

Novel metaphors for a novel school: narratives, voices and experiences from pre-service teachers engaged in Service-Learning in Spain

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Abstract

In this article, we analyze a service-learning experience developed in a class of the major in Primary Education Teaching at the University of Malaga, in Andalusia, Spain, by resorting to the metaphors produced by pre-service teachers in the narrative and reflective pieces written for classwork. As a result, we unearthed a constellation of metaphors organized into two main axes: (1) metaphors for school success; (2) metaphors for learning and teaching. In our interpretation, the experience makes it possible for the emergence of novel metaphors which resonate with a more dialogical and solidary educational praxis compared to participants' own schooling experiences.

Keywords: Teacher education – service-learning – metaphors

1. Introduction

It is noteworthy that a crucial aspect of Paulo Freire's dialogical education, the most influential educational theory in decades, is anchored on two dichotomic metaphors: the banking education and the dialogical education metaphors (Freire, 2011). The former views **education** as filling in students' voids with regular deposits of knowledge, similarly to accumulating capital. In

addition to being monological, it is integral to an oppressive social system as it suppresses difference, otherness, and student agency (Roberts, 2017). Dialogical education, on the other hand, takes place through dialogue, which implies creating dialogic spaces in which different perspectives can collide or coexist, and learning can occur; it is not merely educating through dialog but for a critical and dialogic attitude toward the world and others (Wegerif, 2017). In other words, dialogical education is an educational and political principle built over the image of the everyday conversational arrangement known as dialog. On a similar note, Craig (2005) said that Stephen Hawkins, when explaining in his lectures what the universe looked like, claimed that the universe resembled bubbles – similarly to a hair string that is bidimensional when viewed from a long distance and quadridimensional when viewed through a microscope.

Freire's and Hawkin's use of metaphors reveals how metaphors are employed when breaking new theoretical grounds and producing and sharing knowledge (Craig, 2017). Several authors have debated the importance of metaphors in education (Craig, 2017, 2018, 2020; Guilherme and Freitas, 2018), concluding that they are central to understanding educational phenomena. In this article, we analyze the metaphors used by PSTs¹ as they narrate and reflect upon their experience doing Service Learning (SL) in public schools in and nearby the city of Málaga, in Andalusia (southern Spain), as a critical element of their initial education². Our findings indicate that the experiences lived in SL seem to resonate with the emergence of more dialogical and collective metaphors to talk about educational praxis.

SL here is understood as a process that focuses on the interaction between the learning experience of the student and the real need in a community (Cervantes & Meaney, 2013),

¹ Acronyms used henceforth: pre-service teacher (PST); Service Learning (SL); Learning Communities (LC); and narrative-reflective reports (NR).

² We see teacher education as a type of learning that emerges from the construction of teacher identities in radically biographical ways – essentially contextual, contingent, and narrative. Thus, it is always knowledge production. (Lopes-Pereira, 2012; Rivas-Flores, 2014; Marquez-Garcia, Kirsch, & Leite-Mendez, 2020).

attending to both the service and learning components equally while fostering a horizontal relationship between those who serve and those who are served. In SL, the central purpose is integrating coursework with community service to enhance both service and learning in a dialogical way. Therefore, SL is a powerful tool in PST education since it is simultaneously an educational philosophy, a pedagogical approach, a community development model, and a curriculum design method.

In the next section, we present a review of pertinent literature for the present research. Then, we discuss both its contextual and methodological backdrops. We were interested in how metaphors used by participants could elucidate how they viewed teaching, learning, school community, and teacher education in its political, cultural, ideological, and pedagogical complexities as well as how the SL experience in the LC impacted them. Next, we present and analyze both a conceptual map summarizing the metaphors encountered in the analysis, which we have named a constellation of metaphors, and excerpts that were meaningful in the (re)construction of such constellation and discuss the results considering the literature examined. This constellation is organized around two main axes: (1) metaphors for school success; (2) metaphors for learning and teaching. We interpret it as suggesting a shift from a praxis oriented by more individualistic and banking-like metaphors to more collective, dialogical, and solidary metaphors. Finally, we discuss the implications of this study for PST education and its limitations and delineate avenues for future research.

2.Literature review

2.1 Contemporary theory of metaphor

Differently from a classic conception of metaphor as belonging to poetic or artistic discourse, the contemporary theory of metaphor stems from the idea that metaphors are used in everyday life and contain in them a conceptual map of the hermeneutic structures through which we interpret the world and act in it (Lakoff, 1992). Metaphors are inherited and constructed in social practice and may be inherent to small groups or great population masses. They may be particular to a language or common to several ones.

For instance, "Love is a journey," "Treating an illness is a fight," or "Language is a conduit for meaning" are common conceptual metaphors in English, Spanish, and Portuguese. From these metaphors, others are formed: "Our marriage has hit a dead-end street," "He defeated cancer," or "He needs to pack more thoughts into his words." We see these phenomena as the metaphors suggest, even when such metaphors are poor at describing them or when the depiction is not suitable.³ In a nutshell, metaphors impact how we see such phenomena and how we act about them.

Lakoff (1992) states that metaphors are asymmetric and partial mappings across conceptual domains. Each mapping is a fixed set of ontological correspondences between entities in a source domain and entities in a target domain. When these fixed correspondences are activated, mappings can project inference patterns to the target domain from the base. Mappings are not arbitrary; they are anchored in everyday bodily experience. The conceptual metaphor system is primarily unconscious, automatic, and used without apparent effort, like our linguistic system. Moreover, our systems of conceptual metaphors are alive, just like our phonological and grammatical systems, and, thus, are subject to change below conscious levels.

³ Reddy (1993) has challenged the metaphors that we use to talk about language as shaping how we perceive language mischievously. In health sciences, investigators have pointed out the predominance of war-related metaphors to describe life with cancer and have been critical to it as far as cancer patients' well-being is concerned (Semino et al., 2017).

In short, a metaphoric system is central to our understanding of the experience and the ways we act, influencing how we interpret the world and how we plan present and future social action in it, and how our praxis presents itself (whether we are aware of it or not). Moreover, this understanding has resonated in education in meaningful ways, as discussed below.

