leads to a recurrent dilemma that makes one wonder whether it is a worthwhile endeavor to continue fighting for these pedagogical approaches, despite how they affect teacher educators personally and professionally. This idea points to an interesting line of research that is still to be further examined (Darby & Willingham, 2022; Daumiller et al., 2020). This may mean that, if support is not granted, given the political imperatives to which teacher educators and pre-service teachers are currently subjected, it may be difficult to determine how to continue and sustain movements towards 'alternative pedagogies' such as SL (Darby & Willingham, 2022).

4.1. Implications

In light of the above, this study brings two new ideas to the literature on SL in teacher education. On the one hand, the dilemmas we encountered show that there is not just one way of applying SL. They disclose some of the concerns that teacher educators may feel and will eventually be helpful to cope with them. This means that teacher educators will have to face some challenges when using SL and adjust their teaching to their specific context, students and circumstances. On the other hand, this study has also shown the need to reflect upon SL practices in order to better understand them. To do so, we discussed about our beliefs with colleagues and considered our pre-service teachers' ideas, because they may perceive hidden aspects of our teaching practice that may not be apparent to teacher educators. This has been an enriching learning process and we encourage other teacher educators to carry out similar practices, given that, for us, they were instrumental in examining and comprehending our SL practices in a new way. In fact, to develop further knowledge about teaching we will continue investigating our SL practice in the future.

5. Conclusion

This work has made the knowledge built and created through personal experiences public, showing that, despite its value, SL is a complex pedagogical approach to put into practice. Every teacher educator willing to adopt this approach should be ready to face the challenges it entails. The research has some limitations: (a) it focuses on participant pre-service teachers and teacher educators/researchers' perspectives only, (b) due to the nature of this study, it deals with a specific case and program, so the results should be adjusted to each specific context. In any case, the ideas shared may be useful for others when applying this approach. In this sense, we encountered a number of problems and tensions that led to dilemmas related to SL, such as finding a balance between teaching and research, dealing with reluctant pre-service teachers, pedagogical complexities (i.e., groupwork, assessment) and insufficient external support. In order to cope with these, it may be wise to focus on quality rather than quantity to avoid taking on more than one is capable of handling, align practice with theory as much as possible and be aware of both personal teaching aspirations and pre-service teachers' divergent perspectives on this approach. In addition, teacher education colleges should continue increasing the support provided to teacher educators to encourage SL implementation because establishing stronger university–community partnerships or providing specific assistance to implement SL could ease some of the challenges.

All in all, this research has highlighted the need to pay attention to all the challenges, dilemmas and tensions deriving from SL. Studies exploring and validating the significance and positive outcomes of this pedagogy are common (Salam et al., 2019); we, on the contrary, have unveiled its hidden difficulties in an attempt to help understand it, enhance its implementation and strengthen its potential value. In doing so, it is worth holding close Haraway's statement, "it matters what stories make worlds, what worlds make stories" (Haraway, 2016, p. 12), which may help keep us immanently aware of the need to take into account possible challenges that may arise when teacher educators venture to embrace SL because, in the end, "its benefits are much greater than its drawbacks" (M4-22).

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Declaration of competing interest

