

# Translanguaging Design in a Mandarin/ English Dual Language Bilingual Education Program: A Researcher- Teacher Collaboration

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Boston College  
Lynch School of Education and Human Development

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Curriculum and Instruction Doctoral Program

TRANSLANGUAGING DESIGN IN A MANDARIN/ENGLISH DUAL  
LANGUAGE BILINGUAL EDUCATION PROGRAM: A RESEARCHER-  
TEACHER COLLABORATION

Dissertation

by

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## **Abstract**

### Translanguaging Design in a Mandarin/English Dual Language Bilingual Education Program: A Researcher-Teacher Collaboration

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Traditionally strict language separation policies in dual language bilingual education (DLBE) programs reflect parallel monolingualism and have been criticized as failing to recognize the sociolinguistic realities of bilingual students (García & Lin, 2017). To leverage bilingual learners' full linguistic repertoires as resources, this study explored how Sánchez, García, and Solorza's (2018) translanguaging allocation policy could be strategically and purposefully designed in a third grade Mandarin/English DLBE classroom where the majority of the students were English-dominant speakers.

Taking the form of participatory design research (Bang & Vossoughi, 2016), I (as a researcher) and a Mandarin teacher worked together to co-design translanguaging documentation, translanguaging rings, and translanguaging transformation spaces across different content areas – Chinese Language Arts, Science, and Social Studies. During the process, we also engaged in equitable forms of dialogue and listening to openly discuss, negotiate, and develop our translanguaging co-stance in iterative ways. Data collection included classroom and design meeting recordings, observational field notes, and teacher and students'

artifacts and interviews throughout the school year of 2018-19. Inductive and deductive coding were adopted for data analysis.

Findings revealed that translanguaging pedagogies took many shapes based on contextual factors, such as the different pedagogical purposes and curricular demands across content areas. Students were able to develop deeper content understandings, build cross-linguistic connections, and develop their bi/multilingual identities and critical consciousness in those flexible bilingual spaces. Findings also demonstrated that the ideological (re)negotiation between the researcher and the teacher was a bumpy and discursive journey, replete with tensions, confusions, and difficult conversations. Overall, it was a balancing act to create translanguaging spaces while maintaining the language-minoritized (Mandarin) space and privileging students' use of Mandarin given the societal dominance of English. This study provides implications for new theoretical and pedagogical understandings of translanguaging, and suggests that researcher-teacher collaboration provides a promising way to generate evidence-based, practitioner-informed, and context-appropriate knowledge for DLBE curricular and pedagogical improvements.

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## CHAPTER 1 INTRODUCTION

Dual Language Bilingual Education (DLBE) programs have been shown to be a promising means of reaching all students' academic, linguistic (bilingual and biliterate), and cross-cultural goals for both language minoritized and majoritized speakers (Thomas & Collier, 2003; Collier & Thomas, 2004; Howard, Sugarman, & Christian, 2003). The conventional path toward these promises has been conceptualized under the strict separation of the two languages for instruction. In the United States, such language allocation policy means prescribing one exclusive space for English and another for the partner language (e.g., Spanish or Mandarin). While the clear separation of the two languages in a DLBE program is seen as indispensable (e.g., to protect and develop the minoritized language), the separate and parallel linguistic worlds have come under criticism for reflecting a monoglossic ideology of bilingual development as “two solitudes” (Cummins, 2007) rather than a holistic understanding of bilingualism as an integrated system (Grosjean, 1989, 2010). The rigid adherence to one language or another at a time fails to recognize bilingual students' dynamic, fluid linguistic practices in communicative contexts and may therefore restrict their learning and engagement.

A group of researchers (e.g., de Jong, 2016; Sánchez, García, & Solorza, 2018; García & Lin, 2017; García & Kleifgen, 2018; de Jong, Yilmaz, & Marichal, 2019; Somerville & Faltis, 2019) have questioned the strict boundaries of the two educational spaces in DLBE programs to challenge the “dual” perspective and to move beyond the insistence on strictly monolingual approaches to instruction. They have called for developing flexible, multilingual spaces where the dynamic nature of bilingualism could be recognized and bilingual learners' full linguistic repertoires or translanguaging practices (García, 2009) could be leveraged as a resource in meaning making tasks. Specifically, while recognizing that educators must continue to allocate

separate spaces for one language or another so that students receive adequate input and ample opportunities to use the language of instruction, they argue that teachers must also create or design “an instructional space where translanguaging is nurtured and used critically and creatively without speakers having to select and suppress different linguistic features of their own repertoire” (García & Lin, 2017, p. 127). Integrating translanguaging pedagogies, therefore, provides one pocket of hope to maximize bilingual students’ learning opportunities. This dissertation aims to explore how such pocket of hope could be purposefully realized in a DLBE classroom so that students are not only afforded opportunities to hear and use one language or another exclusively, but also use all the features of their linguistic repertoire in strategic ways to deepen their understandings and enhance their linguistic and academic performances.

In the following sections, I firstly explain the problem statement in detail by explicating the context of DLBE programs in the U.S., why language separation policy is necessary, how it could be reframed through translanguaging pedagogies, and the implementation challenges facing DLBE teachers, especially for language-minoritized ones. Then I identify the purpose of this study and clearly state my research questions. After presenting the potential significance of the study, I provide definitions of key terms that I prefer to use in this dissertation to clarify my stance on bilingual education.

## **Problem Statement**

### **The Emergence and Widespread Expansion of DLBE Programs in the United States**

For centuries, the United States has been experimenting with different education models to serve its growing immigrant student populations (Brisk, 2006; García, 2009). Paradoxically, with cultural and linguistic diversity always being a reality in the U.S. schools, the language in education policies have historically reflected an ambivalent relationship with languages other

than English (Palmer, Zuñiga, & Henderson, 2015). “Bilingual education” in the U.S. has shifted between tolerance and repression in different times and places throughout the history depending on politics (a wide range of legislation, litigation, and state and federal initiatives), the economy, and the size of the immigrant population (see a full review in Gándara & Escamilla, 2017 and Baker & Wright, 2017a). Unfortunately, the prevailing monolingual ideologies and discourses continue to dominate the language in education policies which privilege English-only mandates and regard bilingual education only as a transitional path toward teaching English without actually educating a student in two languages (Gándara & Contreras, 2009). Fortunately, bilingual researchers and educators along with grassroots from minoritized communities have been routinely advocating for the language rights of immigrant students and calling for developing new forms of quality and equitable bilingual education to truly maintain, sustain, and expand students’ bi/multilingual competence. Within the continuous struggle against English monolingualism, dual language bilingual education (DLBE) programs with the purposes of developing high levels of bilingualism and biliteracy, academic achievement, and cross-cultural competence (Christian, 2016) emerged in the mid 20th century. Coral Way Elementary School, developed by a local U.S. Cuban community in Miami, Florida in 1963, has been identified as the first such program that embraced both Spanish- and English-speaking students (García & Otheguy, 1988; de Jong, 2016; Coady, 2019). It approached bilingualism from an additive perspective and viewed learning and maintaining Spanish as a resource rather than a deficit to be overcome (Ruíz, 1984).

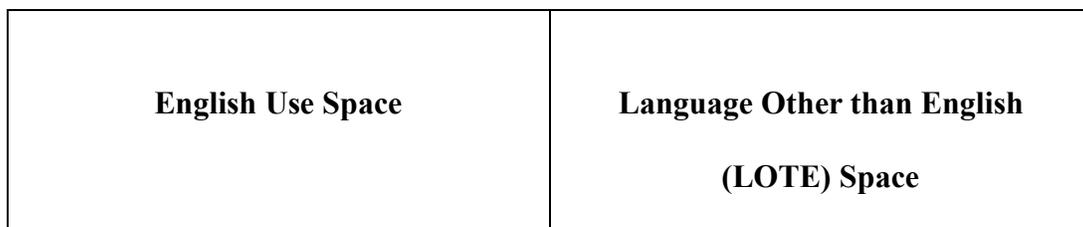
With a substantial number of research studies demonstrating the benefits of bilingualism and the effectiveness of DLBE programs for both language-minoritized and language-majoritized students (e.g., Thomas & Collier, 2002, 2003; Collier & Thomas, 2004; Howard,

Sugarman, & Christian, 2003; Lindholm-Leary & Genesee, 2014; Tedick & Wesely, 2015), the rapid economic globalization at the turn of the 21st century, and more state policies that reward bilingualism (such as the Seal of Biliteracy), proficiency in languages other than English has become an important goal for all (mainstream English-dominant families also developed interest in language immersion education, Dorner, 2011) and thereby DLBE programs are growing in popularity across the states. Various forms of DLBE programs are implemented to suit the local communities' needs during the widespread expansion process. Generally speaking, based on the student population served, DLBE programs can be broadly categorized as either *one-way immersion* which serve one specific target population, be it language-majoritized speakers or language-minoritized speakers, or *two-way immersion* which include students who are native monolingual English speakers as well as students for whom English is an additional language (Howard et al., 2018). In the U.S., the vast majority of DLBE programs are offered at the elementary school level and are Spanish/English programs (The National Association for Bilingual Education estimates over 2,000 DLBE programs across the country, Baker & Wright, 2017b); however, there are small but growing numbers of programs in middle and high schools and programs that involve languages other than Spanish (Center for Applied Linguistics, 2014). With China's growing influence on the world economy, Chinese (Mandarin) has become one of the most popular foreign languages studied among school children. Recent data show that there are 286 English/Chinese DLBE programs in the U.S. (Zheng, 2019).

### **Language Separation Policy in DLBE Programs**

To achieve the three pillar goals of DLBE programs – the development of bilingualism (the ability to speak fluently in two languages) and biliteracy (the ability to read and write in two languages), academic achievement (equal to that of students in non-DLBE programs), and cross-

cultural competence (Gándara & Escamilla, 2017; García, 2009; Genesee, 2004), one central characteristic or keystone practice of all DLBE programs is that “the teaching of core subject matter in a second or minority language for extended periods of time” (Fortune & Tedick, 2019, p. 27). The conventional path toward enacting this has been conceptualized under an instruction in two languages with strict separation of language use (Wong Fillmore & Valadez, 1986). In the U.S. context, such language allocation policy prescribes an exclusive space for English and another for the Language Other than English (LOTE) (See Figure 1.1). Instruction in English and the other language may then alternate by certain subject matter, teacher, time, and/or place. Within each language instructional space, teachers are expected to use the designated language only to deliver content instruction and to serve as language models; students are encouraged to use the language in the instructional time as much and as soon as possible. This ideologically aligns with “a linguistic paradigm that stresses maximizing input and output in second-language learning and minimizing the use of the native language while teaching the target language (Cummins, 2005)” (de Jong, 2016, p. 11).



*Figure 1.1* Traditional language allocation policy of DLBE programs

It is important to note that, language separation in a DLBE program has a long history in bilingual education, and is seen as an indispensable principle particularly when it involves a minoritized language. This language allocation policy has emerged for different reasons. It was influenced by the Canadian immersion research that privileged the Direct Method for language instruction (Ballinger, 2015). It was also a response to research in early bilingual programs that

found that concurrent translation (i.e., consistently repeating the message in the other language) was ineffective. Outcome-based evaluations have shown that children enrolled in DLBE programs that implemented language separation policy (using one language exclusively at a time) achieved greater gains in second language (L2) development than peers in bilingual programs experiencing mainly the concurrent translation approach (Cohen, 1974<sup>1</sup>; Legaretta, 1979<sup>2</sup>). Analysis of observational data in concurrent translation classrooms have revealed that bilingual teachers tended to privilege the use of the dominant societal language (English) at the cost of the LOTE (even though teachers perceived they were using both languages equally, Legaretta, 1977; Legaretta-Marcaida, 1986) and teachers were less likely to translate idiomatic expressions correctly when they were doing direct translations (Torres-Guzmán, 2002). In addition, concurrent translation encouraged students to “tune out” instruction in their weaker language when they knew the teacher would repeat the message in a familiar language (Wong Fillmore, 1982).

Besides the influence of the Canadian immersion research and the ineffectiveness of the concurrent translation approach, one final argument that stresses the necessity of language separation is due to the sociolinguistic and sociopolitical context of DLBE in the U.S. As de Jong (2016, p. 11) poignantly pointed out,

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<sup>1</sup> Cohen (1974) did a comparative study of one Northern California bilingual program which implemented mainly concurrent translation and one Spanish immersion program in Culver City, California which used Spanish exclusively from the beginning. He found stark differences in the second language acquisition (SLA) outcomes of the Anglo (English monolingual) speakers in those two programs: Anglo children in the bilingual program were not functionally proficient in Spanish even after three years, whereas Anglo students in the Culver City program were acquiring proficiency in Spanish with stronger receptive skills.

<sup>2</sup> Legaretta (1979) investigated Spanish monolingual kindergarteners' English and Spanish language outcomes in six bilingual classrooms, of which only one implemented language separation policy. Pre- and post-test scores showed that language separation groups performed significantly higher gains in oral comprehension of English (L2) and communicative competence in both English and Spanish than groups using the concurrent approach.

The lower status of the minority language in the United States, combined with less access to the minority language outside of school, puts the minority language at greater risk of not being chosen by students or teachers as a default language. As a result, if both languages are used without a clear delineation, chances are that English will become the default language as the societal dominant language ... The clear separation of the two languages in a [DLBE] program encourages the use and development of the partner language and protects it from the infringement of the dominant language, English.

A line of research studies in Spanish/English DLBE programs have supported de Jong's (2016) argument by noting that (1) students use target language more consistently with the teacher than with each other; (2) students predominantly use English when working together with their peers in small groups; and (3) the likelihood of English being used during Spanish instruction is far greater than the use of Spanish during English instruction (Amrein & Peña, 2000; Angelova, Gunawardena & Volk, 2006; Ballinger & Lyster, 2011; de Jong & Howard, 2009; Potowski, 2007; Wiese, 2004). As a result, language separation policy "is seen as key to providing equal access to both languages" (de Jong, Yilmaz, & Marichal, 2019, p. 111) to protect the minoritized language from the hegemony of English to make sure ample opportunities are provided for LOTE maintenance and development.

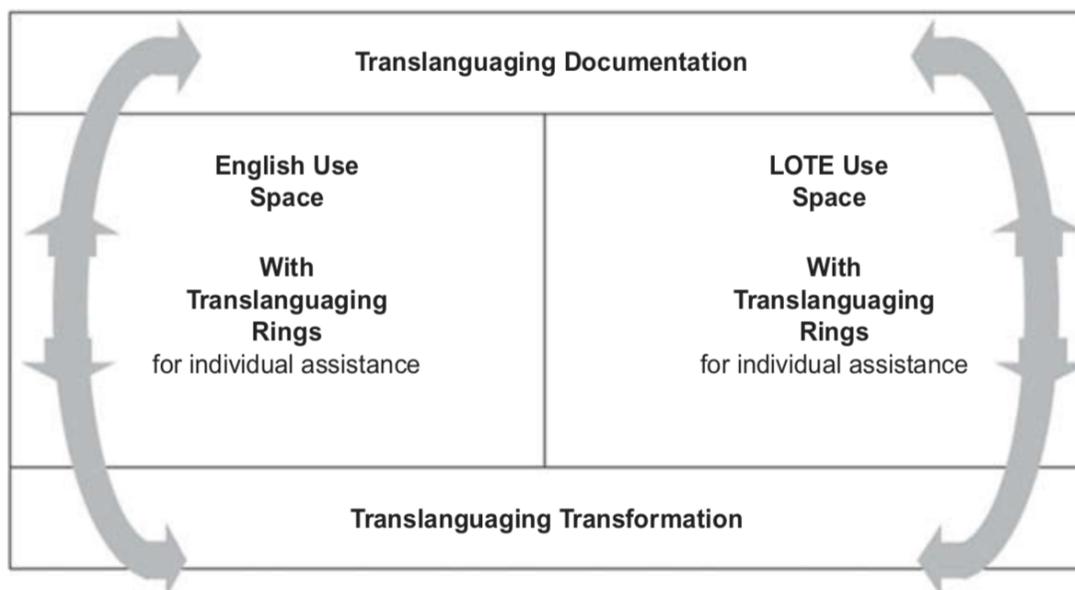
### **Reframing Language Separation Policy through Translanguaging**

While language separation is seen as a necessary guiding principle in DLBE programs in the U.S., the strictly separate and parallel linguistic worlds have come under criticism for reflecting a monolingual, fragmented view of bilingualism as "two solitudes" (L1 + L2, Cummins, 2007) or a monoglossic ideology (Del Valle, 2000). It is incongruent with the current understandings of how bilinguals actually practice or perform their language practices. Moving

toward a holistic, dynamic perspective of looking at bilingualism (Grosjean, 1989, 2010), recent applied linguistics scholarship has adopted “translanguaging” (García, 2009; García & Li Wei, 2014) to refer to the use of two or more languages to make meaning, shape experience and gain understanding and knowledge. It reflects the notion that an individual’s whole linguistic repertoire functions as one integrated system (not two autonomous ones) and bilinguals always engage in translanguaging practices – they strategically and fluidly select (and suppress) semiotic and linguistic features from their full repertoire to accomplish different communicative and expressive ends – inside and beyond school settings. The current arbitrary language separation model, however, fails to recognize the sociolinguistic realities of bilingual children and “may limit students’ ability to use their entire linguistic repertoire when working in either language of instruction. This, in turn, will restrict student learning and student engagement and can marginalize certain identities and home language and literacy practices” (de Jong, Yilmaz, & Marichal, 2019, p. 112).

To recognize the dynamic nature of bilingualism and leverage bilingual learners’ bi/multilingual competence as a resource, a group of researchers (e.g., de Jong, 2016; Sánchez, García, & Solorza, 2018; de Jong, Yilmaz, & Marichal, 2019; Somerville & Faltis, 2019) have called for adopting flexible bilingual pedagogies or creating translanguaging spaces in DLBE programs. Specifically, Sánchez, García, and Solorza (2018) proposed a *translanguaging allocation policy* as a guiding framework to reframe the currently prevalent rigid language allocation policy and to help DLBE educators incorporate translanguaging pedagogy in their instructional practices. They advocate for a **strategic** design of translanguaging spaces within the designated English- and LOTE-use space. Such a bilingual model is flexible and does not aim to return to a concurrent translation situation but tries to engage teachers in judicious and

purposeful use of translinguaging as a pedagogical tool in three ways (See Figure 1.2): “(1) *translinguaging documentation* helps teachers assess what students know and can do when they use all their linguistic resources together, giving them a fuller picture of the learner, (2) *translinguaging rings* are ways of scaffolding instruction that allow teachers to use students’ home languages as resources in learning the target language, and (3) *translinguaging transformation* means creating opportunities for bilingual students to use all their linguistic resources to read, write, and think in ways that challenge existing linguistic hierarchies in school and society overall” (Seltzer & García, 2020, p. 5).



*Figure 1.2* Components of a translinguaging allocation policy for DLBE (adopted from Sánchez et al., 2018, p. 43)

According to Sánchez et al. (2018),

The reframing ... is *not* meant to replace existing language policies or to in any way work against [DLBE] programs. Rather, it is intended to enhance them, to offer the flexibility that is required to tend to the social and academic needs of *all* students who are becoming bilingual. (p. 38, original emphasis)

In other words, a translanguaging allocation policy for DLBE supports the separation of the two named languages in instruction (by time, space, subject matter, and/or people) so that the minoritized language is protected and bilingual learners have ample opportunities to hear and use one language or another exclusively to meet the *external* linguistic demands of schools (and the society). But in addition, a translanguaging allocation policy centers on the students' *internal* unitary language repertoire by recognizing their translanguaging practices and leveraging their full linguistic repertoire in meaning making tasks in three strategic ways: "it fills these traditional spaces [English- and LOTE-use spaces] ... through translanguaging rings as scaffolds, translanguaging documentation for authentic assessment, and translanguaging transformation to liberate bilingual learners' creative voices and critical consciousness" (Sánchez et al., 2018, p. 49). By integrating various translanguaging spaces, this language policy challenges the strictness of the language separation model and provides an alternative way to better serve bilingual students theoretically.

### **Language-Minoritized Teachers: Grappling with the External-Internal Tension**

To implement translanguaging allocation policy in DLBE programs, teachers are at the metaphorical center and they need to constantly grapple with two perspectives. On the one hand, teachers must continue to maintain separate spaces for the two "named languages" (Makoni & Pennycook, 2007; Otheguy, García, & Reid, 2015) to view bilingual language use from the outside (external perspective) to enable students to perform according to the social norms recognized by the school and society. On the other hand, they must provide an instructional space where students' internal translanguaging practices (using their full linguistic repertoire) are honored and leveraged to assess, instruct, and transform. Keeping both perspectives in mind and strategically planning and designing when, where, and why to integrate translanguaging

activities in English- and LOTE-spaces pose significant challenges to teachers as it requires teachers to develop an agentic translanguaging stance (García, Johnson, & Seltzer, 2017) to view bi/multilingualism as a resource and to become language policymakers in their own classrooms to challenge the macro-level strict language separation structure. Moreover, as Henderson and Ingram (2018) point out, “Other teachers, particularly educators from oppressed groups, would be taking a bigger risk to resist mandated policies” (p. 268). In other words, implementing translanguaging allocation policy is especially more challenging for language-minoritized teachers who instruct in LOTE spaces compared to language-majoritized teachers instructing in English spaces due to their power differentials or different social positions in DLBE programs.

In addition, language-minoritized teachers would be more hesitant to initiate translanguaging designs due to several other reasons related to minoritized language protection in DLBE programs. To name a few, (1) the use of translanguaging pedagogies may allow more use of English (especially for language-majoritized students) coming into the classroom, which may threaten the already limited LOTE instructional time (Hamman, 2018; Zheng, 2019); (2) when learners are encouraged to draw on features from the majoritized language (i.e., English) during a minoritized language instructional time, this practice may reinforce the dominance of the majoritized language, an existing societal language imbalance (Ballinger, Lyster, Sterzuk, & Genesee, 2017), and (3) there is still a lack of empirical studies or practitioner guides demonstrating how to frequently protect the non-English language in DLBE contexts (Potowski, 2019). Echoing García and Kleifgen’s (2018) argument that, “Minoritized languages need to be protected, but they cannot be isolated (in language developmental process)” (p. 76), the tension for language-minoritized teachers, therefore, becomes – in what ways can educators leverage

students' full linguistic repertoire in meaning making tasks (the internal view) while still offering protected spaces and support for minoritized language (the external view).

To help language-minoritized teachers develop agency and navigate the tension of both internal and external perspectives, I, as a researcher, strongly believe that we should work *with* teachers together (by treating each other as brokers of knowledge instead of imposing translanguaging on teachers) in the classroom to figure out strategic and purposeful ways to implement translanguaging allocation policy (Sánchez et al., 2018) in contextualized LOTE-use instructional spaces. We should understand that “translanguaging pedagogy should not be framed as a one-size-fits-all approach” (Ballinger, 2019) and it is critical to take the program context and learner background into account when planning and designing translanguaging pedagogies (Fortune & Tedick, 2019). We should, with teachers, continuously seek and co-construct **evidence-based, practitioner-informed, and context-appropriate** applications and knowledge of translanguaging in DLBE programs so that teachers will be empowered “to choose from the growing toolbox of translanguaging practices and adapt them to the complexity of their own classrooms” (Ballinger, 2019). Standing from these vantage points, this dissertation took the form of participatory design research (PDR, Bang & Vossoughi, 2016) in which I worked with a third grade Mandarin teacher (a language-minoritized teacher) in a Mandarin/English DLBE program in the U.S. to see how to strategically incorporate translanguaging spaces in her Mandarin instructional space across different subject matters, drawing upon Sánchez et al.'s (2018) framework (i.e., translanguaging documentation, translanguaging rings, and translanguaging transformation). I will provide a more detailed overview of the study purposes and research questions in the next section.

### **Purpose of the Study and Research Questions**

Much of the U.S. research literature on translanguaging conducted in DLBE contexts emphasizes teachers and students' spontaneous use of translanguaging practices in Spanish/English immersion programs (e.g., Gort & Sembiente, 2015; Palmer, Martínez, Mateus, & Henderson, 2014; Mateus & Palmer, 2017; Hamman, 2018, except for Zheng, 2019 which focuses on a Chinese immersion program). These extant empirical studies have demonstrated some promises of adopting translanguaging in pedagogical discourses and student group interactions, such as translanguaging to buttress meaning making in both content and language knowledge, to build metalinguistic awareness across the two languages, and to cultivate positive bilingual identities. Yet few studies probe into how teachers, especially language-minoritized teachers in LOTE instructional spaces, systemically and strategically design and orchestrate translanguaging spaces in their classrooms to challenge the “dual” model (the strict language instructional boundaries) while protecting and nurturing minoritized language development. Furthermore, more research is needed to examine translanguaging in DLBE programs other than Spanish/English combinations.

To fill these research gaps, this dissertation study specifically looked at how one third grade Mandarin teacher in a Mandarin/English DLBE program in a public elementary school in the New England area intentionally designed translanguaging spaces. Drawing on Sánchez et al.'s (2018) translanguaging allocation policy proposal, I (as a researcher) collaborated with the Mandarin teacher in conceptualizing and implementing contextualized translanguaging pedagogies across different subject matters, i.e., Chinese Language Arts, Science, and Social Studies to maximize her students' learning opportunities and engagement, of whom the majority were English-dominant speakers and heritage speakers of Chinese.

This study took the form of participatory design research (PDR, Bang & Vossoughi, 2016). PDR features an equal partnership between researchers and teachers in which both parties are positioned as “brokers of knowledge” (Paugh, 2004) during the inquiry process and engage in a systematic but flexible way to understand how an educational innovation or intervention works in practice through iterative cycles of development, refinement, and analysis. In this study, the teacher and I mutually informed and reinforced one another’s understanding of translanguaging research and practice through sustained open dialogues, and we co-designed and implemented translanguaging spaces (i.e., translanguaging documentation, translanguaging rings, and translanguaging transformation) through cyclical processes to navigate the tension between strategically leveraging students’ full linguistic repertoires while also maintaining a Mandarin instructional space. This study ultimately aims to generate authentic, sustainable, and context-appropriate knowledge for both researchers and practitioners for curricular and pedagogical improvements and new theoretical understandings of translanguaging in DLBE contexts (Lau & Stille, 2014). The three major research questions guiding this study are:

1. What translanguaging activities are implemented during the design process and how do the students participate in those translanguaging spaces?
2. How do translanguaging strategies vary across Chinese Language Arts, Science, and Social Studies?
3. In what ways does the process of developing translanguaging spaces affect the teacher’s and my beliefs and perceptions of translanguaging and bilingual education?

### **Potential Significance of the Study**

As illustrated in the research questions, this study documents both opportunities and challenges of our (the teacher and me) trajectory of strategically implementing translanguaging

allocation policy in a third grade Mandarin classroom across different content areas. It investigates both the teacher's and my belief change toward translanguaging (if any) and her students' participation during the design and implementation processes of translanguaging spaces. The study has the following significant dimensions, specifically:

1. This study diversifies the language area in U.S. bilingual education research (which is currently dominated by Spanish/English combinations) by providing research evidence in a Mandarin/English DLBE classroom. This also echoes the growing interest in Mandarin/English DLBE programs in the U.S. due to a number of factors, such as the rising economic and political power of China, the growing number of Chinese Americans, and the Chinese parents' concern for maintaining their heritage language and culture (Hsu, 2016);
2. It contributes to the empirical evidence of systematically and purposefully adopting translanguaging pedagogies while privileging LOTE instructional time and space in DLBE contexts from a language-minoritized teacher's perspective;
3. In response to Li Wei and García's (2016) call – “To date, much translanguaging research has been conducted on the language education of minoritized students, whether in bilingual or second language programs. There is now a need to also conduct research on translanguaging in other educational contexts with *dominant language students*.” (p. 11, emphasis added), this study looks at how language-majoritized students (English-dominant speakers) engage or participate in translanguaging spaces;
4. It studies the creation of translanguaging spaces from a design-based research angle, which highlights the opportunities, shifts, and tensions emerging from this longitudinal, iterative processes;

5. The participatory nature of this study signifies an equitable researcher-practitioner collaborative partnership and will thus offer tangible, practical suggestions for both pre- and in-service teachers on how to enact a flexible bilingual pedagogy under language separation and design translanguaging spaces in a DLBE setting (which is especially applicable to elementary school teachers who teach various content areas); and ultimately,
6. This study pushes the development of translanguaging as theory and pedagogy further in bilingual education research field on a larger level by taking a critical and contextualized view.

### **Definition of Key Terms**

There are several important terms and choice of words that I would like to discuss before moving to my rest sections. This is for both clarification purpose and presenting my stance of looking at students and bilingual education.

- Dual language bilingual education (DLBE): I specifically chose dual language bilingual education (DLBE) instead of dual language education (DLE) in a traditional way to disrupt the monoglossic orientation being reflected in DLE program. DLBE indicates that the program not only teaches two named languages (dual language) but also educates children *bilingually* drawing upon their full linguistic repertoire and dynamic translanguaging practices (see more in Sánchez et al., 2018, p. 40-41).
- Bilingual students/learners: I refer students in this study who are learning and developing proficiency in two languages on a continuum as bilingual students/learners instead of dual language learners. This echoes my stance on choosing DLBE to emphasize that these students are not only developing skills in performing language practices associated

with social norms of named languages but also becoming virtuoso language users who could perform bilingually in creative and critical ways using their whole linguistic repertoire. Bilingual students/learners are understood from a dynamic, holistic perspective of bilingualism instead of two monolinguals in one (Grosjean, 1982, 2010).

- Language-majoritized and language-minoritized speakers: In line with Cervantes-Soon et al.'s (2017) word choices in highlighting the power structures that frame people's lives, I use the term "language-minoritized speakers" to indicate linguistic groups that may be labeled minority by Whitemain society (Urrieta, 2010) but who are by no means "minor". In a similar vein, "language-majoritized speakers" refer to English-dominant speakers in the context of U.S. given the hegemonic status of English (but actually they are by no means "major" either).

## CHAPTER 2 LITERATURE REVIEW

This chapter starts with presenting the theoretical framework undergirding the study – a holistic, dynamic view of bilingualism and its connectedness with bilingual education. Next, I explain what translanguaging is from three dimensions: practice, theory, and pedagogy. I also include a brief overview of its historical development and current debates/tensions surrounding its theoretical underpinnings and pedagogical implications. Then I specifically situate translanguaging in dual language bilingual education (DLBE) contexts and review extant studies which investigate translanguaging practices and pedagogies in U.S. DLBE programs that primarily focus on Spanish/English combinations. Finally, I identify the current research gaps and introduce this dissertation study.

### Theoretical Framework

This study approaches language-in-education policies in DLBE programs through a holistic, dynamic understanding of bilingualism and bilingual development. This theoretical lens has been developed in response to what May (2014) called “the multilingual turn” in the applied linguistics field, which rejects entrenched ideologies that frame monolingualism as the norm and instead recognizes the multiplicity of languages and meanings in social communication. Within this discourse, the conceptualization of bilingualism has been moved from a linear, monolingual view positing bilingualism as “two solitudes” (Cummins, 2007) – that is, two bounded, autonomous linguistic systems concurrently existing in an individual’s mind (two monolinguals in one, L1 + L2) – to a holistic, dynamic perspective that includes the following principles:

- (1) A holistic understanding of bilingualism sees the development of two languages in a bilingual person as an *integrated* system rather than as two independent cognitive and linguistic systems (Grosjean, 1989, 2010);

(2) A dynamic conceptualization suggests that the language practices of all bilinguals are complex and interrelated; they do not emerge in a linear way (García, 2009; García & Sylvan, 2011). It highlights “the development of different language practices to *varying degrees* (instead of balanced ways) in order to interact with increasingly multilingual communities and bilinguals *along all points of the bilingual continuum*” (García & Kleifgen, 2018, p. 57, emphasis added).

Accordingly, a holistic, dynamic bilingual lens reflects a heteroglossic (Bakhtin, 1981) stance in which multiple languages are seen as interrelated among one another in an integrated system and as interacting in complex, fluid, flexible ways in the linguistic practices and social relations of multilingual people. This theoretical framework further challenges the idealized monolingualism of constructs such as “first language” and “second language” and argues for a more nuanced understanding of how bilinguals actually do and practice bilingualism in their communities.

The current language-in-education policies in DLBE programs with strict separation of language spaces (e.g., “English-only” time and “Spanish-only” time) reflects a monoglossic, compartmentalized understanding of bilingualism and fails to recognize the interrelationship between the two languages and the complexity and fluidity of bilingual students’ language performances in social interactions. Although it is important to have separate, focused spaces for each language in DLBE programs for a variety of reasons, as I have argued in Chapter 1, the current language allocation policy (“parallel monolingualism” Heller, 1999) does not suffice for developing bilingualism and biliteracy. As Hornberger (2005) contends, “Bi/multilinguals’ learning is maximized when they are allowed and enabled to draw from across all their existing language skills (in two + languages), rather than being constrained and inhibited from doing so by monolingual instructional assumptions and practices” (p. 607). Therefore, this dissertation

study aims to purposefully create educational spaces which provide students with opportunities to build cross-linguistic connections and utilize all of their linguistic resources in dynamic, complex ways. It positions bilingual learners in DLBE programs as language users who are learning and developing proficiency in two languages on a continuum and could perform bilingually in creative and critical ways using their holistic linguistic repertoire. Specifically, under a holistic, dynamic framework of bilingualism, I adopt the term “translanguaging” (García, 2009) to refer to the language practices of bilinguals and flexible pedagogical spaces in DLBE programs. I will elaborate the notion of translanguaging in detail in the next section.

### **Translanguaging**

There is no single definition of translanguaging because it can be used to refer to different things and it is still developing. In this section, I begin with a brief overview of the development of translanguaging, and then demystify what translanguaging is from three dimensions based on the current research: translanguaging as practice, theory, and pedagogy. As the notion of translanguaging is also controversial, I review some current tensions and debates. I end with an operating framework for how I take up translanguaging in the present dissertation study.

#### **Translanguaging: Origins and Development**

The term translanguaging comes from the Welsh *trawsieithu*, which was first coined by Cen Williams (1994). In its original inception, it referred to a pedagogical practice in Welsh/English bilingual classrooms where students are asked to alternate the languages of input and output deliberately for the purposes of receptive or productive use. According to Williams (1996), “Translanguaging means that you receive information through the medium of one language (e.g., English) and use it yourself through the medium of the other language (e.g.,

Welsh). Before you can use that information successfully, you must have fully understood it” (p. 64). As Williams (2002, 2003) suggests, translanguaging is a strong child-centered approach (although it may be engineered by the teacher), which often uses the stronger language to develop the weaker language and requires students to utilize various cognitive skills which include internalizing new ideas they hear or read in one language, assigning their own understanding to the concept, and simultaneously and immediately conveying the message in their other language(s) in spoken or written mode. Such dual language processing moves beyond simply translating and could ultimately lead to a deeper understanding of content and an augment of students’ ability in both languages (Lewis, Jones, & Baker, 2012a). Baker, a close colleague of Williams, later officially launched the term “translanguaging” internationally through the third edition of *Foundations of Bilingual Education and Bilingualism* (2011), and he has continuously discussed four potential educational advantages of translanguaging as a pedagogical practice (Baker, 2001, 2006, 2011):

- It may promote a deeper and fuller understanding of the subject matter;
- It may help the development of the weaker language;
- It may facilitate home-school links and co-operation;
- It may help the integration of fluent speakers with early learners.