2.2 Metaphors and education

Educators have increasingly claimed that metaphors are powerful mechanisms to organize our world experiences and guide present actions and plans. For this reason, Badley and Van Brummelen (2012) have advocated that educators should evaluate how metaphors guide their praxis and then choose carefully within which metaphors they will locate their practice. That is to say, teacher education must invest in introducing metaphors that are appropriate to and coherent with its projects and desires so that metaphors do not "use us in unhelpful ways" (Badley & Van Brummelen, 2012, p. 4). Thus, the metaphors that we use to anchor our teaching practices must be deep enough to shape our personal-professional identities since they are "shaped by those images and related narratives and worldviews we choose to dwell" (Wineberg, 2012, p. 34). However, reflecting on the metaphors used by teachers (or PSTs) entails embracing complexity, as "a multiplicity of images is required to capture the complexity of the praxis" (Wineberg, 2012, p. 32).

The field of narrative research on education has yielded several metaphors over time. For example, Craig (2017) has indicated that personal practical knowledge is a metaphor for the practical knowledge developed by teachers (Clandinin, 2019; Clandinin & Connelly, 1987). The professional knowledge landscape has been widely used as a metaphor for the various contexts where teachers do their work (Ampofo, Claine, & Clandinin, 2019). The concept of knowledge

communities (Craig et al., 2020; Olson & Craig, 2001) has become a familiar metaphor for the contexts where teachers share their stories and narratively produce teacher practical knowledge in collective ways. Additionally, stories to live by (Clandinin & Connelly, 1998) have been widely used to discuss teacher identity.

Craig (2003, 2005, 2017) proposed the concept of storied metaphors to elucidate how educators of four schools made sense of top-down policies of school reform. Educators used metaphors, for they were "human beings making sense of disembodied idea – organized school reform— through reflecting on their embodied relationships" (Craig, 2005, p. 199) as they struggled to manage its impact on their "identities and the stories they and their students could live and tell, and relive and retell on their professional knowledge landscapes" (Craig, 2005, p. 199). These inquiries found metaphors such as school reform as The Monkey's Paw (be careful what you ask for in case you get it) and school accountability as a dragon in school backyards (a fire-breathing dragon relentlessly threatening to snuff out the relevancy dragon living inside school buildings), as the author has later summarized (Craig, 2020). Craig (2017, 2020) has claimed that metaphors may help organize the chaos of lived experience more linearly as a story with a plot and a moral lesson, ordering dispersed and often nonsensical experiences and locking them into a coherent whole.

In Spain, researchers have also approached the role of metaphors in different educational contexts. Lopez-Luengo et al. (2015) discussed metaphors before and after the practicum of a group of elementary school PSTs at a sizeable Spanish university in Valladolid, using the four categories of metaphors proposed by Mellado et al. (2013) – behavioral-transmissive (student is a passive learner and teacher transmits knowledge), cognitive-constructivist (student is an active agent and teacher is a facilitator), situated (similar to the former but with focus on the social and

collaborative aspects of experience), and self-referenced (egocentric metaphors that must be analyzed case by case). They concluded that the practicum period did not significantly influence the metaphors presented by PSTs, for participants' metaphors varied little when comparing pre-test to post-test. Such an aspect differed from the findings of several works investigating this issue.

Mellado et al. (2017) examined if MA students of secondary education at a crucial Spanish university modified their metaphors after practicum in secondary schools, using Mellado et al. (2013)'s metaphorical categories cited above. According to the study, there was no significant change in participants' metaphors, supporting Lopes-Luengo et al. (2015)'s results but challenging several previous studies. Previous studies had concluded that participants' metaphors change throughout practical experiences. Martínez (2016) has explored metaphors that had come up in his work as a teacher educator over the past decades, including a pine nut, which also emerged in our data, and advocated for the essential role metaphors play in reflection about teaching practice.

In Latin America, Fariás and Véliz (2019) have used visual and textual metaphors to investigate the identity-in-construction of pre-service teachers of English as a Foreign Language. They have stated that the identities constructed by participants were anchored in metaphors crossed by multimodality and globalization. In the next section we will turn to how metaphors have been used in the field of education to cater for an important aspect of transformation: the production novel meaning and practices.

2.3 Novel metaphors for novel meanings and practices

Craig (2017) delineates the distinction between novel metaphors and stock metaphors. The former emerges from contingent contexts and has an imaginative and generative power, "able to express the inexpressible, vivid in their illustrations and limitless where interpretation is concerned" (Craig, 2017, p. 302). Stock metaphors, conversely, can become so repetitive and absolutized that they may become trivial and unreflective to shape practice in meaningful ways. For instance, Stock (2021) has claimed that the opposition between darkness (ignorance) and light (education) is the archetypical stock metaphor for education, for it is founded in our depth-experiences of the world and is applicable in many varied contexts, languages, and cultures, which gives it the power of self-perpetuation. However, it brings little to the table in terms of reflecting upon educational phenomena.

Furthermore, Craig (2017) refers to emergent metaphors and ascribed metaphors. Emergent metaphors naturally appear in participants' discourse and unfolding practice and can be novel or stock. One example of an emergent metaphor in our research is that of the "pine nut" to describe PSTs' experience in the SL project. PSTs understand their experience as a shared endeavor where individuals have their idiosyncrasies, limits, and roles but are united as a whole. Researchers did not ascribe this metaphor, nor is it customary in everyday language. In contrast, ascribed metaphors are novel or stock metaphors that researchers adopt to describe a phenomenon they have identified or view as teachers' perceived teaching experiences. Ascribed metaphors are often used in teacher development, such as in workshops or lectures, and teachers are expected to shape their unfolding practice according to them.

Crehan (2018), in reference to Gramsci, stated that common sense is not immovable nor permanent; instead, it is subject to socio-historical changes and echoes emerging human needs. Common sense, therefore, changes in fragmentary and chaotic ways, conforming to the novel,

emergent metaphors that question the inherited and crystallized meanings and hegemonic beliefs, which are created, shared and put forward within the same generation or from one generation to another. Thus, it is necessary to identify the different elements that compose common sense and define the existing bonds between social realities and the metaphors that correspond to them. By doing this, we can produce different metaphors and, thus, help propose novel meanings. In other words, common sense production and dissemination use stock metaphors as an essential tool, but novel metaphors may emerge in the transformation of common sense.

