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No presente volume, publica-se um conjunto de artigos científicos que fixam pela escrita trabalhos apresentados na 29.^a edição da Conferência Europeia de Linguística Sistemico-Funcional, que teve lugar em julho de 2019, na cidade de Leiria.

Esta conferência, um evento promovido anualmente pela Associação Europeia de Linguística Sistemico-Funcional, foi organizada por dez colegas portugueses afiliados a três instituições: Escola Superior de Educação e Ciências Sociais e Escola Superior de Tecnologia e Gestão, ambas do Politécnico de Leiria, e CELGA-ILTEC da Universidade de Coimbra.

A publicação surge em 2021, num contexto de pandemia que veio suspender as nossas vidas em vários domínios, no plano pessoal e institucional, com efeitos na duração do processo de revisão científica e de edição desta publicação. Apesar das adversidades, julgamos que não poderíamos deixar de corresponder às expetativas dos colegas que quiseram contribuir para mais uma publicação da Conferência Europeia de Linguística Sistemico-Funcional.

Aqui chegados, sentimos que devemos a todos, autores e revisores, um profundo agradecimento pela confiança em nós depositada e também pelo cuidado, pela paciência e pela diligência com que sempre responderam às nossas solicitações.

Os textos que compõem a obra foram submetidos para avaliação da comissão científica do volume e foram objeto de revisão por pares. A sua publicação assinala a vitalidade e produtividade da comunidade científica reunida na 29.^a edição da Conferência Europeia de Linguística Sistemico-Funcional.

The present volume contains a selection of scientific papers, originally presented at the 29th edition of the European Systemic Functional Linguistics Conference, which took place in July 2019, in the city of Leiria, in Portugal.

This conference, an annual event promoted by the European Association for Systemic Functional Linguistics, was organized, in 2019, by ten Portuguese scholars affiliated to three institutions: ESECS – School of Education and Social Sciences, ESTG – School of Technology and Management, both from the Polytechnic of Leiria, and CELGA-ILTEC from the University of Coimbra.

The volume is published in 2021, amidst the pandemics that has put our lives on hold in many dimensions, both personal and professional, with real effects on the duration of the peer review and editorial processes. Despite these adversities, however, we felt it was our duty to meet the expectations of all the colleagues who submitted their papers, thereby enabling another publication in the ever-growing SFL list.

Now that the volume is (finally) ready, we feel we owe everyone – authors and reviewers – a big thank you for the trust placed in us and for the care, patience, and diligence with which you consistently responded to our requests.

The papers showcase a wide variety of original research, whose scientific quality was certified by a double-blind peer review. They are also a testimony to the vitality and productivity of the SFL community gathered at the 29th European Systemic Functional Linguistics Conference.

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LEGITIMATE CODES OF EXCHANGE: GAINING AWARENESS FROM TRANSNATIONAL INQUIRY OF LANGUAGE ACQUISITION

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ABSTRACT

The U.S. and Mexico are historically connected despite the current political tensions. Following a research exchange, two university instructors from either side of the border sought to bring together their pre-service teachers through an International Virtual Exchange (IVE) exploring theories of language acquisition with a goal of fostering cultural awareness and global competency. This qualitative study examines student reflections after IVE on language learning between pre-service elementary school teachers from California, USA (N=7) and pre-service English as a Foreign Language (EFL) teachers from Puebla, Mexico (N=7). The extracted data was analyzed using the conceptual toolkit offered by Legitimate Code Theory to investigate the interlocutors' reflections on their exchange. The research questions that this study addresses are: What focus did the LCT analysis reveal in student reflections and how might an LCT analysis provide insights into participants' constructed experiences? The focus of each reflection was analyzed through LCT and themes were quantitatively evaluated to reveal a total prevalence of Epistemic Relations.