To achieve these pedagogical promises, Baker (2011) specifically emphasizes that the teacher should adopt translanguaging “in a *planned, developmental* and *strategic* manner to maximize a student’s linguistic and cognitive ability, and to reflect that language is sociocultural both in content and process” (p. 290, emphasis added). Pedagogically effective examples of translanguaging in Welsh classrooms were documented in a five-year research project (Lewis, Jones, & Baker, 2013). Lewis, Jones, and Baker (2012b) have summarized that in

translanguaging, “*both languages are used in a dynamic and functionally integrated manner to organize and mediate mental processes in understanding, speaking, literacy, and not least, learning*” (p. 1, emphasis added).

With the term translanguaging being developed in Welsh education circles from the 1980s, combined with its potential to build on the dynamic bilingualism of learners, translanguaging has caught the imagination of many bilingual educators and scholars in North American and other European contexts (e.g., Ofelia García, Li Wei, Nancy Hornberger, Adrian Blackledge, Angela Creese and Suresh Canagarajah) in the twenty-first century. Its definition and use has been extended from classroom pedagogical practices to bilinguals’ everyday meaning-making practices (e.g., García, 2009; García & Li Wei, 2014), from Welsh bilingual classrooms to classrooms across international contexts (e.g., Blackledge & Creese, 2010; Li Wei, 2011; Canagarajah, 2011; Hornberger & Link, 2012), and more importantly, it has been infused with social justice purposes to challenge linguistically structured inequalities and to transform language-minoritized students’ learning environments (e.g., García & Kleifgen, 2010; García & Sylvan, 2011; Flores & García, 2013). The past last decade (2009 - 2018) has witnessed the booming of translanguaging in educational research, and this momentum has been continuously growing. Based on the translanguaging studies so far, as well as my own work (e.g., Tian & Link, 2019), I propose that translanguaging has been (re)conceptualized and adopted from three dimensions: *practice*, *theory*, and *pedagogy*. My goal here is not to provide an exhaustive summary of translanguaging to date, but to capture the major trends and developments in translanguaging research. Because another important reason is to illustrate how I take up translanguaging in this study, this chapter will foreground translanguaging research from a U.S.

bilingual education perspective (see more history and development of translanguaging in Li Wei & García, 2016, García & Lin, 2017, and Vogel & García, 2017).

### **Translanguaging as Practice**

Within a holistic, dynamic perspective of bilingualism, Ofelia García (2009) first extended the notion of translanguaging to social practices, defining it as “*multiple discursive practices* in which bilinguals engage in order to *make sense of their bilingual worlds*” (p. 45, original emphasis) to describe the complex ways in which bilinguals move fluidly among multiple languages, dialects, and modalities in their everyday interactions. A translanguaging lens is not centered on languages, but on the active role of multilingual speakers and their readily observable practices – how they actually “do” bilingualism through strategically intermingling linguistic and semiotic features from a single meaning making repertoire to serve their communicative needs in different social contact zones. García (2009) further emphasizes that translanguaging practices are not marked or unusual but rather are “the communicative norm of bilingual communities and cannot be compared to a prescribed monolingual use” (p. 51).

Likewise, Li Wei (2011) also takes up this term to capture the dynamic process whereby multilingual language users select linguistic and semiotic resources to mediate social and cognitive activities. For Li Wei, translanguaging builds on the psycholinguistic roots of *linguaging*, which refers to the process of using language to gain knowledge, to make sense, to articulate one’s thoughts and to communicate using language (e.g., Lado, 1979; Hall, 1996; Smagorinsky, 1998; Swain, 2006; Maschler, 2009). Language in this sense has been conceptualized not as a noun but as a verb (Becker, 1991a, 1991b) to indicate meaning making is an ongoing negotiation process as a result of social interaction and the discursive practices enacted by individuals in social settings. For multilingual speakers, they are *trans*-linguaging

because their dynamic discursive practices are not only going *between* different linguistic structures, cognitive and semiotic systems and modalities (speaking, writing, signing, listening, reading, remembering), but going *beyond* them. During the interaction of multilinguals, they create a *translanguaging space* in which individuals “[bring] together different dimensions of their personal history, experience and environment, their attitude, belief and ideology, their cognitive and physical capacity into one coordinated and meaningful performance” (p. 1223). Li Wei (2011) further posits that this translanguaging space has its own transformative power because it affords multilingual speakers the opportunity to become *creative* and *critical* language users (creativity – the ability to follow or flout norms of language use; criticality – the ability to use evidence to question, problematize, or express views). Multilingual language users consciously construct and constantly modify their sociocultural identities and values (and generate new ones) through social practices such as translanguaging.

Other researchers have also contributed to (re)conceptualizing translanguaging as complexes of situated, processual and interactional communicative practices among bilingual communities (e.g., Blackledge & Creese, 2010; Canagarajah, 2011; Hornberger & Link, 2012). The most recent edited volume by Gerardo Mazzaferro (2018) entitled “Translanguaging as Everyday Practice” investigates translanguaging practices within different domains of social life (i.e., school, education, diasporic families and communities, workplaces, urban linguistic landscapes, advertising practices and mental health centers) across a wide range of social, cultural, and geographical contexts to illustrate how and why language practices, identities and ideologies are (re)negotiated and (re)constructed, as well as opposed and subverted by social actors.

In addition, there are two emerging trends in (re)theorizing translanguaging as practice. One is that there are incessant calls for seeking new perspectives (or theoretical frameworks) to examine and understand the interactions between translanguaging and multimodality. García and Li Wei (2014) point out that “bilingual students perform bilingually in the myriad multimodal ways in the classrooms – reading, writing, taking notes, discussing, signing, etc.” (p. 65). Both García (2016) and Vogel, Ascenzi-Moreno, and García (2018) call for adopting an expansive view of translanguaging practices to include features individuals embody (e.g., their gestures, their posture), as well as those outside of themselves which through use become part of their bodily memory (e.g., computer technology – machine translation software). Likewise, Pennycook (2017) suggests that we include “semiotic assemblages” as a part of translanguaging practices to refer to the other multimodal cultural modes for meaning-making, such as movement, music, and images. Li Wei (2017) provides one way to view translanguaging practices from a social semiotic perspective (Kress, 2010) in which languages are seen as linguistic signs that “are part of a wider repertoire of modal resources” and multilingual speakers are “sign makers [who] employ, create, and interpret different kinds of signs to communicate across contexts and participants and perform their subjectivities” (p. 14). Angel Lin (2015, 2018) has coined the term “trans-semiotizing” to provide another overarching framework to analyze language as entangled with many other semiotics (e.g. visuals, gestures, bodily movement) in meaning making practices. Canagarajah creates “translingual practice” as an umbrella term in his 2013 book to focus on the social practices of mixing languages, modes, and symbol systems as a creative improvisation to adapt to the needs of the context and the local situations.

The second trend is that translanguaging practices have been extended to also include monolingual speakers. A group of researchers (e.g., MacSwan, 2017; Li Wei, 2017; Conteh,

2018; Lin, Wu, & Lemke, 2020) all point out that it is normal even for the so-called monolingual speakers to move across different styles, registers, dialects, and modes to construct meanings, shape experiences, and perform identities in their social encounters in specific, superdiverse contexts: “All languaging is in fact translanguaging” and the traditional notions of “a dialect” could be perceived as “*the variations along the dimension of linguistic features*” (Lin, Wu, & Lemke, 2020, p. 51, original emphasis). Translanguaging in this sense encompasses a variety of discursive practices of both multilingual and monolingual individuals and is seen as a normative behavior of *all* speakers.

In the present study, translanguaging is still considered a distinctive act of bilingual speakers, characterized by multilingual, multimodal, multisemiotic, and multisensory performance (Li Wei, 2017) that integrates diverse languaging and literacy practices to maximize communicative potential and indicate sociocultural identities, positionings, and values in different social and semiotic contexts. Translanguaging practices capture the sociolinguistic realities of bilingual children inside and beyond classroom settings in which they are agentive meaning makers strategically using the totality of their communicative repertoire.

### **Translanguaging as Theory**

In parallel with conceptions of translanguaging as a social practice, it also is a linguistic theory (Li Wei, 2017; García & Lin, 2017) with different epistemological stances than traditional models of bi- and multilingualism. Vogel and García (2017, p. 4) succinctly summarize the three core premises that undergird translanguaging theory:

- (1) It posits that individuals select and deploy features from a unitary linguistic repertoire in order to communicate;

- (2) It takes up an internal perspective on bi- and multilingualism that privileges speakers' own dynamic linguistic and semiotic practices above the named languages of nations and states.
- (3) It still recognizes the material effects of socially constructed named language categories and structuralist language ideologies, especially for minoritized language speakers.

First, the theory of translanguaging represents an epistemic shift from traditional theorizations of bilingualism as two separate, bounded systems. Instead, it posits that all speakers have a singular linguistic repertoire composed of meaning-making features that are selected and deployed in different contexts (García & Li Wei, 2014). In translanguaging theory, multilingual speakers are put front and center and they are seen as creative and critical language users who perform transgressive discursive practices “without regard for watchful adherence to the socially and politically defined boundaries of named (and usually national and state) languages” (Otheguy, García, & Reid, 2015, p. 283). This leads to the second theoretical assumption – the internal/external distinction.

From an *external* perspective, languages are socially constructed linguistic categories and are associated with names/labels/boundaries of nation-states (such as English, Chinese, Spanish, and Vietnamese). These named languages make up a social norm of linguistic conventions (such as grammatical and pragmatic conventions) and certain form of languages and language use are privileged, keeping power in the hands of the few (e.g., Standard American English in the U.S. society). Traditional conceptions, such as L1, L2, native speaker, the notion of the pure, static “language”, are common terms society uses to describe people’s language practices (García & Li Wei, 2014). However, these are social constructions and not linguistic facts. Translanguaging theory takes an *internal* perspective, standing from the point of view of speakers themselves, to

describe bilinguals' flexible and fluid use of language features without clear socially constructed boundaries (Blackledge & Creese, 2010; García & Kleyn, 2016). Such mixing of different linguistic and semiotic codes to perform identity, creativity, and/or criticality is seen as a normative practice of bilingual speakers instead of being stigmatized according to a monolingual norm in the society (Li Wei, 2011, 2017). In this sense, translanguaging theory seeks “to dismantle named language categories and counters ideologies that position particular languages as superior to others and the language practices of monolinguals as superior to those who are said to speak with linguistic resources that go beyond the strict boundaries of named languages” (Vogel & García, 2017, p. 6).

This internal/external distinction has also been conceptualized as the main epistemological difference between translanguaging and code-switching (Otheguy, García, & Reid, 2015; García & Kleyn, 2016; García & Kleifgen, 2018). Code-switching implies a “switch” from one language code (L1) to another (L2) and rests on the assumption that bilinguals have two separate, autonomous language systems. In other words, it takes an external perspective to examine bilinguals' language behavior in which named language categories remain intact. On the contrary, translanguaging theory applies an internal lens to see how bilinguals select or inhibit (or not) different semiotic and linguistic features from their unitary repertoire in response to the locally situated task (García, 2014). Both code-switching and translanguaging theories have made important contributions in understanding individuals' bilingual performances. As Li Wei (2017) has explicitly expressed, “For me, translanguaging has never intended to replace code-switching” (p. 27). However, according to Lin, Wu, and Lemke (2020), they are two research paradigms “because superficially these two traditions seem to look at similar phenomena: People mixing languages, people switching between languages. But the analytical

tools, the apparatus, or methodological resources used to do the analysis are totally different” (p. 69).

In addition, translanguaging theory recognizes the material effects of named languages and the so-called social norms (the third theoretical premise) in the meantime because they carry different statuses and impose real social expectations and contextual constraints upon bilinguals. Bilinguals’ selection of different features from their unitary repertoire are not random or haphazard but *strategic* given the macro socio-cultural-political context and micro local situations. Lin, Wu, and Lemke (2020) present two examples to demonstrate this point: in institutionalized settings (e.g., exam, job interview, research publication), bilinguals are expected to select features that correspond to standardized named language categories to perform tightly structured, homogeneous practices whereas in less-policed settings (e.g., casual conversations, joking, group meetings indexing community solidarity), bilinguals could have a wider choice of linguistic and semiotic features at their disposal to do loosely-structured, mixed performances. As Li Wei (2017) says, “A multilingual is someone who is aware of the existence of the political entities of named languages, has acquired some of their structural features ... that enables a resolution of the differences, discrepancies, inconsistencies, and ambiguities, if and when they need to be resolved, and manipulate them for strategic gains” (p. 11).

One thing that needs to be clear is that translanguaging theory does not intend to reinforce the dominant societal language ideologies or socially constructed linguistic hierarchies, though recognizing they have real consequential effects. The central goal is to challenge colonial and modernist-era structuralist ideologies of language standardization (Makoni & Pennycook, 2007) by liberating and privileging language-minoritized speakers’ bilingual performances and legitimizing all their linguistic varieties. To grapple with this tension, it is important to continue

to develop translanguaging theory with deep social justice implications<sup>3</sup>. Tian and Link (2019) provide one way of making this connection by examining the positive synergies between translanguaging theory and other critical theories in education (e.g., critical literacy, culturally sustaining systemic functional linguistics, feminist post-structuralism) to further enrich the notion of translanguaging and to emphasize its liberating purpose for language-minoritized students.

### **Translanguaging as Pedagogy**

Building upon translanguaging as practice and theory, García (2009) has further conceptualized translanguaging as a pedagogical approach (and extended the Welsh educational origins of translanguaging as language input/output alternation). Generally speaking, translanguaging as pedagogy refers to “the ways in which bilingual students and teachers engage in complex and fluid discursive practices that include, at times, the home language practices of students in order to ‘make sense’ of teaching and learning, to communicate and appropriate subject knowledge, and to develop academic language practices” (García, 2014, p. 112). In a translanguaging classroom, teachers acknowledge bi/multilingualism as a resource and strategically incorporate learners’ familiar cultural and language practices (or funds of knowledge) in academic learning while also showing students “when, where, and why to use some features of their repertoire and not others, enabling them to also perform according to the social norms of named languages as used in schools” (García & Kleyn, 2016, p. 15). Therefore, translanguaging pedagogy calls upon teachers to grapple with both internal and external perspectives: on the one hand, teachers should make heteroglossic spaces that leverage students’ bilingualism and bilingual ways of knowing and that support their socio-emotional development

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<sup>3</sup> The social justice (or socio-political) implications of translanguaging theory is another dimension that is different from code-switching, in my personal understanding.

and bilingual identities; on the other hand, teachers should provide opportunities to expand students' linguistic repertoires to include new "academic" features so they may successfully navigate different contexts of school-based literacies and subject-matter knowledge (García, Johnson, & Seltzer, 2017).

García and Kleifgen (2018) emphasize that "a translanguaging pedagogy is not simply a series of strategies and scaffolds, but also a philosophy of language and education that is centered on a bilingual minoritized community" (p. 80). A translanguaging pedagogy is positioned as a vehicle for "liberating the voices of language minoritized students" (García & Leiva, 2014, p. 200), calling attention to bilingual students' agency, criticality, and creativity in communicative and meaning-making acts while questioning the social hierarchies that would curtail such traits (Li Wei & Wu, 2009). Translanguaging has the potential to "transform relationships between students, teachers, and the curriculum" (Vogel & García, 2017, p. 10) to necessitate a co-learning space (Li Wei, 2013) where teachers and students learn from each other, and all language practices are equally valued, and ultimately to advance social justice to ensure that all students are educated deeply and justly (García, Seltzer, & Witt, 2018).

To facilitate teachers' take-up of translanguaging pedagogy, García, Johnson, and Seltzer (2017) identify three interrelated strands. They claim that in order to implement translanguaging in instruction, a teacher must (1) develop a *translanguaging stance* – they believe the value of bilingualism in content and language learning and position language-minoritized children as legitimate users of language; (2) plan *translanguaging design* – they purposefully and strategically create heteroglossic, inclusive educational spaces (such as appropriating multilingual materials and grouping students according to home languages) where students are encouraged to use their complete communicative repertoires to engage in learning and

assessment; and (3) be ready for *translanguaging shifts* – they must be flexible and willing to deviate and change their lessons (i.e., making moment-by-moment decisions) to respond to the emerging needs of children who are at different points of the bilingual continuum.

### **Current Tensions and Debates**

As the notion of translanguaging has been continuously studied and expanded across the three dimensions (practice, theory, and pedagogy) and applied across different educational contexts, the tensions and debates surrounding its theoretical underpinnings and pedagogical promises have increasingly caught educational researchers' attention. Here I provide a brief overview of three current controversial discussions.

First and foremost, and as alluded to previously in this chapter, scholars have questioned how translanguaging is different from other terms, such as code-switching<sup>4</sup> (e.g., Gumperz, 1976), polylingualism (Jørgensen, 2008), metrolingualism (Pennycook & Otsuji, 2015), and code meshing and translingual practices (Canagarajah, 2013). While acknowledging that translanguaging has much in common with these terms, which are all used to emphasize languages as mobile resources within social, cultural, political, and historical contexts (Blommaert, 2010), García and Li Wei (2014) have argued, “Translanguaging for us, however, is part of a moral and political act that links the production of alternative meanings to transformative social action. As such, translanguaging contributes to the social justice agenda. This in itself distinguishes our concept from many others” (p. 37). They then provide a detailed explanation of how translanguaging differentiates itself from the terms mentioned above (see García & Li Wei, 2014, pp. 36-42). At the current moment, when translanguaging has become a household name in publications, schools, and conferences, I argue that it is especially important

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<sup>4</sup> Please refer to my section “Translanguaging as Theory” to review the difference between translanguaging and code-switching.

to continue to have such conversations, as Jaspers (2018) has reminded us that “popular new concepts [may] run the risk of ‘discursive drift’” (p. 1). That is, during the popularization process, specialist terms can begin to drift away from their original sense, lose their precision, and start to overlap with other terms from which they were once distinguished (Cameron, 1995). Therefore, as researchers, we must hold each other accountable to produce quality work on translanguaging and to avoid it becoming a popularist neologism by maintaining its social justice implications (Poza, 2017).

Second, there are conflicting perspectives about whether bilinguals have only one unitary repertoire. For example, MacSwan (2017) has critiqued the unitary model proposed by Otheguy, García, and Reid (2015) in which bilinguals have only one single, internally undifferentiated repertoire. Based on the empirical data on code-switching literature, he argues that bilingualism is actually *psychologically real* – there are internal differentiations among mental grammars in bilingual individuals’ linguistic repertoire. He then proposes an “integrated multilingual model” to describe that bilinguals have a single system with many shared grammatical resources but with some internal language-specific differentiation as well. Otheguy, García, and Reid (2018) recently respond to this critique, positing that such recognition of language boundaries in cognitive terrain may have pernicious effects in educational practices because it positions language-minoritized students as *incomplete* in their lacking of certain grammatical norms (usually dominant, standardized ones). They claim that “a much healthier educational climate is created by teachers who adopt the unitary view” (p. 1) in which students are seen as possessing “a *full* and unitary linguistic system, a mental grammar made up of features that have been developed in the *social* context in which they have done language up to now” (García & Kleifgen, 2018, p. 64, original emphasis). In addition, applying a linguistic analytical lens, Jay

Lemke provides another perspective regarding the nature of “mental structure” of bilinguals during his most recent conversations with Angel Lin,

I think in MacSwan’s paper, one good point he made is about the question of how structurally organized is the repertoire that is being deployed by a speaker who has some multilingual competence and is using multilingual resources. He says he doesn’t agree with García that it’s a completely unified system, because it appears that speakers apply somewhat language-specific rules or forms of grammar or habits of speaking even to small segments within an utterance ... But they are not completely separate. It is not two completely separate systems that you are just moving back and forth between, but on the other hand, there is not one single completely unified system ... They are not as tightly structured as formal written grammars would dictate, but they are not so loosely structured that anything is possible, any mix is possible. But they are something in between. And it is important to know what is the nature of that structuring? (Lin, Wu, & Lemke, 2020, p. 50)

Last but not least, the generalizability of translanguaging pedagogies has been questioned – to what extent can translanguaging pedagogies be effective and transformative across all the educational contexts, especially with concern about protecting the development of minoritized languages (e.g., Cenoz & Gorter, 2017; Ballinger, Lyster, Sterzuk, & Genesee, 2017; Fortune, & Tedick, 2019; Potowski, 2019; Lyster, 2019). Jaspers (2018) warns us that the transformative claims of translanguaging pedagogies cannot be taken for granted because translanguaging research “always needs to be considered against the *background of continuing inequalities, predominant discourses, local circumstances, and personal considerations*” (p. 7, emphasis added). In other words, it is essential to recognize that context matters and translanguaging

pedagogies have to be *strategically* and *purposefully* planned, designed, and implemented considering multiple contextual factors at both macro and micro levels, such as imbalanced power dynamics among languages, learner background, program context, and lesson goals. I argue that, while recognizing that the extant research shows translanguaging as a promising pedagogical practice in some educational contexts (e.g., Sayer, 2013; García & Kleyn, 2016; Gort, 2015, 2018), researchers must continue to work with teachers to conduct classroom-based research on translanguaging with a critical lens to provide more evidence (or counter-evidence) as well as contextualized translanguaging strategies.

### **My Take-Up of Translanguaging in the Present Study**

As illustrated in Chapter 1, this study aims to address one central question: in what ways can educators leverage students' full linguistic repertoires in meaning making tasks while still offering protected spaces and support for minoritized language development (Mandarin, in this case) in DLBE contexts (a Mandarin/English DLBE program). While I have explained my views toward translanguaging in Chapter 1 and the sections above, here I reiterate some of the core theoretical beliefs about translanguaging as practice, theory, and pedagogy that undergird this study.

Guided by a holistic, dynamic theoretical framework of bilingualism, I see translanguaging as natural, common, and distinctive language practices of bilingual learners in which they strategically select (and/or inhibit) linguistic and semiotic features from their unitary repertoire based on different contextual factors to participate in multimodal classroom tasks, to communicate with teachers and peers, to make sense of content and language learning, and to perform their identities and ideologies. Translanguaging practices are always present in bilingual classrooms, sometimes surreptitiously and other times out in the open; they are sociolinguistic

realities for bilingual children. However, under the current, often-strict language separation policies in DLBE programs, these dynamic discursive practices have not been fully recognized and leveraged as a resource to contribute to students' learning, socio-emotional development, and positive identity cultivation. This study aims to identify ways to encourage bilingual students to bring their translanguaging practices and full selves into different academic tasks across different content areas.

Translanguaging theory posits that bilingual learners only have one unitary repertoire; it positions learners at the center to define their language practices through their own lenses (internal perspective) and to privilege and legitimize their complex, dynamic practices, seeking to soften the boundaries of named language categories while also recognizing these categories' real material effects. This has significant implications for teachers in DLBE. First, under the unitary model proposed by Otheguy, García, and Reid (2015), teachers should be aware that the bilingual development of different language features cannot be totally isolated from one another in an integrated language system. In this study, Mandarin language and literacy can only be developed and sustained in “functional interrelationship [with other language features] within the communicative context” (García & Lin, 2017, p. 127). Therefore, it is important to create spaces for bilingual students to use both of their language features to incorporate new ones and expand their whole linguistic repertoire. Second, the unitary model also implies that teachers should perceive students (from an asset-based view) as competent language users who “possess a *full* and unitary linguistic system” instead of “*incomplete*” lacking of certain language features (García & Kleifgen, 2018, p. 64, original emphasis) and should create spaces to free students from the strict language separation structures in DLBE programs (in this case, Mandarin-only time) to liberate their tongues and minds, letting them perform their agency and be creative and

critical language users. Third, the tension that translanguaging theory grapples with – i.e., trying to dismantle the named language boundaries while recognizing that they have real and material consequences – reminds teachers that they are also classroom language policy makers who are constantly grappling with both perspectives. In this case, while it is important for the Mandarin teacher (a language-minoritized teacher) to create a child-centered classroom for the students who are mostly language-majoritized speakers (i.e., English dominant speakers) to use their full linguistic repertoire, it is also crucial to keep or protect the boundaries of minoritized language space (i.e., Mandarin instructional time) to only allow students to use their Mandarin features at certain times (because otherwise, the students would not get authentic opportunities to fully develop their Mandarin language and literacy). This balancing of both perspectives has posed significant challenges for all teachers, especially language-minoritized teachers, in DLBE programs and calls for a strategic and purposeful design of translanguaging spaces in classrooms. This study aims to address this issue in a specific context where a Mandarin teacher was working with a group of third graders who were primarily English-dominant speakers, and to understand both the teacher and students’ participation during the translanguaging design process.

Lastly, in DLBE contexts, translanguaging pedagogy represents a flexible bilingual pedagogy to support what bilingual learners *do* with language and engages students in performing academic tasks utilizing their entire linguistic and semiotic repertoires. Building upon this, Sánchez, García, and Solorza (2018) have further proposed a *translanguaging allocation policy* by calling upon teachers to strategically incorporate translanguaging pedagogy in their English- and LOTE-use spaces. They specifically highlight three parts of the translanguaging allocation policy that are essential to DLBE programs: “(1) **translanguaging documentation** helps teachers assess what students know and can do when they use all their

linguistic resources together, giving them a fuller picture of the learner, (2) **translanguaging rings** are ways of scaffolding instruction that allow teachers to use students' home languages as resources in learning the target language, and (3) **translanguaging transformation** means creating opportunities for bilingual students to use all their linguistic resources to read, write, and think in ways that challenge existing linguistic hierarchies in school and society overall" (Seltzer & García, 2020, p. 5). With these new components integrated in the traditional space for each of the named languages, a translanguaging allocation policy provides opportunities for bilingual students to not only hear and use one language or another exclusively (so that the minoritized language is protected), but also use all the features of their linguistic repertoire in strategic ways to deepen their understandings and enhance their linguistic and academic performances. This study aims to look at how to purposefully design these translanguaging components informed by Sánchez et al.'s (2018) model to maximize students' learning opportunities and engagement in a U.S. Mandarin/English DLBE program.

To further situate the study in the context of U.S. DLBE, in the next section I will review research studies to date (till early 2019) which investigate translanguaging practices and/or pedagogies in U.S. DLBE programs.

### **Translanguaging Studies in U.S. DLBE Programs**

I have conducted a thorough review of translanguaging studies in U.S. DLBE programs based on an ERIC database search. I have also consulted three current books addressing classroom-based studies on translanguaging issues, including García and Kleyn's (2016) *Translanguaging with multilingual students: Learning from classroom moments*, Paulsrud, Rosén, Straszer, and Wedin's (2017) *New perspectives on translanguaging and education*, and

Fu, Hadjioannou, and Zhou's (2019) *Translanguaging for emergent bilinguals: Inclusive teaching in the linguistically diverse classroom*.

For the ERIC database search, I used keywords “translanguaging AND dual language education or bilingual education or bilingual program or dual language bilingual education” for searching. The initial results were 91 related articles. Then I applied inclusion/exclusion criteria which were: (1) only peer-reviewed articles, (2) empirical studies only, (3) studies conducted in U.S. K-12 formal classroom contexts (not after-school programs), and (4) research on DLBE programs (not ESL, English mainstream programs or transitional bilingual programs). My final group of studies included 25 articles from ERIC and two book chapters total from García and Kleyn (2016) and Paulsrud et al. (2017). Therefore, I reviewed 27 articles in total.

Among the 27 empirical studies, 26 of them address translanguaging practices and pedagogies in U.S. Spanish/English DLBE classrooms, focusing on preschool and elementary school level with only 1 study conducted in Mandarin/English combinations. This is not surprising considering that the vast majority of DLBE programs are offered at the elementary school level and are Spanish/English programs (Baker & Wright, 2017a). In addition, all the studies adopt qualitative research methodologies (the most common methodologies are case study and classroom ethnography). The studies are concentrated between the years 2013-2018, which responds to the growing trend of translanguaging research in the past decade. I will first report the major common findings from the 26 translanguaging studies in U.S. Spanish/English DLBE programs.

### **Translanguaging Studies in U.S. Spanish/English DLBE Programs**

Among the twenty-six studies, I have identified three common themes they address: (1) the majority of studies (twenty out of twenty-six) look at how students and teachers are using

multiple languages (i.e., naturally occurring translanguaging practices) during different classroom activities; (2) four studies examine intentional and purposeful translanguaging pedagogical designs in classrooms, and (3) three studies investigate teachers’ language ideologies toward translanguaging<sup>5</sup>.

**Students and teachers’ translanguaging practices in classrooms.** There are 20 empirical studies exploring students and teachers’ translanguaging practices during class, i.e., when, why, and how they draw upon multiple language features from their communicative repertoire in academic tasks and instructional practices when translanguaging is not purposefully designed and implemented in DLBE classrooms. Most studies adopt ethnographic and case study methods including classroom observations, video/audio-tape recordings of class activities, fieldnotes, and students and/or teachers’ artifacts to document and analyze the nature, purpose, and potential benefits of these naturally occurring translanguaging practices. Table 2.1 presents the contexts in which these studies took place.

Table 2.1 *Contexts of the studies addressing students and teachers’ translanguaging practices*

<b>Study (author/year)</b>	<b>Region of USA</b>	<b>Grade level</b>	<b>Program model</b>	<b>Observed focus/activity</b>
Bengochea, Sembiente, & Gort (2018)	Southeastern	Preschool	Two-way	Sociodramatic plays
Arreguín-Anderson, Salinas-Gonzalez, & Alanis (2018)	Texas	Preschool	One-way	Sociodramatic plays
Hamman (2018)	Midwestern	2nd grade	Two-way	Classroom activities in both languages across different subject matters

<sup>5</sup> One of the twenty-six studies fits into more than one theme.

Garza & Arreguín-Anderson (2018)	Texas	4th grade	One-way	Science (taught in Spanish)
Henderson & Ingram (2018)	Texas	3rd grade	One-way	Throughout the day
Poza (2018)	California (San Francisco Bay Area)	5th grade	Two-way	Science (taught in Spanish)
Infante & Licon (2018)	Northeastern	7th grade	Two-way	Science (taught in English)
Durán & Henderson (2018)	Texas	3rd grade	One-way	Math and science (taught in English)
Bauer, Presiado, & Colomer (2017)	Midwest	Kindergarten	Two-way	Writing time (Spanish)
García-Mateus & Palmer (2017)	Southwestern	1st grade	Two-way	Social studies (taught in English)
Alamillo, Yun, & Bennett (2017)	California	Preschool	One-way	Throughout the day
Pontier & Gort (2016)	Southeastern	Preschool	Two-way	Shared book readings by co-teachers
Gort & Sembiente (2015)	Southeastern	Preschool	Two-way	Show-and-tell led by co-teachers
Garrity, Aquino-Sterling, & Day (2015)	California	Infant classroom	Predominantly monolingual English backgrounds	Throughout the day
Henderson & Palmer (2015)	Texas	3rd grade	One-way (Gómez and Gómez model)	English language arts and Spanish language arts
Durán & Palmer (2014)	Texas	1st grade	Two-way	“Bilingual pairs” time

Esquinca, Araujo, & de la Piedra (2014)	Texas	4th grade	Two-way	Science (taught in English)
Palmer et al. (2014)	Texas	Pre-K and 1st grade	Two-way	Throughout the day in both classrooms
Garza & Langman (2014)	Texas	5th grade	One-way	Science (taught in English) and social studies (taught in Spanish)
Gort & Pontier (2013)	Southeastern	Preschool	Two-way	Read-aloud and show-and-tell in both Spanish and English time

One group of the studies has demonstrated that despite the presumed and imposed language boundaries of DLBE program curriculum, bilingual students strategically perform translanguaging practices, drawing upon their multiple language and multimodal features to maximize their communicative potential and to engage in academic learning. Poza (2018) and Hamman (2018) have documented how students constantly performed complex, fluid translanguaging practices (i.e., alternating features of Spanish and English across speech and text, and also alternating between spoken and written language as well as visual/digital imagery) to support their meaning-making in subject-matter (math and science) classes. Bengochea, Sembiente, and Gort (2018) and Arreguín-Anderson, Salinas-Gonzalez, and Alanis (2018) have both revealed that bilingual preschoolers made use of the full range of their linguistic resources in tandem with other bodily actions/movements, environmental, and visual modes available to them to participate in sociodramatic plays to generate and communicate meaning with varied play partners, while accommodating their language and play preferences. Alamillo, Yun, and Bennett (2017) have demonstrated that, “While the teachers in this context spoke Spanish, the children did not feel limited to communicating in the language of instruction; rather, each child

negotiated language use in relation to the listener” (p. 483): the children engaged in translanguaging naturally by shifting languages, blurring language boundaries, and gesturing to meaningfully interact with peers and teachers. In a similar vein, Henderson and Palmer (2015) found that even in a classroom where the teacher enacted an “English-only” policy, the students found “wobble room” and were enacting agency to engage in hybrid language practices with their peers when the teacher was at a distance. In summary, these studies demonstrate that translanguaging is an authentic communicative and meaning-making practice among bilingual students. Students are language policy makers themselves who exercise agency and make deliberate decisions on when and how to translanguage based on contextual demands to achieve their interactional and learning purposes.

Recognizing translanguaging practices are always present (visibly or invisibly) among students in the classroom, a second group of the studies have investigated teachers who embrace linguistic complexity and flexibility in instructional practices/pedagogical discourses in their everyday classroom teaching. Mileidis Gort and her colleagues (Gort & Pontier, 2013; Gort & Sembiente, 2015; Pontier & Gort, 2016) have specifically examined partner teachers’ translanguaging performances during shared read-aloud and show-and-tell activities with preschool children. They have collectively found that, despite the “one teacher/one language” strict language allocation policy set forth by the DLBE program, partner teachers crossed these boundaries in strategic and flexible ways for a variety of classroom discourse functions. Their translanguaging practices (such as code switching, bilingual recasting, translation, and language brokering that drew on students’ cultural and linguistic funds of knowledge) created a safe space for students to adopt their emerging bilingual repertoire to experiment with new language forms and integrate various languages and language varieties while helping students make cross-

linguistic connections and recognizing, validating, and expressing teachers and students' shared bilingual identities.