It is no different in schools and teacher education programs. In collaborative experiences in inclusive and transforming educational contexts, novel metaphors emerge and often conflict with common sense pervasive stock metaphors. Some of these metaphors are fleeting, but others sediment and help conform novel metaphors, more aligned with a dialogic and democratic perspective towards education, which, by what has been discussed above, may help confirm new ways to view the world and act in it. As we understand, looking at the metaphors that come up in PSTs' narratives is a way to see both the stock metaphors – conformed by common sense – that they bring along and how novel ones can challenge such metaphors as they reflect on transformative school experiences in SL.

The studies reviewed (2.2 and 2.3) are educational developments of the contemporary theory of metaphors (2.1) and claim that metaphors are essential to understanding educators' praxis and PST preparation. They have helped us frame the present study by showing how metaphors can be employed to understand teachers' views concerning their practice and future teachers' views concerning their preparation.

2.4 Pedagogy of Wonder, learning from the unexpected, and success for all:

Contemporary philosophers of education and educational researchers have advocated for the importance of wonder in and for education (Wolbert & Schinkel, 2020), even though it has been largely overlooked in the field (Hadzigeorgiou, 2016). Wonder could be defined as a mode of consciousness in which we experience what we perceive as strange, beyond our powers of comprehension, yet worthy of our attention (Schinkel, 2018). In other words, it is learning from the unexpected (Acaso & Ellsworth, 2011). What is not expected provokes, breaks into the routine of what has been learned, and shakes it. Wonder comes from contrast. To be amazed is to find oneself faced with a reorganization of the world that poses a problem for intelligence. Thus, wonder activates our desire to learn (Chateau, 1996).

For this reason, Lévinas (1999) proposes a philosophy of difference that starts from the fact that the important thing is not existence itself but the difference that determines each existence and, thus, highlights the relevance of the encounter in the constitution of the self and the world that we inhabit. The emotion makes the difference, the one that defines, establishes, and orders the priorities, both regarding what we learn in the curriculum and in life. Thus, “emotions are present in all educational processes, despite not being noticed in many of them. They are intangible, unpredictable, and unexpected” (Martinez et al., 2017, p.110). Therefore, socializing educational processes must be experienced and constantly rebuilt (Augé, 2000).

According to Charlot (2014), narratives bring the empirical self and the epistemic self into play. The empirical self is the one of daily life, from everyday anecdotes, while the epistemic self is the self that transcends the contingent meaning of quotidian experiences. The epistemic self consolidates knowledge, problematizes, and questions experiences. In this sense, we speak of the game of the ordinary and epistemic selves in reconciling astonishment and

reflection in building knowledge. The empirical self is amazed at experienced reality, while the epistemic self uses the amazement and the unexpected to produce knowledge.

In the 1980's, Robert Slavin and Nancy Maden based their educational program on the metaphor of "success for all" (van Kuijk, Mullender-Wijnsma, & Bosker, 2021). Several educational programs, such as LCs in Spain, have subsequently been based on their work. As Santos-Rego and Slavin (2002) have pointed out, it is paramount to put the best studies on pedagogy into practice with students at risk or in underprivileged environments. The purpose of their program is to reorient the organization of the school and its relations with the background so that all stakeholders can maximize student learning. The concept of school success in this enterprise is based on research, teacher development, school organization, and collaboration among all agents to promote autonomous development for students without leaving any child behind. Moreover, the program encourages the participation of families so that they actively participate in the education of their children and the school's everyday life.

As our analysis will suggest, the experience examined in this study was a source of learning from wonder and the unexpected. Moreover, it provoked knowledge construction in the reconciliation of ordinary selves with epistemic selves through reflection over lived experience in a way that seems to have transformed their views. Finally, success for all is present in PSTs' emergent metaphors, which is coherent with the idea of SL in LCs.

3.Context and methodology

In this section, we describe the context for the present study (3.1) and the methodological procedures employed for participant recruitment, data generation, and data analysis (3.2). While

the former is a more general account of the SL project, the latter describes this study's methodological and analytical procedures.

3.1 Contextual backdrop

This study has emerged from the work of the research group Teaching, Communication and Educational Research (Procie)⁴ from the School of Educational Sciences at the University of Malaga in southern Spain⁵. In the project "Ecologies of learning in multiple contexts: analysis of expanded education and citizenship projects"⁶, Procie has proposed a new approach to PST education in courses of the Primary Education Teaching Degree by promoting (a) horizontal partnerships with several public schools in Malaga to foster SL contexts for PSTs doing said degree; and (b) redesigned syllabi that included SL in public schools as an integral part of classwork. This approach has three main characteristics: (1) it fosters PST learning through participation in Learning Communities (LCs)⁷ while simultaneously contributing to transformation in these partner schools; (2) it nurtures collaboration between universities and schools for PST and continues teacher development; (3) it supports public school projects of social transformation (Puiggros et al., 2010). This model of a community of praxis for teacher education supports schools that have entered the LC project by sending PSTs from the university

⁴ More information at <http://ofertaidi.uma.es/institucion-educativa.php>, last consulted on 03/16/2020.

⁵ The contextual backdrop regarding the work of Procie, the SL project, and a more comprehensive discussion of SL and Communities of Praxis can be found in our earlier work (Marquez-Garcia, Kirsch, & Leite-Mendez, 2020).

⁶ Ecologies of Learning (Fernandez & Anguita, 2015) indicate constructivist and dialogic theories that conceive of learning contexts as complex, interconnected, and interactive.