KEYWORDS

Legitimation Code Theory, specialization dimension, IVE, language acquisition inquiry

1 – Introduction

Understanding the nature of language development and language acquisition has been identified as of key importance for teachers working with linguistically diverse students (Valdés, Bunch, Snow, & Lee, 2005). Moreover, in today's globally complex world, teachers' ability to model global competence for their students is an imperative. The United Nations Secretary-General on Youth Envoy has identified global competency as a primary indicator of success for youth in the global workforce and in achieving sustainable development goals (Hunter, 2015). Responding to global interconnectedness marking the 21st century, higher education's charge has been to graduate globally competent citizens who could navigate the social, economic, and political forces of globalization (Turlington, 1998; Lumina Foundation, 2011; American College on Education, 2017). Likewise, educators within the Language Awareness movement have built pedagogical models for engaging pre-service teachers in cultural understanding and communication (Ruggiano Schmidt, 1998; Ruggiano Schmidt & Finkbeiner, 2006; Finkbeiner & Lazar, 2015) contributing to global competency. Yet international exchanges which support global competency are only available to, at best 10%, of the student body (Guth, 2020; American College on Education, 2017). International Virtual Exchange (IVE) has been promoted as a means of expanding intercultural exchange to a larger segment of the university population (Guth, 2020). Ruggiano Schmidt and Finkbeiner (2006) developed the ABC curricular model to support intercultural awareness. This model builds intercultural awareness through an inquiry process in which students write a self-exploratory Autobiography. Then an interview and written Bibliography about an intercultural partner. Lastly, students evaluate their cultural biases through a Comparison, Contrast and Critique paper exploring the partners' and their own notions of culture in order to identify their own bias (hence, ABC model). This ABC model has been successfully applied in a variety of disciplinary contexts, including International Virtual Exchange (Finkbeiner & Lazar, 2015). The current study sought to examine students' participation in an ABC adapted activity through the lens of Legitimation Code Theory (LCT) for the purpose of exploring the explanatory power of LCT within a novel social context.

Following an international research exchange, we, the authors of this paper, were inspired to bring our students together to build Language Awareness and global competency through IVE. While our countries share a common border, it is currently a source of political tension. Yet the communities on either side are intricately connected historically, socially, and economically. To achieve our goal, we designed flexible exchange activities which would allow our students to come together using English or Spanish as a medium of communication to explore perspectives on understanding language acquisition which is a learning outcome in both our courses.

Ortega (2013) has proposed that teachers must understand language acquisition within both naturalistic and instructed contexts. Naturalistic contexts include opportunities outside of a classroom where learners acquire languages in multilingual communities, workplaces, etc. without formal instruction. At the same time, formal instruction at school, university, or private classes may be a gateway for language acquisition and for specialized professional discourses used in today's globalized world. Building an understanding of these diverse language contexts has also been identified as of key importance for public school teachers working with learners in both Mexico and the United States (US) public schools (Garcia, 2009).

Understanding the nature of language development and language acquisition was a unifying curricular theme in both of our courses. The first course was for pre-service English language teachers in a Second Language Acquisition program at a university in Puebla, Mexico. English Language Learning in Mexico has been a controversial topic because there exists a lack of "communicatively proficient English teachers" in the country (Borjian, 2015, p. 164), despite the "Mexican government's mandates to promote the teaching of English to students across grade levels," (SIPSE, 2017, p. 165). The partnered course, offered at a California State University, was for pre-service primary and elementary school teachers working towards California teaching credentials. As California has a long history with Mexico, the students in California schools are predominantly of Hispanic descent. In California schools, 20% of the students are designated as needing English language support and of that number, 16% speak Spanish as a heritage language (Ed-data, 2019). For this reason, schools of higher education training pre-service teachers have been called to incorporate curriculum which prepares teachers to work with linguistically diverse students (Valdés, Bunch,

Snow, & Lee, 2005). Moreover, the goal of offering “equitable, non-discriminatory education to all children” (Young, 2018, p. 24) is also central to Young’s call for raising language awareness in primary school education in order to bring together stakeholders who understand the language and cultural diversity within their communities. Our research exchange provided the perfect opportunity to bring together communities connected, yet separated by a border, in order to understand the diverse contexts of language acquisition and learning – a concept of central importance for all teachers. We designed activities drawing from the ABC model (Finkbeiner & Lazar, 2015) which brought together our classes through IVE.