The authors declare that they have no known competing financial

interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

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References

- Adarlo, G., & Pelias, M. F. (2021). Teaching and learning with others: Situated encounters in service learning among pre-service teachers. *Asia-Pacific Journal of Teacher Education*, 49(2), 177–202. <https://doi.org/10.1080/1359866X.2020.1789910>
- Aguinis, H., & Solarino, A. M. (2019). Transparency and replicability in qualitative research: The case of interviews with elite informants. *Strategic Management Journal*, 40(8), 1291–1315. <https://doi.org/10.1002/smj.3015>
- Braun, B., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Burke, A. S., & Bush, M. D. (2013). Service learning and criminal justice: An exploratory study of student perceptions. *Educational Review*, 65(1), 56–69. <https://doi.org/10.1080/00131911.2011.638138>
- Camus, R. M., Ngai, G., Kwan, K. P., & Chan, S. C. F. (2022). Transforming teaching: Service-learning's impact on faculty. *Journal of Higher Education Outreach and Engagement*, 26(2), 47–64.
- Carrington, S., Mercer, K. L., Iyer, R., & Selva, G. (2015). The impact of transformative learning in a critical service-learning program on teacher development: Building a foundation for inclusive teaching. *Reflective Practice: International and Multidisciplinary Perspectives*, 16(1), 61–72. <https://doi.org/10.1080/14623943.2014.969696>
- Carson, R. L., & Raguse, A. L. (2014). Systematic review of service-learning in youth physical activity settings. *Quest*, 66(1), 57–95. <https://doi.org/10.1080/00336297.2013.814578>
- Cervantes, C. M., & Meaney, K. S. (2013). Examining service-learning literature in physical education teacher education: Recommendations for practice and research. *Quest*, 65(3), 332–353. <https://doi.org/10.1080/00336297.2013.773533>
- Chambers, D., & Lavery, S. (2017). Introduction to service-learning and inclusive education. In S. Lavery, D. Chambers, & G. Cain (Eds.), *Service-learning: Enhancing inclusive education* (Vol. 12, pp. 3–19). Emerald Publishing Limited.
- Chambers, D., & Lavery, S. (2022). International service learning: Benefits, challenges and experiences of pre-service teachers. *Asia-Pacific Journal of Teacher Education*, 50(5), 498–514. <https://doi.org/10.1080/1359866X.2022.2050355>
- Chickering, A. W., & Kuh, G. D. (2005). *Promoting student success: Creating conditions so every student can learn*. Retrieved from <https://scholarworks.iu.edu/dspace/bitstream/handle/2022/23541/Promoting%20student%20success-%20Creating%20conditions%20so%20every%20student%20can%20learn.pdf?sequence=1&isAllowed=y>.
- Chiva-Bartoll, O., Capella-Peris, C., & Salvador-García, C. (2020). Service-learning in physical education teacher education: Towards a critical and inclusive perspective. *Journal of Education for Teaching*, 46(10), 395–407. <https://doi.org/10.1080/02607476.2020.1733400>
- Chiva-Bartoll, O., & Fernández-Rio, J. (2022). Advocating for service-learning as a pedagogical model in physical education: Towards an activist and transformative approach. *Physical Education and Sport Pedagogy*, 27(5), 545–558.
- Chiva-Bartoll, O., Maravé-Vivas, M., Salvador-García, C., & Valverde-Esteve, T. (2021). Impact of a physical education service-learning programme on ASD children: A mixed-methods approach. *Children and Youth Services Review*, 126, Article 106008.
- Cochran-Smith, M. (2002). The research base for teacher education: Metaphors we live (& die) by. *Journal of Teacher Education*, 53(4), 283–285. <https://doi.org/10.1177/0022487102053004001>
- Cochran-Smith, M., & Lytle, S. L. (2015). *Inquiry as stance: Practitioner research for the next generation*. Teachers College Press.
- Compare, C., & Albanesi, C. (2023). Belief, attitude and critical understanding. A systematic review of social justice in Service-Learning experiences. *Journal of Community & Applied Social Psychology*, 33(2), 332–355. <https://doi.org/10.1002/casp.2639>
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches*. Sage.
- Curtis, C. A. (2020). Facilitating youth development through service-learning: Social justice implications for underserved youth. *Education, Citizenship and Social Justice*, 15(2), 93–103. <https://doi.org/10.1177/1746197918789404>
- Darby, A., & Newman, G. (2014). Exploring faculty members' motivation and persistence in academic service-learning pedagogy. *Journal of Higher Education Outreach and Engagement*, 18(2), 91–120.
- Darby, A., & Willingham, L. (2022). Faculty motivation in service-learning based on expectancy x value theory. *Journal of Experiential Education*, 45(3), 337–353. <https://doi.org/10.1177/10538259211058292>
- Daumiller, M., Stupnisky, R., & Janke, S. (2020). Motivation of higher education faculty: Theoretical approaches, empirical evidence, and future directions. *International*