⁷ The LCs consist of a network of public schools run by the Regional Government of Andalusia, aiming to open schools up to community participation (including PSTs and students' families) and create a network of pre-service continued teacher development. All schools that have engaged in the LC project follow the same guidelines: (1) learning is the central axis of all activities inside and outside school, and all activities are oriented to learning by interacting in heterogeneity; (2) positive expectations about the possibilities of every student is the basis for relationships and learning; and (3) the project is in continuous progress and is permanently being evaluated and rethought. The main actions in the LCs are interactive groups in class, family education, mixed organizational commissions, dialogic gatherings, and dialogic conflict resolution models. Success for all has been an influential reference to LCs.

to participate in school activities. This work intersects with classwork through reflection seminars mediated by university faculty, increasing PSTs' learning opportunities (Marquez-García, Ibañez, & Padua, 2015)⁸. It is, thus, a SL experience.

The present investigation was carried out in a class named "Educational Intervention and Sociocultural Diversity" in the Primary Education Teaching Degree at the School of Educational Sciences of Malaga. It took place in the first semester of the 2018-2019 academic year (October 2018 through February 2019). As a result, PSTs could volunteer in seven primary schools in Malaga and nearby as part of their classwork, all of which were members of the LC program.

The professor presented the project in the first week of classes, emphasizing the importance of practical experiences in professional preparation, and introduced the partner schools. The seven schools faced similar challenges (such as a low number of enrollments, many cases of conflict, and poor student performance) and had joined the LC program to enhance their work. The schools collaborated with Procie in terms of volunteering, research, and teacher development (Márquez-García, Leite-Méndez, & Rivas-Flores, 2017). PSTs who did volunteer would not have to attend every class; they had to present the seminars and do the evaluations (presentations, a pedagogical intervention, a final report, and a group reflection); those who did not participate in SL had to attend class weekly. Fifty-five students enrolled in the course, while forty engaged in SL (more in 3.2).

At the schools, volunteers initially observed activities, including classwork, and interacted with direction, faculty, staff, students, and families. Then, they collaborated in several class activities at different levels of Primary Education, including planning and implementing a pedagogical intervention with students. The university's classes consisted of roundtable

⁸ Four faculty members and one doctoral student mediated the relationship with the schools then, with regular visits to help direction and faculty implement LC's principles.

discussions with assigned readings regarding teaching in general and the LC experiences. In the middle of the term, there was a small seminar. In the end, there was a large one where PSTs presented in groups the result of their work as volunteers and gave feedback to other groups of SL. Finally, PSTs delivered individual and collective reflective reports (in groups of three or four) produced during the semester.

3.2 Methodological backdrop

Participants and ethics

Most PSTs were white middle-class European women in their early twenties, with few exceptions being first-generation Europeans (children of immigrants) and working-class students who entered university through a unique program for older students (25+). PSTs chose schools based on schedule compatibility with schools or the geographical location of the seven partner schools (3.1).

Author 1 explained that participation would not imply extra work or benefit them beyond the learning experience in class. PSTs were informed that their NRs could be used for research purposes, which would not impact how the class was conducted and evaluated. Furthermore, participants were informed that their anonymity would be protected – by using pseudonyms for all proper names and avoiding the use of images where PSTs or schools could be recognized – and signed consent forms.

Forty PSTs participated in SL and delivered the final reports, so only these were considered participants in the study. The data gathered was a collection of texts produced for course evaluation and would have been written and evaluated despite research, so no measure was taken to tackle the fact that author 1 was their teacher.

Authors 1 and 2 were both professors at the School of Educational Sciences of the University of Málaga, while author 3 was a visiting scholar there. Therefore, author 1 was responsible for the class; author two sometimes cotaught it, and author 3 participated in some classes as a guest.

Data sources

The database consisted of the forty individual NRs and the twelve collective NRs produced by the PSTs who participated in the SL project. Each volunteer presented an individual and a collective NR. The individual texts were developed throughout the collaborative experience. At the same time, the group reports were produced through dialog, sharing, and systematization in groups of three or four participants volunteering in the same school⁹.

There were no specific guidelines on producing the NRs, except that PSTs should narrate their experiences in the SL projects and reflect upon them considering the class discussions and assigned readings. PSTs were free to choose the formal aspects of their NRs. Most reports comprised daily narrations of PSTs' visits to schools interwoven with or followed by reflective segments with or without relation to assigned readings. All reports contained pictures of classes and students' work. Metaphors were not mentioned to PSTs in class, so all the metaphors encountered in the NRs emerged without being provoked.

Schools	Group narratives	Individual narratives
Catalina	1	2
Ignácio de Loyola	1	2
Lope de Vega	1	4
Río Ancho	1	4
Ciudad de Puelenje	5	19
Doña Francisquita	1	3
Nuestra Señora de Guadalupe	2	6
Total	12	40

Table 1: partner schools (pseudonyms)

⁹ Schools with more volunteers naturally have more collective reports.

In previous work, we analyzed online interviews and one collective NR (randomly chosen) per school of the same group of PSTs. We found that PSTs learn by feeling, belonging, placing actions in a social perspective, and sharing experiences and reflections. This paper examines all the NRs produced by PSTs of the same group, focusing specifically on what had emerged as a critical component of NRs – the metaphors that PSTs produced to make sense of lived experience.

Data analysis

Researchers divided the data to examine smaller chunks of data more thoroughly when data analysis started. Researchers read NRs multiple times and then produced tables with words, images, ideas, and metaphors that emerged recurrently in the reflective reports and all excerpts from the data that illustrated such metaphors. Subsequently, the tables were shared and discussed in group analysis sessions. Then, the main categories and prototypical metaphors were agreed upon. We understood metaphors as ontological correspondences between entities in a source domain and entities in a target domain¹⁰. After that, the most prototypical data segments were chosen to be quoted in the manuscript. Finally, the mind map with the constellation of metaphors was produced as a synopsis of the results. These metaphors and images are presented in their complexity, relationships, intersections, and contradictions. The constellation was produced and discussed in multiple data analysis meetings until the team considered it a precise enough representation of the findings.

We approached the PSTs' NRs as archaeologists organizing pieces of a seemingly disconnected puzzle to make sense of PSTs' experience doing SL in LCs. In this process, we analyzed the NRs to understand how the transformative contexts and the implication of PSTs in

¹⁰ For instance, the metaphors "education is the path" or "school success is winning in an obstacle race" appeared in our data. We considered them metaphors because they explain abstract concepts (education and school success) by referring to concrete concepts (a path or winning an obstacle race).

their processes may instigate novel and more critical shared metaphors to talk about education, teaching, learning, and the school context in a dialogical process of data analysis among the three researchers.