2 – Internationalizing the curriculum

IVE also known as Collaborative Online International Learning (COIL), Globally Networked Learning, or Telecollaboration are collaborative learning exchanges conducted through digital technology (Guth, 2020). These collaborations may allow students from different parts of the globe to engage in digital exchanges for the purpose of language and intercultural learning, gaining intercultural perspectives, and to participate in project based problem-solving. Telecollaboration has also been used for the purpose of computer assisted language learning but with mixed results (as reported in Przymus, 2017). In a review of the literature on computer assisted language learning through telecommunication, exchanges which focused on language practice reported mostly failed results (Przymus, 2017). Przymus instead used a “calculated pedagogical” design which encouraged the use of code-switching through his Functional Approach to Code-switching Electronically (FACE) framework (Przymus, 2014 as cited in 2017). He proposed a “call to action for education to rethink language learning and practice” by engaging students in code-switching or other pedagogical interventions which go beyond “static depictions of culture and monolithic target-language identities” (Belz & Thorne, 2006 as cited in Przymus, 2017, p. 54).

Our design drew on Finkbeiner and Lazar’s ABC’s pedagogical model (2017) but matched students together through IVE, who had the flexibility to use either English or Spanish, in exploring their experiences and thoughts about language learning. First, IVE is an approach to pedagogy

which has been used with the ABCs model and has the potential to offer more students an intercultural learning experience than study abroad. Second, prior to the activities, students prepared for the exchanges by reflecting on the topics in their heritage languages. In other words, students had the time to consider the topics of the exchange deeply and discuss the topics in class with their peers and instructor, before engaging in dialog with their intercultural exchange partner. The purpose of this sequence of activity was to allow students processing time before the exchange. Thus, while the topic of the exchange was authentic, it was not spontaneous. Students could prepare and thoroughly articulate their ideas in advance. In this way, the activity drew on Przymus (2017), but also aimed to support global competency and language awareness.

3 – Global competency and language awareness

The theme of the activities around which the student exchanges occurred drew on the ABC model presented in Finkbeiner and Lazar (2015) built from Ruggiano Schmidt (1998). The ABC model, named because it was a transatlantic grant funded project (Finkbeiner & Lazar, 2015), employed a strict structure for the purpose of exploring cultural similarities and differences. We followed this model for exploring intercultural similarities and differences, but grounded the exchanges by topic within the cultural contexts of students' respective language learning experiences. Each phase of the exchange began with a reflection by the students. Phase A was an Autobiography in which students reflected on their own language acquisition and language learning experiences. Students also discussed theories of Second Language Acquisition in class and the ways in which their experience was reflected by theory. Phase B was a Biography which was based on an interview of their IVE partner, whose lived experience occurred in another national context. Finally, phase C was a cross-cultural comparison of their own and partner's experience. During the IVE, the participants thoughtfully compared concepts of language acquisition, translanguaging, and intercultural communication. Following these activities students reflected upon the experiences which provided a metacognitive lens of their constructed perspectives.

4 – Reflection as metacognition

Reflection has been proposed as a means of understanding student experience. White, Frederiksen and Collins (2009) report that collaborative reflection may help students to think more deeply. Opportunities for reflection are best employed in a social context allowing reflection on multiple perspectives. As such our interest was to examine students' post-interaction reflection to consider meaning construction through a Legitimation Code Theory lens.