Deborah Palmer and her colleagues (Palmer, Martínez, Mateus, & Henderson, 2014; Durán & Palmer, 2014; García-Mateus & Palmer, 2017; Durán & Henderson, 2018; Henderson & Ingram, 2018) have also conducted translanguaging research in DLBE contexts by observing experienced teachers who embraced pluralist language ideologies and created translanguaging spaces in their classrooms. These studies were primarily conducted at the elementary school level in different content areas. To be specific, Palmer et al. (2014) explored the translanguaging pedagogical practices of two exemplary classroom teachers in Pre-K and Grade 1. Through this work, they identified three translanguaging strategies with great educational potential, which include (a) modeling dynamic bilingual language practices, (b) positioning students as bilingual (even before they are), and (c) celebrating and drawing attention to language crossing. They claim that by allowing, valuing, and even mirroring students' voices and linguistic choices, teachers "appeared to open up spaces for students to engage in sensitive and important topics (e.g., immigration, identity) and take risks to express themselves in developing languages (e.g., attempting to translate)" (p. 769). Durán and Palmer (2014) have illustrated how teachers and students worked together in strategic translanguaging ways to co-construct a multilingual classroom space for bilingual/biliterate development. These ways included teachers positioning themselves as co-learner and valuing students as language experts with expansive linguistic repertoires, and students being encouraged to work in "bilingual pairs" to take on the roles of language experts in their "native" language to co-construct understanding in academic tasks. García-Mateus and Palmer (2017) analyzed a literacy event where two students (one Spanish-dominant Latinx immigrant student and one English-dominant African American student) were

allowed to use their full linguistic repertoire to construct meaning around critical bilingual literature in a social studies class. They have demonstrated the potential of translanguaging pedagogies to support the development of positive bilingual identities and critical metalinguistic awareness for students, both “English” dominant and “Spanish” dominant, who are users of minoritized languages or language varieties. Durán and Henderson (2018) and Henderson and Ingram (2018) have shown two teachers’ translanguaging pedagogical practices during math and science instruction in which they shifted between Spanish and English and dialectal varieties of both English and Spanish and validated students’ hybrid language practices by repeating their language choices and mirroring them in their responses. Both studies have concluded that translanguaging pedagogies provided students the opportunity to access cognitively demanding content, contributed to classroom community building, and developed students’ metalinguistic awareness.

Along with Gort, Palmer and their colleagues’ research, other researchers have also come to similar conclusions regarding the educational promises of adopting translanguaging pedagogies in DLBE classrooms. Garza and Arreguín-Anderson (2018), Infante and Licon (2018), Esquinca, Araujo, and de la Piedra (2014), and Garza and Langman (2014) all investigated teachers’ translanguaging practices in science classes (at both elementary and middle school levels). They found that by modeling translanguaging (teacher’s dynamic use of English and Spanish), co-constructing a learning space that allowed bilingual learners to engage in meaning making (e.g., group discussions, scientific experiments) through the language of their choice, and alternating the receptive and expressive language use strategically, teachers created a heteroglossic, inclusive space for students to make connections with their out-of-school experiences, to demonstrate their understanding of scientific concepts comfortably, and to

engage in dialogues with peers to enhance science learning. These findings are consistent with Durán and Henderson (2018) and Henderson and Ingram's (2018) research mentioned above – translanguaging pedagogies offer possibilities to mediate students' understanding and mastery of academic content to further apprentice learners into academic discourses. Bauer, Presiado, and Colomer (2017) have documented how the teacher's use of "buddy pairs" created a classroom environment where students could take risks and participate in translanguaging. They analyzed one interaction between a Latinx student and an African-American student during writing time and summarized that, "Both (students) grew in ways that may not have occurred without their ongoing interactions (e.g., they received opportunities to expand their linguistic repertoire across both languages, metalinguistic awareness of their languages, and appreciation for Spanish)" (p. 32). Garrity, Aquino-Sterling, and Day (2015) explored an infant classroom where fluid language practices across three languages, English, Spanish, and Baby Sign Language (BSL) were permissible and encouraged by the teachers. They specifically highlighted that the use of BSL in tandem with two languages within the classroom "provided infants with a cultural tool that enabled them connect to others, make their needs known, communicate their thoughts, and make sense of their environments. It served as a cultural tool for teachers as well, allowing them socialize children into the life of the classroom and support their participation in socially valued practices" (pp. 185-186).

To summarize, the extant studies have demonstrated that embracing translanguaging in instructional practices could generally hold two promises: (a) it can be used as a scaffold to buttress bilingual learners' meaning making while engaging them in academic discourse, and (b) it can also be transformative in validating students' hybrid language uses in their own right and

cultivating positive bilingual identities. However, there are two caveats emerging from the literature that are worth further attention.

First, Henderson and Ingram (2018) remind us that the exemplar teacher participant in their study, Michael, is a native, English-speaking White male. His privileged subjectivity and positionality contributed to his agency and emboldened his stance to espouse pluralist language ideologies, engage in translanguaging practices, and disrupt the school's strict language allocation policy. Yet, "Other teachers, particularly educators from oppressed groups, would be taking a bigger risk to resist mandated policies" or they may feel "reluctant to publicly articulate (their practices) in a survey or interview" even though they are already doing this exemplary teaching (p. 268). It is important to take the power differentials (or the social positions) among language-majoritized (English) teachers and language-minoritized teachers (e.g., Spanish, Mandarin) in DLBE programs into consideration, and more language-minoritized teachers' voices need to be represented in translanguaging research.

Second, Hamman (2018) reminds us that translanguaging could also be problematic because it might "lead to unequal participation dynamics in which native English speakers are better able to share their ideas and content area expertise, regardless of the language of instruction" (p. 33). In other words, translanguaging could contribute to the increased dominance of English in the classroom, especially in a language-minoritized instructional space (also see Durán & Palmer, 2014). This concern goes back to the issue of the protection of minoritized language (from the infringement of English) and the strategic use of translanguaging pedagogies. Hamman (2018) therefore proposes that DLBE teachers should "foster a *critical* translanguaging space (by recognizing language hierarchies within particular sociolinguistic spaces), a dialogic classroom environment that encourages students to experiment with language and draw upon

their entire linguistic repertoire for meaning-making, while also prioritizing the minority language and minority language speakers” (p. 38, emphasis added). She further adds that, “This does not belie the need for ‘flexible’ language spaces that encourage translanguaging and facilitate metalinguistic connections, but it does require that the decisions for how and when to create those spaces be intentional” (p. 38). More research is needed to explore what a critical translanguaging space would look like in practice and how it would be implemented within particular sociolinguistic contexts.

In light of these concerns, I end this section by addressing students’ and teachers’ translanguaging practices in classrooms with a question posed by Durán and Palmer (2014): “We see here the power of embracing the linguistic moves that bilingual children are already inclined to, and ask: what might happen if this were not only allowed but intentionally and thoughtfully taught?” (p. 385). This question is still relevant today because we need more studies focusing on how teachers could strategically design and orchestrate translanguaging spaces under the current strict language allocation policy in DLBE settings. So far, there are only four studies that address this question. I discuss these in the next section.

**Translanguaging designs in classrooms.** Four studies have examined teachers’ intentional translanguaging designs in curriculum. They all adopt qualitative methodologies (using video/audio-recording of classroom events, fieldnotes, class observations, interviews with teachers and students, and teachers and students’ artifacts) to document the translanguaging pedagogical moves that teachers purposefully and systematically designed and how students participated in those activities. Table 2.2 presents the contexts in which these four studies took place.

Table 2.2 *Contexts of the studies addressing translanguaging designs in classrooms*

<b>Study (author/year)</b>	<b>Region of USA</b>	<b>Grade level</b>	<b>Program model</b>	<b>Observed focus/activity</b>
Martínez-Álvarez & Ghiso (2017)	New York City	1st grade	One-way	English and Spanish language arts
Martínez-Álvarez (2017)	New York City	1st grade	One-way	English and Spanish language arts
Hopewell (2017)	Unspecified	2nd grade	Two-way	Literacy-based English language development block
Espinosa & Herrera (2016)	New York City	6th grade	One-way	Science (taught in Spanish)

Patricia Martínez-Álvarez and her colleague (Martínez-Álvarez & Ghiso, 2017; Martínez-Álvarez, 2017) designed one 5-6 week long multilingual, multimodal literacy project with teachers together in a first-grade classroom across both English and Spanish language arts curricula. This project intentionally drew upon Latinx children’s cultural and linguistic funds of knowledge (their family and community experiences) and encouraged students to make full use of their linguistic and multimodal resources during the process, regardless of the language of instruction. Specifically, children were invited to photograph their family and neighborhood experiences, and then they used the images for collaborative storytelling, digital comic making using iPads, and informational writing. Children also participated in literacy groups with purposeful reading of culturally relevant texts in which they adopted translanguaging as a literary device and discussed their perceptions of translanguaging. Martínez-Álvarez and her colleague have called this pedagogy, which implements flexible hybridity of worlds and languages through technology and translanguaging as semiotic tools for meaning making, *critical digital pedagogy*.

By analyzing students' reading and writing experiences, both studies have revealed that this literacy project provided students with expansive learning opportunities to make connections with their out-of-school experiences, to (re)negotiate and (re)think their bilingual/bicultural identities, and to develop social justice awareness to challenge deficit language ideologies in their communities and the U.S. society. Students became virtuoso users of translanguaging who were able to convey sophisticated meanings through strategic use of multiple linguistic and semiotic codes and also to metacognitively reflect on their language use. These studies call for curricular re-orientations to continually investigate how "bilingual programs might leverage children's multilayered and dynamic language practices (i.e. bilingual children's translanguaging) while continuing to reinforce the status of minoritized languages, which has historically been accomplished through the separation of languages for instructional purposes" (Martínez-Álvarez & Ghiso, 2017, p. 685).

In Hopewell's (2017) study, drawing upon the original work of Cen Williams who discusses receiving information in one language and using or applying it in the other (Baker, 2003), translanguaging pedagogy is conceptualized as "the strategic and flexible use of multiple languages within a single learning event, the expectation that content learned in and through one language informs academic performance and participation in the other, and the creative distribution and use of materials across languages in service to overall teaching and learning" (p. 73). Based on this definition, she observed how one second grade ELA teacher intentionally designed lessons and activities that required the use of two languages for receptive and productive uses. She specifically highlights two purposefully planned translanguaging strategies: (1) thematic biliteracy boards and (2) home-school language and literacy experiences. Different from the traditional word wall which was arranged alphabetically and exhibited throughout the

year, thematic biliteracy boards were organized around ELA unit themes and were meant to serve as temporary scaffolds only for the period of time in which students were acquiring the knowledge or skill they addressed. These biliteracy boards were co-constructed with students to include single words, phrases, and sentences in English, attention to cognates (Spanish), and strategic translations (both). Such dynamic bilingual display served as a way to bridge and toggle between languages to develop students' metalinguistic awareness and overall linguistic capacity. The second strategy provided opportunities for family engagement in which students were asked to read and interact with families in one language and then use those experiences as the foundation for work accomplished at school in the other language. One example Hopewell gave was in a unit study on legends. The teacher first read aloud a series of culturally and personally relevant texts on legends in English, and asked her students to discuss them at home in Spanish with their parents. Students were expected to retell in Spanish one of the versions of the legend that they had learned in ELA class, and to elicit their parents' inputs about their experiences with the legends. When the students returned to school, they wrote about what they had learned from their parents during their Spanish language literacy block. Hopewell (2017) concludes that "these strategies capitalize on theories of linguistic transfer and increase the likelihood that students can use and apply the totality of their linguistic repertoire in service to learning" (p. 85).

Espinosa and Herrera's (2016) study is part of the larger CUNY-NYSIEB<sup>6</sup> project. They investigated the strategic implementation of translanguaging in a middle school bilingual (Spanish/English) science classroom in New York City. The translanguaging episodes were

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<sup>6</sup> City University of New York (CUNY) – New York State Initiative on Emergent Bilinguals (NYSIEB) works to improve the education of emergent bilingual students across New York State. It is a collaborative project of the Research Institute for the Study of Language in Urban Society (RISLUS) and the Ph.D. Program in Urban Education funded by the New York State Education Department from 2011 to the present. See more information at <https://www.cuny-nysieb.org/>.

drawn from a science unit on the three states of matter, which was taught in Spanish. The class cohort were all Latinx students who were predominantly U.S.-born, proficient in English, and were reclaiming their bilingualism. Based on the students' background and their needs, the researchers and teachers specifically designed translanguaging moments where students were explicitly allowed to use their whole linguistic repertoire (English, Spanish, and their dialectal features) to articulate their thoughts in class discussion (the science teacher also sometimes modeled translanguaging practices). In addition, the teacher asked students to use the "gist" strategy by writing down the main ideas using their entire linguistic repertoire on sticky notes when they were reading science texts after experiments. These intentional translanguaging pedagogical moves provided students with "access to scientific vocabulary and ways of talking about science in both languages, thus giving access to 'languages of power' (García, 2009, p. 12), so that (students) can transform their future possibilities as bilingual U.S. Latinos" (pp. 173-174).

These four studies illustrate some concrete strategies of purposefully designing translanguaging strategies (such as strengthening home/community-school links, building cross-linguistic connections in reading and writing) in literacy and content area lessons. They all offer pockets of opportunity by demonstrating that translanguaging can contribute to both students' content and language/literacy development and positive bilingual identity cultivation. Bearing in mind that translanguaging is not a one-size-fits-all approach, more research is needed in this area to illuminate the possibilities of integrating translanguaging designs in curriculum in different contexts (e.g., with various learner backgrounds, program contexts). Furthermore, how to leverage students' full linguistic and semiotic repertoires in meaning making tasks while offering protected space for minoritized language development (as Hamman (2018) says, developing a

“critical translanguaging space”) remains underexplored. It is important to continue to develop contextualized translanguaging design strategies to help teachers enact their agency to navigate this tension under existing language separation policies in DLBE programs.

**Teachers’ language ideologies toward translanguaging.** There are additional three studies looking into teachers’ language ideologies toward translanguaging in Spanish/English DLBE programs. They all use qualitative methods such as participant observation, video-/audio-recording of classroom events, and (semi-structured) interviews to unpack teachers’ articulated (spoken form) and embodied (in practice) language ideologies (Kroskrity, 2004). Table 2.3 presents the contexts in which these three studies took place.

Table 2.3 *Contexts of the studies addressing teachers’ language ideologies*

<b>Study (author/year)</b>	<b>Region of USA</b>	<b>Grade level</b>	<b>Program model</b>	<b>Observed focus/activity</b>
Henderson (2017)	Texas	3rd grade	One-way (Gómez and Gómez model)	Two self-contained classrooms
Henderson & Palmer (2015)	Texas	3rd grade	One-way (Gómez and Gómez model)	English language arts and Spanish language arts
Martínez, Hikida, & Durán (2015)	Southern California	K/1 and 2/3 grade	One-way	Two self-contained classrooms

Martínez, Hikida, and Durán (2015) conducted the first study to examine how two exceptional teachers articulated and embodied their language ideologies with respect to translanguaging in their self-contained (one teacher/two languages) classrooms. They found that both teachers articulated deficit rationales when explaining their own translanguaging, echoing dominant ideologies of linguistic purism that frame code-switching as deviant and deficient.

These teachers also showed ambivalent attitudes towards students' translanguaging (e.g., one teacher said translanguaging was allowed in speaking but unacceptable in writing). They both emphasized the importance of modeling "pure" and "unmixed" Spanish for their students and adhering to the policy of language separation. Although articulated purist ideologies were sometimes embodied in these teachers' instructional practices, there were instances when teachers (whether deliberately or not) moved fluidly across languages and dialects in classrooms (and these moves actually mediated instruction and communication in generative and productive ways). Clearly, there was mismatch between these teachers' articulated and embodied language ideologies. The researchers also point out that, although modeling "pure" Spanish and sticking to one language at a time were informed by ideologies of linguistic purism and reflective of the broader policy context in dual language education, they were also informed by teachers' counter-hegemonic ideologies to privilege Spanish and promote bilingualism within the broader English-dominant, monolingual ideological context in the U.S. society. This study has revealed that teachers' articulated and embodied ideologies with respect to the everyday translanguaging in their classrooms were complex, nuanced, and sometimes contradictory. It is therefore important to have deep (and critical) dialogues with teachers to unpack these ideological complexities, tensions, and contradictions within the broader contextual/structural constraints to better help them embrace translanguaging pedagogies that recognize and build on students' everyday bilingualism while also protecting minoritized language space.

The following two studies (Henderson & Palmer, 2015; Henderson, 2017) have produced similar results – they found that there was tension, struggle, and (mis)alignment between teachers' articulated and embodied language ideologies and that an individual's language ideologies can be multilayered, espousing both hegemonic and counter-hegemonic language

ideologies, reflective of the societal, institutional, and policy contexts (such as the dominance of English, monolingual assessment pressure) in which they were situated as dual language teachers. Henderson (2017) points out that there seems a dynamic interplay between agency and structure. On one hand, the teachers are able to find “wiggle room” to enact aspects of their stated language ideologies. On the other hand, societal language ideologies embedded within the district program and school language policies constrain and shape their agency. These studies once again emphasize that it is important to take contextual factors (both macro- and micro-level) into consideration when working with teachers to develop their agency as classroom language policy makers to implement translanguaging pedagogies.

Teachers are the central mediators of classroom-level language policies. Unpacking their language ideologies could help them develop a translanguaging stance and further facilitate their translanguaging design and shifts in DLBE classrooms (García, Johnson, & Seltzer, 2017). These three studies have provided insights in understanding articulated and embodied language ideologies with regards to translanguaging. However, given that an individual’s language ideologies could be multiple, nuanced, and even contradictory, being constrained by societal, institutional, and policy contexts, it may be an iterative, dynamic process of embracing a translanguaging stance. Further studies should approach teachers’ language ideologies from a longitudinal perspective to analyze their shifts (if any) across time and space to shed light on how we can better work with teachers to enact a flexible bilingual pedagogy in DLBE settings.

### **Translanguaging Research in U.S. Mandarin/English DLBE Programs**

With the bulk of translanguaging research conducted in Spanish/English DLBE contexts described above, more studies are needed to look into other dual language combinations. Currently there is only one study that occurred in a Mandarin/English DLBE context. Zheng

(2019) examined the interactional and instructional discourses that emerged when a teacher and her students engaged in translanguaging practices in a 4th/5th one-way Chinese immersion classroom where the majority of students were English-dominant speakers. The teacher wanted to create an inclusive space by not enforcing the Chinese-only policy and encouraging students to choose their own languages and modalities through iPad, Apps, artwork, games, and plays. Results show that translanguaging provided a comfortable space where multi-leveled students were able to appropriate their own linguistic and semiotic resources to express their ideas and to engage in discussions. Translanguaging pedagogical practices in tandem with using various modalities were effective to develop students' both language and content knowledge (e.g. in science class). These promising findings are consistent with research conducted in Spanish/English DLBE settings.

However, Zheng (2019) also found that, "When various linguistic and semiotic resources are encouraged in this Chinese immersion classroom, one prevalent affective response from students is their resistance against using Chinese. Students spoke English most of the time and often preferred easier modalities (i.e. English text and Pinyin) over Chinese characters in their writing" (p. 10). The teacher therefore found it very challenging in maintaining the status of Chinese and regulating the classroom routines. Given the specific context of this study, it is not surprising to anticipate this outcome, which is also in line with one of Hamman's (2018) findings that translanguaging can also be problematic, leading to the increase of English dominance in a language-minoritized space. Zheng (2019) warns researchers and teachers that, "Encouraging translanguaging in teaching and learning does not indicate a lower demand for minoritized language use. Rather, these translanguaging resources should be *strategically* planned depending on factors such as the learning task, the learning goal, students' background, needs, and levels"

(p. 13, emphasis added). This echoes Hamman's (2018) call for fostering a critical translanguaging space where students' full linguistic repertoires are leveraged while minoritized language and their speakers also being prioritized. More research is needed to further explore how to strategically design such a space considering multiple contextual factors to optimize the potential of translanguaging pedagogies in DLBE programs.

### **Conclusions and Implications for the Present Study**

Translanguaging research in U.S. DLBE programs has been predominantly conducted in Spanish/English combinations with only one study focusing on a Mandarin/English context. The majority of studies (including the Mandarin one) focus on students' and teachers' translanguaging practices naturally occurring in classrooms. These studies have found that both students and teachers are classroom language policy makers, and they perform agentive translanguaging practices strategically in spite of the strict language allocation policies in DLBE programs. These translanguaging moves also hold great educational potential: they create a safe, heteroglossic learning space where students feel comfortable and validated to draw upon their full linguistic and semiotic resources to engage in academic tasks to develop both language and content knowledge and positive bilingual identities. These promising findings call for a reconsideration of current "parallel monolingualism" (Heller, 1999) models in which translanguaging spaces should be purposefully and strategically designed and integrated to maximize bilingual students' learning opportunities.

There are a few studies looking into intentional translanguaging designs in Spanish/English DLBE curricula, and they offer some concrete strategies for teachers who are willing to resist the mandated language boundaries, such as making home-school connections, choosing culturally relevant texts which incorporate translanguaging as a literary device, and

creating translingual/transmodal inquiry projects. However, more research is needed in this area to illuminate the possibilities of integrating translanguaging designs in different contexts (e.g., with various learner backgrounds, other language combination program contexts). Furthermore, as previous studies suggest (Durán & Palmer, 2014; Hamman, 2018; Zheng, 2019), how to leverage students' full linguistic and semiotic repertoires in meaning making tasks while offering protected space for minoritized language development needs more careful attention. It is important to continue to develop contextualized translanguaging design strategies, especially to support language-minoritized teachers to navigate this tension in different DLBE programs.

To fill these research gaps, this dissertation study took the form of participatory design research (PDR, Bang & Vossoughi, 2016) in which I worked with a third grade Mandarin teacher (a language-minoritized teacher) in a U.S. Mandarin/English DLBE program to figure out how to strategically incorporate translanguaging spaces into her Mandarin class across different subject matters while privileging Mandarin language and literacy development, informed by Sánchez et al.'s (2018) proposed translanguaging allocation policy framework. This study foregrounds both the teacher and her students' perspectives (as well as the researcher's perspective) and participation during the translanguaging space creation and implementation processes. It is an important next step for the field not only because will it diversify the language area but also it will contribute to the continued development of translanguaging as theory and pedagogy in bilingual education research for both researchers and practitioners.

## CHAPTER 3 METHODOLOGY

### Research Questions

As illustrated in Chapter 2, this dissertation study specifically looked at how I (as a researcher) and one third grade Mandarin teacher in a Mandarin/English DLBE program strategically co-designed contextualized translanguaging spaces in her classroom across different subject matters, drawing on Sánchez et al.'s (2018) translanguaging allocation policy framework (i.e., translanguaging documentation, translanguaging rings, and translanguaging transformation). It investigated both the teacher's and her students' perspectives (as well as the researcher's perspective) and their participation during the translanguaging space creation and implementation processes. The three main research questions undergirding this study are:

1. What translanguaging activities are implemented during the design process and how do the students participate in those translanguaging spaces?
2. How do translanguaging strategies vary across Chinese Language Arts, Science, and Social Studies?
3. In what ways does the process of developing translanguaging spaces affect the teacher's and my beliefs and perceptions of translanguaging and bilingual education?

### Research Design

To answer these questions, this study took the form of *participatory design research* (PDR, Bang & Vossoughi, 2016). PDR “identifies pressing problems of practice with participating community members, and co-designs in iterative ways toward the accomplishment of both a social change agenda and transformative and consequential forms of learning” (Gutiérrez, Engeström, & Sannino, 2016, p. 276). In this case, to provide evidence-based, practitioner-informed, and context-appropriate applications of translanguaging for language-

minoritized teachers in DLBE programs, I (as a researcher) worked *along with* a third grade Mandarin teacher (a language-minoritized teacher) in a Mandarin/English DLBE program in the U.S. to co-design and implement various translanguaging spaces in her Mandarin instructional space across different subject matters through iterative cycles of collaborative inquiry.

PDR emerges from and draws upon two main traditions of research methodology: design research (e.g., Brown, 1992; Cobb et al., 2003) and participatory research, such as participatory action research (Fine et al., 2003; Whyte, 1991) and collaborative action research (Erickson, 1994, 2006). Specifically speaking,

- (1) From a design research perspective, PDR provides a systemic but flexible way to understand how, when, and why an educational innovation (in this case, translanguaging design) works in practice through iterative analysis, design, refinement, and implementation in real-world settings (i.e., a third grade Mandarin classroom); and
- (2) From a participatory research perspective, it aims to break down the traditional hierarchical relationship between researchers and teachers (“researcher” and “teacher” are intentionally treated as porous categories) by fostering a dialogic approach to theory building and inquiry and positioning teachers as “brokers of knowledge” within the research process (Paugh, 2004).

In general, PDR recognizes the complexity embedded in classroom-based research and commits to collaborative research design and practices between researchers and practitioners. It positions teachers as active participants and problematizes the dynamics of power in research-practice partnerships. During the inquiry process, PDR emphasizes trusting relationship building “with/in the ethic of genuine care and respect that relations of dominance are turned inside out” (Lau, in press), equitable forms of dialogue and listening centering on epistemic openness and

heterogeneity (i.e., valuing different views and engaging in open, difficult conversations) (Bang & Vossoughi, 2016), and continuous plan-act-evaluate-(self)reflect cycles (i.e., iterative stages including strategic planning to deal with the problem of practice, putting the plan into action, observation and evaluation, and critical and self-critical reflection on the previous results and making decisions for the next reflect-act-evaluate cycle, Zuber-Skerritt, 1996). Ultimately, PDR aims to cultivate collective forms of “transformative agency”<sup>7</sup> (Haapasaari, Engeström, & Kerosuo, 2014) of both researchers and practitioners in which they are attentive to each other’s desires, needs, and feelings, and listen to and leverage one another’s (conflicted) voices and stories, and co-create a change-enhancing context without being impositional (Lather, 1991).

My research agenda seeks to understand how one Mandarin teacher leverages students’ full semiotic and linguistic repertoire in meaning making tasks (i.e., strategically designing translanguaging spaces) while still offering protected spaces and support for minoritized language development. Adopting PDR grants me the opportunity to research *with* the teacher (not *on* her) and co-design and implement translanguaging pedagogies in multiple, iterative cycles together with continuous reflections and refinement of translanguaging theory and practice. Furthermore, PDR highlights my positionality by demystifying the power dynamics between the teacher and the researcher, and documents opportunities and tensions emerging from the design process, which contributes to generating authentic, sustainable knowledge for both researchers and practitioners for curricular and pedagogical improvements and new theoretical understandings (Lau & Stille, 2014).

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<sup>7</sup> “Transformative agency differs from conventional notions of agency in that it stems from encounters with and examinations of disturbances, conflicts, and contradictions in the collective activity. Transformative agency develops the participants’ joint activity by explicating and envisioning new possibilities. Transformative agency goes beyond the individual as it seeks possibilities for collective change efforts” (Haapasaari, Engeström, & Kerosuo, 2014, p. 2).

With the affordances of PDR and drawing upon our collective experience, knowledge, and perspectives, we (the teacher and I) a) officially designed and implemented translanguaging pedagogies together throughout two cycles (September – December 2018, and January – June 2019), b) progressively refined the designs by studying unfolding enactments, teacher- and student-generated artifacts and activities, and our own critical reflections, c) progressively reflected upon and contemplated the opportunities and challenges of doing translanguaging designs, and d) documented, studied, and analyzed teacher and student activities in classrooms. In the following sections, I describe key aspects of our PDR including: a) context of study, b) validity of study, c) design cycles and timeline, and d) data collection and analysis.

### **Context of Study**

#### **Research Setting**

This study took place at a third grade Mandarin classroom in a Mandarin/English DLBE program. The DLBE program was offered as a strand in a public elementary school in the New England area. This program was considered a “Mandarin Immersion Program” and adopted the “dual-language immersion education” model in which “students receive their daily instruction through English and Mandarin”. The goal of this program was that “students will maximize their learning potential by becoming proficient speakers, readers and writers of Mandarin and English while realizing their potential in all of their academic subjects” (according to the school webpage). At the time of the study, this Mandarin immersion program provided K-5 bilingual education in English and Mandarin. Mathematics was taught in both languages across all the grades. Science and Social Studies were taught only in Mandarin from grades 3-5 (K-2 Science and Social Studies instruction was in English). In addition, English Language Arts (ELA) and Chinese Language Arts (CLA) were taught from K-5. Generally speaking, this program adopted

a 50/50 “one language, one teacher, one classroom” policy in which students received half-day instruction in English (e.g., in the morning) in certain content areas with one English teacher in one classroom and the other half-day instruction (e.g., in the afternoon) with one Mandarin teacher in another classroom. The program’s original goal was to recruit 50% native Mandarin speakers and 50% native English speakers (two-way); however, the current students in the program (across all the grades) were primarily from English-speaking families or Chinese-as-a-heritage-language families with middle to high socioeconomic backgrounds. Regarding the racial distribution of the students in the program, the majority of the students were mixed-race (biracial – Asian and White) and White.

### **Participants**

**Teacher.** The participating teacher is Ms. Li<sup>8</sup>, who was teaching third grade CLA, Math, Science, and Social Studies, and fifth grade Social Studies and Science in Mandarin (she used to teach kindergarten for over four years) at the time of this study. She is a self-identified bilingual speaker of Mandarin and English, originally from Taiwan, and a veteran teacher who has been teaching in this program for more than seven years (since the inception of the program). She holds a Master’s degree in Applied Linguistics from a U.S. university and has received various trainings (professional development) in Mandarin teaching in the past few years. We first met in mid-June 2017 through a university professor’s connection. At that point, the teacher was eagerly seeking someone outside her school who could provide suggestions for her teaching and I was looking for potential sites to design an empirical translanguaging study based on my personal research interests and passion. During our first meeting, she introduced me to some basic knowledge about the Mandarin immersion program including macro- (e.g., curriculum and

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<sup>8</sup> The teacher’s last name is used with her permission. I am using her real last name because she has been my active collaborator in this project and deserves the credit. Students’ names are not revealed in this study.

school leadership) and micro-level (e.g., classroom materials) challenges facing the development of this program. I specifically learned that she had heard about the concept of translanguaging and had some understanding of it. She mentioned that “language mixing is detrimental for students who are learning a new language” and interpreted translanguaging (or more precisely, using English in Chinese instructional time) as a “lazy” approach. Based on her past teaching experience, she believed that “one language at a time” or strict language separation was more beneficial to helping students develop language and literacy skills to read, write, and think in Mandarin (field notes on June 19, 2017). In general, she held a skeptical perspective and certain level of resistance toward translanguaging pedagogies. Although we did not share similar language ideologies on translanguaging (I was a strong advocate of translanguaging to counteract monolingual approaches in instruction) at that time, we were both willing to listen to and understand each other’s stance and stories. I see our first meeting as a promising starting point to negotiate tensions on translanguaging design and to open up collaborative inquiry possibilities which could potentially lead to “transformative agency” of both of us.

Before formally conducting research with her, I volunteered as a teaching assistant first in her classroom to build a trusting relationship with her and to familiarize myself with the school, program, and classroom context. In the process (September 2017 – June 2018), I had the opportunity to observe her teaching her third grade Mandarin classroom and we kept openly exchanging our (evolving) ideas on translanguaging practices and pedagogy. This dissertation study was a natural evolution from our ongoing conversations and is in line with our mutual interests to improve instructional practices in Mandarin teaching to better serve bilingual learners in this program. We wanted to see the possibilities (and feasibilities) of implementing translanguaging pedagogies in her Mandarin instructional space across different content areas,

specifically CLA, Science, and Social Studies, and how her third-grade students could participate in translanguaging spaces through iterative cycles in PDR.

We officially started our Design Cycle 1 in late September 2018 when the principal granted me permission to conduct research with the teacher in early September 2018. This dissertation study mainly focused on two cycles of design: September – December 2018, and January – June 2019 (for which I will provide more details in the section, “Design Cycles and Timeline”).

**Students.** The students involved in the two cycles of design (September – December 2018, and January – June 2019) were the same group of third graders in Ms. Li’s class. There were 22 students in total, 12 girls and 10 boys. Among the 22 students, 12 are interracial (8 White and Asian), 7 White, 2 Asian (Chinese) and 1 Latinx. The majority of the students (20 out of 22) are native English speakers or heritage speakers of Chinese (who speak English predominantly at home). Two students are native Mandarin speakers who use Mandarin on a regular basis with their parents at home. Most students come from families with middle to high socioeconomic status and/or have parents with highly educated (university-level) backgrounds.

### **Positionality**

Given the participatory, collaborative nature of this dissertation study, I think it is important to demystify where I came from and how I position myself in this study. I am originally from China and consider myself a bilingual speaker of Mandarin and English with conversational fluency in Cantonese. I obtained my Master’s degree in TESOL (Teaching English to Speakers of Other Languages) from Boston University and am currently pursuing my PhD degree in Curriculum and Instruction at Boston College. My first encounter with translanguaging occurred when I was taking a bilingualism theory course in the first year of my

PhD program (in October 2016). I was really intrigued by the theory of translanguaging (Otheguy, García, & Reid, 2015; García & Li Wei, 2014) as it perfectly captured who I am and how I perform bilingual practices in my everyday life (i.e., constantly selecting/inhibiting different language features from my unitary linguistic repertoire to achieve different communicative goals in different contexts). More importantly, translanguaging as theory has empowered me and affirmed my positive bilingual identity as translanguaging legitimizes “language-mixing” as creative and critical language use/performance (Li Wei, 2011) without adhering to standardized/monolingual norms of named languages. Translanguaging has shifted my lens of identifying myself as a proud bilingual speaker rather than “a native Mandarin speaker with proficiency in English” (i.e., viewing bilingualism as a resource and an advantage).

Meanwhile, translanguaging as pedagogy fits into my teaching philosophy in working with emergent bilinguals (who are traditionally labeled as “English language learners”). I strive to create heterogeneous, meaningful educational contexts for all learners in which their full language and semiotic repertoires and funds of knowledge are seen as valuable resources to be leveraged in academic tasks (García & Kleyn, 2016). As I delved into the translanguaging literature further, I became increasingly enthusiastic about the promises of translanguaging pedagogies. I believed that translanguaging could be positioned as a liberating and powerful tool to counteract monolingual ideologies underlying different program structures. I wanted to study translanguaging pedagogies further in my own research agenda because I also realized that translanguaging studies were getting contentious (see more in Chapter 2), and there were still many gaps in translanguaging empirical studies given that the majority focused on translanguaging pedagogies in the U.S. English-centric mainstream classrooms with few addressing strategic translanguaging design in DLBE program contexts. The Sánchez et al.’s

(2018) article entitled “Reframing language allocation policy in dual language bilingual education” provided a promising conceptual framework in guiding researchers and language policymakers in (re)thinking translanguaging design in DLBE contexts, and it has also informed me to pursue research studies in this area.

I strongly believe that as educational researchers, we must work *with* teachers to generate evidence-based, practitioner-informed, and context-appropriate knowledge to better serve our students; we must respect and trust teachers’ expertise, position them as brokers of knowledge, and develop an equitable and sustainable partnerships in collaborative inquiry (Lau & Stille, 2014; McKinley, 2019). During my first meeting with Ms. Li, I really appreciated hearing her counter perspective (and resistance) on translanguaging as it also pushed me to take a critical examination of what translanguaging pedagogies actually meant and how they could be better implemented in different learning contexts. I am really aware of the unbalanced power dynamics in working with practitioners, because traditionally researchers are positioned as the knowledge holders and implement top-down interventions in classrooms, and am open to, and willing to, have difficult conversations with teachers to hear their stories and perspectives and negotiate conflicts. I see such tensions as reflective opportunities for both parties to grow together. PDR encompasses the major components in my research philosophy and provides me with a viable methodological approach to determine how translanguaging pedagogies work in a language-minoritized space with students who are English-dominant speakers mostly.