We unearthed the metaphors used by PSTs in the NRs to make sense of their experience doing SL at the partner schools, understanding that they could provide us with a glimpse of common sense, stock metaphors that they brought along to experience as well as the novel metaphors that emerged as participants to make sense of their experiences and produced knowledge. We were interested, as stated earlier, in how these metaphors could help us understand how PSTs viewed teaching, learning, school community, and teacher education in its political, cultural, ideological, and pedagogical complexities and how the SL experience in the LC resonated in them. These meanings revealed footprints and conceptual marks that gathered political, cultural, ideological, and pedagogical insights about teaching and teacher education, schools, and learning.

The data was analyzed two years after the course finished, which separated data analysis from teaching and data collection. During the analysis, we were conscious of the dual-role nature of this study (Bell, 2018), for, in a way, we were investigating our practice. However, we did not see it as a paradox to be fought but as a constitutive aspect of the research, a paradigm to be constantly reflected upon and critically assessed.

4. Results and discussion

In this section, we present and discuss the results obtained in the study. First, we introduce the findings in a synoptic mind map, which we have metaphorically named constellation of metaphors. According to the International Astronomical Association, constellations are a matter

of perspective; they are our Earth-based interpretation of two-dimensional star patterns in the sky made up of stars of many differing brightnesses and distances from Earth¹¹. This quote sums up the results we present henceforth – they are a two-dimensional interpretation of a complex landscape of images, analogies, expressions, and collocations that we have interpreted as metaphoric and relevant to participants’ interpretations of the professional landscape they were constructing. Below we present the map, which we discuss in this section by presenting meaningful segments from participants’ narratives and discussing the findings compared to the literature examined.

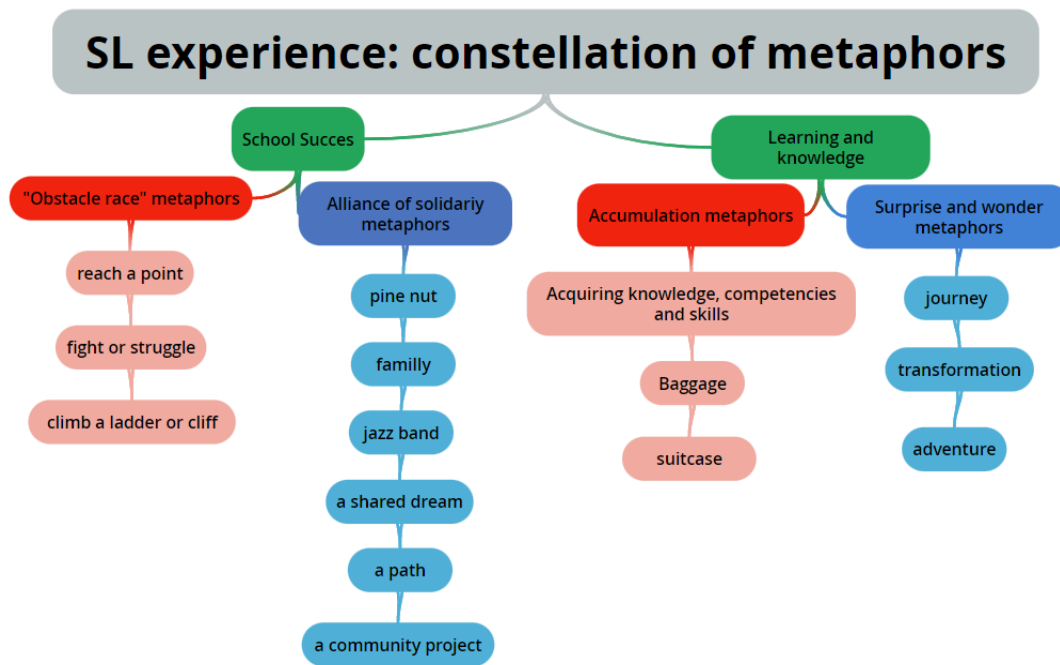


Figure 1: constellation of metaphors

4.1 Metaphor 1: School success. From “obstacle race” metaphors to “solidarity alliance” metaphors

¹¹ <https://www.iau.org/public/themes/constellations/>, consulted on September 28, 2021.

In this experience, PSTs **used** individualistic and competitive metaphors to refer to school success in their memories of school or their expectations about the school that they would find. In other words, they **built** these metaphors in their educational path and brought them as a resource to understand and explain school success, learning, and teaching. For instance, school success **was** initially referred to as “reaching a point,” “fighting or struggling for something,” “acquiring and accumulating” knowledge competencies and skills, and “climbing a ladder or a cliff¹² , among others that also **presupposed** a tremendous individual effort to rise in status, a competition of some kind, or acquisition/accumulation.

Nevertheless, novel metaphors – more aligned with the LC’s philosophy and with a dialogic sense of education – **emerged**. This transition **was** particularly evident in a segment where a participant **said** that students “drown”¹³ in individualism and that our role **was** to help stop this through dialog, sharing, and learning to coexist with others:

We believe that this starting point was necessary and that it could be an excellent start to progress in the classroom and to end this individualism that "drowns" us more and more. We recognize that it is difficult to open up to others. We do not know to what extent this activity could motivate "success," but we see it as extremely important that they relate to one another, listen to one another, and share thoughts with others. In short, they coexist.

This segment **represented** a transition from the “obstacle race metaphors,” which **were** emergent metaphors that **represented** education as an individual competition, to “solidarity alliance” metaphors, which we ascribed to stand for a group of emergent metaphors that **described** education as a collective and solidary endeavor.

One PST, when talking about an experience lived in SL, a class assembly, **described** success as forming a pine nut¹⁴ with others:

After twenty minutes, when the class had been divided into three groups to do the different activities, I felt that we were all like a big family and that everyone

¹² *Alcanzar, pelear, luchar, subir las escaleras, saltar sobre el precipicio.*

¹³ *Ahogarse.*

¹⁴ *Una piña.*

was eager to learn and help their classmates. Teachers have much freedom to be self-starters and work as they want. They are all pine nuts.