- Journal of Educational Research*, 99, Article 101502. <https://doi.org/10.1016/j.jer.2019.101502>
- Daum, D. N., Marttinen, R., & Banville, D. (2021). Service-learning experiences for pre-service teachers: Cultural competency and behavior management challenges when working with a diverse low-income community. *Physical Education and Sport Pedagogy*, 27(4), 396–408. <https://doi.org/10.1080/17408989.2021.1891210>
- Deeley, S. J. (2022). *Assessment and service-learning in higher education: Critical reflective journals as praxis*. Springer Nature.
- Denzin, N. K. (1988). Review of qualitative analysis for social scientists. A. L. Strauss (Ed.), *Contemporary Sociology*, 17(3), 430–432. <https://doi.org/10.2307/2069712>
- Denzin, N. (2017). Data: The wonder of it all. In M. Koro-Ljungberg, T. Löytönen, & M. Tesar (Eds.), *Disrupting data in qualitative inquiry: Entanglements with the post-critical and post-anthropocentric* (pp. 81–92). Peter Lang.
- Denzin, N. K., Lincoln, Y. S., MacLure, M., Otterstad, A. M., Torrance, H., Cannella, G. S., Koro-Ljungberg, M., & McTier, T. (2017). Critical qualitative methodologies: Reconceptualizations and emergent construction. *International Review of Qualitative Research*, 10(4), 482–498. <https://doi.org/10.1525/irqr.2017.10.4.482>
- Dewey, J. (1938). *Experience and education*. Macmillan.
- Dunbar, K., & Yadav, A. (2022). Shifting to student-centered learning: Influences of teaching a summer service learning program. *Teaching and Teacher Education*, 110, Article 103578. <https://doi.org/10.1016/j.tate.2021.103578>
- Dvir, N., & Avissar, I. (2014). Constructing a critical professional identity among teacher candidates during service-learning. *Professional Development in Education*, 40(3), 398–415. <https://doi.org/10.1080/19415257.2013.818573>
- Ellingson, L. L., & Sotirin, P. (2020). *Making data in qualitative research: Engagements, ethics, and entanglements*. Routledge.
- Eutsler, L., Naik, M., Peecksen, S., & Branton, R. (2023). Impact of inquiry portfolios within a service-learning literacy field experience on preservice teachers' knowledge growth and GPA. *Teaching and Teacher Education*, 124, Article 104032. <https://doi.org/10.1016/j.tate.2023.104032>
- Fendler, L. (2003). Teacher reflection in a Hall of mirrors: Historical influences and political reverberations. *Educational Researcher*, 32(3), 16–25.
- Flory, S. B., & Walton-Fisette, J. L. (2015). Teaching sociocultural issues to pre-service physical education teachers: A self-study. *Asia-Pacific Journal of Health, Sport and Physical Education*, 6(3), 245–257. <https://doi.org/10.1080/18377122.2015.1092722>
- Francisco-Garcés, X., Salvador-García, C., Maravé-Vivas, M., Chiva-Bartoll, O., & Santos-Pastor, M. L. (2022). Research on service-learning in physical activity and sport: Where we have been, where we are, where we are going. *International Journal of Environmental Research and Public Health*, 19(11), 6362. <https://doi.org/10.3390/ijerph19116362>
- García-Rico, L., Santos-Pastor, M. L., Martínez-Munoz, L. F., & Ruiz-Montero, P. J. (2021). The building up of professional aptitudes through university service-learning's methodology in sciences of physical activity and sports. *Teaching and Teacher Education*, 105, Article 103402. <https://doi.org/10.1016/j.tate.2021.103402>
- Gil-Gómez, J., Chiva-Bartoll, O., & Martí-Puig, M. (2015). The impact of service learning on the training of pre-service teachers: Analysis from a physical education subject. *European Physical Education Review*, 21(4), 467–484. <https://doi.org/10.1177/1356336X15582358>
- Haraway, D. J. (2016). *Staying with the trouble: Making kin in the chthulucene*. Duke University Press.
- He, Y., & Prater, K. (2014). Writing together, learning together: Teacher development through community service learning. *Teachers and Teaching: Theory and Practice*, 20(1), 32–44. <https://doi.org/10.1080/13540602.2013.848512>
- Hollingsworth, H. L., & Knight-McKenna, M. (2018). "I am now confident": Academic service-learning as a context for addressing math anxiety in preservice teachers. *Journal of Early Childhood Teacher Education*, 39(4), 312–327. <https://doi.org/10.1080/10901027.2018.1514337>