### **Validity of Study**

Validity is an essential key to effective research as it largely determines whether the study design will produce valid knowledge. Almost two decades ago, Bradbury and Reason (2001) argued that it is high time to “broaden the ‘bandwidth’ of concerns associated with the

question of what constitutes good knowledge research/practice” (p. 343). Informed by Lather (1986, 1991) and Habermas (1979), proponents of PDR believe that good knowledge research/practice results from an emancipatory process, one which emerges as both the researcher and the “researched” strive towards conscious and reflexive emancipation, speaking, reasoning and coordinating action together, unconstrained by coercion (Gutiérrez, Engeström, & Sannino, 2016). In other words, valid educational research, if the ultimate goal is to serve our teachers and students, must strengthen the teaching-research nexus, and demonstrate its ability to generate knowledge not as a top-down, unidirectional matter, but an equitable, reciprocal inquiry process with shared goals from both parties. In line with this conception of validity, my dissertation study – through working *with* a third grade Mandarin teacher together (teacher empowerment) and documenting opportunities and tensions emerging from the design process (continuous reflection and adaptation) – holds the potential of generating valid, sustainable, and contextualized knowledge for both researchers and teachers for DLBE curricular and pedagogical improvements and new theoretical understandings of translanguaging.

### **Design Cycles and Timeline**

This section outlines the two official design cycles with the corresponding timeline in the PDR: one in Fall 2018 (September – December 2018) and the other in Spring 2019 (January – June 2019), with the second informed by learnings and outcomes derived from the first cycle. As explained previously, PDR (Bang & Vossoughi, 2016) is not a linear but a cyclical, iterative process involving continuous collaborative planning, implementation, observation, evaluation, reflection, and refinement from both the researcher (me) and practitioner (Ms. Li).

#### **Design Cycle #1**

**Initial Phase (early September 2018).** This dissertation study represents a natural evolution from our ongoing conversations and relationship building during my volunteer teaching time (September 2017 – June 2018). After the principal granted me permission to conduct research with Ms. Li, we officially began by establishing research activity structures and habits, developing a timeline of tasks for the fall semester. One of our first tasks was to establish a regular design process that was both constrained enough to enable focused and timely completion of work at the same time that it was open-ended and flexible enough to handle emergent, transactional complexity inherent in elements of design, theory, problem and environment (Barab, 2006). Meanwhile, we started revisiting some translanguaging texts (we both had some prior knowledge) and examining current literature on translanguaging spaces and strategies (such as Sánchez et al., 2018) to gain ideas for our design. We met weekly to exchange ideas and audio-record our meetings.

**Implementation Phase (late September - mid December 2018).** In this phase, I visited the class once per week (every Friday) and during each visit, I was able to observe Ms. Li's class for three instructional hours including CLA, Science, and Social Studies (with 30-minute student recess time in between). Our planning/debrief meeting was usually scheduled after the whole day class ended and Ms. Li and I met for another hour on a weekly basis to reflect upon our translanguaging activities (and other emerging issues along the process) and to discuss future steps.

For Cycle #1, we aimed to implement three to four translanguaging designs in the class across different content areas, drawing on Sánchez et al.'s (2018) translanguaging allocation policy framework (i.e., translanguaging documentation, translanguaging rings, and translanguaging transformation). As the teacher and students experienced our purposefully

designed translanguaging activities in class, their activity was audio- or video-taped once per week and artifacts were collected along the way. During our weekly planning/debrief meetings, the teacher and I engaged in critical reflections in which we reviewed the teacher and students' activities and work for the previous period, discussed emerging opportunities and dilemmas/tensions, and adapted the plan for the following weeks. I also interviewed the teacher once each month in these meetings to document her thoughts on translanguaging. Such process tracing (George & Bennett, 2005) on a regular basis helped me stay close to her unfolding sense-making trajectory of translanguaging and identify her ideological shift towards translanguaging (if there were any) from a longitudinal perspective. These meetings were audio-recorded during our iterative design processes.

## **Design Cycle #2**

**Initial Phase (late December to early January 2019).** We anticipated that Cycle 2 would proceed much like Cycle 1. We initially debriefed what we had learned from Cycle 1 during this phase, and then began planning translanguaging designs for the new cycle (January – June 2019).

**Implementation Phase (January – June 2019).** In this phase, I visited the class twice each week (every Tuesday and Friday except for school breaks) and during each visit, I observed Ms. Li's class for three instructional hours including CLA, Science, and Social Studies (with 30-minute student recess time in between). Our planning/debrief meeting was scheduled after the whole day class ended and Ms. Li and I usually met for another 1 - 1.5 hours once a week to reflect on our translanguaging activities (and other emerging issues) and to discuss future steps.

For Cycle #2, we aimed to implement four to five translanguaging designs in her class across different content areas, continuously drawing on Sánchez et al.'s (2018) translanguaging

allocation policy framework. We followed similar procedures in Cycle 1 – progressively refined, documented, and analyzed our design and practices including continuously tracing Ms. Li’s (and my) attitudinal or ideological shift toward translanguaging. In addition, from early March, I started to conduct exit interviews with some focal students to learn about their attitudes toward and experiences in translanguaging spaces. Finally, we used the time following Design Cycle #2 (June – July 2019) to have a complete debrief.

### **Data Collection and Analysis**

Data collection involved various sets of data from the initial and implementation phases of Cycles 1 and 2 for triangulation purposes. They included:

- (1) Approximately 100 hours’ classroom audio- and video-recordings of Ms. Li’s Mandarin class of different content areas (CLA, Social Studies, and Science), accompanied with my detailed observation field notes (see Appendix III for my class observation protocol). The recordings focused on classroom interactions (both teacher-student and peer interactions) and key literacy practices and events (i.e., translanguaging design activities);
- (2) Audio-recordings of our regular research planning/debrief meetings (twenty hours) and artifacts generated from these meetings such as our reflection notes (including my research memos) and design drafts;
- (3) Eleven semi-structured interviews (1-hour on average for each) with Ms. Li to gain insights about her ideological shifts (if any) toward translanguaging in our design process; the interviews were mainly conducted in Mandarin because this was the language we both preferred to communicate in (see Appendix II for interview questions);
- (4) Short semi-structured, individual exit interviews (10-minute on average for each) with twelve focal students with varying characteristics in home language background, race,

and Mandarin proficiency level to further understand their attitudes toward and experiences in translanguaging spaces; students could choose to use their preferred language to participate in the interviews and most of them chose English (see Appendix II for interview questions); and

(5) Ms. Li and students’ artifacts such as teaching materials, graphic organizers and worksheets from weekly teaching sessions and student work samples generated from participating in translanguaging design activities.

PDR usually results in considerable amounts of data and therefore, data analysis was guided closely by the three research questions noted earlier and involved both inductive and deductive coding (Maxwell, 2013). Table 3.1 lists my general analytic plan.

Table 3.1 *Data analytic plan*

<b>Research Questions (RQ)</b>	<b>Participants</b>	<b>Data Sources</b>	<b>Data Analysis</b>
1. What translanguaging activities are implemented during the design process and how do the students participate in those translanguaging spaces?	Ms. Li, her students (and me)	Classroom recordings, observational field notes, the teacher and students’ artifacts and interviews, our planning/debrief meeting recordings	Deductive coding based on Sánchez et al.’s (2018) framework, open coding and constant comparison
2. How do translanguaging strategies vary across Chinese Language Arts, Science, and Social Studies?	Ms. Li (and me)	Classroom recordings, observational field notes, the teacher’s artifacts	Deductive coding based on content areas and cross-case analysis
3. In what ways does the process of developing translanguaging spaces affect the teacher’s and my beliefs and perceptions of translanguaging and bilingual education?	Ms. Li and me	Our planning/debrief meetings and related artifacts (e.g., design drafts), teacher interviews, my field notes (including my memos)	Inductive coding (open coding)

Specifically speaking, to address RQ1, deductive codes were adopted from Sánchez et al.'s (2018) translanguaging allocation policy framework and were used to group each translanguaging activity into the three categories – translanguaging documentation, translanguaging rings, and translanguaging transformation. Within each category, I relied on a constant comparative perspective to engage in open coding. I examined classroom videos and compared them against the field notes, the teacher's artifacts, and planning/debrief meeting transcripts in an iterative and recursive process to provide a grounded description of each translanguaging activity. For each translanguaging activity, I identified corresponding student artifacts and analyzed them thematically regarding their choice of language features and meaning-making processes. These data were further triangulated with students' interview transcripts to glean insights into student participation in those translanguaging spaces. In response to RQ2, content areas (CLA, Science, and Social Studies) served as the deductive codes and the translanguaging strategies were regrouped into these three categories. I then treated each category as one case and engaged in cross-case analysis to identify similarities and differences of translanguaging strategies among these three cases/content areas. For RQ3, I adopted inductive coding of our planning/debrief meeting transcripts and teacher interview transcripts to identify *critical events*, episodes and moments that revealed “a change of understanding” (Webster & Mertova, 2007, p. 73) of translanguaging in our perceptions and beliefs in the process. These critical events were framed as different developmental stages of our ideological shifts from a longitudinal perspective. I then re-read the transcripts and compared them against our corresponding design artifacts and my field notes and memos in an iterative process: I engaged in open coding to identify salient, recurring themes, highlighting both the teacher (Ms. Li) and

the researcher's (my) perspectives in a dialogic way for each critical stage. Finally, participant member checks were conducted following completion of analysis to ensure reliability.

In summary, this dissertation study took the form of PDR (Bang & Vossoughi, 2016) in which both the teacher and I acted as knowledge brokers and collectively engaged in equitable forms of dialogues and cyclical design processes to explore how translanguaging allocation policy (Sánchez et al., 2018) could be strategically designed and implemented in a third grade Mandarin classroom with the majority of the students being English-dominant speakers. Data collection included audio-/video-tapes of class sessions, class observations and field notes, audio-recordings of our design/debrief meetings, teacher and students' artifacts, and interviews with the teacher and some focal students during the two design cycles (September – December 2018 and January – June 2019). Through conducting inductive and deductive coding (Maxwell, 2013) of the collected data, this study aimed to address (1) what contextualized translanguaging activities were implemented and how students participated in those translanguaging spaces, (2) how translanguaging strategies varied across different content areas, and (3) if there were any ideological shifts occurring in the teacher's and my beliefs toward translanguaging in the process. The ultimate goal of this study was to generate evidence-based, practitioner-informed, and context-appropriate knowledge for both researchers and teachers (especially language-minoritized teachers) for DLBE curricular and pedagogical improvements and new theoretical understandings of translanguaging.

## CHAPTER 4 TRANSLANGUAGING CO-DESIGNS IN ACTION

Drawing on data primarily from classroom audio- and video-recordings, my observational field notes, and the teacher and students' artifacts and interviews, this chapter seeks to address the first two research questions:

1. What translanguaging activities are implemented during the design process and how do the students participate in those translanguaging spaces?
2. How do translanguaging strategies vary across Chinese Language Arts, Science, and Social Studies?

Ms. Li and I co-designed various translanguaging activities within and across different content areas – CLA, Science, and Social Studies – throughout our iterative design cycles #1 and #2 in the school year of 2018-19 (see Appendix I for an overview of the curriculum and a timeline of our translanguaging activities). These planned translanguaging activities were informed by Sánchez et al.'s (2018) overarching translanguaging allocation policy framework in DLBE contexts, and therefore can be further divided into three major categories: translanguaging documentation, translanguaging rings, and translanguaging transformation. In this chapter, I will firstly address my research question one by describing our typical translanguaging designs for each category (what they looked like) and how students participated in every activity. Table 4.1 below summarizes the translanguaging activities we co-designed within each category and the student participation patterns in each activity. After this, I will also illustrate how students participated broadly within and across the three translanguaging spaces (translanguaging documentation, translanguaging rings, and translanguaging transformation) to identify similar and different patterns, if any. Lastly, I will discuss how translanguaging strategies varied across these content areas: CLA, Science, and Social Studies in response to question two.

Table 4.1 *A list of translanguaging activities we co-designed and student participation*

<b>Category</b>	<b>Pedagogical Purpose</b>	<b>Specific Activity (Content Area)</b>	<b>Student Participation</b>
Translanguaging Documentation	To assess content proficiency	Exit ticket (CLA and Science)	Almost all used English; all multi-leveled students participated and they were able to elaborate their thoughts
	To assess both language and content proficiency	Adding criteria to regulate students' language use (CLA and Science)	All tried their best to produce output in Mandarin characters with limited use of pinyin and English words
Translanguaging Rings	To co-construct knowledge with distributed expertise	Allowing for linguistic flexibility in class discussion (CLA, Science, and Social Studies)	All felt safe to participate and used English and Mandarin to different degrees
	To build cross-linguistic connections and raise metalinguistic awareness	Chinese word use comparison, Chinese and English syntax study (CLA)	Drew on English explicitly for meaning-making and cross-linguistic analysis
	To make content accessible to all	Bilingual vocabulary list, providing English for instructions on worksheets, individualized instruction in one-on-one tutoring (CLA, Science, and Social Studies)	All multi-leveled students were able to participate and stay more focused on their academic tasks; more willing to take risks with L2
	To enhance/deepen understanding of a subject matter	Reading English picture books, utilizing English videos (Science and Social Studies)	Student engagement increased; students were able to demonstrate deeper understanding of complex concepts
Translanguaging Transformation	To build family-school connections	Culture Day Project (CLA and Social Studies)	Students were very motivated; used English and Mandarin at different stages

			of the project; learned more about their family traditions
To develop students' bi/multilingual and bi/multicultural identities and awareness	Language/Culture Portrait (CLA and Social Studies)		Made their own linguistic choices to use English or Mandarin; developed a deeper understanding of who they are (and their peers)
	Pen-pal project with a HK school (CLA, Science, and Social Studies)		Students were excited; almost all wrote in English; shared their ideas freely and gained some knowledge about HK culture and Mandarin, Cantonese, and “Chinglish” expressions
To foster critical consciousness	“Privilege” and “Empathy” activity (Social Studies)		Participated actively, using English and Mandarin freely during the process; all chose English to demonstrate their written reflections; developed an understanding of “privilege” and “empathy”

### Translanguaging Documentation

The first category we co-designed was “Translanguaging Documentation”. It suggests that teachers can get a fuller picture of a learner’s academic performance by encouraging bilingual students to use all their linguistic resources together in a given assessment task (Sánchez et al., 2018). In our third grade Mandarin classroom, academic performance generally included two dimensions: *content proficiency* (how much content knowledge of a subject matter students can demonstrate) and *language proficiency* (how much Mandarin, e.g., words and sentence structures, students can use accurately and appropriately in a given context). Based on different assessment purposes, we created two kinds of translanguaging documentation spaces in

classroom formative assessments to get to know students' academic performance in content and language more deeply and justly compared with Mandarin-only monolingual assessments.

### **When the Primary Goal is to Assess Content Proficiency**

Brisk (2006) has long argued that “When students are forced to do [an assessment] in one language, it becomes a language proficiency test rather than evidence of literacy ability or content knowledge” (p. 161). García and Kleifgen (2018) also echo that “Every assessment is an assessment of language. Thus, assessment for emergent bilinguals, who are still learning the language in which the test is administered, is not valid unless language is disentangled from content” (p. 146). Therefore, when the primary goal is to assess students' content proficiency in a given subject matter, it is important to free them from the limitations of using one named language only at a time and create translanguaging spaces where they can draw on all their linguistic features to showcase their content understanding. In our case, Ms. Li and I designed exit ticket activities in CLA and Science class where we allowed students to use their full linguistic repertoire to demonstrate what content they learned in written form without using Mandarin-only constraints. Below I firstly describe what the exit ticket scenarios looked like for each content area and then discuss student performances using their written samples.

**CLA Exit Ticket – Activity Description.** In early December 2018, the students were learning a complex Chinese text called “Smart buildings” (“聪明的建筑”) in their CLA classes. The text talks about in different regions of the world, people use different materials to build houses with various exterior and interior structures to accommodate to the local topography and climate. Ms. Li wanted to know if her third graders really understood the content and remembered the examples introduced in the text after several sessions (because later students were going to apply their content understanding in a science test in which they would be asked to

design and draw their own houses in a given region scenario). Therefore, we designed a small exit ticket activity to assess students' content proficiency without limiting them to use Mandarin-only. In our exit ticket (see Figure 4.1), we wrote the instructions in English “*What did you learn from this text ‘Smart Buildings’. Include as many details as possible*” (which indicated that it was permissible to use English in this task). When we gave out the exit tickets to students in class, Ms. Li explicitly reinforced that they can use both English and Mandarin to craft their answers as well.

<p>12.7 10-min writing Exit ticket</p> <p>Name: _____</p> <p>What did you learn from this text “Smart Buildings”. Include as many details as possible.</p> <div style="border: 1px solid black; height: 200px; width: 100%; margin-top: 10px;"></div>	<p>Exit ticket Name: _____</p> <p>What did you learn from this text “Smart Buildings”. Include as many details as possible.</p>
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Figure 4.1 CLA exit ticket

**CLA Exit Ticket – Student Participation.** This activity allowed all students with varying levels of Chinese proficiency to safely and freely express their thoughts without being confined to using only Chinese characters. Students were actively engaged and made their own linguistic choices to participate in the writing process. Given that most of our students were English-dominant, it was not surprising to see that almost all of them chose to write in English

(the way they felt most comfortable or confident with) with one or two using some Chinese words (i.e., translanguaged) in their writing (see Figure 4.2). From their answers, we saw that students were able to elaborate their thoughts on their own to exhibit various levels of content understanding. Some of them discussed different examples they learned from the text with details – where the place is, what materials people use to build their houses, and why they build houses in that way, as student work 1 (see Figure 4.3) demonstrated, *“In India or Thailand they have forests around them, they use that wood from trees to make house on pillars. This keeps water from getting inside, but it also keeps animals in the forest from getting inside”*. Some of them talked generally about house building in different weather conditions, as student work 2 (see Figure 4.4) showed, *“In this lesson I learned that it’s best if there is a shelter underground because you can be safe in a hurricane, tornado, and even very strong wind ... the house should be made of a strong material so that it won’t break in extreme weather”*, and student work 3 (see Figure 4.5) – *“People make houses on stilts so if there are floods the water will not get into the houses”*. These answers from multileveled students displayed that all of them had developed a basic understanding that people use different materials to build different houses to adjust to different climates.

In general, this small activity provided a more equitable way for bilingual learners to demonstrate their content understanding, particularly for students with lower Chinese proficiency (like the student in Figure 4.5 who could not express her ideas fully in Chinese only). It offered us an opportunity to get a more complete picture of where they were in terms of content comprehension and to plan how we could better support them in the next round of instruction. This would not have been possible had the assessment been restricted to one language.

Exit ticket Name: [redacted]

What did you learn from this text "Smart Buildings". Include as many details as possible.

What I learned is that 我们的 ancestors built all these houses using the material around them. In antartica, inuits build igloos to survive. People in India and thailand build houses on long wooden poles. Why they build it is that so animals and 水 won't get in. This house is also water proof. Another house is built inside a lot of yellow 土. 中国的汉人在里面住. they dig inside the yellow dirt and 在里面是冬暖, and in the summer it is cool. Our anesators used the nature around us to malce the houses.

What I learned is that 我们的 ancestors built all these houses using the material around them. In antartica, inuits build igloos to survive. People in India and thailand build houses on long wooden poles. Why they build it is that so animals and 水 won't get in. This house is also water proof. Another house is built inside a lot of yellow 土. 中国的汉人在里面住. they dig inside the yellow dirt and 在里面是冬暖, and in the summer it is cool. Our anesators used the nature around us to malce the houses.

Figure 4.2 A student translanguaged in writing

Exit ticket Name: [redacted]

What did you learn from this text "Smart Buildings". Include as many details as possible.

I learned that our ancestors build houses & building in many different ways like people in very cold places such as the north pole or antartica make iglos from whats around them they use what they have & make it into what they need. In India or Thailand they had/have forests around them, & they use that wood from trees to make house on pillers. This keep water from getting inside, but it also keeps animals from in the forest from getting inside. & last, in China they have moutains & moutains of yellow mud, which is kind of like clay. They dug holes in the mud & made them their houses. In summer it's nice & cool inside, & in winter it's warm. I learned a lot from the text "Smart Buildings".

I learned that our ancestors build houses & building in many different ways, like people in very cold places such as the north pole or antartica make iglos from whats around them, they use what they have & make it into what they need. In India or Thailand they had/have forests around them, & they use that wood from trees to make house on pillers. This keep water from getting inside, but it also keeps animals from in the forest from getting inside. & last, in China they have moutains & moutains of yellow mud, which is kind of like clay. & They dug holes in the mud & made them their houses. In summer it's nice & cool inside, & in winter it's warm. I learned a lot from the text "Smart Buildings".

Figure 4.3 Student work 1

<p style="text-align: center;">Exit ticket      Name: <span style="background-color: black; color: black;">[REDACTED]</span></p> <p>What did you learn from this text "Smart Buildings". Include as many details as possible.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>In this Lesson I learned that its best if there is a shelter underground because you can be safe in a hurricane, tornado, and even very strong wind. There also should be a lightning rod so that if there is a storm the lightning rod will protect the house, also the house should be made of a strong material so that it wont break in extrime weather.</p> </div>	<p><u>In this Lesson I learned that its best if there is a shelter underground because you can be safe in a hurricane, tornado, and even very strong wind.</u> There also should be a lightning rod so that if there is a storm the lightning rod will protect the house, also <u>the house should be made of a strong material so that it won't break in extrime weather.</u></p>
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Figure 4.4 Student work 2

<p style="text-align: center;">Exit ticket      Name: <span style="background-color: black; color: black;">[REDACTED]</span></p> <p>What did you learn from this text "Smart Buildings". Include as many details as possible.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>people make houses on stilts so if there are floods the water will not get in to the hous. people yoad callims for there hous because the callims help keep the hous up. briks are yoad in alot ofe houses because they are esey to bild with. som houses are bilt in to the ground. some houses are made out of mode.</p> </div>	<p><u>people make houses on stilts so if there are floods the water will not get in to the hous.</u> people yoad callims for there hous because the callims help keep the hous up. briks are yoad in a lot of houses because they are esey to bild with. Som houses are bilt in to the Ground. some houses are made out of mode.</p>
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Figure 4.5 Student work 3

**Science Exit Tickets – Activity Description.** Informed by the CLA design in cycle #1, we also implemented the exit ticket activity in science classes in our design cycle #2. In early

May 2019, Ms. Li and the students were learning a science unit on “Water” in Mandarin. There were two class sessions where they first conducted science experiments and then she wanted the students to report their observations in a written form. The main goal was to assess if students could articulate their noticings and wonderings after participating in/observing an experiment to demonstrate their content-level understanding (rather than language proficiency). Therefore, Ms. Li and I both agreed to open up a translanguaging space in the two exit ticket activities in which students were encouraged to bring their full linguistic repertoire to “freely” write down their observational notes.

The first science experiment was “watershed model”. Students worked in two groups to create a landscape that included multiple watersheds using wax paper. Next Ms. Li gave each group some small orange foam balls representing trash and asked them to randomly place those balls on the landscape. They then used different color markers to mark where they thought could be “mountain” and where could be “river/lake”. After that, Ms. Li and I simulated rainfall using spray bottles and students observed how the water and “trash” flowed through the landscape. Finally, students were asked to mark where they thought people could build houses on the landscape. After conducting this hands-on experiment, students were provided with exit tickets saying “What did you notice from this watershed model?” and Ms. Li explicitly mentioned that they can use English or Mandarin (or both) to present their answers.

Similarly, we also implemented this exit ticket activity in the second science experiment: “saltwater/freshwater model”. Ms. Li first presented a big tank of water (around 1 gallon) in front of the students, telling them to imagine this as the whole body of water on the earth. Next, she used a measuring cylinder to get a tiny portion of water (approx. 3 ounces) from the tank and put it into a measuring glass. Then she put salt into the tank and named it as “saltwater” and the

water in the measuring glass as “freshwater”. Later she divided the “freshwater” into three smaller cups, naming them as “glaciers”, “underground water”, and “rivers/lakes” – the “glaciers” cup has the most amount of “freshwater” (#1), and then the “underground water” (#2) and “rivers/lakes” (#3) cups. Ms. Li finally asked the students “where do human beings get water from?” and they had a heated discussion on “why people get drinking water mostly from rivers and lakes, but not glaciers?” and “Is it possible to get water from glaciers (if so, how)?” After the observation and discussion, Ms. Li offered exit tickets as a “free writing” space and asked students to jot down their reflections in response to the prompt question: “What did you notice from this saltwater/freshwater model?”.

**Science Exit Tickets – Student Participation.** For the exit tickets of the first science experiment, all of the students chose English to participate in this written task. This was expected because we knew that students were able to elaborate more of their observations and ideas in their stronger language, English, which was also affirmed in my later interviews with focal students. One of them explained her language choice saying, “I think it’s easier to write in English because we have already known a lot more words in English than in Chinese.” Although their responses varied in length, almost all of the students shared their observations that under the rain, the “trash” spread throughout the watershed and polluted the “river/lake” and it was hard for people to find places near water due to the flooded situation, as shown in Figure 4.6 – two of the student works.

For the second exit tickets, not surprisingly, all the students used English to share their thoughts as well. Two of the most common themes from their answers were (as shown in Figure 4.7) – (1) the majority of the water on the earth is salt water; (2) people can only drink a small portion of the freshwater, primarily coming from rivers and lakes instead of glaciers.

<p>What did you notice from this watershed model? 名字: [redacted]</p> <p>1. <u>I noticed that after the water was there it was hard to decide where to put the houses where they might like to go.</u> I also noticed that since there is a lot of litter then it wouldn't be a nice place to live. I wonder, if the water were put on the mountains then it would be easier to place the houses there because the houses should deserve to be put in a place without much litter and with water and on the mountains, <sup>there</sup> wasn't a lot of litter. I also noticed that after the water came in then some of the water got dirty.</p>	<p><u>I noticed that after the water was there it was hard to decide where to put the houses where they might like to go.</u> I also noticed that since there is a lot of litter then it wouldn't be a nice place to live. I also wonder, if the water were put on the mountain's then it would be easier to place the houses there because the houses should deserve to be put in a place without much litter and with water and on the mountains. There wasn't a lot of litter. <u>I also noticed that after the water came in then some of the water got dirty.</u></p>
<p>What did you notice from this watershed model? 名字: [redacted]</p> <p>1. <u>Trash can escape from places and move to other places just by the rain.</u> And when the rain washes in it can cause many pieces of trash to float away, rain can cause dirt and other dirty things to make the water polluted. people would not as likely want to live near dirty water. I wonder where rain water goes to after it sinks into the ground. I also wonder how mountains form and why water evaporates</p>	<p><u>Trash can escape from places and move to other places just by the rain.</u> And when the rain washes in it can cause many pieces of trash to float away. <u>Rain can cause dirt and other dirty things to make the water polluted. People would not as likely want to live near dirty water.</u> I wonder where rain water goes to after it sinks into the ground. I also wonder how mountains form, and why water evaporates.</p>

Figure 4.6 Two of the student works “watershed model”

<p>What did you notice from this saltwater/freshwater model?</p> <p><u>I noticed that, based on this experiment is that the water that we drink is almost the least type of water on earth. Most of the water on earth is saltwater, and saltwater if you drink it it just makes you thirstier. So the only freshwater we get, besides the earth water and the water we get from freezing, is from lakes, ponds, and rivers.</u> The rest of from what we drink from is the rain, which is to bad, because we really need water to survive. And even though we, or at least I think we have a ton of water</p>	<p>I noticed that, based on this experiment is that <u>the water that we drink is almost the least type of water on earth. Most of the water on earth is saltwater,</u> and saltwater if you drink it, it just makes you thirstier. <u>So the only freshwater we get</u> (besides the earth water and the water we get from freezing) <u>is from lakes, ponds, and rivers.</u> The rest of from what we drink from is the rain, which is to bad, because we really need water to survive. And even though we, or at least I think we have a ton of water compared to the rest of the world. But I don't get why ponds, lakes, and rivers have the least, and based on this experiment, there is more water that freezes up in the mountains than there is in ponds, lakes, and rivers!</p>
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<p>to drink, if this experiment is correct, we actually don't have a lot of water compared to the rest of the world. But I don't get why ponds, lakes, and rivers have the least, and based on this experiment there is more water that freezes up in the mountains than there is in ponds, lakes, and rivers!</p>	
<p>What did you notice from this saltwater/freshwater model?  <u>I notice that streams, rivers and lakes are where we get our water. But they don't have as much water as glaciers or oceans. Is there a stream or river that goes up?</u>  <u>Glaciers are BIG with A LOT of water. But you can't drink from them. I notice glaciers have a lot of ice, how does it move?</u></p>	<p><u>I notice that streams, rivers and lakes are where we get our water.</u> But they don't have as much water as glaciers or oceans. Is there a stream or river that goes up? <u>Glaciers are BIG with A LOT of water. But you can't drink from them.</u> I notice glaciers have a lot of ice, how does it move?</p>
<p>What did you notice from this saltwater/freshwater model?  <u>I noticed many things from the model. One thing was that in the world there is more saltwater than freshwater. Another thing was that fresh water was split into 3 categories while saltwater only had 1 category. I also noticed that in the freshwater categories, glaciers (one of the freshwater categories) had the most while underground water had second most and Lakes + Rivers had the least amount of water.</u></p>	<p>I noticed many things from the model. One thing was that <u>in the world there is more saltwater than freshwater.</u> Another thing was that fresh water was split into 3 categories while saltwater only had 1 category. I also noticed that in the freshwater categories, glaciers (one of the freshwater categories) had the most while underground water had second most and <u>Lakes + Rivers had the least amount of water.</u></p>

Figure 4.7 Three of the student works “saltwater/freshwater model”

To summarize, we clearly saw that students achieved the content goals we had originally planned through these two science exit ticket activities. They were able to demonstrate their content proficiency in their familiar language: explaining the flows of water and “trash” under the simulated rainfall and developing an understanding that our drinking water is very limited compared to the saltwater on the earth. Although this activity did increase students’ use of English to a certain extent in Mandarin class, it helped us fulfill our primary assessment goal – to get a more comprehensive picture of bilingual learners’ content proficiency on science concepts.

It cultivated a safe (low-stakes) environment where all students were willing to participate and elaborate their content ideas, regardless of their Chinese language proficiency level.

### **When both Content and Language Proficiency are Assessment Goals**

For certain formative assessments, Ms. Li and I wanted to see students demonstrate more than content-level understanding, but also their use of Mandarin words, sentences, and expressions. Our assessment goals then contained measuring both content and language proficiency. To prioritize students' use of Mandarin while offering them “wiggle room” to use their whole linguistic resources, Ms. Li and I added criteria to translanguaging documentation spaces to “regulate” or “control” students' written output. We implemented this idea in two content areas – CLA and Science class.

**CLA Story Retelling Assessment – Activity Description.** In early January 2019, the students were working on their story (re)telling skills in CLA class. In one academic task, Ms. Li first read a Chinese text called “Rosie’s trip: Rollercoaster fun” (“小柔的旅行：好玩的过山车”) and then she asked the students to retell the story in a written form. The text is designed for beginning learners of Chinese and matches the students' reading grade level. It talks about Rosie (小柔) and May (小美) taking a rollercoaster ride together and their emotion changes at different stages of the ride: when the rollercoaster slowly climbed up, Rosie was excited while May was scared; however, when the rollercoaster went down swiftly, May squealed with excitement while Rosie screamed and felt nauseous.

In this assessment, Ms. Li wanted to test the amount of detail students could recall (content proficiency) and of Chinese used (language proficiency) at the same time. To fulfill and balance both goals, we created translanguaging spaces with added criteria – to offer flexibility so that all students with varying Chinese proficiency levels could elaborate their ideas while

maximizing their use of target language. Our criteria were: (1) first use as many Chinese characters as you can to retell the story; (2) if you do not know how to write the character, you can use pinyin (which is the Romanization of the Chinese characters based on their pronunciation) instead; (3) if you do not know either, you can then use English. For example, we encourage students to write “妈妈” in the first place; if they don’t know the characters, they can put its pinyin “ma ma”; if neither, they can write “mother” or “mom”. In this case, students can draw on all their linguistic resources to demonstrate their content understanding but in a more structured way of using their Chinese and English.

**CLA Story Retelling Assessment – Student Participation.** On a general level, we saw that students translanguage among Chinese characters, pinyin, and English fluidly in their written works, but different from their performance in exit tickets, most of them produced their retelling in Chinese characters with only limited use of pinyin and English. This may be due to that our added criteria raised students’ “translanguaging awareness”: they were aware of the contextual constraints (the criteria) and knew what linguistic features of their repertoire should be selected primarily to showcase both content and language proficiency. Three of the students’ works were selected below (see Figure 4.8). Their works illustrate that the third graders were trying their best to craft their retelling in Chinese characters, and in order to fully elaborate their story retelling, they strategically translanguage to pinyin and English. With regards to content understanding, the students were able to explain the gist with different levels of details (such as the orientation, dialogues between characters, turning point, and the coda). In terms of language proficiency, Ms. Li and I got a fuller picture of their bilingual development continua – what Chinese words they had already mastered (such as 爸爸妈妈), what Chinese words they knew how to say using pinyin, but did not know how to write in the form of characters, and what

Chinese words they still needed to learn (for example, all of them used the English word “rollercoaster”). From their translanguaging, Ms. Li learned more about each student’s language needs and could therefore design targeted scaffolding to help them in the following lessons.

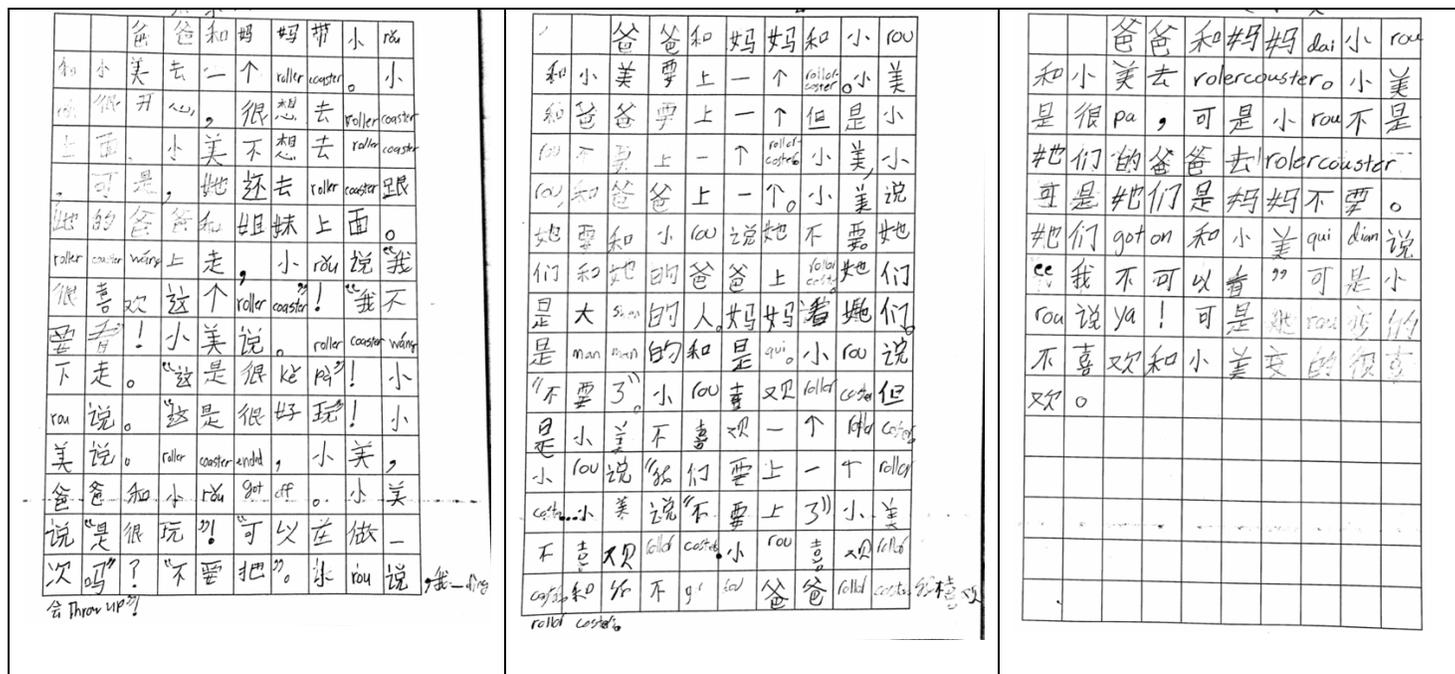


Figure 4.8 Three of the student works “Rosie’s trip: Rollercoaster fun”

**Science Test on Forces – Activity Description.** In January 2019, Ms. Li and her students were working on a science unit on “Forces: Push and Pull”. In one formative test, Ms. Li wanted to see if students were able to identify forces using arrows (content proficiency) and to explain the causes and effects of forces using appropriate key words and sentence structures in Mandarin (language proficiency). To balance the dual assessment goals, we implemented the same idea (informed by our CLA story retelling assessment design) and added a more specific criteria to this science test (see Figure 4.9).

point	4	3	2	1	0
criteria	Correct answer all in Chinese(or pinyin) , especially using the key words	Correct answer in Chinese (or pinyin), with a little English	Correct answer in English, with some words in Chinese (or pinyin)	Correct answer in English	Wrong answer
	因为有地心引力，地心引力会把东西往下拉，所以球会掉下来。	因为有 gravity， gravity会把东西往下拉，所以球会掉下来。	There is地心引力，地心引力pull things down， so the balls are掉下来。	Gravity pulls things down, so the balls eventually fall back to his hand.	There is no gravity.