In the pine nut, all the small parts of the nut form a whole, so it is colloquially **viewed** as a union. In this sense, success is both seen as a union and as the capacity to open up to give one's best. In the same segment, we can also see a ubiquitous metaphor of the school environments of this experience – that of the "family," understood as a unity where everyone has their place and cares for one another.

This logic of success, crystallized by individualism, homogenization, and segregation, disappeared as students' stories **unfolded** and other success metaphors **emerged**. Another image that **appeared** is that of the "jazz band"¹⁵, where everyone **worked** collectively to make music together, feeling the interaction of creating a piece of art cooperatively. Like the pine nut metaphor, it **was** about individuals creating a cohesive whole together without blurring the boundaries they **maintained** as individuals. In this sense, the metaphor of "doing my tiny bit"¹⁶ **got** a collective and solidary context where tiny **was** not **demeaning**. Success **was** a solidarity alliance where learning, coexistence, inclusion, and participation **went** hand in hand. The possibility of transforming social inequalities into the right to succeed and contribute to small successful interactions **was** widespread in the data.

Furthermore, it **would** be impossible to talk about school success without dreams in this context. Unlike viewing dreaming as an individual process, it **could** be considered something shared dialogically. Viewing dreams as dialogical, which in some educational contexts may seem obvious, in socially vulnerable contexts **became** the possibility of creating meaning for transformative educational projects. As a PST **put** it:

¹⁵ *Conjunto de jazz.*

¹⁶ *Aportar um grão de areia*, which means pitching in a grain of sand.

I want to highlight the question, "What is your dream? What would you do to get it? ". That was the most successful question in this section and the one that I am most proud of having asked because seeing participants' faces when asked about a dream was genuinely unforgettable. Their eyes opened, their shoulders trembled, and the gaze was directed upward. Dreams are goals to fight for. They are dedication, enthusiasm, and the desire to succeed in something... It is crucial to motivate these children, who are in a more disadvantaged context and who experience significant problems, the desire to dream big [...] It reflects illusion, when something is possible and, as we saw it in the dream phase, so crucial in LCs.

From the PST's perspective, success **consisted** of small steps in everyday experience: "It is a way to recognize that through small steps one can achieve great things, in this case, great things in school." In this sense, three meaningful metaphors, pervasive in the data, **emerged**: "school life as a path"; "learning as walking a path"; and teaching as "guiding through the path" or simply "walking it together as a comrade." Compared to the "obstacle race" metaphor, this set of metaphors constellated around the idea of a path **had** a subtle but crucial distinction – there was no prize at the end. Instead, the process of walking (and what you experience as an individual and with others along the way) **was** more relevant than what you encountered at the end. After all, it **was** a path and not a race.

Furthermore, the idea of school success – and of a successful school – **was** a project connected with community life:

It is an educational project that aims to provide the opportunities that students and the entire community need to achieve success. Therefore, it is educational and could say that it is a live training in which everyone participates to create a society as citizens in a more cohesive community.

In this sense, success **involved** participating in social life but, even more importantly, the possibility of learning to create a more cohesive and democratic community.

Success **was** perceived as achievement in a shared context. PSTs **narrated** how planning and observing action **brought** into play a sense of shared success, that is, of something experienced with others. The creation of meaning **was** possible through the interaction of people

who co-constructed the purposes they shared in a community (Patton & Parker, 2017). Success **had** a substance shared in the LC by engaging in dialog with others. As a PST **narrated**:

It was real; I mean, their voices were heard, and it was an example that the LCs welcome each of the agents that make up the community by welcoming their contributions. It is solidarity as a principle (of the education). That is to say, here I participate, and I propose my dream by sharing a common interest for our Center. Therefore, success is constructed.

However, the community's sense of success **called** into question metaphors crystallized in society through social justice, dignity, and equity, as discussed by a PST:

All children have the right to an equal education that guarantees success and is helpful for them to live with dignity both in the present and in the future. Here the idea of community arises because they began to rethink in a dialogical way, on a level of equality, which seems so human to me. (...) Quality education emerges as one of the premises to achieve success for everyone, including those who belong to socially excluded groups. Promoting social cohesion implies perceiving diversity as an enriching value.

In this sense, success only **existed** when it **was** shared by everyone in the Community in a dialogical way. Its function **was** to make it possible for students to live their lives with dignity, both in the present and future.

4.1.1 Metaphor 1: discussion

The idea of school success itself may be better understood metaphorically. For instance, in the banking metaphor of education, success involves acquiring knowledge over time as if it were good (Freire, 2011). However, such a metaphor imposes profound limitations, for it describes learning as a process of acquisition that is individual. In the studies of school biographies carried out in the last decades, school success **appeared** in a meritocratic and individualistic sense, as a race towards university, whose logic **was** to achieve the highest academic levels as individual achievement overcoming obstacles of all kinds – social, personal, in the family (Rivas-Flores, 2014). This meritocratic and individualistic inclination could

legitimize neoliberal doxa in education (Diez-Gutierrez, 2018). PSTs bring this moral, embedded in everyday common sense, to the university in their stories, anecdotes, complaints, and, of course, metaphors.

Hernández and Padilla-Petry (2013) **showed** that failure is assumed from an early age: those who are considered to have failed are the ones who **did not** adapt to a system that **excluded** them. Viewed in this way, students who adapted **participated** in the race towards success. Therefore, it was necessary to draw different metaphors for success to transform the landscape of relationships in school, classroom, and social context. In this regard, Charlot (2000, 2008, 2014) **suggested** that changing the relationship between knowledge and its connection with the experience of being in the world would help us rethink school. In the data, it was possible to see how the connection between knowledge and experience, attained through reflection and demonstrated in the novel metaphors that emerge, making it possible for these PSTs to think about a novel school experience – one different from theirs and in which success had more just and solidary meanings.