5 – Explanatory power of Legitimation Code Theory (LCT)

Legitimation Code Theory (LCT) is a framework that emerged from Basil Bernstein's code theory (Maton & Chen, 2020). Bernstein sought to explain how *social codes* established and defined social communities. Codes are like a sociolinguistic grammar which signals cultural messages (Bernstein, 1990). Bernstein, working with Halliday and Hasan, reflected a major shift in linguistic thought toward semiotic uses of language in education which emerged as Systemic Functional Linguistics (SFL) (Halliday, 1995). Building from this work, Maton proposed Legitimate Code Theory (LCT) as a way of understanding the mismatch in social concepts present in 'academic languages' and 'academic learning practices', as well as differences between 'what is known' and 'who possesses knowledge'. In order to fill this gap, Maton (2014b) claims that LCT provides a framework for Academic Language and Learning (ALL). "LCT views knowledge as both socially produced and real, in the sense of having effects" (Maton & Moore, 2010 in Maton & Chen, 2020, p. 2). In other words, LCT aims to capture the multidimensionality of Bernstein's social codes.

The LCT framework can help language analyzers to understand multidimensional concepts in different circumstances, and different degrees of difficulty and disciplines of study. Moreover, it can be applied in education and beyond (Maton, 2014b, 2017b; Doran, 2018). LCT aims to analyze any utterance through systematic and integrated lenses (Maton, 2014a, 2017a); thus, as qualitative study, it examines general tendencies. Particularly, in the current study, we proposed that LCT may provide the explanatory power to examine the characteristics of the students' metacognitive experience.

LCT analysis addresses five dimensions: semantics, specialization, autonomy, temporality and density (Maton, 2014a, 2014b, 2017a, 2017b, Legitimation Code Theory website, n.d.). In Figure 1, each of these dimensions identifies different coding schemas. First, the semantic dimension identifies the semantic gravity and semantic density codes. Second, specialization addresses the epistemic relations and the social relations codes. Third, the autonomy dimension has two codes as well: the positional autonomy and the relational autonomy. Meanwhile, the temporality dimension has the temporal position code and the temporal orientation code. Finally, the density dimension works with the material density and the moral density codes (Maton, 2014a, 2014b, 2017a, 2017b, Legitimation Code Theory website, n.d.).

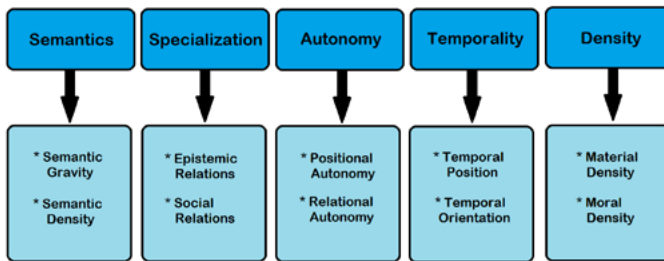


Figure 1 – LCT framework dimensions

Specifically, this study is focused on the specialization dimension from the LCT framework: “Specialization begins from the simple premise that every practice is about or oriented towards something and by someone” (Maton & Chen, 2020, p. 3). Therefore, this study approached the specialization dimension because the IVE experience provided participants the opportunity for a meaningful exchange of specialized knowledge about their language and learning experiences. In simpler terms, the analysis section of this paper aims to reveal the constructed experience of the participants as they stated their understanding about objects or subjects. In order to achieve the analysis, we designed a series of parallel reflective activities. We then partnered students between our classes and asked students to interview each other gaining each other’s experiences, thoughts, and perspectives on the learning activities. The exchanges between students were conducted through IVE. Following the exchanges, students reflected on the experience. Thus, we incorporated a written reflection as a means

of constructing meaning around intercultural exchanges for the purpose of building cultural awareness. At the conclusion of the course, the written data from these exchanges were extracted and analyzed through a LCT framework. In other words, since the “specialization codes generate knowledge-knower structures of different kinds” (Martin & Maton, 2017, p. 32), this study aimed to investigate the explanatory power of students’ constructed experiences and how they differed (Maton, Hood, Shay, 2016), applying the specialization plane of the LCT framework to a novel social context. This would allow the researchers to explore the relation between this study’s participants and their subjects/objects in terms of weakness or strength within the specialization code.