Figure 4.9 Science test criteria

As shown in Figure 4.9, we specified each criterion with corresponding points and examples: students had the “freedom” to choose to write answers in complete English, a mix of English, pinyin, and Chinese characters, or complete Chinese, but different language practices led to different points obtained. Since demonstrating language proficiency was one of the key goals in this assessment, students who were able to provide correct answers all in Chinese would get the full marks. However, we also validated students’ correct answers in a translanguaging way because they also displayed content understanding, and the more Chinese they could use, the higher marks could they get (even though the correct answer was in English completely, we still gave them one point).

**Science Test on Forces – Student Participation.** We found that these criteria motivated students to use as much Chinese as they can, which may be due to students’ desire to get high

marks. When they were working on their individual tasks, they actively sought help from Ms. Li and me and consulted the word walls in the classroom (which was encouraged). This is important for students' Chinese proficiency development because they were willing to experiment with demonstrating his or her scientific knowledge through the target language; they were willing to take risks and communicate in their non-dominant language. As Zheng (2019) says, "encouraging translanguaging in teaching and learning does not indicate a lower demand for minoritized language use" (p. 13), with strategic design – in our case, adding criteria – we could still maximize students' use of Chinese to "push" them produce output in L2 while disrupting the monolingual bias in assessment.

Given the different goals of each assessment – be it measuring content proficiency primarily or measuring both content and language proficiency, we as educators can set parameters (either adding criteria or not) to promote students' *judicious* use of translanguaging to display their academic performance in a more holistic and equitable way. Compared with monolingual assessments, translanguaging documentation provides a promising path in which students at all points of their bilingual continua could participate and are encouraged to mobilize their full linguistic repertoire (using linguistic features such as Chinese characters, pinyin, and English) purposefully and strategically to demonstrate their ability without limitations to one named language only. This would provide educators with a fuller picture of understanding where students are, and further contribute to more individualized instruction to help bilingual learners expand their bilingual zone of proximal development (Moll, 2014). In the next section, I will discuss how we integrated the second category, translanguaging rings – ways of scaffolding instruction that leveraged students' home languages as resources to facilitate their academic learning in different content areas.

## Translanguaging Rings

My class observation, which was in line with previous research (e.g., Gort & Sembiente, 2015; Durán & Palmer, 2014), showed that students' *translanguaging corriente* (García, Johnson, & Seltzer, 2017) was always present in the classroom – for example, they talked to each other in both English and Mandarin to make sense of content in small groups in Social Studies and Science classes, and they sought Google translate for help on their own when they constructed their short Chinese essays on their computers in CLA class. It was clear that students regularly utilized their whole linguistic resources in dynamic, flexible ways and crossed the language boundaries in spite of the monolingual-oriented language separation policy in the program. As Seltzer and García (2020) point out, teachers should make these *corrientes* visible and provide translanguaging rings to strategically leverage these as resources to maximize students' content and language integrated learning (CLIL) opportunities. Therefore, besides formative assessments, we also co-designed multiple ways of utilizing students' home/dominant languages intentionally as scaffolding in classroom instruction. These planned scaffolding moves were “translanguaging rings” in our Mandarin classroom across different content areas; they were manifested in different forms based on various pedagogical purposes.

During our one-year long PDR process, we co-created translanguaging rings strategically with four main purposes: (1) to co-construct knowledge in class discussion with distributed expertise; (2) to build cross-linguistic connections and raise metalinguistic awareness; (3) to make content/instructions accessible to all students; and (4) to enhance/deepen students' understanding of a subject matter. In the following sub-sections, I will firstly describe what translanguaging activities were implemented to achieve each purpose and then illustrate the corresponding student performances and participation in those spaces.

## Co-constructing Knowledge through Distributed Expertise

Recognizing students' translanguaging practices as a resource, Ms. Li and I allowed for linguistic flexibility in whole group class discussion. Although optimal use of and exposure to the target language were still the guiding principles, Ms. Li did not shut down students' dynamic meaning-making flows, instead she saw bilingual learners as legitimate knowledge contributors and accepted their hybrid language uses in sharing opinions and answering questions to advance the conversation. Students also understood that their inexperience with Mandarin or use of English would not impede their participation in the knowledge-making process. Therefore, the teacher and students collaboratively cultivated a heterogeneous, safe interaction environment where they engaged in fluid translanguaging practices to facilitate their meaning negotiation and knowledge co-constructions process with distributed expertise. These flexible "translanguaging rings" spaces were prevalent in class instruction across all content areas (ELA, Science, and Social Studies). Below I select one class vignette from Social Studies class to showcase how embracing translanguaging *corriente* fostered a knowledge co-constructing space among Ms. Li and her students.

**Activity Description.** From December 2018 to January 2019, the third graders were learning about "U.S. immigration history" in their Social Studies class, including topics on Native Americans' (Wampanoags') lives, the arrival of the Pilgrims in the ship of May Flower, and the story afterwards between the Pilgrims and the natives on the land of nowadays called Massachusetts. The excerpt below (see Excerpt 4.1) shows that Ms. Li and her students were working on a Chinese text called "五月花 (May Flower)" (explaining how the Europeans came to the land of Americas, overcame different difficulties, and finally settled down becoming the first immigrants). There was one Chinese phrase in the text that Ms. Li wanted her students to

comprehend deeply – “生根 (sheng gen)” [literal translation: taking roots]. To do it she read aloud the passage containing that phrase: 他们终于在美洲“生根” [literal translation: They finally “took roots” in the Americas], encouraging the students to read along with her. Then she dialogued with the students to co-construct the meaning of “生根 (taking roots)” and the use of quotation marks with that phrase.

Unit <sup>9</sup>	Speaker	Original	English translation
1	Ms. Li	“他们终于在美洲‘生根’”	[reading from the smartboard] Ta - men - zhong - yu - zai - mei - zhou - “sheng - gen”. They finally “took roots” in the Americas. [The students were reading along with her.]
2		这有一个符号，叫做引号。	There’s a punctuation here [surrounding this word “(sheng gen) take roots”]. It’s called quotation marks [Ms. Li then circled the quotation marks].
3		英文也有学过吧？	You also learned the use of this punctuation in English, right?
4		什么时候有一个词会用引号？	When do you use quotation marks for a word? [Ms. Li wrote down the name of “quotation marks” in Chinese characters on the smartboard and used hand gestures to show what quotation marks look like]
5	Ss	<i>Oh!</i> ( ... )	[Some students suddenly thought of something and expressed “Oh” and started mumbling]
6	Ms. Li	S1?	[Ms. Li called a student’s name to ask her to answer]
7	S1	它的 <i>words</i> 很 -	Its words are very -
8	Ms. Li	对! 这个词怎么样?	[Ms. Li affirmed S1’s idea] Yes, this word is very ...?
9	S2	<i>Special</i> -	[Another student quickly mumbled his answer] Special -
10	Ms. Li	特别! (S1 - <i>yea</i> - ) 很特别的词，	[Ms. Li quickly affirmed his answer and recast it in Mandarin] Yes, special! (S1 also expressed <i>yea</i> ) Very special words,
11		还有吗?	Anything else? [Ms. Li was trying to elicit more thoughts.]
12	S3	是 ... 那个 ... 有一个 <i>expression</i> 。	[S3 expressed his thoughts] Hmm ... when there is an expression.
13	Ms. Li	有一个 <i>expression</i> ，很好。	[Ms. Li repeated his words] Yes, when there is an expression. Very good.
14		特别的用法。	[Ms. Li recast it in Mandarin] A very special expression.
15		还有没有?	Anything else?

<sup>9</sup> Unit here refers to one unit of utterance (see Appendix IV for transcription key).

16		S4。	[Ms. Li saw another student raising her hand and called her name.]
17	S4	不是真的在生根, 他们好像可能在生根。	They are not taking roots in a literal sense. They are seeming like taking roots.
18	Ms. Li	好像他们在生根。	[Ms. Li repeated S4's answer.] Seeming like, they're taking roots.
19		请问“根”是什么?	Tell me what “gen (root)” is? [Ms. Li then underlined this character “gen” on the smartboard.]
20		你有没有学过根?	Have you learned what is “gen (root)”?
21	S3	Yea, 那个 <i>roots</i> 。	Yea, it means roots.
22	Ms. Li	<i>Roots</i> . 一个植物放下去了, 它会生根, 然后它会长出茎, 它会长出叶子, 然后它会开出花, 对不对, 开出花。	Roots [Ms. Li repeated S3's word]. [She then started drawing alongside] Here's a plant on the ground, it will take roots, and then it will grow a stem, then leaves, and it will bloom, right?
23		这个就是生根。	[Ms. Li drew an arrow pointing to the root part] This part is “taking roots”.
24		那请问, 什么叫做“他们在美洲生根”呢?	Now please think, what do we mean by “They are taking roots in the Americas”.
25		人可以生根吗?	Can people take roots? [After this question, some students started mumbling their answers.]
26		人站在这里, 然后他的脚下有生根吗?	[Ms. Li started to draw another person picture next to the plant picture] A person is standing here, and he can grow roots under his feet? [laughter from the students.]
27		所以它真的在说人生根吗?	So, does the text really talk about people growing roots?
28		是什么意思?	What does that mean? [Many students were raising their hands.]
29		S5, 你觉得呢?	[Ms. Li called a student to answer] What do you think?
30	S5	是在说, 不是一个人在生根, 是一个 <i>way of speaking</i> , 是那个... 是 <i>like settle in</i> 。	It says, it's not a person growing roots, it's just a way of speaking. It's actually ... like (people) settle in. [During the student's talk, Ms. Li kept nodding her head to show affirmation.]
31	Ms. Li	就是这里本来没有一朵花, 没有植物, 可是你放了一个种子以后, 它就开始了有生命对不对, <i>settle</i> 在这边, 不会走了, 它就在这里。	It's like – originally there is no flower, no plant; but after you put a seed [to the ground], it will start to have a life, right, [start to] settle here, not moving anywhere, it's growing here. [Ms. Li pointing to the plant picture she drew before.]
32		好像这个人他来了以后, 他也不走了, 他就在这里, 他会盖自己的	Similarly, when this person comes here, he is not moving anywhere and staying here. He will start to build his house, have his own children, and settle down

		房子，会有自己的小孩，他也不走了，就在这里 <i>settle</i> ，不走了。	here, not moving. [Ms. Li drew/added more details to the person picture – a house and a child.]
33		所以呢，好像一个植物一样，生...根。	So, this person is like a plant – <b>taking roots</b> . [Ms. Li pointing to the original text “sheng gen”.]
34		S6?	[Ms. Li saw another student raising his hand and pointing to the person picture she just drew; she called his name.]
35	S6	那个 <i>children</i> 是他的 <i>root</i> 。	The children are his root.
36	Ms. Li	小孩就是他的根！你说得很好。	[Ms. Li was so happy and surprised to hear what S6 just said. She recast his words in Mandarin.] The children are his root! What you said is very good.
37		所以我有根就是好像我有根很多的小孩，很多很多的小孩。	So, I have many roots is like I have many, many children. [Ms. Li started to draw more children on the person picture.]
38		S6 讲了一个东西，在-	What S6 just said is -
39	S5	( <i>family tree</i> )	[S5 mumbled a word – family tree.]
40	Ms. Li	啊！我就是要讲这个字！S5，你说什么？	[Ms. Li was very excited to hear the word and pointed to S5.] Yes, that’s what I’m going to say! S5, what did you say?
41	S5	<i>Family tree</i> .	Family tree.
42	Ms. Li	对。所以为什么呢我们说很多美国人是移民。	Yes. So that’s why we call many Americans immigrants. [Ms. Li started to draw a family tree picture.]
43		因为你的祖先 <i>ancestor</i> 来了，他生根了，所以他有小孩，然后呢小孩他们又有小孩，所以可能这就是你，你可能就是移民的根，你是他生的根。	Because your ancestor first came, he settled in. Then he had children and his children had children, and continually from generation to generation, so now you are here. [Ms. Li kept drawing the family tree picture and circled the last child she drew.] This is you, so you are probably the root of immigrants; you are his root.

*Excerpt 4.1* Co-constructing the meaning of “生根(sheng gen)” in a Social Studies class

As shown from the above excerpt, Ms. Li and her students went through three main stages of class discussion to co-construct the meaning of “生根 (taking roots)” in a dialogic manner with flexible uses of both linguistic and non-linguistic resources. They firstly engaged in figuring out the function of using quotation marks surrounding the phrase “生根 (taking roots)”. Then they collectively unpack the literal meaning of “生根 (taking roots)” and its figurative use

in the context “people taking roots”. Finally, they developed further understanding of notions like “children as roots”, “family tree”, and “immigrants”. During the process, Ms. Li consistently performed as the target language (Mandarin) model: she read aloud, asked questions, and recast students’ answers all using Mandarin. However, she did not enforce a strict Chinese-only rule in class discussion and instead opened up a heterogeneous space, allowing for student answers in both Mandarin and English. She also played the role as facilitator to foster a knowledge co-making space, offering prompts in Mandarin and using a number of non-linguistic strategies to enhance comprehension, such as underlining/circling the text, hand gestures for demonstrating the quotation marks, and drawings on the smartboard to illustrate the analogy between “plants and people taking roots” and “family tree”.

**Student Participation.** The students participated using both Mandarin and English to different degrees, building upon each other’s ideas to advance the class discussion. At the initial stage of the class conversation – when Ms. Li was guiding her students to use their familiar knowledge from their ELA class to understand when people use quotation marks in passages without dialogues, one student (S1) used both Mandarin and English saying “它的 words 很...” (The words are ...). She (S1) was making conscious effort to use the target language (Mandarin) to express her ideas, but got stuck on the adjective part. Another student (S2) quickly added “special”, using English to complete her expression “when the words are special”. Subsequently, another student (S3) joined the conversation, using both Mandarin and English, to further elaborate “有一个 expression”, meaning that “when there is a special expression, we will use quotation marks for that phrase”. Ms. Li accepted these answers and provided recast of their English words in Mandarin at the same time. This joint translingual meaning-making process

(Unit 7 – 12) among them laid a foundation for the following stages of class discussion – “生根 (taking roots)” in this context was a special expression with figurative meaning embedded.

Moving to the second stage, the students continuously used their full linguistic repertoire to participate in the conversation to co-construct the literal meaning of “生根 (taking roots)” with Ms. Li (Unit 19 – 23; as in a plant taking roots) and figure out its figurative meaning under Ms. Li’s guided questions in Mandarin and her analogy between a plant and a person. One student (S5) elaborated his ideas in a translanguaging manner, drawing on English and Mandarin flexibly (Unit 30) – “是在说，不是一个人在生根，是一个 way of speaking，是那个...是 like settle in” (“It says, it’s not a person growing roots, it’s just a way of speaking. It’s actually ... like (people) settle in.”). His response unveiled the metaphorical meaning of “生根” (“take roots”) in the textual context – (people) “settle in”, which pushed the class discussion forward to the next stage.

In the final stage, Ms. Li expanded her analogy in Mandarin and used drawings on the smartboard for illustration in the meantime, building upon the student (S5)’s English explanation “settle in” – like plants, people taking roots means “settling” down to a place and building houses and having children (Unit 31 – 33). This triggered another student (S6)’s sudden realization – “那个 children 是他的 root” (The children are his root), which was expressed in a fluid mix of English and Mandarin. Ms. Li was surprised and happy to hear what S6 said and affirmed his answer right away. As she was about to wrap up the conversation, S5 quickly chimed in and brought up the notion of “family tree” in English. This happened to coincide with what Ms. Li was planning to summarize based on the discussion to this point. She then grasped this teaching moment and introduced the concept of “immigrants” in Mandarin (Unit 39 – 43). The class then transitioned to dialogues on students’ own family history as U.S. “immigrants”.

Overall, the excerpt above showed how fostering a translanguaging space (allowing students' translanguaging *corrientes* to flow naturally, fluidly, and visibly) in whole class discussion could contribute to greater participation and knowledge co-construction (Lau, Juby-Smith, & Desbiens, 2016). The students were seen as competent language users and felt safe to use their full communicative repertoire to demonstrate understanding in this inclusive learning environment; while the teacher, Ms. Li performed as a moderator (instead of a dominant role) to elicit answers from students, provide recast when and where necessary, and build upon what students had said all in Mandarin with non-linguistic strategies (e.g., hand gestures, drawings, etc.) as complementary multimodal explanation. All these moves from both parties formed a tightly knit translanguaging sequence and it was all happening very fast in the flow of simultaneous and consecutive interactions involving multiple linguistic resources and multiple modes (e.g., spoken, written, smartboard, drawing, gestures, facial expressions, eye gaze). Angel Lin (2017) defines these interactional practices as collectively building up a tightly knit “*translingual chain of meaning*” (p. 233, original emphasis), which has a valuable pedagogical scaffolding function to advance class discussion to different levels. In our Excerpt 4.1, it was evident to see that enabling students to draw on the totality of their linguistic resources (i.e., integrating these “translanguaging rings” in class interaction) moved the conversation from figuring out the function of using quotation marks in the textual context to understanding the literal and figurative meanings of “生根” (“taking roots”) to developing further comprehension of notions like “children as roots”, “family tree”, and “immigrants”. Ms. Li and her students were all participants with changing leadership roles to shift positions of expertise in co-making meaning. It should be noted that the formation of this meaning-making chain would not have

been possible had the discussion been restricted to strictly Chinese only or discouraged by the teacher.

### **Building Cross-linguistic Connections and Raising Metalinguistic Awareness**

The second purpose that we intentionally integrated students' home/dominant languages (English) as translanguaging rings was to build cross-linguistic connections and raise their metalinguistic awareness. This was similar to and informed by Beeman and Urow's (2013) idea of "The Bridge", an instructional time in teaching for biliteracy when teachers bring the two languages together, guiding students to engage in contrastive analysis of the two languages and to transfer the academic content they have learned from one language to the other language. Translanguaging rings in this sense were cross-linguistic strategies to facilitate connections and transfer between linguistic (phonology, morphology, syntax and grammar, and pragmatics) and content-area knowledge and learning skills. Below I present two activities we implemented in CLA class to demonstrate how Ms. Li and her students engaged in Chinese/English cross-linguistic analysis.

**Chinese Word Use Comparison – Activity Description.** In late January 2019, Ms. Li noticed that some students were confused about the use of two Chinese words – “来自” vs. “来”. They look very similar (the first word has one extra character “自”); however, their meaning and use are different. To help students better master their pragmatic difference, Ms. Li incorporated a mini-lesson into one CLA class. In this lesson, she first put the two words into the same Chinese syntactic context “我的妈妈\_\_\_\_\_New York” for comparison and then explicitly used English translations of the two words to differentiate their uses (see Figure 4.10): “来自” in sentence 1 means “coming *from*” and it is followed by a place of origin whereas “来” in sentence 2 means “comes (*to*)”, followed by a place of destination. Although both sentences share the same subject

(“我的妈妈”) and place (“New York”), they depict the opposite trajectories: one is departure (sentence 1) and the other is arrival (sentence 2). Utilizing English/Chinese translation served as a scaffold to facilitate students’ contrastive analysis (“来自” vs. “来”) and deepen their understanding of the nuances of the two words in both Mandarin and English.

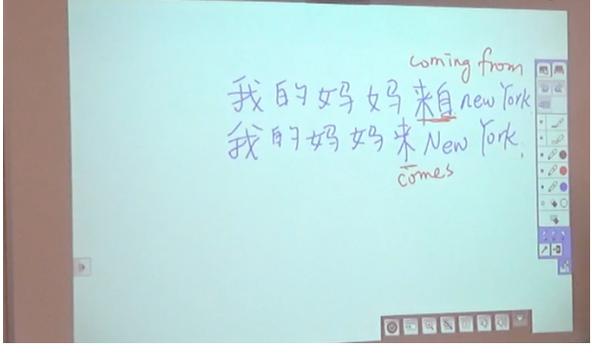
	我的妈妈 <b>来自</b> New York。
	My mom is <b>coming from</b> New York.
	我的妈妈 <b>来</b> New York。
	My mom <b>comes</b> to New York.

Figure 4.10 Pragmatic differences between “来自” vs. “来”

**Chinese Word Use Comparison – Student Participation.** Excerpt 4.2 demonstrated how Ms. Li and her students co-constructed the pragmatic differences between “来自” vs. “来”, using their full linguistic repertoire, both English and Mandarin, purposefully.

Unit	Speaker	Original	English translation
1	Ms. Li	请问这两个句子有什么不一样? [S1]哪里不一样?	[Ms. Li first wrote down the two sentences on the smartboard; students read aloud both of the sentences while she was writing.] Question – what’s the difference between these two sentences? [Many students raised their hands.] S1, what’s the difference? [She called on one student’s name.]
2	S1	(inaudible)	[S1 was explaining in a very low voice.]
3	Ms. Li	一个是有“自”，那这个没有。所以它是“来自”，那这个是“来”。可是还有什么不一样? [S2]。	[Ms. Li repeated what S1 just said.] So, the first sentence has one extra character “Zi” as in “Lai Zi” while the second one doesn’t have it – it’s “Lai” only. [Ms. Li underlined both words in the two sentences.] Any other difference, S2? [She saw S2 raise his hand.]
4	S2	“我的妈妈来自 New York”，她是从 New York [来]，可是她是在	[He was reading the first sentence] The first one means, she came from New York, but she’s here now at this point. However, [he

		这里在这个时间。可是“我的妈妈来 <i>New York</i> ”是她 <i>went to New York</i> 。	was reading the second sentence] this one means she went to New York. [Ms. Li jot down “coming from” above “Lai Zi” as S2 was talking.]
5	Ms. Li	哦，所以“来自”是 <i>coming from New York</i> 。所以她可能现在不一定是在纽约。她以前在纽约。	I see. So “ <b>Lai Zi</b> ” means coming <b>from</b> New York. She’s probably not in New York now. She was in New York.
6		这个是“我的妈妈来纽约”。这是说 <i>comes to New York</i> 或者 <i>came to New York</i> 。所以不太一样。	The second one is [she was reading the second sentence.] It means she comes <b>to</b> New York or came <b>to</b> New York. [Ms. Li then jot down “comes” under “Lai”.] So, they’re different.

Excerpt 4.2 “来自” vs. “来” in CLA class

As shown, Ms. Li first invited her students to contribute their thoughts (Unit 1 – 4). One student (S2) resorted to both Mandarin and English in making sense of the pragmatic difference (Unit 4). Building upon S2’s answer, Ms. Li then intentionally brought in English translations in both oral and written (on the smartboard) forms to reinforce her explanation of their uses (“coming from” vs. “comes/came to” in Unit 5 – 6). It should be noted that Ms. Li conducted this min-lesson primarily in Mandarin, but she also purposefully drew on English as a scaffolding tool to deepen students’ understanding and develop their metalinguistic awareness.

**Chinese and English Syntax Study – Activity Description.** The second activity we designed was a mini-lesson on Chinese and English syntax in February 2019. This emerged due to our observation of one common area that most students struggled with in their Chinese essays: the word order (specifically verb and place adverbial) in Chinese sentence structure. We speculated that this difficulty could be related to students’ dominant language (English) influence and therefore decided to juxtapose both languages together to explicitly study the word order differences and similarities in Chinese and English syntax.

In this lesson (see Figure 4.11), Ms. Li used one Chinese sentence that the students had just learned from their CLA class as an example – “我在美国出生”. Then she wrote its English counterpart (“I was born in America”) below for compare and contrast. Through underlining the different parts of each sentence (the subject, verb, and place adverbial) and using arrows to signify their positions in each sentence, Ms. Li directed the students to understand that both Chinese and English sentences start with a subject (“我/I”); however, in English, place adverbial (“in America”) is always placed after the verb (“was born”) while in Chinese, place adverbial (“在美国”) is usually placed before the verb (“出生”). Ms. Li purposefully used English in this scenario to make cross-linguistic connections and to deepen students’ metalinguistic knowledge in both languages.

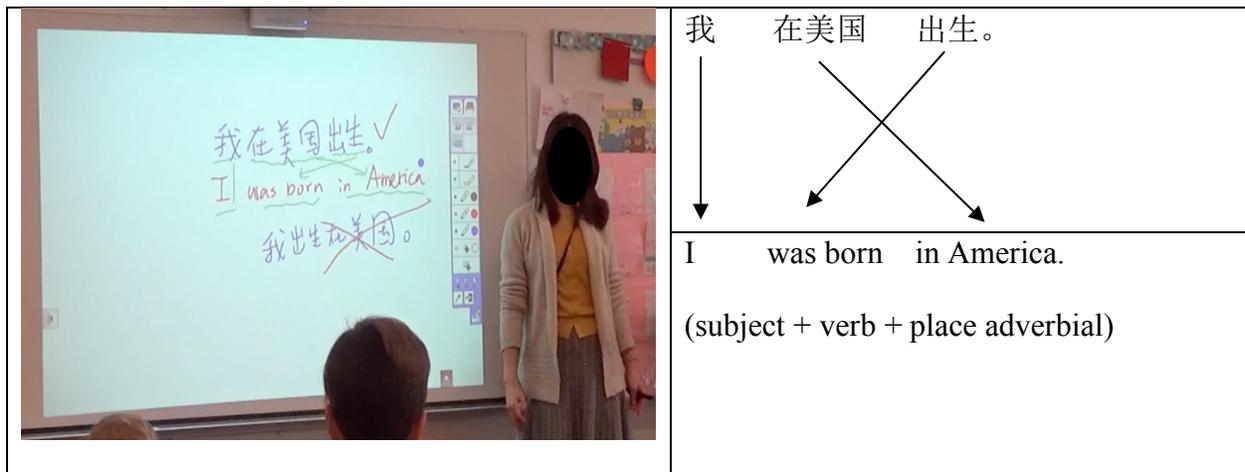


Figure 4.11 Chinese and English syntax study

**Chinese and English Syntax Study – Student Participation.** Excerpt 4.3 displayed the actual process of this mini-lesson: how Ms. Li guided students step-by-step to unpack the word order differences and similarities in the two Chinese and English sentence examples (“我在美国出生” and “I was born in America”).

Unit	Speaker	Original	English translation
1	Ms. Li	“我在美国出生”英文怎么说？	[Ms. Li wrote down the Chinese sentence on the smartboard.] “Wo Zai Mei Guo Chu Sheng” How do you say this in English?
2		“ <i>I was born in America.</i> ” 对不对？	[Some Ss were mumbling the English translation.] “I was born in America”. Correct? [Ms. Li wrote down the English translation below the Chinese sentence.]
3	Ss	嗯。	Yes.
4	Ms. Li	所以，第一个是“我”，这个也是“我”。	[Then Ms. Li started to compare the two sentence structures.] So, the first one starts with “Wo (I)” and the second one starts with “I” too. [She underlined the subjects in both sentences and used a line to connect them together: they are both at the initial position of the sentences.]
5		然后再来我要说“在美国”，	Next, let’s look at “Zai Mei Guo” [Ms. Li underlined the place adverbial in the Chinese sentence.]
6	Ss	“ <i>in America</i> ”.	“in America”. [Ss expressed that its English counterpart was “in America” and Ms. Li underlined it in the English sentence.]
7	Ms. Li	“ <i>in America</i> ” 在哪里？在后面，所以它跑到这里来了。	Where is “in America”? [Some Ss were mumbling.] It is at the end (of this English sentence). [Ms. Li then used a line to connect both place adverbials: they are at different positions.]
8		然后呢，我再说“出生”。“出生”在哪里？	And then, let’s look at “Chu Sheng”. Where is “Chu Sheng”? [Ms. Li underlined the verb in the Chinese sentence.]
9	Ss	“ <i>was born</i> ”.	“was born”. [Ss expressed that its English counterpart was “was born”.]
10	Ms. Li	“ <i>was born</i> ”. 所以变成这样。所以有一点点不一样。	“was born”. So, it’s here. [Ms. Li underlined “was born” in the English sentence and used a line to connect both verbs: they are at different positions.] So, the two (sentence structures) are a bit different.
11		一样的只有“我”对不对？“我”都在最前面，“ <i>I</i> ”在最前面。但是后面呢，有一点点不一样。你有发现吗？	Only “Wo” and “I” are the same, right? “Wo” is at the very beginning, and same is “I”. But the following parts are a bit different. Have you noticed that? [Ss were nodding their heads.]
12		所以在说中文的时候，你要说“我在美国出生”	So, when you say it in Chinese, do you say “Wo Zai Mei Guo Chu Sheng” or “Wo Chu Sheng Zai Mei Guo”? Which one is correct?

		还是“我出生在美国”? 哪一个是对的?	[Ms. Li wrote down a third sentence in Mandarin on the smartboard – “Wo Chu Sheng Zai Mei Guo” for comparison.]
13	Ss	“我在美国出生”。	“Wo Zai Mei Guo Chu Sheng”.
14	Ms. Li	哦，对。上面这个才是对的。下面的这个是不对的。因为中文和英文有的时候的顺序会不一样。你的动词跟你的地方要交换一下。你有没有想到什么句子也是这样?	Yes, the one above is correct. [She put a tick next to the Chinese sentence above.] The one below is not right. [She crossed out the Chinese sentence below.] Because the order of words is different in Chinese and English. You need to switch the position of your verb and place adverbial. Can you give some other examples like this?
15	Ss	[举例子]	[Ss gave out some similar examples.]
16	Ms. Li	所以下次你再说的的时候要 <b>说“我在美国出生”</b> 。地方先说。我在 <b>台湾</b> 出生。我在 <b>cafeteria</b> 吃饭。我在 <b>黎老师</b> 的班说话。地方要先说。	So, next time you need to say “Wo <b>Zai Mei Guo</b> Chu Sheng”. Say the place first. Wo <b>Zai Tai Wan</b> Chu Sheng (I was born in Taiwan). Wo <b>Zai Cafeteria</b> Chi Fan (I eat at cafeteria). Wo <b>Zai</b> Li Lao Shi De Ban Shang Shuo Hua (I talk at Ms. Li’s class). [Ms. Li was repeating some of the students’ examples.] You need to say the place first.

*Excerpt 4.3 Chinese and English syntax study in CLA class*

As shown from their dialogue, Ms. Li first elicited the English counterpart from the students by explicitly asking “英文怎么说? (How do you say it in English?)” in Mandarin. After writing down both the Mandarin and English versions of one sentence (“我在美国出生” and “I was born in America”), she used prompt questions in Mandarin and smartboard-writing to guide students to compare and contrast their syntactical differences (Unit 4 – 11). The students followed Ms. Li’s instructions closely to gradually figure out the different word orders in Chinese (S + Place Adverbial + V) and English (S + V + Place Adverbial). To test if the students really understood this mini-lesson, Ms. Li gave out another Chinese sentence following English word order (“我出生在美国”) and asked them which one was correct. The students answered correctly by choosing the one which put the place before the verb (Unit 12 – 13). Ms. Li also invited the students to give other similar examples in Chinese and English. The students then

participated in the discussion using their full linguistic repertoire and their knowledge from ELA and CLA (Unit 14 – 15). Some examples from the students were “我在 cafeteria 吃饭” (I eat at the cafeteria) and “我在黎老师的班说话 (I talk at Ms. Li’s class)”. Ms. Li repeated these afterwards to reinforce their understanding.

In this activity, Ms. Li purposefully brought two languages together for cross-linguistic analysis. She harnessed students’ home language (English) and their existing knowledge from ELA as resources to develop their metalinguistic awareness of both languages. This pedagogical move functioned as a bridge to help students make connections between Chinese and English to further facilitate positive transfer of linguistic knowledge. The students were more attentive to form and grammatical structure of Chinese and could potentially become more competent bilingual readers/writers.

### **Making Content More Accessible to All Students**

In addition to cross-linguistic analysis, Ms. Li and I also used English for making content more accessible to all students with varying levels of Chinese proficiency. This was manifested in many aspects of our class instruction across all content areas (CLA, Science, and Social Studies): bilingual Chinese (pin yin)/English vocabulary list, providing English for instructions on worksheets, and using English for individualized instruction in one-on-one tutoring.

**Activity Description.** The first example (see Figure 4.12) was two vocabulary lists from Social Studies class in March 2019. The students were learning to use key vocabulary, collocations, and sentence connectors to describe Pilgrims’ lives in written paragraphs. To make the vocabulary reference list more accessible to all students, Ms. Li also added pictures and/or English translations as scaffolding to some of the difficult Chinese words. The second example (see Figure 4.13) was a worksheet page from one CLA class. The first item in the left red box

was self-evaluation criteria for text reading. It listed all the basic requirements when students practice reading a Chinese text on their own (e.g., they need to read slowly, to circle the important words, and to put the words in chunks when reading). We chose to write it in English so that all students could get immediate access to what they were expected to do with this self-checking list. On this worksheet, we also made the instructions for each task more accessible to all students by using English and Chinese to different degrees – using English completely, providing both English and Mandarin versions, and offering English translations of the unfamiliar key word. The purpose was to make instructions as comprehensible as possible so that students could engage in academic tasks as quickly as possible.

Lastly, Ms. Li and I also integrated “translanguaging rings” as scaffolding when working with students in one-on-one groups. Given the different Chinese proficiency levels of our students, we used English orally to different extents when helping them with academic tasks on content area knowledge. For some students, we needed to use English to first review the major points from the lesson while for some, we only needed to use English occasionally for certain words. Our purpose was to provide individualized comprehensible input to make content accessible to all learners at different points of their bilingual continuum.