The experiences narrated by the PSTs who **collaborated** at the LCs **helped** us pull out other metaphors for school success. In these cases, it is a concept that encompasses an inclusive sense of education as a collective achievement. When we think of the slowest students, or simply those with more difficulties, we do not see them as everyone's responsibility – the class, the school, and their closest context. Flecha and Puigvert (1998), supported by Freire and Vygotsky, indicate that the dialogic proposal of school success for everyone involves transforming what happens in the classroom, at the center, in the family context, and more vulnerable neighborhoods. Success **would not be** a helpful concept if understood as an individual and

isolated from the social context. From a critical education perspective, the social, educational, and organizational go hand in hand to form a sense of success for everyone.

PSTs' narratives about their collaborative experiences in LCs **could** help deconstruct the neoliberal metaphors of success. Their experience volunteering in LCs **put** them in a context where an individualist metaphor of school success **made** little sense. Quite the reverse, such knowledge **seemed** to encourage thinking of school success in collective terms – that is, when success only exists if it is for everyone (Santos-Rego & Slavin, 2002; van Kuijk, Mullender-Wijnsma, & Bosker, 2021).

PSTs doing SL in LCs **disputed** school success in a neoliberal sense by using metaphors of success as an “alliance of solidarity,” which **echoed** the very idea of success for all as put forward by Slavin and Maden. That is to say, the banking education metaphors – education as individual acquisition and “obstacle race” – **were** challenged with the production of novel metaphors that echo SL experience. The metaphors of “alliance of solidarity” **put** forward LC's notion that everyone is entitled to move forward, dream, and make decisions about possibilities rather than deficits and **showed** how participation in LCs may help teacher educators and PSTs produce new metaphors to guide transformative pedagogical praxis (Noyes, 2006; Badley & Van Brummelen, 2012; Wineberg, 2012).

4.2 Metaphor 2: Learning. From “acquiring baggage” to “amazement” and “adventure.”

In PSTs' narrative of their experience doing SL in the LC schools, surprise, amazement, and astonishment **appeared** as central elements concerning their professional learning, students' learning, and even the kind of school they **encountered** in the SL. Participants often **referred** to these metaphors as “realizing” or “figuring out” something different from what they **had expected** and what they **had experienced** in their schooling. In this process, surprise or

amazement **emerged** as aspects that attracted PSTs' attention due to the emotional experience that these feelings triggered in contrast with the routine to which they **were** used. For instance, a PST wrote: "What surprised me the most about this activity was the degree of cooperation and inclusion that I experienced in one of the groups." Novel experiences **had** an emotional impact that **seemed** valued and left a mark. Moreover, as mentioned **before** in the section's title, the very process of doing SL in the schools **was referred** to as "an adventure," "a journey," a "transformation," or a "metamorphosis."

It is important to remember that this experience **happened** in the transformative LC schools in a specific context. PSTs expressed a deeply social sense of learning and teaching and a community sense of a school context that **included** teachers, students, family members, and the social environment in its decisions. Some metaphors about school **were revealing** of this sense – school was "a family,"; a "living being,"; a "big team that rowed in the same direction." Considering the kind of education that they had had, experiencing an LC **proved** surprising.

Amazement **was related** to the teaching team and the dialogical work that they **did** together and with students, but, above all, to the family's involvement in the school's operation:

Even without knowing how to read or write, the woman (a mother) guided her group (of pupils), contributing vocabulary and asking a lot about the latest rains. This experience has taught me that the parents and the center genuinely make up a great team that rows in the same direction, aiming to provide children with the education they deserve.

In the segment, the metaphor of a "team that rows in the same direction" **was associated** with the surprise of having a mother who **could** not read or write in Spanish¹⁷ contribute to the team. Similarly, PSTs **found** the schools remarkable due to the sense of sharing and social transformation that they **demonstrated** in their work:

Nevertheless, this, in my opinion, is not what makes this center so remarkable, but the fact that it manages to lower the precipice so that this climb is milder.

¹⁷ Some expanded context: the mother in question was an Arabic immigrant who could not read or write in Spanish.

How do they do this? In such a simple way: by involving family members and other members of society in the educational process so that everyone benefits from one another, feel valued, and, above all, grow free of stereotypes by opening up to a relationship with others. Just as the world of education has made me change, it can do it with other people, and if they do it directly, society can change. Society itself is where the problems in our world are. We collectively label situations as "problematic," establish social precipices and push people towards them. We choose whom we will push down the precipice and when they will fall into an abyss of discrimination and exclusion. Moreover, this helps keep this extensive social and political system going.

In this sense, horizontal relationships with students **sounded** weird and thought-provoking. It **called** PSTs' attention that, in this school, children were listened to with attention by several agents who used this to plan their actions towards them:

There is thus a total breakdown of the archetypal teacher-student relationship to which we, unfortunately, have been accustomed, producing everyday dialogic situations between teacher-child, child-child, child-family member, and family member-teacher. Nevertheless, that is the only way education is understood in this center since it is from the different contributions of its boys and girls that knowledge is produced and, therefore, learning, leaving behind its mere reproduction.

Throughout the transformation process, the entire community **contributed**, including PSTs. The amazement from this perspective **was how** the surprise was intertwined with what PSTs contributed to life and relationships in the school.

By this token, epistemic thinking **returned** to teacher education as PSTs **experienced** democratic experiences and **changed** their views. This contrast was a significant impact, for lived democracy **was** an inexhaustible source for epistemic thinking, as the segment below shows:

I reflect on the lack of responsibility that comes with not thinking and not daring to be, not to mention everything that a group of people loses if many of them do not dare to contribute their grain of sand. Also, I question that if future teachers are not used to being in a group or reaching a consensus, we will hardly be able to help others do it. The answer I got was that getting to all of this was already the beginning of something new.

4.2.1 Metaphor 2: discussion

Learning from wonder (Wolbert & Schinkel, 2020) or the unexpected (Acaso & Ellsworth, 2011) works as a metaphor to pursue an understanding of PSTs' experiences in

schools with students from challenging backgrounds. In many ways, PSTs were amazed to participate in experiences different from their backgrounds as school students. As we have pointed out earlier, many of their school experiences had been marked by hierarchical values, established roles, and structured learning. In this framework, experiences in LCs, where quite a lot was focused on the collective dimensions of school experience, was unexpected to them.