Particularly, when analyzing the written data, it was necessary to classify all reflections according to the partnered participants in order to contrast information. Later, each of the utterances identified in the reflections were classified into two main sections: Epistemic Relation (Subject–Object) and Social Relation (Subject–Subject) following Maton (2014a, 2014b, 2017a, 2017b, Legitimation Code Theory website, n.d.). The application of this analysis is explained in the data analysis section below. Simply put, drawing on LCT provided a new way of seeing the constructed experience of our respective students and how their shared experiences on language acquisition changed or expanded their thinking. Therefore, our research questions are: (1) What focus did the LCT analysis reveal in their reflections? (2) To what extent an LCT analysis provides insights into participants’ constructed experiences?

6 – Research methodology

6.1 – Adaptation of the ABC model

Each ABC phase was reflected upon and the data for the reflection was stored in the university learning management system. Structured reflection as a data source is a method of capturing the meta-cognitive work of an activity. It may occur before, during or after a task (Avineri, 2017). This study elected to collect data on “reflection-on-action” (Murphy, 2014 as cited in Avineri, 2017) in order to capture the ways in which the students made sense of the intercultural exchange. As this was a structurally designed re-

lection, it can be characterized as Reflection using the capital 'R' as student reflections provided summative data on their experiences.

Students were notified of the study and given the option to consent or opt out of the study. Their consent or withdrawal from the study was recorded blindly so that the instructors did not know whether the students elected to participate until after the completion of the course. At that time, the data was cleaned and prepared for the meta-analysis. The data on the students' perception is qualitative in nature (Kothari, 2004). In total, pre-service elementary school teachers from California, USA (N=7) and pre-service EFL teachers from Puebla, Mexico (N=7) elected to participate in the study. As previously mentioned, the extracted data was analyzed using the conceptual toolkit offered by the LCT framework to investigate the interlocutors' reflections on their exchange.

7 – Data analysis

Regarding the data analysis process of this study, these researchers used two types: descriptive and analytical (Kothari, 2004). Firstly, the descriptive methodology was useful to obtain a description of the structure of intercultural exchange experience. Specifically, this data collection was achieved through field notes. Secondly, the analytical research consisted of making a critical evaluation of cleaned data obtained from the reflective memos written by the participants (Kothari, 2004) using the LCT framework.

Over a period of four months, the students in this study communicated with their international partner in order to construct an academic relationship. After building trust between IVE partners, a final reflection about their whole experience was assigned following the ABC Model (Finkbeiner & Lazar, 2015). This analysis was only concerned with the *specialization dimension* from the LCT framework. The findings are based on epistemic and social relations only. Moreover, since participation was voluntary as stated above, this research analyzed a total of fourteen reflections from this IVE. Likewise, during the data analysis process, it was necessary to identify if the reflections had either a *knowledge, knower, elite* or *relativist code*. In order to do so, all possible focuses were identified, i.e., the main objects (epistemic relations) or subjects (social relations) within their statements. A signifi-

cant step was distinguishing if subjects were demonstrating possession of specialized knowledge (Knowledge code), if the attributes of actors were emphasized (Knower code), if a subject was possessing specialist knowledge (Elite code) or if anything else was mentioned instead of the others (Relativist code) (Maton, 2014a, 2017a; Doran, 2018). In the following section of this article, the results of this research are indicated.

8 – Findings and discussion

In total, this research reports four main findings. The first research question is *what focus did the LCT analysis review in their reflections?* This depended on the country where the participants were from. Mexican participants considered five focuses (Maton, 2017a): *personal information, second language acquisition/learning (SLA), experience with an IVE partner, a third language learning and mother tongue*. Also, even though American participants decided to talk about six focuses which are similar to the Mexican students’ focuses, they added the *bilingualism* focus as part of their reflections.