- Iyer, R., Carrington, S., Mercer, L., & Selva, G. (2018). Critical service-learning: Promoting values orientation and enterprise skills in pre-service teacher programmes. *Asia-Pacific Journal of Teacher Education*, 46(2), 133–147.
- Jackson, A. Y., & Mazzei, L. (2012). *Thinking with theory in qualitative research: Viewing data across multiple perspectives*. Routledge.
- Koro-Ljungberg, M., Löytönen, T., & Tesar, M. (2017). Introduction: Multiplicities of data encounters. In M. Koro-Ljungberg, T. Löytönen, & M. Tesar (Eds.), *Disrupting data in qualitative inquiry: Entanglements with the post-critical and post-anthropocentric* (pp. 1–10). Peter Lang.
- LaBoskey, V. K. (2004). The methodology of self-study and its theoretical underpinnings. In J. J. Loughran, M. L. Hamilton, V. K. LaBoskey, & T. Russell (Eds.), *International handbook of self-study of teaching and teacher education practices* (pp. 817–867). Kluwer.
- Lapidot-Lefler, N., & Kais, N. (2021). What makes inclusive service-learning inclusive? *International Journal of Inclusive Education*, 1–14. <https://doi.org/10.1080/13603116.2021.1958263>
- Lather, P. (2007). *Getting lost: Feminist efforts toward a double(d) science*. Suny Press.
- Laverty, S. M. (2003). Hermeneutic phenomenology and phenomenology: A comparison of historical and methodological considerations. *International Journal of Qualitative Methods*, 2(3), 21–35.
- Lee, S. J., Wilder, C., & Yu, C. (2018). Exploring students' perceptions of service-learning experiences in an undergraduate web design course. *Teaching in Higher Education*, 23(2), 212–226. <https://doi.org/10.1080/13562517.2017.1379486>
- Loughran, J. J. (2004). Learning through self-study: The influence of purpose, participants and context. In J. J. Loughran, M. L. Hamilton, V. K. LaBoskey, & T. Russell (Eds.), *International handbook of self-study of teaching and teacher education practices* (pp. 151–192). Kluwer.
- Loughran, J., & Northfield, J. (1998). A framework for the development of self-study practice. In M. Hamilton (Ed.), *Reconceptualizing teaching practice: Developing competence through self-study* (pp. 7–18). Routledge.
- Márquez-García, M. J., Kirsch, W., & Leite-Mendez, A. (2020). Learning and collaboration in pre-service teacher education: Narrative analysis in a service learning experience at Andalusian public schools. *Teaching and Teacher Education*, 96, Article 103187. <https://doi.org/10.1016/j.tate.2020.103187>
- Martínez-Usarralde, M. J., & Chiva-Bartoll, O. (2020). Inclusivity and social justice through service-learning in the era of biopolitics. In *Futures of education: Learning to become* (pp. 117–121). UNESCO.
- Martin, A. D., & Kamberelis, G. (2013). Mapping not tracing: Qualitative educational research with political teeth. *International Journal of Qualitative Studies in Education*, 26(6), 668–679. <https://doi.org/10.1080/09518398.2013.788756>
- Mason, J. (2002). *Qualitative researching* (2nd ed.). Sage Publications.
- Miles, M., Huberman, M., & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook*. Sage.
- Nduna, N. J. (2006). Locating and managing service-learning: A complex issue in higher education. *South African Journal of Higher Education*, 20(4), 488–502.
- Nelson, L. P. (2021). Service-learning collaboration: Improving teachers' critical-thinking and job-skill training using active simulation. *Journal of Higher Education Theory and Practice*, 21(9), 189–202.
- Nielsen, D. (2016). Facilitating service learning in the online technical communication classroom. *Journal of Technical Writing and Communication*, 46(2), 236–256. <https://doi.org/10.1177/0047281616633600>
- North, C. (2017). Swinging between infatuation and disillusionment: Learning about teaching teachers through self-study. *Physical Education and Sport Pedagogy*, 22(4), 390–402.
- Ovens, A. (2014). Disturbing practice in teacher education through peer-teaching. In A. Ovens, & T. Fletcher (Eds.), *Self-study in physical education teacher education: Exploring the interplay of practice and scholarship* (pp. 87–98). Springer.
- Pavlovich, K. (2008). The development of reflective practice through student journals. *Higher Education Research and Development*, 26(3), 281–295. <https://doi.org/10.1080/07294360701494302>