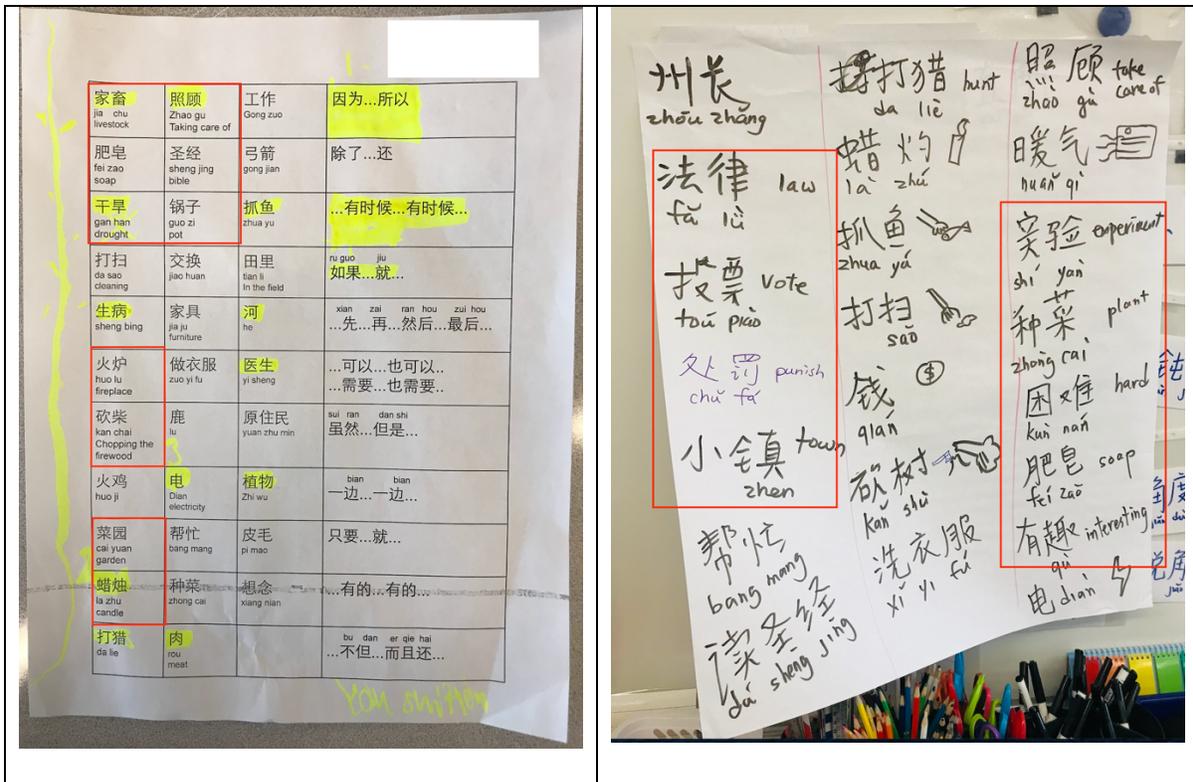


Figure 4.12 Vocabulary list from Social Studies class

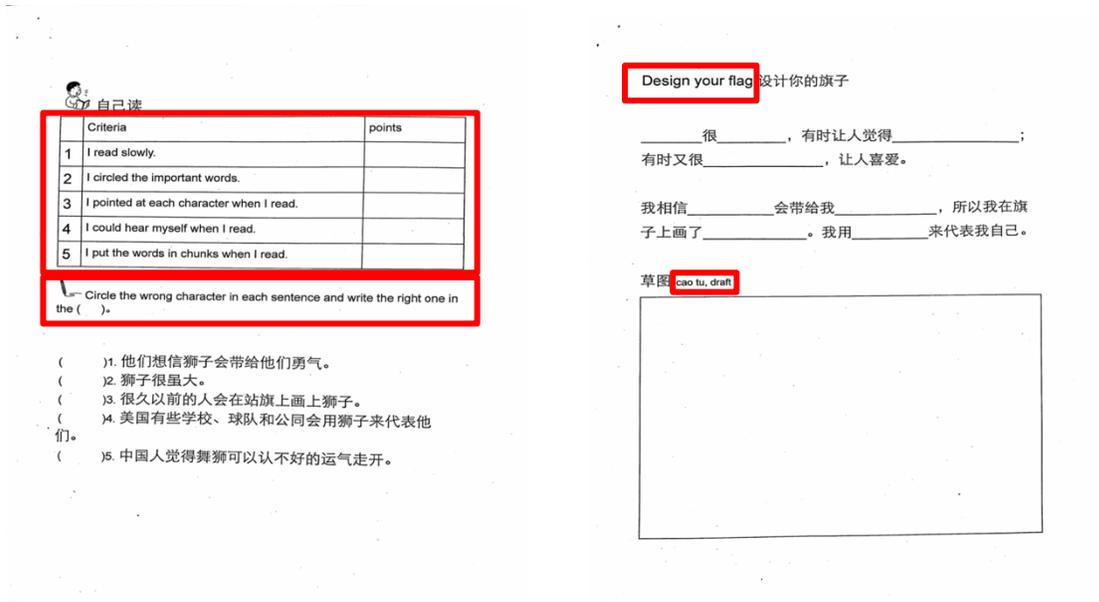


Figure 4.13 Worksheet from CLA class

**Student Participation.** These “translanguaging rings” in both oral and written forms cultivated a more equitable learning environment in which all the students with varying levels of Chinese proficiency were able to participate in and stay more focused on their academic tasks. To be specific, the bilingual vocabulary list provided students with multiple access (i.e., Chinese characters, pin yin, English translations, and/or pictures) to learn and understand academic (disciplinary-specific) Chinese words; students were more willing to experiment with using these words in their discussions and Chinese writing. With English translations provided for (some if not all) complex instructions on the worksheet, the students developed a clearer understanding of what they were asked to do and could engage in tasks in a timely fashion without spending extra time on asking Ms. Li for clarification. Using English as an individualized scaffolding in one-on-one tutoring especially helped some learners who had a lower Chinese proficiency “catch up” or review the content area knowledge that they did not grasp well during the whole group class instruction; however, due to the limited Mandarin instructional time and lack of teaching assistants, this translanguaging ring was not always available to all students. Overall, the students felt safe and engaged to express their ideas and to take risks with L2 (Mandarin) learning when content was made accessible to them.

### **Enhancing/Deepening Understanding of a Subject Matter**

In addition to making content more accessible to all bilingual learners, we also drew upon the work of Cen Williams (1994) to integrate translanguaging rings in our class instruction to enhance/deepen students’ understanding of a subject matter (which was our fourth pedagogical purpose in this category). According to Williams (2002, 2003), translanguaging in this context means deliberately alternating languages of input and output, and it often uses the stronger language to develop the weaker language. Processing information in a familiar language could

promote a deeper and fuller understanding of the subject matter and conveying that information in the other language (dual language processing) could develop learners' overall linguistic capacity in both languages (Lewis, Jones, & Baker, 2012a). Informed by this, we designed translanguaging activities in Science and Social Studies class where students were usually required to digest cognitively complex concepts. Given that our students were primarily English-dominant speakers, we integrated more input in their "stronger" language (English), such as reading English picture books and utilizing English videos, and then prompted them to produce output in their "weaker" language (Mandarin).

**Activity Description.** In September 2018, Ms. Li and her students were working on a science unit "weather". They first spent two to three sessions learning different weather conditions and how to express them in Mandarin. To enhance the students' understanding of this science concept and how it was related to human lives on the earth, Ms. Li added an English storybook reading "On the Same Day in March: A Tour of the World's Weather" in one following class (see Figure 4.14). As the title suggests, this picture storybook depicts what is happening on seventeen different places in the world (from the poles to the equator) – all on the same day in March.

What is worth mentioning was Ms. Li's structured reading patterns. She held the book in front of the students so that everyone could see the lines and pictures on each page. From page to page, she first read the English lines and then she provided some prompt questions in Mandarin for students to think about. Here is an example from my field notes.

Ms. Li first read the English lines on the page – *"In Xi'an China. In the park, the old men and small children guess: What will the wind carry today? Clouds of blue-winged swallows ... On the same day in March."* Then she guided the students to pay attention to

the picture cues and offered prompt questions in Mandarin, “三月的时候，中国有一个地方叫西安。看起来是这样的。哪里有下雨，哪里没有下雨，天空看起来怎么样呢？人们在做什么呢？他们穿的衣服是怎么样的衣服？你可以猜一猜现在的温度大约是多少吗？你觉得他们喜欢这个天气吗？(English translation: In March, there is a place in China called Xi'an. It looks like this. Did you notice which area has raining and which has not? What looks like in the sky? What are the people doing? What kind of clothes they are wearing? Can you guess what the temperature is now? Do you think they like the current weather?)” (field notes, September 21, 2018).

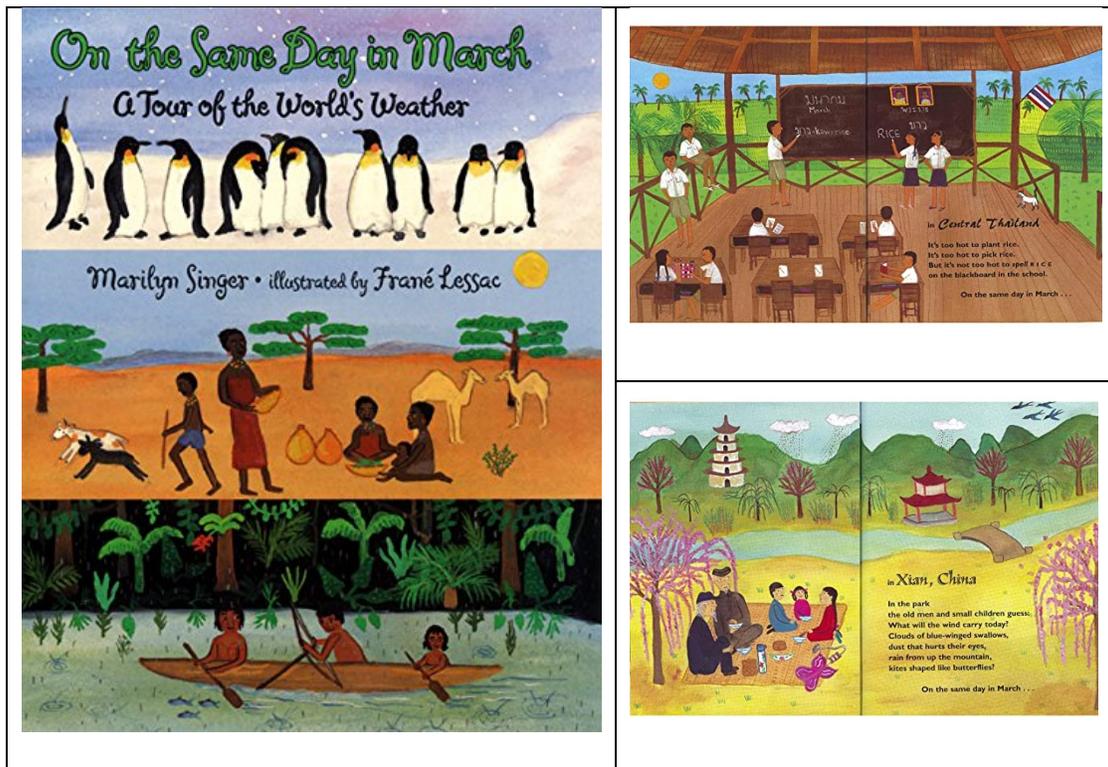


Figure 4.14 Picture storybook “On the Same Day in March”

As shown from the field notes, Ms. Li’s prompts aimed to help students develop a holistic understanding of the weather conditions on each page by directing their attention to the gist of English lines, the people and their clothing and activities, and the environment in the

picture. After the prompts, she paused for a bit (wait time for students to process information) and did not let students jump in the discussion right away. She continued with this reading pattern till the last page: reading in English (input) → prompts in Mandarin → pause for seconds. After the book reading was done, she conducted a whole group discussion in Mandarin. Students made conscious efforts to present their ideas in Mandarin (output), for example, the summary of the book (on the same day in March, different parts of the world are experiencing different weathers) and what weather conditions they learned from the story (rainy, snowy, tornado, sunny, etc.). Ms. Li provided recast of students' answers in Mandarin when and where necessary and in the end reviewed the key vocabulary describing common weather in Mandarin – 晴天 (sunny), 阴天 (cloudy), 大风天 (windy), 下雨天 (rainy), and 冰雨 (sleet), to name a few, with the students together.

**Student Participation.** The purposeful alternation of language input and output in this activity – reading in students' stronger language, English and prompting students to think in Mandarin and produce answers in Mandarin – contributed to students' engagement (from my observation – students actively raised their hands to share answers in discussion) and their understanding of science concepts in both languages (in this case, different weather conditions, the clothes people wear and the activities people do in response to weathers in various regions). The dual language processing is more than translation, but as Williams (2002, 2003) suggests, includes cognitive skills such as internalizing new ideas students hear or read in one language, assigning their own understanding to the concept, and simultaneously and immediately conveying the message in their other language(s) in spoken or written mode. This has the potential to deepen students' understanding of a subject matter, increase their overall linguistic capacity in both named languages from an integrated, holistic point of view of bilingualism

(Grosjean, 2010), and ultimately, expand students' linguistic repertoire to include more Mandarin features with explicit recast and instruction.

Similarly, in Social Studies class unit on "Wampanoags' lives" in December 2018, Ms. Li also incorporated an English picture storybook reading in the middle, using the same pattern for each page: reading in English → prompts in Mandarin → pause for seconds and then had class discussion in Mandarin. After a few sessions' learning and reinforcement on key vocabulary and sentence structures in Mandarin, the final project for students was to craft a short essay describing Wampanoags' lives in written Chinese. From the students' final works, Ms. Li and I found that many of them included details from the English storybook and were able to present them in Mandarin. This pedagogical practice of receiving (additional) information in English and producing written output in Chinese helped students build up their background knowledge and make (both linguistic and subject-matter concepts) connections between the two languages.

Besides reading English books, in other Science class, for example, the unit on "force and motion" in March 2019, Ms. Li first let students watch an English video explaining how gravity and friction works in the action of skydiving. Then they had a discussion in Mandarin to unpack how the forces shift during the process and how forces can change direction, speed, and movement. This alternation of watching a video in English and having discussions in Mandarin provided students with an easy access to understanding the complex science concepts and augmented their ability to present scientific arguments in both English and Mandarin.

To sum up, we have co-designed multiple translanguaging rings to strategically leverage students' home/dominant languages (English) as valuable recourses in class instruction across different content areas (CLA, Science, and Social Studies) based on different pedagogical

purposes. These translanguaging rings occurred in whole group discussion to foster a heterogeneous knowledge co-construction space; they also appeared as “the bridge” to build cross-linguistic connections and develop bilingual learners’ metalinguistic awareness. In addition, our translanguaging rings were not only applied generally in vocabulary list, word wall, and instructions on the worksheet to make content more accessible to all students, but also individualized to cater to different students’ linguistic needs in one-on-one groups. Furthermore, some translanguaging rings were in the form of strategic alternation of language input (English) and output (Mandarin) to organize and mediate students’ mental processes in complex academic tasks to further their understanding of a subject matter and augment their overall linguistic capacity. Based on our implementation, we have found that these teacher-initiated, purposeful translanguaging rings served as scaffolds to promote students’ engagement, maximize their learning opportunities, and help them develop both content knowledge and (meta)language skills.

### **Translanguaging Transformation**

In addition to creating translanguaging spaces in assessment (translanguaging documentation) and instruction (translanguaging rings), we also co-designed translanguaging transformation spaces where students’ home languages were seen as more than scaffolds but rich resources that were connected to their cultures, identities, creativity, and criticality (Li Wei, 2011). From our PDR data, translanguaging transformation was embodied in cross-disciplinary projects primarily (thematic design across different content areas) with more than academic goals: (1) to build family-school connections; (2) to develop students’ bi/multilingual and bi/multicultural identities and awareness; and (3) to foster critical consciousness. We created four projects based on these pedagogical purposes.

## **Building Family-School Connections**

**Culture Day Project – Activity Description.** The first one was a thematic literacy project called “Culture Day Project” that aimed to mobilize students’ full linguistic and semiotic repertoire fluidly and judiciously across named languages (English and Mandarin) and modalities. It was a cross-disciplinary design between CLA and Social Studies class. From late January to early February 2019 (in the time of Chinese New Year), Ms. Li and her students had learned things about different cultures and holidays people celebrate around the world (content) and words, sentences, and expressions related to cultures and holiday celebrations (language) in CLA class. Meanwhile, they had also learned about the concept of immigration and identity in Social Studies class. Therefore, we both agreed that it was a perfect time for students to explore and showcase their own culture and family holiday traditions to reinforce and apply what they had learned from CLA and Social Studies classes. We also wanted “Culture Day Project” to be more culturally and linguistically responsive to students’ home languages and cultures, and also to intentionally invite their family members (e.g., parents, grandparents) to participate in this process. We saw this as a great opportunity for family engagement and school-family and community knowledge co-construction.

The project lasted for approximately three to four weeks, consisting of six main steps (See Figure 4.15). Firstly, Ms. Li sent a letter to students’ parents explaining this upcoming project (its goals and guide questions) and explicitly mentioned that “Please help your child prepare for this project by talking to them about the family tradition, holidays they celebrate, etc.” The letter was written in English because almost all of the students’ family members were English speakers. Students could also read this letter to get a deeper sense and overall picture of this project. Next, we provided students with a worksheet written in English to help them gather

information for this project. Based on the key guided questions on the worksheet, students conducted interviews with their family members to learn about their family origins, one traditional holiday and its related cultural rituals, food, and clothing. Then students and family members were expected to work together to co-construct the information on the worksheet. During the second and third steps, students were encouraged to use their home or dominant language (English) in both oral and written forms to elaborate their family “funds of knowledge”. After information gathering, students came back to class with a specific holiday in mind that they wanted to present. They needed to “translate” the English information into Mandarin. A new worksheet with outlines written in Mandarin was provided, containing sentence starters and key questions to scaffold students’ writing process. One thing worth mentioning was that students were not doing simply word-by-word literal translation. Instead they were synthesizing and re-contextualizing their information into Mandarin, utilizing what they had learned from CLA class and their emerging metalinguistic awareness. Ms. Li and I were also by students’ side to provide help when and where necessary.

After hours of working, students needed to turn written worksheets into PowerPoint slides. Ms. Li provided a template (in Mandarin), including the structure of the presentation and sentence starters as scaffolds. Students could choose to add pictures and background color to enrich their own slides. The final step was to give oral presentation of their slides in class. We gave students adequate time for rehearsal. Some of them asked for more individualized help while some of them recorded themselves and improved their Mandarin oral skills by repetitively listening to their own recordings.

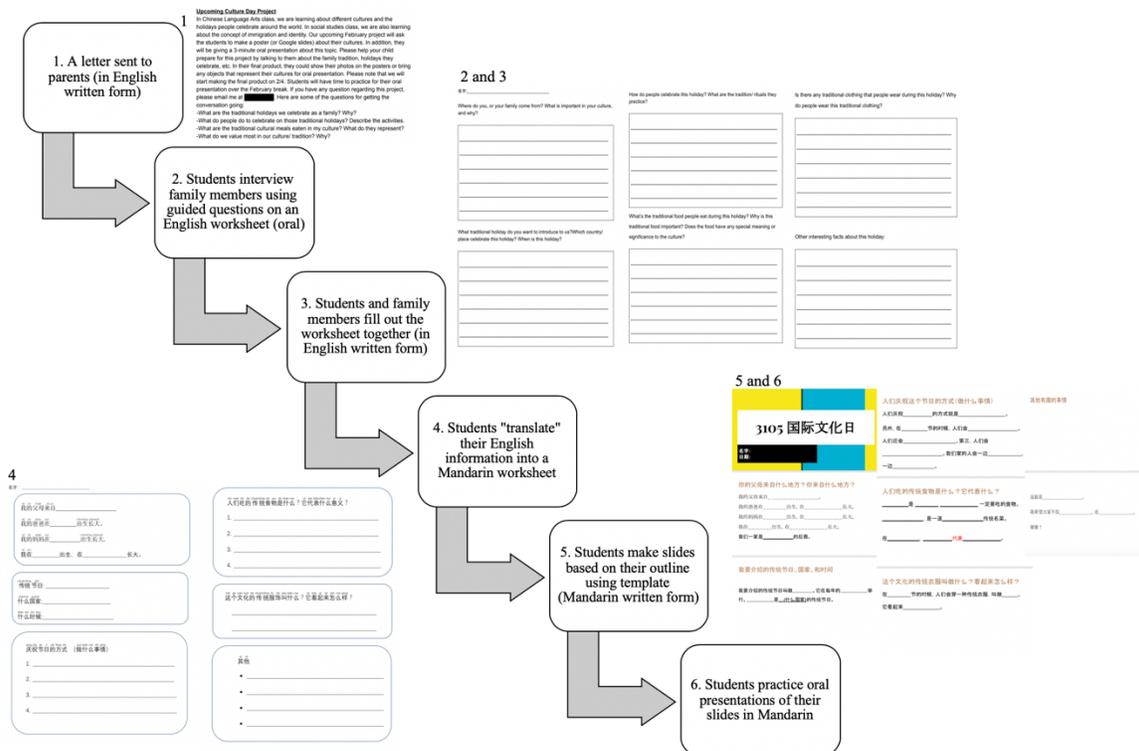


Figure 4.15 Steps for “Culture Day Project”

**Culture Day Project – Student Participation.** The students were very motivated during the process because (1) the project was relevant to their family and personal lives, and (2) they were able to use their familiar or full language resources in the drafting process; they moved flexibly and fluidly across various named languages (English and Mandarin) and modalities (written and oral forms) in different steps to showcase their bilingual skills and creativity. Figure 4.16 demonstrated how one student worked from his initial draft in English toward the final presentation product in Mandarin (his “culture day” was Christmas Day).

It was exciting to see the students exhibit their own “culture days” on the days of presentation. There were a variety of holiday traditions represented in our class – from China, Kazakhstan, Canada, and Irish and Jewish communities, to name a few (see Figure 4.17 for some student final works). We all learned from each other and expanded our knowledge repertoire

during this process, which contributed to building a more culturally inclusive learning community.

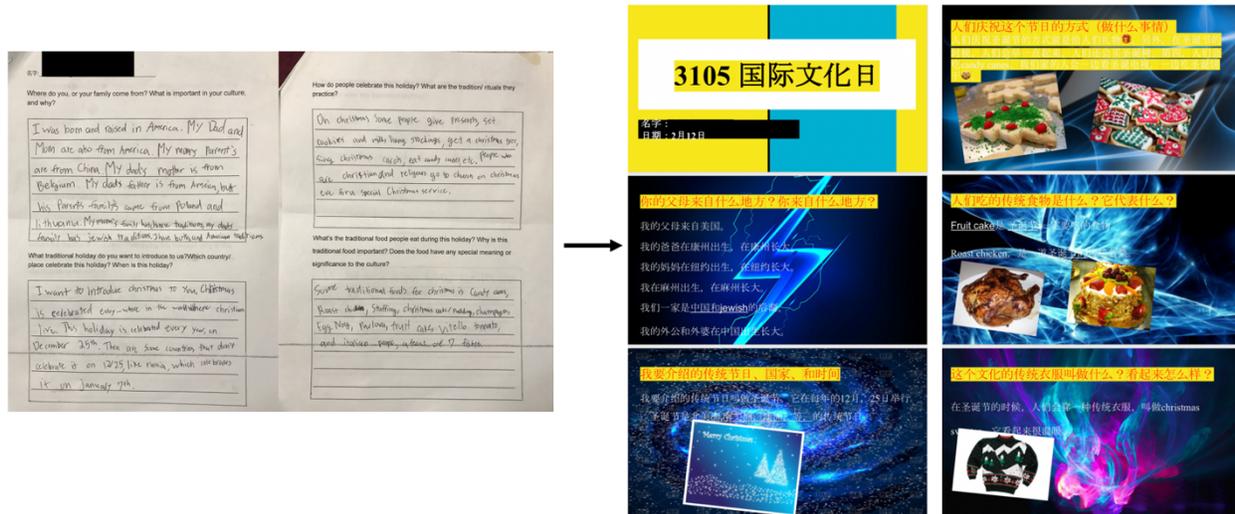


Figure 4.16 One student's "Culture Day Project" (from initial draft to final slides)

<p>我要介绍的传统节日、国家、和时间</p> <p>我要介绍的传统节日叫做Nauryz。它在每年的3月22日举行。Nauryz是Kazakhstan的传统节日。</p> 	<p>我要介绍的传统节日、国家、和时间</p> <p>我要介绍的传统节日叫做农历新年。它在每年的农历一月一日举行。农历新年是在全是界华人的传统节日。农历新年也叫做春节。</p> 	<p>我要介绍的传统节日、国家、和时间</p> <p>我要介绍的传统节日叫做加拿大天。它在每年的7月1日举行。加拿大天是加拿大的传统节日。</p> 
<p>Nauryz (Kazakhstan)</p>	<p>Chinese New Year (China)</p>	<p>Canada Day (Canada)</p>
<p>我要介绍的传统节日、国家、和时间</p>  <p>我要介绍的传统节日叫做中秋节。它在每年的八月十五日举行。中秋节是中国的传统节日，可是也有别的地方庆祝中秋节，好像台湾，Singapore，Malaysia，等地方。</p>  	<p>我要介绍的传统节日、国家、和时间</p> <p>我要介绍的传统节日叫做passover。它在每年的春天举行。passover是Jewish的传统节日。</p> 	<p>我要介绍的传统节日、国家、和时间</p> <p>我要介绍的传统节日叫做元宵节。它在每年的农历一月十五日举行。元宵节是台湾和中国的传统节日。</p>  
<p>Mid-Autumn Festival (China)</p>	<p>Passover (Jewish)</p>	<p>Lantern Festival (China)</p>

Figure 4.17 Some student final works – different "Culture Days"

Generally speaking, the whole project was based on a flexible multiple (instead of separation) model of biliteracy (García, 2009) in which students' full linguistic repertoire were

leveraged during the whole complex and dynamic process of meaning making. Through engaging in moving across different named languages and modalities (spoken and written modes) in a dynamic and functionally integrated manner, students not only developed their bilingual and biliteracy skills, but also started to see themselves as dexterous and competent bilingual readers/writers. In addition, this project was beneficial to building and strengthening family-school connections: family members could still participate in their children's learning even though they did not speak the L2 (Mandarin) the children were developing; Ms. Li learned more about the students' family background and also cultivated learners' (inter)cultural awareness and social identity development, promoting them to think about their family heritage and who they were – for example, the notions on cultural/language broker and sense of belonging to cultural community.

### **Developing Bi/Multilingual and Bi/Multicultural Identities and Awareness**

**Language/Culture Portrait – Activity Description.** After students showcased their family cultures and traditions on “Culture Day” presentations, Ms. Li and I found that this provided another great opportunity to further engage students to explore their own cultural and linguistic identity (to take an introspective lens on “who you are”). I mentioned to Ms. Li about one small activity I always enjoyed doing with my graduate students in Bilingualism class – “Language Portrait” (Busch, 2012) (see Figure 4.18). Through drawing, mapping, and explaining, students engage in multimodal ways to reflect on their thoughts and feelings about their language experiences and practices to develop multilingual awareness. Ms. Li and I further adapted this to “Language/Culture Portrait” to make this project more inclusive and applicable to third graders in our classroom (although the majority of our students were English-dominant

speakers, they most came from bi/multi-racial backgrounds), not limited to linguistic variety experiences, but also mixed cultural representations.

- Language Portrait Assignment**
- The purpose of this assignment is for you to reflect on your thoughts and feelings about your language resources and practices. Consider the following questions; then color in the portrait below to illustrate your language culture experience.
1. What languages and varieties of languages make up who you are? Be sure to consider the various dialects and/or registers that also make up who you are within your language repertoire?
  2. Consider your thoughts and feelings with respect to your language practices. What colors and/or patterns would you use to represent what you think and feel about your languages/language varieties?
  3. Using the colors and patterns you associate with your thoughts/feelings about your language practices, how and where on your body would you "map" your language practices?



*Figure 4.18* Language portrait activity from my graduate class

In one CLA class in late February 2019, Ms. Li firstly demonstrated her language/culture portrait to the whole class as a modeling practice (see Figure 4.19) before letting students work on their own ones. She walked the students through the different parts of her body portrait. For instances, (1) most of her body parts (face, legs, etc.) were painted in green, which represents Taiwan, because she looks like Taiwanese and she was born and grew up in Taiwan; (2) red represents the United States and she put red in hands and feet because she usually plays squash and rock climbing which are typical American sports; (3) her heart is half green and half red because both parts play an equally important role in her daily lives; and (4) her tummy has different colors because she likes meals from different countries/cultures – Taiwanese, Japanese, Korean, French, Spanish, and American dishes.

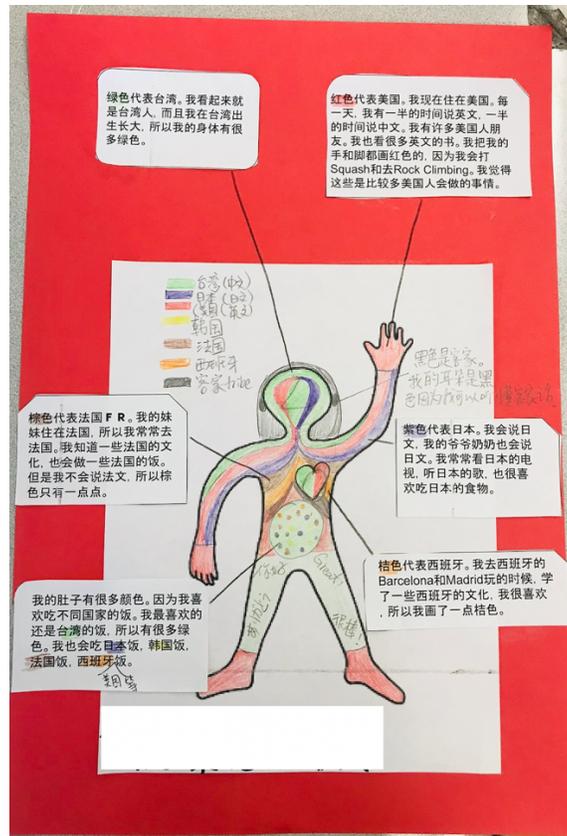


Figure 4.19 Ms. Li's "Language/Culture Portrait"

Students were amazed by Ms. Li's colorful portrait and then Ms. Li explained that, "Now it is your turn to draw your own language/culture portrait. You can decide to use what colors to represent what parts of your body. There is no right or wrong. It is who you are and yours may look very different from mine. (English translation)" She also added explicitly that for the written parts to explain the rationale, students can choose to write in Mandarin, English, or mix of both. The key was to "explain a lot and include as many details as possible to show what you think; you will get the same credits regardless of your language choice (English translation)". Our goal was to provide a translinguaging space in which students could draw on their whole linguistic and semiotic resources to bring their full selves in this self-exploration activity.

**Language/Culture Portrait – Student Participation.** We were surprised by the students' finished products, not just due to their creativity (which we had already known and

never doubted), but also that this was a precious learning experience for us as educators – getting to know more about our students and their distinct multicultural and multilingual repertoires. Some of the students wrote their explanations in Mandarin and some in English. They were all agentive meaning makers showing their stories. In later individual interviews with some focal students, I was curious about their language choices in this activity. It was very interesting to hear students’ perspectives on why they chose Chinese: one student expressed that she was trying to use as much Chinese as she can because this was a Chinese class and this activity was a great opportunity to practice Mandarin; another student said that she always liked challenging herself and chose the harder one when there were choices. For students who chose English, one main reason was “I feel like it is easier because I know more English than Chinese” (they were able to elaborate their thoughts more in their stronger language, English).

Below I show three of the students’ language/culture portraits (see Figure 4.20). As seen, the top one was written in Chinese while the bottom two in English. Although their stories varied, all of them demonstrated students’ development of (emergent) bi/multicultural and bi/multilingual identities.



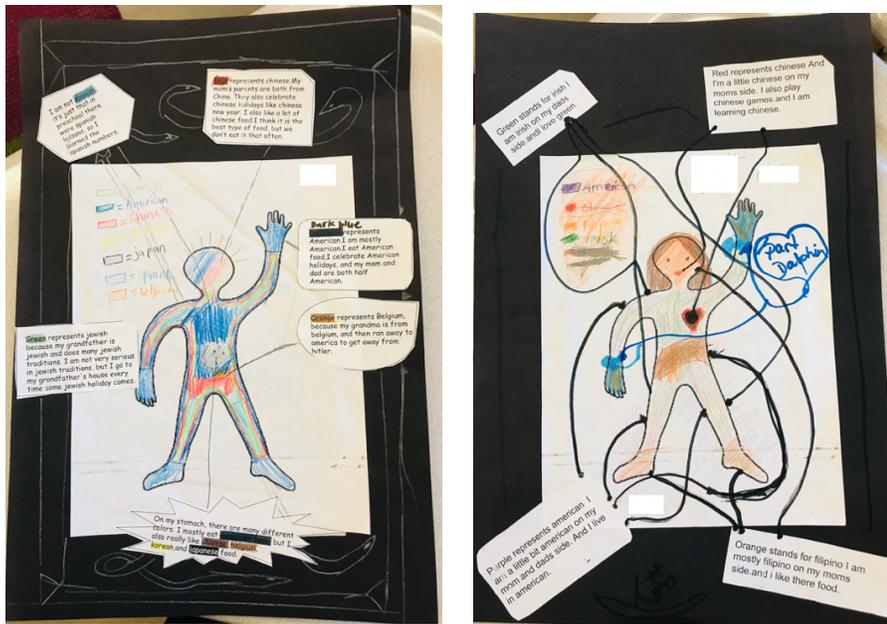


Figure 4.20 Three of the students' language/culture portraits

In the top one, the student painted her portrait with three main colors: blue, black, and purple. All these colors are (sort of) spread out evenly across her body. According to her explanation in Chinese, blue represents Japan because her paternal grandparents originally came from Japan and she loves Japanese culture and food and also speaks Japanese (which was new knowledge to Ms. Li and me). Black represents Taiwan because her mom and maternal grandparents originally came from there. Red represents America because she was born and grew up here. She felt America was very safe and enjoyed her life here.

In the bottom left, the student used six colors to represent his identity and he explained in detail how “strong” he felt with each cultural community. For instance, “I am *mostly* American. I eat American food. I celebrate American holidays”, “I am *not very serious* in Jewish traditions, but I go to my grandfather’s house every time some Jewish holidays come”, “I think (Chinese) is the *best type of food*, but we don’t eat it that often”, and “I am *not* Spanish. It’s just that in preschool there were Spanish lessons” (emphasis added). It was also interesting to see that he included his family history as well – “Orange represents Belgium, because my grandma is from

Belgium, and then ran away to America to get away from Hitler”. Overall, this student associated strong ties with American culture. Different from the bottom left, the right one identified herself strongly with Filipino culture. She used orange to represent that cultural component and explained that “I am *mostly* Filipino on my mom’s side”. She saw herself “*a little* Chinese” and “*a little bit* American” (emphasis added). She also included Irish culture using green color as part of her portrait.