The second finding was that this study’s participants wrote a total of two hundred sixty-three utterances in their reflections. Specifically, Mexican participants wrote one hundred thirty-five and American participants wrote one hundred twenty-eight:

Table 1 – Participants’ directional focus

Focus	Mexican Participants		American Participants	
Personal Information	4	11	10	12
Second Language Acquisition/Learning	32	17	24	12
Experience with your IVE partner	42	20	30	26
3rd Language Learning	5	-	1	-
Mother Tongue	3	1	7	2
Bilingualism	-	-	4	2
Total	86	49	75	53

As Table 1 displays, the majority of utterances written by Mexican and American participants were mostly focused on their experience with their IVE partner (M=62 and A=56) positively and negatively. According to Matton (2017a), focus refers to what is being written or spoken about. He claims that there are three types of focuses: (1) content focus, (2) directional focus, and (3) behavioral focus. Therefore, we can assert that the type of focus that the participants from this study had were utterances with directional focus. To be clear, a directional focus is based on talking or writing about this experience when undertaking this IVE activities. Therefore, it seems that this experience was very important and fruitful for them academically and personally (Przymus, 2017). Moreover, in total, the second most important focus was based on their process of second language learning or acquisition (Garcia, 2009; Ortega, 2013). That is why participants decided to share it with their IVE partners too (M=49 and A=36). Conversely, Mexicans did not mention anything about bilingualism and they produced fewer utterances about their mother tongue (N=4). Meanwhile, Americans talked less about their third language learning (N=1) followed by bilingualism (N=6). The following examples would illustrate some of these focuses:

Focus: Bilingualism

Participants C (American): We both (S) agreed that what helped us learn Spanish and English properly had to be the assistance that we had from our parents (O). (Knowledge ER+)

Focus: Mother Tongue

Participant 2 (Mexican): I (S) want to teach my own language because Spanish is one of the most beautiful languages of all the world (O). (Knowledge ER+)

Focus: 3rd Language Learning

Participant B (American): I (S) took French (O) my senior year and didn't start Spanish classes again until my spring semester of my freshman year of college. (Relativist ER-)

Thirdly, one hundred sixty-one utterances (See Table 1) are representing participants' epistemic relations utterances, eighty-six from Mexicans

and seventy-five from Americans. Therefore, it means that the lowest number of utterances, in both participants, is in regard to their social relations (italic numbers). Hence, the LCT basis in this research is not focused on knower terms but in knowledge mainly. This is because these participants had experienced all reported events in their reflections; thus, that was their “language of legitimation” (Maton, 2000, 2007, 2014 in Maton & Chen, 2020, p. 2). The following example represents how a social relation looks like:

Focus: Personal Information

Participant 4 (Mexican): *There, I (S) had the chance to talk to a couple of German tourists (S) in English. (Relativist SR-)*

Participant D (American): *Considering my parents (S) didn't have their education in the United States, it made it much more difficult having them help me (S) with school work. (Relativist SR-)*

In answer to the second research question, as previously stated, the obtained results from the strong and weak relations point out that the maximum number of utterances written by Mexicans and Americans are located in the epistemic relations (See Table 2). Predominantly, Americans referred more to strong epistemic relations (N=44); meanwhile, the Mexicans denoted weak epistemic relations (N=44). The following examples help to illustrate what a weak or strong epistemic relation seems like:

Couple (7-G)

Focus: Experience with your IVE partner

Participant 7 (Mexican): *We both studied the same, so we (S) shared knowledge, and some data that she did not know (O). (Knowledge ER-)*

Participant G (American): *It was especially interesting FOR ME^ (S) to hear his outside opinion on how the U.S. looks to other countries (O). (Knowledge ER+)*

This means that the knowledge code was significant for them. Thus, we believe that this answers the second research question of this study, because an LCT analysis provides insights into participants' constructed experiences since they really care, believe, or identify themselves possessing or

lacking some specialized knowledge. In other words, their main goal is to prepare themselves to know about specific objects of study (Maton, Hood, & Shay, 2016).