- Peters, K. A. (2011). Including service learning in the undergraduate communication sciences and disorders curriculum: Benefits, challenges, and strategies for success. *American Journal of Audiology*, 20(2), S181. <https://doi.org/10.1044/1059-0889>
- Ramsaroop, S., & Petersen, N. (2020). Building professional competencies through a service learning 'gallery walk' in primary school teacher education. *Journal of University Teaching and Learning Practice*, 17(4), 3. <https://doi.org/10.53761/1.17.4.3>
- Resch, K., & Schritteser, I. (2021). Using the Service-Learning approach to bridge the gap between theory and practice in teacher education. *International Journal of Inclusive Education*, 1–15. <https://doi.org/10.1080/13603116.2021.1882053>
- Resch, K., Schritteser, I., & Knapp, M. (2022). Overcoming the theory-practice divide in teacher education with the 'Partner School Programme'. A conceptual mapping. *European Journal of Teacher Education*, 1–17. <https://doi.org/10.1080/02619768.2022.2058928>
- Rutti, R. M., LaBonte, J., Helms, M. M., Hervani, A. A., & Sarkarat, S. (2016). The service learning projects: Stakeholder benefits and potential class topics. *Education + Training*, 58(4), 422–438. <https://doi.org/10.1108/ET-06-2015-0050>
- Salam, M., Awang Iskandar, D. N., Ibrahim, D. H., & Farooq, M. S. (2019). Service learning in higher education: A systematic literature review. *Asia Pacific Education Review*, 20(4), 573–593. <https://doi.org/10.1007/s12564-019-09580-6>
- Salam, M., Iskandar, D. N., & Ibrahim, D. H. A. (2017). Service learning support for academic learning and skills development. *Journal of Telecommunication, Electronic and Computer Engineering*, 9(2–10), 111–117.
- Saldana, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). Sage Publications.
- Salter, P., & Halbert, K. (2019). Balancing classroom ready with community ready: Enabling agency to engage with community through critical service learning. *Asia-Pacific Journal of Teacher Education*, 47(1), 5–17. <https://doi.org/10.1080/1359866X.2018.1497771>
- Salvador-García, C. (2023). Learning to teach, teaching to learn: A self-study to promote gender awareness through debates in teacher education. *Studying Teacher Education*, 19(1), 63–81. <https://doi.org/10.1080/17425964.2022.2149482>
- Schoenherr, T. (2015). Service-learning in supply chain management: Benefits, challenges and best practices. *Decision Sciences Journal of Innovative Education*, 13(1), 45–70. <https://doi.org/10.1111/dsji.12052>
- Smith, B., & Sparkes, A. (2019). *Routledge handbook of qualitative research in sport and exercise*. Routledge.
- Stenhouse, L. (1975). *An introduction to curriculum research and development*. Heinemann.
- Strom, K. J., & Martin, A. D. (2017). *Becoming-teacher: A rhizomatic look at first-year teaching*. Springer.
- Strom, K. J., & Martin, A. D. (2022). Toward a critical posthuman understanding of teacher development and practice: A multi-case study of beginning teachers. *Teaching and Teacher Education*, 114, Article 103688. <https://doi.org/10.1016/j.tate.2022.103688>
- Taylor, C. A., & Bayley, A. (Eds.). (2019). *Posthumanism and higher education: Reimagining pedagogy, practice and research*. Springer.
- Tietjen, L. L. (2016). *Service learning pedagogy in teacher education: An examination of individual and group experiences (doctoral dissertation)*. Retrieved from ProQuest, Article 10161483.
- Toporek, R. L., & Worthington, R. L. (2014). Integrating service learning and difficult dialogues pedagogy to advance social justice training. *The Counseling Psychologist*, 42(7), 919–945. <https://doi.org/10.1177/0011000014545090>

- Valencia-Forrester, F., Patrick, C. J., Webb, F., & Backhaus, B. (2019). Practical aspects of service learning make work-integrated learning wise practice for inclusive education in Australia. *International Journal of Work-Integrated Learning*, 20(1), 31–42.
- Xavier, N. A., & Jones, P. A. (2021). Students' perceptions of the barriers to and benefits from service-learning. *Journal of Higher Education Theory and Practice*, 21(8), 195–205.
- Zuzovsky, R., Guberman, A., & Amasha, M. (2022). Citizenship education to promote civic engagement among Arabic speaking student teachers in Israel. *Education, Citizenship and Social Justice*, 17461979221114552. <https://doi.org/10.1177/17461979221114552>