In general, it was a joyful learning process for Ms. Li and me to look at each portrait and we then decided to do an exhibition of all the students’ language/culture portraits (see Figure 4.21). This “Language/Culture Portrait” exhibition lasted for several weeks in the school year. Students from Ms. Li’s class and other classes in the same school all got an opportunity to learn from each other, which contributed to building an inclusive multicultural and multilingual community. In later interviews with focal students, many of them shared their enjoyment throughout the whole process. One student said, “it’s fun because you get to show your secrets to other people and it’s fun to show it in a way of coloring not actually telling”. He also shared his reflections on the exhibition – “I like it because then I know where they came from, where they are. It’s helpful to learn that they have different cultures, so we can treat them not bad, like all that”.



Figure 4.21 Language/Culture Portrait exhibition

**Pen-Pal Project with a Hong Kong School – Activity Description.** The third cross-disciplinary project we co-designed was a pen-pal project. Thanks to Sunny Man Chu Lau’s introduction, we established our “writing partnerships” with an English-medium all girls’ school in Hong Kong (HK) in early March 2019. We had 20 third graders from our class participating in this project and they had 26 students from Grade 7 (secondary level; 12-14 years old on average) who were interested in being pen-pals. Therefore, some of the students in our class got paired up with more than one student in HK. During our previous email correspondence with the HK school administrators and the teacher, both parties were very keen on this project and we saw it as an opportunity for students to not only hone their bilingual and biliteracy skills in an authentic way, but also develop cross-cultural/-linguistic competence and forge transnational friendships. We opened up a translanguaging space where students could choose to use any linguistic and semiotic features from their repertoire for communication (which could contribute to developing bilingual reader/writer identities and awareness). The teachers from both sides served as moderators to facilitate the process and provide help when and where necessary, such as generating meaningful topics for students to write about, offering linguistic support during the writing stage, and collecting digital letters for exchange via emails (because our third graders did not have their personal email accounts yet).

**Pen-Pal Project with a Hong Kong School – Student Participation.** Given the time constraints, we did two rounds of pen-pal letter exchange from late March to mid-June 2019. The HK school first sent their letters to us in late March and next we replied in April. Then we continued with this pattern one more time in May and June. In the first round, all the HK students chose to write in English, which could be due to that they were in an English-medium school and they wanted to practice their English skills, especially knowing that they were writing

to pen-pals in America. In their letters, besides doing self-introductions, they shared their hobbies (including sports and favorite places and food in HK) and the busy school life in HK (such as many school subjects to learn and heavy homework). They were also very curious about their pen-pals' interests, life in the New England area, and school life. In our first round of response, almost all of the students chose to write in English except for one student (he wrote in Mandarin). They introduced themselves, responded with their hobbies and likes (sports, games, food, books, and animals), and shared their school and living experiences. They also included pictures, emojis, and more questions for their HK pen-pals. From their words, Ms. Li and I could tell their genuine interests, excitement and curiosity.

In our second round of pen-pal exchange, to make this activity more beneficial to our students (which means that our third graders could still learn and/or practice Chinese in the process), I proposed an idea to the HK teacher via email:

“For our second-round pen-pal exchange, I was wondering if the HK students could introduce some common phrases/words (in Cantonese/Mandarin) to our third graders if our students are going to visit HK as tourists? Our students are English-dominant speaking students and they'd love to learn more Mandarin/Cantonese phrases and the HK culture. Also, I think for your students, it will be a good exercise for them to learn how to explain Cantonese/Mandarin phrases in English to convey the meanings and culture connotations (email communication on April 27, 2019)”.

By making this pen-pal communication a bit more structured (but not tightly prescribed), my goal was to create reciprocal learning opportunities for students from both sides while maintaining the authenticity of conversation. In theory, our students can learn more Chinese language and culture from the HK students and vice versa, we can teach them more English and

American culture. Everyone would then feel empowered to draw upon and share their “funds of knowledge” with shift positions of expertise and would continuously expand their cultural and linguistic repertoire.

We received the letters from the HK school in May. In addition to addressing questions from our students, they were excited to teach our students Cantonese, Mandarin, and even “Chinglish” phrases. Below I select four excerpts from the HK pen-pal letters (see Figure 4.22). As shown, they were introducing common phrases in daily lives and expressions based on shared interests. They also included how the words should be pronounced in Cantonese or Mandarin and the English translations. What was interesting was that the last student chose to share some “Chinglish” – “add oil”, a local language variety for daily communication. Clearly, the student also did research and included detailed explanations in the letter. She also demonstrated emerging metalinguistic awareness because she was aware of the contextual limits of using this kind of expression – “I don’t really suggest you use this word in your writings”. Overall, Ms. Li and I were very intrigued by their linguistic dexterity.

English was not my first language. We use cantonese in Hong Kong. I will teach you two simple cantonese here. First, the cantonese of 'hello' is '早晨', it named 'joe san'. Second, the cantonese of 'bye' is '再見', it named 'joy geen'.

Did you have mandarin class in schools? We have mandarin class in Hong Kong. Since you love soccer and want to be a soccer player when you grow up, do you have any idols that are soccer players? I want to teach you about how to tell others your favourite idol in mandarin.

我喜欢的偶像是\_\_\_\_\_。

Pinyin : Wo xi huan de ou xiang shi \_\_\_\_\_.

It means : My favourite idol is \_\_\_\_\_.

Great to know that you learn Chinese Mandarin few days a week. Your Chinese Mandarin must be very good. May I know your origin? I had Putonghui assessment last week. So, if we meet, we can also communicate in Mandarin. Well, let me teach you some Chinese “我希望好快見到你!” Do you know what it mean? It means “I wish I can see you soon”.

In this letter, I would like to share with you some “chinglish”. For example, “add oil”(“ga yau”). It was widely used nowadays in Hong Kong. According to the information I searched, it represents the metaphor of injecting fuel into a tank, or alternatively, stepping on an accelerator to propel a vehicle forward. But the use of “add oil” as an expression of encouragement is a creation of Cantonese: *ga yao*, or *jiayou* in Mandarin. Often accompanied by exclamation marks, it is a versatile phrase Chinese speakers use to express encouragement, incitement or support, somewhere along the lines of “keep it up” or “good luck”. Although the word “add oil” was added into the Oxford dictionary a long long time ago, I don’t really suggest you use this word in your writings.

*Figure 4.22 Excerpts from the HK pen-pal letters*

In mid-June, Ms. Li had to return to Taiwan for a family matter and students were busying with school talent show preparation before summer vacation. It was a shame that we could not find enough time and provide scaffolding for students to work on their reply letters, although some of them managed to complete their letters. We still shared the finished ones with the HK school and all the letters were written in English with one exception in Mandarin. In their responses, the students talked about their science field trips to Charles River from their Science class with varying details (see Figure 4.23), which was my proposed idea to see if they could summarize what they had learned in Mandarin into English (the alternation of the languages of input and output to enhance their content learning). Some of them were also excited to share their talent shows and summer travel plans.

I went on a trip to the ~~Charles River~~ a few days ago and what I saw was fish, clams, and a lot of weird birds but unforchintly I couldn't find a frog.

I hope you can come to boston soon! I highly suggest it here, although there is a high percentage of trash, there are many great sites and animals here! For example, The Charles River, it's polluted, but you can still see the beauty of the charles river! This beauty isn't just because of the bridges, and plants around it, it's also because of all the animals around it, inside it, and on the surface of it.

*Figure 4.23* Two pen-pal excerpts from the third graders

I wish we could continue with this pen-pal partnership for a longer time (it was also too short to claim positive effects of this writing partnership). Students from my focal interviews also expressed their enjoyment and wished that the letter turnaround time could have been quicker. However, with the closure of school semester in late June and students moving up to fourth grade with a different teacher in September 2019, it was hard to sustain the relationship. Looking back, I definitely saw some missed teaching opportunities especially from the second round of HK pen-pal letters that could have potential to develop students' metalinguistic awareness and criticality and further foster their emergent bilingual/translingual identities. For instance, we could have had a critical conversation around "traditional vs. simplified Chinese characters" with our third graders because the characters that the HK students used in their letters were traditional ones whereas our students were learning simplified ones. Ms. Li and I actually had a conversation around this topic in May and we both agreed that it would be very interesting to hear our students' perspectives because in America, or more specifically Chinatown, they also got exposed to many traditional Chinese characters. Based on their mixed experiences, we could ask – Can they still recognize the traditional ones? Why or why not? Why are we learning

simplified ones while the students in HK are still learning the traditional version? What is the history and relation between these two?

We could also have had conversations on HK as a post-colonial site and the implementation of trilingual language policy (Cantonese, Mandarin/Putonghua and English) in current HK schools. The Cantonese and “Chinglish” expressions shared by the HK students in their letters could have served as the basis of such dialogue. Questions can be like – Do you know why HK students learn three languages? Are “Cantonese” and “Mandarin” both considered as “Chinese”? How are they similar to and different from each other (like pronunciation and word expressions)? What is “Chinglish”? Why do you think the students in HK use “Chinglish”? Have you ever used or encountered “Chinglish” in your life? If so, any examples? Is it appropriate to use them in writings?

I firmly believe that third graders are more than capable of having these discussions with teachers as mediators. These conversations can also build upon and extend the themes of our previous CLA and Social Studies class sessions on culture, immigration, and identity. Having these dialogues could cultivate a (critical) “translingual awareness” of Chinese language among students – in other words, recognizing that Chinese is not a monolithic entity; it is dynamic and in a flux of change; it can be blended with other languages in creative forms to convey new meanings (e.g., Chinglish); and it has different varieties like Mandarin, Cantonese, and Hakka. Further, being Chinese heritage can mean a multitude of different things (it is a heterogeneous cultural community rather than a homogeneous one). In general, this pen-pal project could have opened many possibilities to help students flourish as bi/multilingual individuals and held a great deal of transformative potential for both parties beyond academically.

#### **Adding a Fourth Goal: Fostering Critical Consciousness**

In Cervantes-Soon et al.'s (2017) critical review of research on two-way immersion (TWI) programs, they propose to add a fourth pillar: to develop *critical consciousness* to combat the existing inequalities and empower marginalized communities with explicit social justice goals, in addition to the three foundational goals of bilingualism and biliteracy, high academic achievement, and multicultural competence. They call for all stakeholders (TWI children, parents, teachers, and school leaders) must “study the effects of power relations in language education in order to transform pedagogical stances, positions, and curricula” (p. 419-420). In Palmer et al. (2019), they reiterate the importance of centering “critical consciousness” in TWI curriculum and specifically define it as “the ability to *read the world* (Freire, 1970): to reflectively discern the differences in power and privilege rooted in social relationships that structure inequalities and shape the material conditions of our lives; to *read the world* also includes recognizing one’s role in these dynamics” (p. 3, original emphasis). They further promote four pedagogical ways of promoting critical consciousness – interrogating power, critical listening, historicizing schools, and embracing discomfort (see more details in the article) – in a “praxis cycle”, an iterative, cyclical process of engaging in dialogues, taking collective actions for social justice, and then returning to reflection and dialogues.

Informed by this, I argue that adding a fourth goal: critical consciousness should be extended to all dual language program types including both one-way and two-way ones to support increased equity and social justice in bilingual education. By way of reminder, the third graders from our class were primarily English-dominant speakers from highly educated families or families with middle to high socioeconomic status (SES). Many of them were biracial (Asian and White) and White. In short, these children came from very privileged backgrounds from a societal perspective. Ms. Li and I, thus, thought it was more than important to foster their critical

consciousness in Social Studies class – to develop their basic understanding of social relations and imbalanced power structures in the U.S. society and ability to interrogate them and be empathize with people from minoritized communities. We also saw that integrating a translanguaging space could facilitate these conversations to happen in which students could focus on their meaning making without limitations to one named language.

**“Privilege” and “Empathy” Activity – Activity Description.** We conducted this activity in January 2019. An overview of the specific steps is described in Figure 4.24. As shown, this activity consisted of three main stages: (1) Ms. Li firstly engaged students in an experiential (unfair) game “paper ball boss”; (2) then she led a post-game reflection with the whole class, explaining its symbolic meaning and introducing the concepts of “privilege” and “empathy”; and (3) finally, students were asked to write their own reflections on exit tickets.

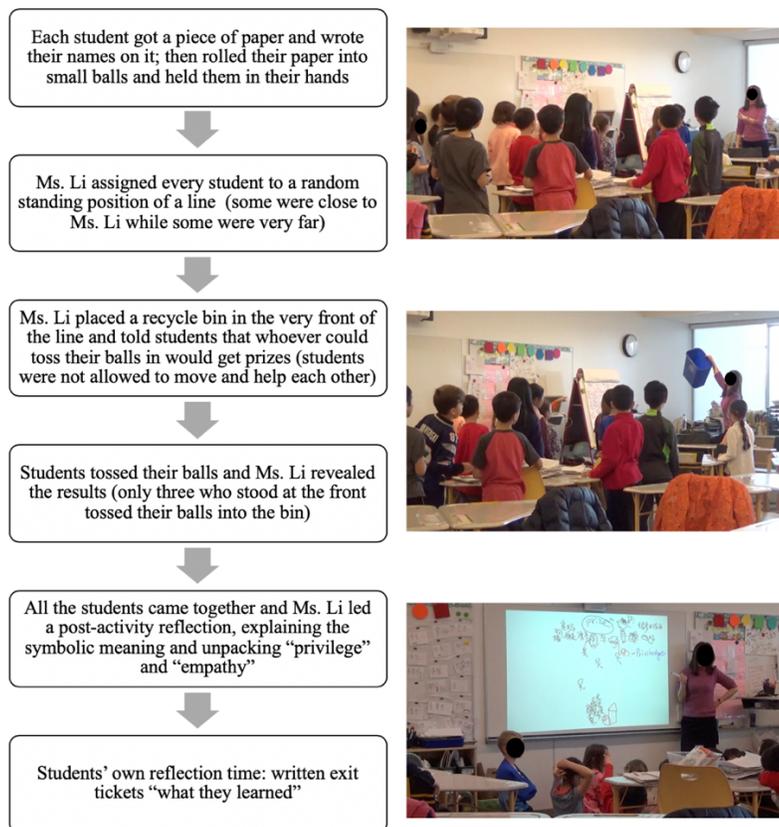


Figure 4.24 An overview of the steps of the “privilege” and “empathy” activity

During the whole process, Ms. Li consistently performed as the target language model: she gave instructions, asked questions, and recast students' answers all using Mandarin with the use of non-linguistic strategies to enhance students' understanding, such as body language and drawings on the smartboard. Students, however, were allowed to use their full linguistic repertoire to participate: they could use English or Mandarin to voice their concerns during the game and share their thoughts in the class discussion; also, they could make their own linguistic choices to write down their reflections in the exit tickets. The main goal was to build up their emergent critical consciousness in a translanguaging space (without limitations of language use) through a praxis cycle "action (simulation game) → dialogues and discussion (whole class) → individual reflection (exit ticket)".

**“Privilege” and “Empathy” Activity – Student Participation.** During the first stage of the “paper ball toss” game, all the students participated actively: when they heard from Ms. Li about the prizes, they were very excited; however, when they saw the bin was placed at the very front and no one was allowed to move, they had a heated discussion about the unfairness of the game and how to make it fairer. They used Mandarin and English to different degrees to share their concerns and ideas: some of them suggested passing the balls from back to front and asking the front person to toss their balls on behalf of everyone; some of them recommended to stand in a circle and place the bin in the center to make this game fair to everyone. In the end, Ms. Li asked them to toss their balls without helping each other, and not surprisingly, only three of them who stood very close to the bin succeeded. Ms. Li asked how the students were feeling and there were frustration, anger, and sadness from their faces.

In the second stage of post-game reflection, Ms. Li started to unpack the symbolic meaning of the game with the students together. Students contributed their answers using both

Mandarin and English fluidly to form a translingual knowledge co-construction space (Lin, 2017) with emphasis on meaning making. They gradually developed a deeper understanding of “prizes” as a lot of money, big houses and cars, good appearances and so forth in real lives, and that some people were born “at the front” with an easy access to these “prizes” because of their parents whereas some were born “at the back” with limited resources.

Ms. Li then introduced an English word to the whole class “*privilege*” and wrote it down on the smartboard, explaining in Mandarin that the people who were born with many benefits without making efforts are called “privileged” (like the three students who were at the front lines and successfully tossed their balls in). It should be noted that Ms. Li intentionally chose English word to present this concept (although she consistently used Mandarin in class discussion) because she thought that the English word carried specific social connotations in the U.S. society and would resonate with students’ background knowledge more easily to facilitate their understanding compared to the Chinese word (优越权) – the students may have had already heard of this word “privilege” from their ELA class and social media in daily lives (she explained this to me in our after-class debrief meeting that day).

With a basic understanding of what “privilege” was, Ms. Li added that in the U.S., skin color being white (race) and being a male (gender) are also privileges, and then she guided students to reflect upon themselves and their family’s positions in the U.S. society. Students actively talked about their parents’ educational background and occupations, and their family’s living conditions, using Mandarin and English to different degrees. Many of them realized they had already enjoyed many privileges in the society, such as being able to go to school, being able to sleep at a house, and having parents with stable income. One student then raised a question – “Can the people at the back move up to the front through their own efforts?”, which advanced

the class conversation to a new level on “upward mobility”. Ms. Li said yes and elaborated that everyone should make efforts on their own to move upward. But at the same time, she also reminded the students of the existing social inequality: the people who are at the back of the line need to make more efforts to get the “prizes” compared to the people who are already at the front. Ms. Li finally introduced a second concept “empathy” in both English and Mandarin, hoping students to be grateful for what they have and know to put themselves into other “less fortunate” people’s shoes to offer help.

Moving to the final individual reflection stage of exit tickets, each student was given a piece of paper and asked to share what they had learned from the game and class conversation in whatever language they felt comfortable with (Mandarin, English, or both). The key was to include as many thoughts as possible. As expected, all the students chose to write in English to convey their ideas. As shown from the two of the students’ reflections below (see Figure 4.25), some common themes were (1) recognizing the inequalities existing in the society – “*Some people can be very lucky, can have whatever they want & some people have to sleep outside*”; (2) being aware of our own privilege and grateful for that – “*we should all remember that there are people who are less fortunate and that we should always be thankful for how much we have*”; (3) believing in hardworking for upward mobility – “*everyone can move up if they work hard*” and “*even if you are at the bottom, if you work hard you can still make it to the top*”; and (4) helping others who are in need – “(everyone should) *help those who need more help*”. Overall, we were happy with the process and results of this activity. Students demonstrated their understanding of “privilege” and “empathy” and displayed their emergent “critical consciousness” – an awareness of social inequalities that surround us and a readiness to take actions to correct them.

I learned that people are very... different.  
 Some people can be very lucky, can have  
 whatever they want, & some people have  
 to sleep outside!!! But the people at the  
 very top don't see the other people at  
 the bottom. They just think why does  
 he/she have more stuff!!! I think every one  
~~we~~ should be thankful & help those who need  
 more help. Also, every one can move up  
 if they work hard, but people can  
 also move down. If they don't  
 work hard they could move down  
 till they are at the very bottom.  
 EVERYONE should be thankful (And if your at  
 the bottom, more)

I learned that sometimes people who are very  
 fortunate, forget how privileged they are. I  
 think that we should all remember that there are  
 people who are less fortunate and that we  
 should always be thankful for how much we  
 have. I also learned that even if you have  
 a lot of stuff and money, you might  
 not always be at the top. If you stop  
 working hard and making good choices,  
 then you might slowly get less and less  
 fortunate. I think that the moral of this  
 lesson is that even if you are at the bottom,  
 if you work hard you can  
 still make it to the  
 top.

Figure 4.25 Two of the students' reflections

As Cervantes-Soon et al. (2017) and Palmer et al. (2019) suggest, it is important to add a fourth pillar: critical consciousness to DLBE programs to develop bilingual students' ability to read the world with critical minds. We firmly believe that with proper activity design and guidance from teachers, early grade students are able to engage in difficult conversations and develop criticality. One effective way of doing this that we have found is to combine "praxis cycle" and "translanguaging space" together – provide students with multiple opportunities to engage in simulation activities (a learning activity that is designed to reflect a real situation or system, like the "paper ball toss" game) and to discuss and reflect on the inequality issues in a safe, inclusive learning space that allows students to draw on their full communicative repertoire for complex meaning making.

To summarize, I presented four projects in this section to illustrate translanguaging transformation spaces and their affordances: culture day project, language/culture portrait, pen-pal project, and "critical consciousness" activity. In these projects, students' home/dominant languages were not only seen as tools for scaffolding, but as rich meaning making resources that were intertwined with their family histories, community traditions, and culture values.

Translanguaging pedagogies therefore opened up a heteroglossic space that allowed students to bring their full selves and cultural and linguistic funds of knowledge to engage in academic tasks. Translanguaging also held transformative potential to develop their multilingual and multicultural awareness and positive identities as bilingual readers/writers, and forge their creative and critical voices.

### **Student Participation Across Translanguaging Spaces**

In the previous sections, I discussed how the students participated in each translanguaging activity. To provide a broad picture of student participation patterns, I will illustrate how the students participated generally within and across the three translanguaging spaces (translanguaging documentation, translanguaging rings, and translanguaging transformation) in this section. I looked at “student participation” from four dimensions: their oral language use, their written language use, their academic performance, and their socio-emotional aspect (referring to for example, their affective/feeling part, social nature of learning). Table 4.2 lists what every dimension of student participation looked like within each translanguaging space.

Table 4.2 *Student participation in translanguaging spaces*

	<b>Translanguaging documentation</b> ( <i>written assessment</i> )	<b>Translanguaging rings</b> ( <i>oral class instruction</i> )	<b>Translanguaging transformation</b> ( <i>class projects</i> )
<b>Student participation</b> ( <i>oral language use</i> )	N/A (We only implemented written assessments as “translanguaging documentation” in this study, so this dimension is “N/A”)	Used English and Mandarin to different degrees	Used English and Mandarin to different degrees

<b>Student participation</b> <i>(written language use)</i>	Majority used English in content proficiency assessments; majority tried to use as much Chinese as they can and translanguaged among Chinese characters, pinyin, and English in assessments with added criteria	N/A (Our “translanguaging rings” focused more on class instruction orally, so this dimension is “N/A”)	Used English and Mandarin at different stages of writing/drafting (in a structured way in “Culture Day Project”); majority used English in “free” writing space (e.g., pen-pal project, language/culture portrait)
<b>Student participation</b> <i>(academic)</i>	Demonstrated a fuller picture of their content proficiency and language gap areas	Built upon each other’s ideas to co-construct knowledge and advance conversation in whole class discussion; developed deeper understanding of content knowledge and (emerging) metalinguistic awareness; started working on tasks timely and more engaged	Developed deeper understanding of all content areas, their family traditions/history and other peers’ cultural and linguistic background
<b>Student participation</b> <i>(socio-emotional)</i>	All felt safe/comfortable to participate	All felt safe to express their ideas; became collaborative in knowledge co-making; seemed more willing to take risks in using L2	Became more empathetic and fostered (emerging) critical consciousness; developed openness to and appreciation of multilingualism and multiculturalism; cultivated positive self-identity

As shown from the table, one common pattern regarding students’ oral and written language use across these teacher-initiated, purposefully planned translanguaging spaces was the students’ increased use of English to certain extent in Mandarin class. This was not surprising due to that our students were English-dominant speakers, and when they were offered flexible spaces to use their full linguistic repertoire in oral and written forms, they chose to use their more

familiar/stronger language to engage in academic tasks. We also observed some common benefits in student participation brought by the increased use of English across these spaces – for instances, students were able to demonstrate and develop a fuller/deeper understanding of content knowledge academically, and students with varying levels of Chinese proficiency felt safe and included to participate and share their thoughts affectively.

We were aware of the tension between increased use of the dominant language (English) and the protection of language-minoritized (Mandarin) instructional space to ensure that students had adequate opportunities to practice and develop their Mandarin language proficiency. Therefore, we also “regulated” or “controlled” students’ translanguaging *corrientes* with different strategies in each translanguaging space. In translanguaging documentation, we added criteria (e.g., Chinese characters first, pinyin second, and then English words) in formative assessments to get a more holistic sense of their content and language proficiency. In translanguaging rings, Ms. Li consistently used Mandarin and recast the students’ answers that included English in Mandarin (still maintaining a “Mandarin-centric” instructional space); she also read English picture books or presented English videos but asked the students to answer questions in Mandarin (alternating the languages of input and output). In translanguaging transformation, we provided a structured way in “Culture Day Project” to help the students use both languages in a dynamic and functionally integrated manner (e.g., students used English and worked with family members in the initial preparation and information gathering stage, but then they needed to present and re-contextualize the information in Mandarin on the worksheets and slides). All these pedagogical moves “balanced” the students’ oral and written language use among Chinese and English features to different degrees in their participation across these spaces. Another noteworthy point was – in my interviews with some focal students from Ms.

Li's class, almost all of them mentioned that they were clearly aware of the "rule" of DLBE programs: using Mandarin as much as possible when in Mandarin class and the majority expressed their willingness to practice the target language whenever they can. This mindset could (potentially) serve as another factor to help the students "balance" their use of English and Mandarin in oral and written forms.

In addition to common student participation responses across the translanguaging spaces, I also identified some unique student participation patterns that were only elicited from certain translanguaging spaces. Relatively speaking, translanguaging rings contributed to more collaborative nature of learning (compared to translanguaging documentation and translanguaging transformation): by allowing for linguistic flexibility in whole class discussion, all the students felt more engaged (or more "empowered" in a sense) to contribute and elaborate their ideas and they all participated as competent language users in a collaborative, dialogic process of meaning negotiation and knowledge co-construction. Furthermore, translanguaging transformation spaces promoted more socio-emotional dimension of student participation: besides the students feeling safe and positive about themselves (as found in translanguaging documentation and translanguaging rings), they also developed openness to and appreciation of multilingualism and multiculturalism and became more aware of social (in)equity issues with criticality and more empathetic through engaging in personally- and culturally-relevant projects in a heterogeneous learning environment.

### **Translanguaging Strategies Across Content Areas**

As Cenoz and Gorter (2020) point out, "[translanguaging strategies] can take many shapes because there are contextual factors that have to be taken into consideration" (p. 9). Content area, as one of the contextual factors, therefore can affect the forms of translanguaging

strategies. Because each content area has its own disciplinary-specific features, translanguaging strategies may look differently to suit various learning goals, skill development, and materials used of that content area, to name a few. In this section, I first take a look at what translanguaging strategies we implemented in each content area – CLA, Science, and Social Studies (see Table 4.3) and then discuss how translanguaging strategies varied across these content areas in response to research question two.

Table 4.3 lists the three content areas where we co-designed translanguaging activities, their respective disciplinary features in Ms. Li’s third grade Mandarin class, and the relevant translanguaging strategies we implemented in each subject matter class throughout the school year of 2018-19. Each content area was characterized by six descriptive factors (not an exhaustive list but main features) through consulting Ms. Li’s Grade 3 curriculum pacing, the school website, and my field notes: overall purpose of the subject, language goals, content learned, core skills, participant organization, and materials adopted. Translanguaging strategies were further categorized into translanguaging documentation, translanguaging rings, and translanguaging transformation based on Sánchez et al.’s (2018) framework within each content area.

Table 4.3 *Translanguaging strategies we implemented in different content areas*

<b>Content Area</b>	<b>Disciplinary Features</b>	<b>Translanguaging Strategies</b>
<b>CLA</b>	<i>Purpose:</i> Chinese language/literacy and (multi-)cultural awareness	<i>Translanguaging documentation:</i> Use any languages in exit ticket for content proficiency, assessment design with added translanguaging criteria for both content and language proficiency
	<i>Language:</i> Pinyin, word/character, phrase, collocation, sentence starters, etc. (Phonetics, lexicon, syntax, pragmatics, discourse)	
	<i>Content:</i> Moral values, cultures, American history, social equity, and government, magnet, life	<i>Translanguaging rings:</i> Allow students to translanguage in whole class discussion, cross-linguistic analysis, English translation for

	cycles (many text topics were connected to Science and Social Studies)	instructions on the worksheet, bilingual vocabulary list, English use in individualized instruction
	<i>Skills:</i> reading, writing, and communicating	
	<i>Participant organization:</i> Whole class, pairs, individual	<i>Translanguaging transformation:</i> Culture day project (interview family members and use translanguaging in the writing process), language/culture portrait (“free” writing/drawing space for self-identity exploration), pen-pal project with a HK school (translanguaging writing space; transnational writing partnerships)
	<i>Materials:</i> Chinese texts (written) and worksheets	
<b>Science</b>	<i>Purpose:</i> Scientific knowledge and inquiry	<i>Translanguaging documentation:</i> Use any languages in exit ticket for content proficiency, assessment design with added translanguaging criteria for both content and language proficiency
	<i>Language:</i> Academic words (science literacy) and constructing scientific arguments	
	<i>Content:</i> Weather and climate, force and motion, Charles River explorations (including natural ecosystem, life cycle and traits)	<i>Translanguaging rings:</i> Allow students to translanguage in whole class discussion, English translation for instructions on the worksheet, bilingual vocabulary list, English use in individualized instruction, read English books/watch English videos (and then produce output in Mandarin) to enhance content understanding
	<i>Skills:</i> Scientific thinking and reasoning, interpretation of charts/tables	
	<i>Participant organization:</i> Whole class, groups, individual	<i>Translanguaging transformation:</i> Pen-pal project with a HK school (translanguaging writing space to share content knowledge; transnational writing partnerships)
	<i>Materials:</i> Multimodal (PowerPoint slides, texts, videos, experimental tools and worksheets)	
<b>Social Studies</b>	<i>Purpose:</i> Understand historical events, civic awareness	<i>Translanguaging documentation:</i> N/A
	<i>Language:</i> Academic words/literacy	
	<i>Content:</i> Map, Native American (Wampanoag), Puritan and Pilgrims, American revolution	<i>Translanguaging rings:</i> Allow students to translanguage in whole class discussion, English translation for instructions on the worksheet,

	<i>Skills:</i> Making sound judgements and analyzing problems (reasoned and reflective thinking)	bilingual vocabulary list, English use in individualized instruction, read English books (and then produce output in Mandarin) to enhance content understanding
	<i>Participant organization:</i> Whole class, pairs, individual	<i>Translanguaging transformation:</i> Culture day project (interview family members and use translanguaging in the writing process), language/culture portrait (“free” writing/drawing space for self-identity exploration), pen-pal project with a HK school (translanguaging writing space; transnational writing partnerships), open up a translanguaging space in both oral and written forms to discuss difficult topics (like “privilege”) to raise critical consciousness
	<i>Materials:</i> Chinese texts (written) and worksheets	

As shown from the table, CLA had a heavier focus on Chinese language and literacy development (e.g., phonetics, lexicon, syntax, pragmatics, discourse; reading and writing skills) compared to Science and Social Studies. Therefore, the “wobble room” for translanguaging design was smaller in order to maintain sufficient time allocated for “Mandarin-centric” instruction. To enhance students’ L2 development, Ms. Li consistently performed as the target language model in CLA class, providing Mandarin input as much as possible and recasting students’ answers in Mandarin when and where necessary; she also offered the students opportunities to practice Mandarin in both oral and written forms (such as oral presentations and Chinese diary writing). However, this did not mean that Ms. Li policed a “Mandarin-only” space in CLA class at all times. Through experimenting with translanguaging strategies, we found that creating translanguaging spaces brought flexibility to Ms. Li’s instruction – for instances, allowing students to translanguage in whole class discussion contributed to knowledge co-construction and meaning negotiation (of difficult Chinese words); encouraging students to use English in the writing/drafting process helped them elaborate their ideas and promoted family

engagement; and opening up a translanguaging space with added criteria (Chinese characters first, pinyin second, and then English words) in formative assessments gave us a fuller picture of their content understanding and language gap areas. What really stood out in CLA or was distinct from Science and Social Studies was the use of cross-linguistic analysis (or the “Bridges”) as one translanguaging strategy to raise students’ metalinguistic awareness and deepen their (meta)linguistic knowledge in both languages. By explicitly comparing and contrasting e.g., word order (syntax) and use (pragmatics) similarities and differences in English and Chinese, the students utilized what they learned from their ELA class and expanded their bilingual zone of proximal development. In general, these translanguaging strategies maximized our students’ L2/CLA learning opportunities.

As many Chinese texts in CLA already covered topics connected to Science and Social Studies in Grade 3, the CLA class laid a linguistic foundation (which meant the students learned key words, phrases, and expressions in Mandarin in CLA) for students to discuss the concepts like force and motion, American revolution history in Science and Social Studies class. This in turn allowed for more “wiggle room” for implementing translanguaging strategies in Science and Social Studies which emphasized more on content understanding and scientific/reflective thinking. The subject of Science often took advantage of multimodal materials and hands-on experiments in collaborative groups to develop students’ inquiry stance and comprehension of complex scientific concepts (compared to CLA and Social Studies which relied heavily on text reading/writing and individual work). Therefore, incorporating “translanguaging rings” in multimodal materials and hands-on experiments were very prevalent strategies in Science class instruction. Examples that we tried were reading English picture books and watching English videos on certain science topics (providing input in students’ stronger/familiar language to

mediate their mental processes and result in deeper content learning). We also allowed the students to document their experiment observations in whatever language they felt comfortable to demonstrate their noticings and wonderings. These pedagogical moves cultivated a safe, inclusive class environment (with low affective filters) where students could draw on their pre-existing knowledge resources and the whole linguistic repertoire cross-linguistically in effective academic content learning.

Different from CLA and Science, we seldom did assessments (in a traditional sense) in Social Studies class. However, we identified strong connections between CLA and Social Studies on some shared themes such as multiculturalism, immigration, American history for Grade 3, which prompted us to design thematic/interdisciplinary culminating projects for students to work on to cultivate not only their academic skills, but also civic awareness as global citizens, bi/multilingual and bi/multicultural appreciation, and critical minds (which were the main goals of the Social Studies subject). We saw that these goals could be fully realized with the integration of translanguaging spaces (where students could bring their full selves – their whole semiotic and linguistic repertoire – to engage in tasks). Therefore, we designed many thematic “translanguaging transformation” projects (such as “Culture Day Project”, “Language/Culture Portrait”, and “Privilege” and “Empathy” activity) instead of simply “translanguaging documentation” for academic purposes to mobilize the students’ funds of knowledge from their families and communities, develop their positive identities, and foster their creativity and criticality. Overall, Social Studies, compared to CLA and Science, seemed to provide the most fertile territory for designing translanguaging strategies with transformative learning purposes.

By analyzing how translanguaging strategies looked differently across different content areas, this further confirmed that translanguaging is not a one-size-fits-all approach and instead is context-bounded; it has to be strategically and purposefully planned based on the features of one specific content area and many other situational factors (such as school grade, teacher background, student background, and status of languages, as illustrated in Cenoz & Gorter, 2020). However, it should be noted that my analysis does not mean certain translanguaging strategies were only limited to one content area. Instead of setting up clear-cut boundaries to constrain the possibilities of designing translanguaging strategies in content areas, my analysis aimed to serve as a heuristic guide, showcasing what forms of translanguaging strategies were more applicable to unearth the learning potential of one content area (e.g., cross-linguistic analysis was more applicable in CLA, but it could also be designed in Science and Social Studies).