Therefore, the PSTs were moved by the unexpected, that is, the contrast between previous experience and the reality they encountered in the schools. What is not expected provokes, breaks into the routine of what has been learned, and shakes it (Chateau, 1996). To be amazed is to find oneself faced with a reorganization of the world that poses a problem for intelligence.

The impact emerged from what had been lived. On many occasions, the narratives revealed PSTs' school history and expressed how different what they were living in LC was from their prior schooling experience. Also, the assigned readings seemed to help PSTs give meaning to what they narrated. In this process, the narratives brought the empirical self and the epistemic self into play (Charlot, 2014) in constructing knowledge from the unexpected. This amazement in the experience of collaboration with the democratic school projects was referred to as an "adventure," a "journey," or a "metamorphosis." This amazement consisted of a sociohistorical and identity matters, grounded on the personal dimension of the PSTs and how these dimensions were projected in the teaching profession (Charlot, 2014).

Epistemic thinking has a depth in the collective project in a macrosocial sense and its contribution to equality in difference, from a perspective of social justice through the involvement of families in schoolwork. Therefore, educational processes must consider that emotions, personal, temporal, and spatial magnitudes are intrinsic to the environment in which

they happen and the story of those feeling such emotions. By embracing wonder in relationships, people become permanent seekers of meaning.

4.3 Metaphors 1 and 2: transversal discussion

As we stated earlier, metaphors are paramount to making sense of everyday experience (Lakoff, 1992). They are also fundamental in education research, as earlier work has claimed (Noyes, 2006; Badley & Van Brummelen, 2012; Wineberg, 2012). In the data, we rooted out a constellation of metaphors that indicated the construction of professional identities that resonated with the SL experience in LC schools. The very ideas of school success and learning were reconfigured in the metaphors used to make sense of them. Initially, narratives reflected stock metaphors (Craig, 2017), such as “obstacle race,” “reaching a point,” “fighting or struggling for something,” and “acquiring and accumulating,” which changed into novel metaphors (Craig, 2017), such as “school life as a path”; “learning as walking that path”; and teaching as “guiding through the path” or simply “walking it together as a comrade”. In this sense, we could see a modification of rather individualistic metaphors, which could be associated with banking metaphors, to more collective ones, more aligned with a dialogic paradigm.

Furthermore, there was a sense of surprise and amazement in this process, expressed in the metaphors of “journey,” “adventure,” “transformation,” and “metamorphosis,” which were often used to convey surprise when facing lived experience. Interestingly, the ideas of “realizing,” “figuring out,” or “breaking stereotypes,” emergent in PSTs’ narratives, were revealing of such surprise. This sense of wonder came as a reconfiguration of learning as acquiring baggage, quite individualistic and banking, to learning as a joint endeavor or as an adventure. This reconfiguration seemed to happen in the process of reflection upon experience

and surprise, in a reconciliation between experience and epistemic self, mediate by discussion, narration, and reflection. Such a point is interesting when we consider that metaphors may help organize the chaos of lived experience into a more coherent whole (Craig, 2017) by assisting participants in making sense of disembodied ideas in new stories that they can (re)live and (re)tell on their professional knowledge landscapes (Craig, 2005).

Besides, it is possible to infer that the SL experience resonated in participants' metaphoric systems differently from previous research (Lopes-Luengo et al., 2015; Mellado et al., 2017), although the methodological approaches adopted were not entirely compatible. This peculiarity might explain the kinds of experiences in which participants were engaged rather than in analytic terms, but further research would be necessary to state this.

5. Final remarks

This article has confirmed earlier research stating that metaphors are critical resources educators use to make sense of experience and anchor their teaching practice (Badley & Van Brummelen, 2012; Craig, 2017; Noyes, 2006; Wineberg, 2012). Thus, metaphors have proven “promising catalysts of change in teaching and teacher education and in life itself” (Craig, 2017, p. 310) in their power to help conform new, more democratic stories for future teachers to live and tell with their students, schools, and communities.

The process of knowledge construction may sustain discourses and practices or help transform them. This process is deeply grounded in the images and metaphors that we use to give meaning to experience. In this sense, we have created segregating, individualistic, and competitive metaphors, which help confirm and sustain segregating, individualistic, and competitive views of education. In this paper, we have demonstrated that novel experiences – which surprise and astonish PSTs in positive ways and take place in contexts where solidarity,

collectiveness, and inclusion happen – may help shape novel metaphors. As we have demonstrated, these metaphors could help echo more inclusive, solidary, and dialogic views of education. Therefore, experiences such as the one examined here may work as a political and democratic strategy to create novel views of education for PSTs.

Furthermore, SL has emerged as a crucial tool in teacher education. SL provides PSTs with experience in contexts where they can witness solidarity, collectiveness, and inclusion. It also places PSTs in these contexts as agents in a peculiar way. PSTs are there to serve the community, on the one hand, while, on the other, they are expected to narrate their experience and reflect upon them. This way, both the transformative contexts where they are inserted – LCs – and their role in these contexts serve as catalysts for texts with a novel language. Thus, crystallized metaphors start to fall apart as novel metaphors emerge, where old views can be dismantled and new views can emerge.

On the same note, this experience has helped us as educators to contact students' views of education and see how these views changed through experience and reflection and reinforced the need for teacher educators to construct with PSTs a common shared language. That is to say, we cannot change the world without changing the language that we use to talk about it and the metaphors and images that we use to represent it and give meaning to it. This experience has led us to abandon academic language in a pursuit to move closer to the language employed by PSTs and other stakeholders in schools.

This research has at least one significant limitation. It was carried out without interaction with the participants about their metaphors. It would be, in future research, to discuss the metaphors with the participants to expand the analysis, as it is more compelling to show transformation in PSTs' metaphors when in conversation with them. Narrative research is a

necessary theoretical background for the present investigation. Nevertheless, the nature of the data sources used (only written narratives and no interviews) makes it closer to the perspective of qualitative narrative analysis, which fails to account for a more radically pragmatic ontology rooted in a commitment to experience. Future research should address these limitations.

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