Table 2 – Strong and weak relations

		American Participants	Mexican Participants
Epistemic Relations	Strong (+)	44	42
	Weak (-)	31	44
Social Relations	Strong (+)	40	29
	Weak (-)	13	20

To sum up the results of this analysis, we refer to Maton, Hood and Shay (2016) who highlight that usually, there is a specific code that is dominant as the base of accomplishment or not. Nevertheless, this can or cannot be “transparent, universal or uncontested” (p. 13). Therefore, the specialization plane that Maton (2014a) suggests to use would demonstrate the results of this research in the following Figure 2.

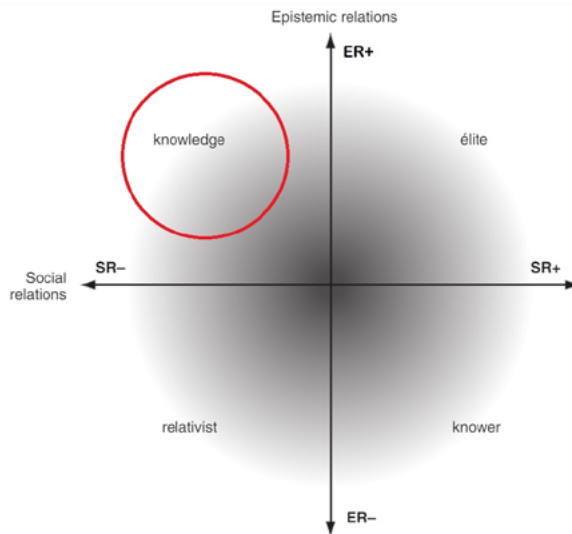


Figure 2 – Specialization plane results

9 – Limitations and conclusion

LCT is a relatively new analytical framework. Our aim at using the LCT framework was to examine its explanatory power in revealing the foci within student reflections on their IVE learning experience. Moreover, we wondered to what extent the LCT analysis would provide insights into the participants' constructed experiences. However, this article does not attempt to make generalizations about how an IVE helped pre-service teachers build their awareness of language acquisition or learning. In fact, this paper only obtained results from a small sample population which was analyzed through LCT lenses. Another limitation is the small number of volunteer participants (N=14) in the analysis which could have affected the results. Or there may have been some possible misunderstanding between participants due to language proficiency or shyness.

In summary, this study aimed to understand how the structured reflections between Mexican and American pre-service teachers' IVE experiences were revealed through LCT analysis. The findings demonstrated in this inquiry are that Mexican and American participants revealed five similar focuses (Maton, 2017a), which basically marked their experience in this IVE (RQ1). In addition, this study asked to what extent the LCT analysis might provide insights into the participants' constructed experiences. In sum, the Mexicans and Americans reflections are located in the *epistemic relations* where *knowledge code* showed as lack or possession of some specialized knowledge respectively (RQ2). While the research questions in this study were answered, it needs to be clarified that the researchers of this project lack expertise in the LCT framework. Therefore, for further research, we suggest a deeper analysis to locate specifically this finding on an epistemic plane (Maton, 2014a) which would allow a clearer understanding of the ontic and discursive relations of these utterances. Also, an analysis based on the weakening or strengthening relations ($ER\uparrow/\downarrow$, $SR\uparrow/\downarrow$) from this research can be decoded to identify their drift or shift (Maton, Hood, & Shay, 2016). In conclusion, this study has shown that LCT may provide the explanatory power to examine the characteristics of the students' meta-cognitive experience. However, more research is needed which employs an LCT analysis to further investigate the operational power of the LCT framework in other social contexts.

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