I would also like to point out that regardless of the content area differences, one core characteristic shared by translanguaging strategies is to soften boundaries between languages and challenge the traditionally monolingual approach in instruction and assessment (García & Lin, 2017; Cenoz & Gorter, 2020). In other words, translanguaging claims that elements from several (two or more) languages can be used in the same session; language and content learning is a dynamic process of using multiple semiotic and linguistic resources from the full communicative repertoire. Bearing in mind this would ensure that even though translanguaging strategies shift across various content areas, they still maintain (or they will not lose) the original, core pedagogical purpose.

In this chapter, drawing from classroom data (classroom recordings, field notes, artifacts from both Ms. Li and students) and focal student interviews primarily, I illustrated what

translanguaging activities we co-designed in our third grade Mandarin class and how students participated in each translanguaging activity specifically and within and across the three planned translanguaging spaces broadly (research question one). I also discussed how translanguaging strategies varied across different content areas – CLA, Science, and Social Studies based on their disciplinary features (research question two). Integrating translanguaging pedagogies offers counter-narratives to conventional language separation policy in DLBE programs. It challenges the underlying monolingual ideology of bilingual development and centers on how students actually do and practice bilingualism in instruction and assessment. Throughout the co-design and implementation process, Ms. Li and I found out that, when students' home languages and cultures were seen as resources and strategically leveraged in translanguaging documentation, translanguaging rings, and translanguaging transformation spaces (Sánchez et al., 2018), they were able to demonstrate a fuller picture of their content and language proficiency, and were capable of engaging in their translanguaging *corrientes* on a visible level to build cross-linguistic connections, develop metalinguistic awareness, and foster positive bi/multilingual identities. Further, these translanguaging spaces held promises of promoting multi-leveled students' engagement and maximizing their learning opportunities; they were more than scaffolds, but could potentially cultivate bilingual learners' creativity and criticality in academic tasks.

## CHAPTER 5 DEVELOPING AND NEGOTIATING A TRANSLANGUAGING CO-STANCE TOGETHER: A BUMPY IDEOLOGICAL JOURNEY

The previous chapter documented that Ms. Li and I worked together to implement three various forms of translanguaging spaces – translanguaging documentation, translanguaging rings, and translanguaging transformation (Sánchez et al., 2018) – in a Mandarin/English DLBE classroom to maximize bilingual students’ learning opportunities and promote their positive identity development with creativity and criticality. Throughout our co-designing of “implementational spaces”, our “ideological spaces” (Hornberger, 2005) – language beliefs and perceptions toward translanguaging and bilingual education also shifted in a dynamic, complex manner. We engaged in equitable forms of dialogue and listening to openly discuss, negotiate, and even transform our language belief systems in iterative ways; we also learned from each other, positioning ourselves as co-learners, to develop a translanguaging co-stance together to make informed decisions on when and how to build translanguaging spaces. However, this ideological journey was a bumpy road replete with tensions, confusions, and difficult conversations. In this chapter, I aim to unpack the different ideological stages we went through together in response to my third research question – “In what ways does the process of developing translanguaging spaces affect the teacher’s and my beliefs and perceptions of translanguaging and bilingual education?”

Drawing on transcription data from our research planning/debrief meetings and interviews with Ms. Li, and my field notes (including my memos), I identified *critical events*, episodes and moments that had “impact and profound effect” that brought “radical change” (Webster & Mertova, 2007, p. 77) in the process; in this case, change in our perceptions and beliefs that revealed “a change of understanding or worldview” (p. 73) of translanguaging that

pushed our work forward. I will frame each critical event in a *dialogic* way due to the participatory nature of my research – through multiple conversations, Ms. Li and I co-constructed an “ideological space” to which we brought “different dimensions of [our] personal history, experience and environment, [our] attitude, belief and ideology, [and our] cognitive and physical capacity” (Li Wei, 2011, p. 1223) together. Our perception and belief shifts did not occur in isolation, but in a collective manner with mutual reinforcement. Although our ideological journey will be presented in a more linear form in the following sections: from our starting points to the five main critical stages (see Figure 5.1 for an overview), the full picture of our belief and perception development process encompassed more nuances, complexities, and iterations.

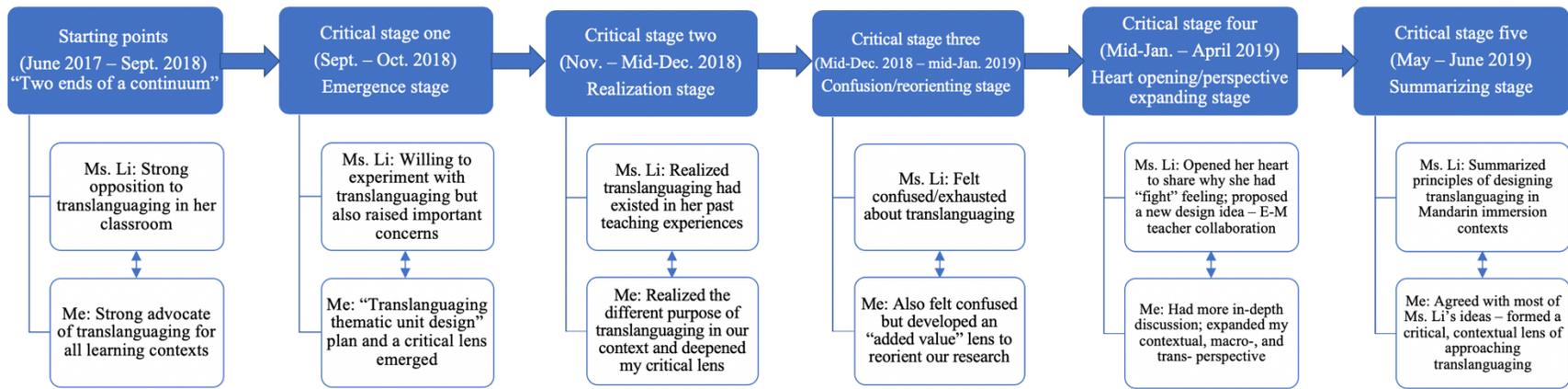


Figure 5.1 Overview of the critical stages of our ideological journey

### **Our Starting Points (June 2017 – September 2018): “Two Ends of a Continuum”**

Before our PDR started, Ms. Li and I held different (almost the opposite) positionalities or stances toward translanguaging as in “two ends of a continuum” (which is documented in Chapter 3). By way of reminder, I reiterate our various starting points first to showcase where we came from and what original beliefs and perceptions we brought together to our ideological journey.

I had been a strong advocate of the notion of “translanguaging”. My passion for it mostly emerged from its close connection to my personal life – translanguaging represents my lived experience and has captured who I am and how I perform bilingual practices in my daily communications with my family, friends and colleagues. Studying this notion in my doctoral program was a self-affirming and -empowerment process: As a graduate student who speaks multiple languages with an international background from China myself, I had gradually moved away from a deficit framing – being a “non-native” English speaker and an “outsider” who did not grow up and receive K-12 education in the U.S., to an asset-based view of seeing my difference as advantages – being a translingual, transnational individual who has an ever-expanding, dynamic, complex linguistic repertoire and can contribute alternative perspectives to challenge the U.S.-dominant narrative with creativity and criticality in education.

Translanguaging provided me with positive lens and tools to reevaluate my own identity, which in turn influenced my research agenda and pedagogical stance. As an educational researcher, I aimed to work with teachers and educators together to experiment with translanguaging implementation in classrooms: to think of ways of creating heterogeneous, meaningful educational contexts which center on learners’ sociolinguistic realities and leverage their full language and semiotic repertoires to challenge the English-dominant and monolingual structures.

I wanted to study the transformative potential of translanguaging as a promising pedagogy in all learners' academic learning and identity development across different learning contexts. Ofelia García and her CUNY (The City University of New York) team's work (such as their website and books) gave me lots of inspirations and further helped me identify the research gaps in translanguaging studies. Specifically, the Sánchez et al.'s (2018) article entitled "Reframing language allocation policy in dual language bilingual education" provided a promising conceptual framework in guiding researchers and teachers in (re)thinking translanguaging pedagogies in DLBE contexts; however, little research focused on how to design and implement translanguaging in Chinese/English DLBE programs. With a strong belief in the positive power held by translanguaging and curiosity to see how it might play out in Chinese classrooms, I reached out to Ms. Li, an experienced Mandarin teacher who worked in a Chinese/English dual language program in a public school.

During my first meeting with Ms. Li in June 2017, I learned that she had heard about the concept of translanguaging during her Master's degree studies in Applied Linguistics at a U.S. university and had some understanding of it as language-mixing or code-switching strategies. Based on her past teaching experience in Kindergarten (she was a third and fifth grade teacher at the time of this study), Ms. Li mentioned that using English in Chinese classrooms would be the last resource she resorted to because she could always rely on multimodal ways, such as drawings and body language, to help students understand concepts and acquire Chinese proficiency. She mentioned that "language mixing is detrimental for students who are learning a new language" from a developmental perspective and interpreted translanguaging (or more precisely, using English in Chinese instructional time) as a "lazy" approach. She strongly believed that "one language at a time" or Mandarin-only policy was more beneficial to fostering

students' language and literacy skills to not only read and write, but also “think in Mandarin”, which was the main purpose of a Chinese immersion program (field notes on June 19, 2017). In general, she held a skeptical perspective and certain level of resistance towards translanguaging pedagogies.

Although Ms. Li and I had two different opinions on the role of translanguaging in classrooms, we did not shut down our communication space; instead, we were both willing to listen to and understand each other's stance and stories. In the following one year (2017 – 2018), I volunteered as a teaching assistant in her classroom to build trusting relationships and familiarize myself with the school context; we continued with informal conversations on what translanguaging meant and how it could be implemented in Chinese immersion contexts. In the school year of 2018 – 2019 (when this study was conducted), we formally embarked on our ideological journey together through regular research planning/debrief meetings and interviews. During the process of developing translanguaging spaces in Chinese classrooms, we consistently positioned ourselves as co-learners and saw difficult dialogues as reflective opportunities for both parties to grow together. As a result, we both experienced shifts in our perceptions and beliefs toward translanguaging and bilingual education via five main stages.

### **Critical Stage One (September to October 2018): Emergence Stage**

At the initial stage of our co-design (September to October, 2018), we started to unpack the applicability of creating translanguaging spaces in Ms. Li's classroom. Ms. Li expressed her emerging interest in experimenting with translanguaging designs based on her observation of the third graders' academic performance so far:

我觉得我今年的学生有很多是很落后的，然后为什么我会这样说是因为我教三年级教了四年了，现在是第四年 ... 然后今年的话就是我觉得我要花特别多的时间要做

这些 scaffolding, 重点是我做了之后他们还不见得能够使用我提供的这些工具 ...

所以我觉得也许他们需要的 scaffolding 比我现在 create 给他们的要更多而且可能是更多的英文。所以也许就是可以试试看在某种 design 之下能不能使用他们懂的东西去帮助他们 ... 也许当你在教一些更难的概念的时候, 真的需要用一些 L1 来辅助一下, 也许是这样没有错。

(English translation: I think I have many [English-dominant] learners who are behind their grade-level Chinese proficiency this year. I have been teaching third grade for four years, and now it's my fourth year ... [compared to the previous years,] this year I especially found that I need to spend more time providing scaffolding [such as multimodality], but the point is my students still did not know how to use these [multimodal] tools I provided [for academic learning] ... Therefore, I think maybe I should create more "scaffolding" to address their needs, i.e., English. I would like to try if we can create certain [translanguaging] design to use what they already knew to help their academic learning. Maybe when you teach more difficult concepts, you do need to use some L1 as scaffolding. It does make sense.) (Our research planning/debrief meeting transcript, October 5, 2018)

As Ms. Li indicated, she was willing to try out translanguaging designs because there were many "struggling learners" with varying levels of Chinese proficiency in her class this year. She saw that using their familiar/stronger language, English (L1) could potentially serve as another layer of "scaffolding" in addition to multimodality to accommodate to all learners' needs and facilitate their understanding of more difficult concepts.

However, Ms. Li also raised concerns about the use of English during Chinese instructional time with her English-dominant students. Here I summarize five main points using her quotes from our audio-recorded discussion on Oct. 5, 2018:

(1) 但是我其实还是怀疑说，我觉得这可以帮助他们理解就是科学我们在上什么，但是我不觉得可以帮助他们 acquire Chinese language。我觉得可以 achieve comprehension。

(English translation: But I actually still suspect that, [using their home language] can help them easily understand [for example] scientific concepts we learned in Science class, but I don't think it could help them acquire Chinese language. I think it is more on achieve[ing] comprehension.)

(2) 如果我自己是那种中英夹杂，只是某一些词用英文的时候，我反而觉得我是不是在助长他 ... 就是 learner language 是一个很自然的现象嘛，就是你会把中英夹杂在一起用，可是我在想我自己都这样子的话是不是在助长他换着使用这个语言，那换着使用也没有什么真的不好，但是要到什么样的程度他才能够有这个 transition from learner language to truly like, you know, Chinese language speaker.

(English translation: If I use Chinese-English mixing myself, like using English for certain words [in Chinese sentences], I feel like if I am fostering more language-mixing in students' language use ... although learner language is a very natural phenomenon – i.e., students will experience the stage of mixing Chinese and English [in their language development]. However, if I use language-mixing a lot, will this contribute to more language-mixing use among students? I am not saying language-mixing is bad or wrong, but to what extent and when students can transition from learner language to truly like, you know, [become] Chinese language speaker.)

(3) 但是我觉得这种东西一旦开始就很难回头，所以我很怕我开始释放了 30%的英文之后，它就会一直越来越大越来越大，就是没有办法回去。

(English translation: But I feel like once I open the floodgate to using L1, it would be difficult to close the gate again. I am afraid that once I open up the space for 30% English [in Chinese classroom], the space will become bigger and bigger and we can never return to the original.)

(4) 就是要做这件事情要花很多的时间跟人力，如果有 extra adults 在我的班上可以做这种 intervention 把四个五个落后的孩子带去都用英文解释给他们听，我觉得是可以的。

(English translation: [Using English as scaffolding to address all learners' needs] takes a lot of extra time and labor. If I have extra adults in my class who could do intervention, like using English in small group tutoring with four to five struggling learners, I think that's fine.)

(5) 但是因为我一直很担心翻译这个问题，所以我就一直尽量不要做一些事情会让他们以为他们可以翻译或者是不知不觉养成了翻译的习惯。

(English translation: I really worry about the problem of “translation”. I try to avoid doing [translation] so that students won't rely on it or develop the habit of translating unconsciously.)

While demonstrating interest in translanguaging pedagogies, Ms. Li offered several counter-arguments to using English or language-mixing strategies. These include that (1) increased use of English may not benefit students' Chinese language development although it may contribute to their content comprehension; (2) her use of language-mixing, i.e., intra-sentential code-switching specifically (using English words in a Chinese sentence) may lead to a plateau effect in students'

Chinese proficiency – students may stagnate at their “learner language” (mixing Chinese and English) level and cannot produce monolingual Mandarin output; (3) increased use of English may eventually “take over” the already limited Mandarin instructional time; (4) for students who are more struggling, they may need individualized help with more English as scaffolding, which requires more time and energy; and (5) using English constantly may become concurrent translation, which may cause students’ over-reliance on translation and delayed development in Chinese language proficiency.

Hearing Ms. Li’s concerns made me realize that we were dealing with a unique bilingual education context with regards to translanguaging design: the use of the majoritized language (English) during instructional time in the minoritized language (Mandarin) in Mandarin/English DLBE classrooms filled with English-dominant speakers primarily. Ms. Li’s concerns were reasonable given her learner profiles and classroom context, and were also in line with some claims in the existing DLBE literature, for instance: (1) there is a lack of empirical evidence showing that increased use of English during minoritized language instructional time will benefit students’ minoritized language development or bilingual proficiency (Ballinger et al., 2017; Fortune & Tedick, 2019; Tedick & Lyster, 2019); (2) concurrent translation approach (consistently repeating the message in the other language) would lead students to “tune out” instruction in their weaker language (Wong Fillmore, 1982) and produce less gains in L2 development compared to maintaining language separation spaces (Legaretta, 1977, 1979); (3) both Jacobson (1981) and Faltis (1996) opposed intra-sentential code-switching and translation because they found that teachers tended to use more English and these two practices did not promote strong bilingualism; and (4) In the context of French/English DLBE in Canada, Ballinger et al. (2017) argued that, “when learners are encouraged to draw on features from the

majority language during class time allocated to the minority language, this practice can replicate, rather than resolve, an existing societal language imbalance” (p. 46). Hamman (2018) also observed the similar language practices in a Spanish/English two-way DLBE classroom, “the practice of engaging in translanguaging ... generated a more English-centered classroom” (p. 37).

Ms. Li’s concerns further pushed me to take a critical lens to examine translanguaging pedagogies in Chinese classrooms: while it is important to create spaces that center on how bilingual students actually “do” bilingualism and leverage their translanguaging *corriente*, it is also equally essential to maintain and protect the minoritized language instructional space and provide bilingual learners with extensive opportunities to receive input and produce output in the minoritized language only in order to achieve high levels of language proficiency. Therefore, I started to realize the key of our design lied in being *strategic* and *purposeful* to “balance” both sides, and I also wanted to help Ms. Li expand her understanding that translanguaging can take varying forms and is more than intra-sentential code-switching and translation.

By revisiting Sánchez et al.’s (2018) article in relation to addressing Ms. Li’s concerns, I came across an idea of bringing thematic design and translanguaging pedagogies together. Below is a draft of “translanguaging thematic unit design” from my memo on October 19, 2018 (see Figure 5.2). It documented my preliminary idea of incorporating translanguaging spaces in and across different content areas while maintaining Mandarin instructional space to achieve high levels of both content and language proficiency.

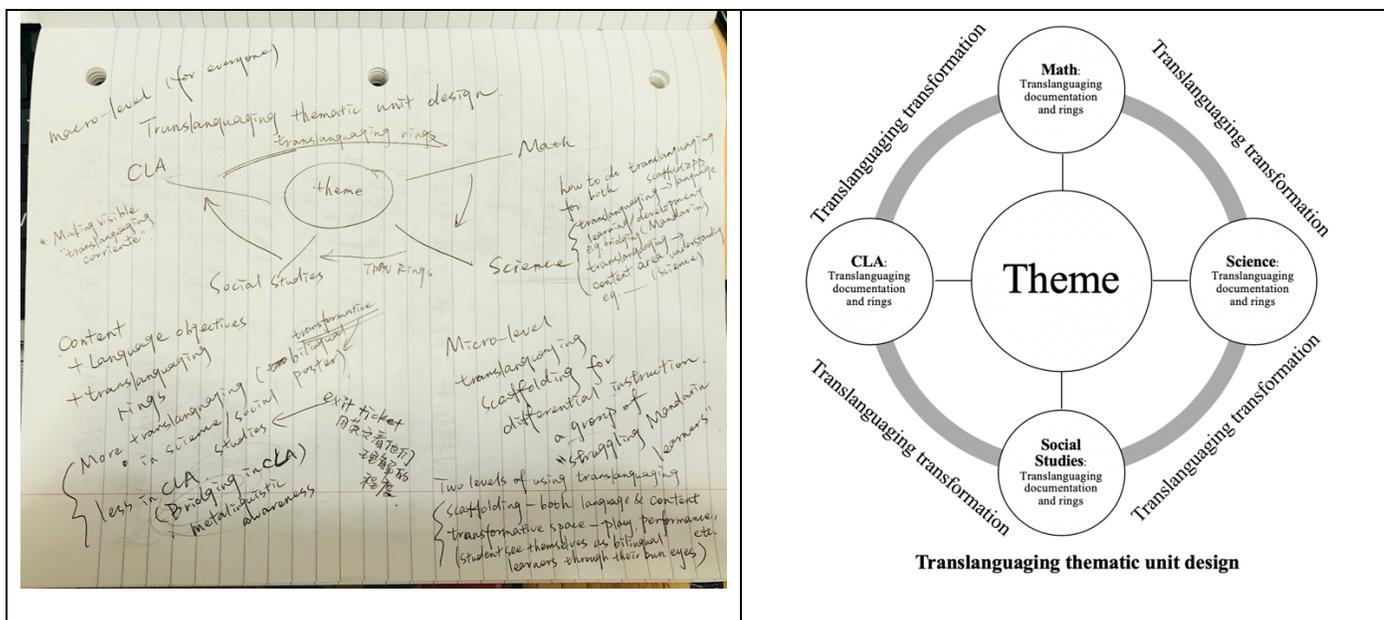


Figure 5.2 Translanguaging thematic unit design draft

Thematic unit design involves creating a series of integrated lessons for all content areas (at the time of the study, Ms. Li taught CLA, Science, Social Studies, and Math in Mandarin for her third-grade class) with shared and recurring content and language objectives. Around one theme, these content areas work together to support and complement one another to promote high levels of bilingualism, biliteracy, and subject-matter knowledge. I proposed this design due to several reasons: (1) it is very feasible for curriculum design from lower grades (I checked Ms. Li’s curriculum pacing for her third graders and identified several common themes easily – such as “weather”, “culture”, etc.); (2) this design would allow more flexibility for integrating translanguaging spaces across content areas – given the shared content and language objectives, teachers will have more “wiggle room” to open up translanguaging spaces in, for instance, Science and Social Studies class to promote deeper student engagement with complex concepts while maintaining a more “restricted” space in CLA class to reinforce Chinese language development. In this way, the teacher would be less worried about the “infringement” of English and help students see connections of their learning among different subject matters; and (3) I

found that the Sánchez et al.'s (2018) conceptual framework could be easily mapped onto this thematic design model – from a *macro-level* across different content areas, Ms. Li and I could design “translanguaging transformation” as culminating projects to cultivate bilingual learners’ positive identities, creativity, and criticality while from a *micro-level* within each content area, Ms. Li and I could implement “translanguaging documentation” as formative assessments and “translanguaging rings” as scaffolding. For instance, “translanguaging documentation” can be exit tickets to document students’ fuller understanding of a science or social studies concept, and “translanguaging rings” can be “the bridges” in CLA class to foster bilingual learners’ metalinguistic awareness or individualized instruction in the form of small group tutoring for struggling learners. These two levels (macro and micro) of translanguaging will also help teachers expand their vision of translanguaging beyond simply code-switching and translation in teacher-student dialogues.

This “translanguaging thematic unit design” emerged from our first critical negotiation stage and served as the foundation of our following co-designing. For instance, we tried planning a thematic unit around “climate” with recurring and respective content and language objectives within and across CLA, Science, and Social Studies on October 26, 2018 (See Figure 5.3 – our design draft). Although still being skeptical about the potential of translanguaging pedagogies, Ms. Li was open-minded and willing to experiment with creating different forms of multilingual spaces in her class. I also learned that translanguaging design was not one-size-fits-all, and had to be strategically and purposefully planned considering the power dynamics between the majoritized and minoritized language, learning goals, and student demographics in bilingual education.

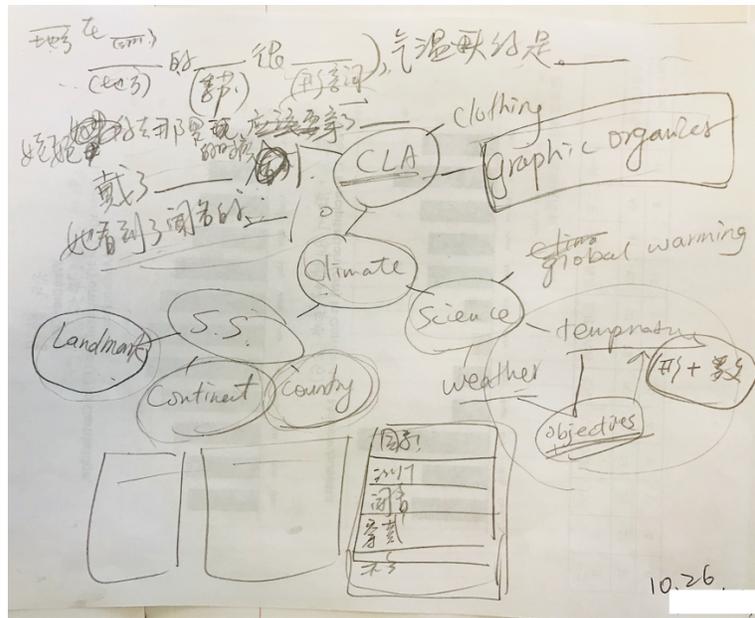


Figure 5.3 “Climate” thematic unit design draft

**Critical Stage Two (November to Mid-December 2018): Realization Stage**

Ms. Li and I continued with co-designing translanguaging spaces based on my proposed idea of “translanguaging thematic unit” since late October 2018. Meanwhile, I also attended Rhode Island Teachers of English Language Learners (RITELL) conference “Translanguaging: Using Home Language as a Classroom Resource” and had the opportunity to listen to the keynote speech given by Ofelia García and to converse with her. To help us brainstorm more translanguaging strategies, I shared my conference experience with Ms. Li and brought the conference handout (See Figure 5.4) to our research planning/debrief meetings for iterative discussion (November to mid-December 2018).

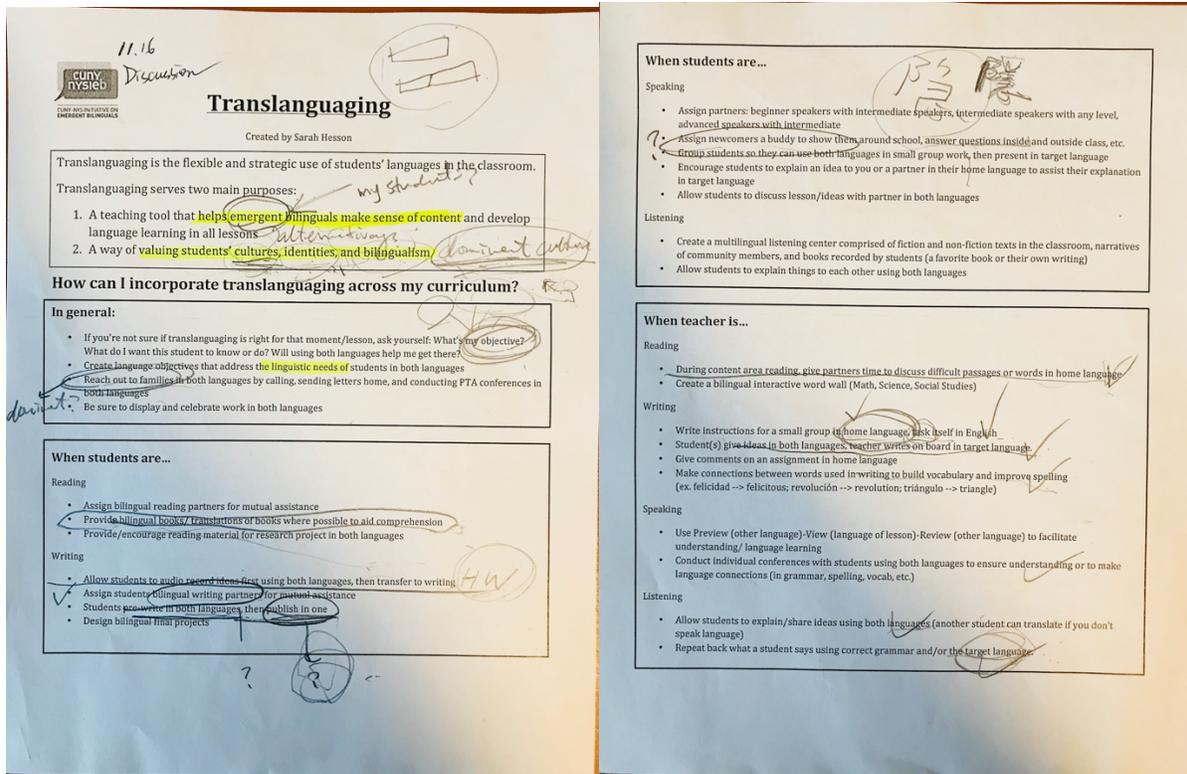


Figure 5.4 RITELL conference handout with our discussion notes

One continuing theme emerged from our discussion of the handout was that translanguaging pedagogies needed to be critically scrutinized against the local classroom contexts and their learner populations. Since this handout was distributed at an “English Language Learners” conference, one of its main purposes was to “[value emergent bilinguals] cultures, identities, and bilingualism” in English mainstream classrooms. However, Ms. Li quickly raised her concerns regarding its applicability to our Mandarin classroom filled with language-majoritized (English-speaking) students:

I don't need to do that because all of my students, they are from English-speaking families, 他们的 culture 已经在 center 了, 就是 by default, 他们已经就是最主导的语言跟文化, 任何东西都是, 思考方式, 学习方式都是。我在这个 system 里面我都是个 minority, 然后我觉得我很 honor 他们的学习 (方式), 其实我的教法不是很

传统的，我是 incorporate American teaching style 在我的教学当中，所以我觉得那个是 my way of honoring them ... 但对于刚才我说的那个 Hispanic 小孩，他现在来到美国了他是 minority，对不对，他要重新学一个系统，然后什么东西都不习惯，所以我们要特别做一件事情来 honor 他的文化他的 identity, 我当然是很同意的。但反过来说，我不是说我不 honor 我的学生，而是他们就是已经活在这样的系统里面了。那其实相反地，我觉得我存在的目的反而是要让他们看清楚说，你这个已经是非常 dominant 的 culture, 你可不可以来看看别的 minority culture, there's something you need to learn, that's valuable, that's different from yours, but you need to learn to appreciate it. 这是一个很大的 immersion program 存在的目的。对于 heritage families, 就比如说是刚从中国移民来的也好，或者是 half, 一半中国人一半美国人的也好，他活在这个 English dominant American culture dominant 的环境里面，我要他有这样的机会除了[接触]他自己的家人之外，他还可以学习到就是说 “oh yea, this is part of my root. I'm proud to learn my culture.” 所以我的责任不在 honor 他另外一半的 American identity, 我是想要突显他的 Chinese identity。我觉得这是 objectives 非常不同的地方。

(English translation: I don't need to do that because all of my students, they are from English-speaking families. Their culture is already in the center by default. Their language, culture, ways of thinking and learning are already very dominant. I am actually a minority in this system, and I think I honor their way of learning very much. My teaching style is not traditional [Chinese], I have [incorporated] American teaching style in my teaching, so I think that's my way of honoring them ... but for a Hispanic child [in an English-dominant mainstream classroom], when he/she comes to the U.S. and he/she

becomes minority, he/she needs to learn a new system and is not used to anything, so we need to do something special to honor his/her culture and identity. Of course, I agree with this. On the contrary, I am not saying I don't honor my students, but they are already living in this dominant system. I think my purpose is actually the opposite – to let them recognize that you're already in a very dominant culture, and you need to learn minority culture. There's something you need to learn, that's valuable, that's different from yours, but you need to learn to appreciate it. This is one of the main purposes of immersion program. For [Chinese] heritage families, for example the ones who just immigrated from China, or kids from mixed-race families (half Chinese and half White), they are living in English dominant and American culture dominant environment. In addition to having contact with his/her families, I would like them to learn that “oh yea, this [Chinese culture] is part of my root. I'm proud to learn my culture.” Therefore, my responsibility is not honor[ing] his/her American identity, but to highlight/bold their Chinese identity. I think the objectives are very different. (Our research planning/debrief meeting transcript, November 16, 2018)

In her explanation, Ms. Li illustrated that the purpose of translanguaging pedagogies would look very differently in two class scenarios – English language learners (from minoritized groups) in an English mainstream classroom and English-speaking students (from majoritized groups) in a Chinese immersion class. She pointed out that given that her students were already from dominant or privileged groups in the U.S. society, valuing or honoring their original “American/White” culture was not the main goal. What's more important is to develop their respect and appreciation to minoritized/heritage language and culture and to foster their critical culture awareness (e.g., minoritized culture is equally “valuable”). Ms. Li's words reminded me

of the importance of being strategic and judicious with translanguaging design in our Mandarin class (Hamman, 2018) – we need to develop *contextualized* translanguaging strategies to fulfill our learner needs and learning objectives. One question I realized was that, “Will increased use of English reinforce the already imbalanced power dynamics between majority and minority cultures in a minority language instructional space? How can we design translanguaging pedagogies to cultivate students’ critical bi/multilingual identities instead of simply ‘bolstering’ their dominant cultural identity?” (My memo on November 16, 2018).

In addition to deepening our critical lens of translanguaging pedagogies, our discussion of the handout also gave us inspirations to create different forms of translanguaging spaces in Mandarin classes. Although the handout was originally developed for English language learners (emergent bilinguals), Ms. Li still found some of the strategies relevant to her teaching context and could be adapted to benefit her third graders’ learning, such as “Provide bilingual books/translation of books where possible to aid comprehension” and “Allow students to audio record ideas first using both languages, then transfer to writing”. Furthermore, she realized that translanguaging had been part of her past teaching experiences because she was already adopting some of the strategies mentioned in the handout in her daily teaching practices, for instance:

- (1) “Allow students to explain things to each other using both languages”. Ms. Li usually gave students room to engage in translanguaging practices in their small group discussion. She believed that this could help bilingual learners elaborate their complex ideas and deepen their content understanding without limitations to using Chinese-only.
- (2) “Make connections between words used in writing to build vocabulary and improve spelling”. Ms. Li said that she did a similar activity called “error treatment” in CLA

- class before, in which she compared and contrasted some Chinese and English words and sentence structures to develop bilingual learners' metalinguistic awareness and reinforce their correct use of Chinese and English languages.
- (3) “Conduct individual conferences with students using both languages to ensure understanding ...”. Ms. Li explained that as long as time permitted in the past, she approached those struggling learners individually to use English as scaffolding to help them understand content from Science or Social Studies class. However, this was not always realistic given the limited instructional time and labor resource (e.g., the lack of teaching assistants).
- (4) “Allow students to explain/share ideas using both languages” and “Repeat back what a student says using correct grammar and/or the target language”. Ms. Li specifically talked about this as part of her routine teaching practices. She always allowed linguistic flexibility during whole class teacher-student discussion to make students feel safe and encouraged to express their ideas more smoothly. She treated this space as the process of “meaning negotiation” and “co-constructing knowledge” (her original words). However, she did mention that it was important for teachers to maintain the target language model – once students used English to express their ideas, she usually recast what they said in Mandarin right away. She named this strategy as “*allow but not announce*”: she allowed “wiggle room” for students to mix languages to present their answers but she would not officially announce they can use English. The point was that she still wanted to maintain her Mandarin instructional space without completely opening the floodgate to use English so that the students could still try their best to learn and practice Mandarin.

These conversations raised Ms. Li's consciousness that translanguaging pedagogies had already existed in her repertoires of practice and gradually mitigated her level of resistance toward translanguaging. Ms. Li started to recognize some promises held by translanguaging – such as creating a safe, inclusive learning environment for all students who were at different points of their bilingual continuum (Gort & Sembiante, 2015), building cross-linguistic connections to foster metalinguistic awareness (García-Mateus & Palmer, 2017), and promoting student engagement to elaborate their ideas as knowledge co-constructors (Durán & Palmer, 2014; Garza & Langman, 2014). These shifts in Ms. Li's perspectives in turn facilitated our co-design of “translanguaging rings” and “translanguaging documentation”.

At this realization stage (November to mid-December 2018), both Ms. Li and I developed more nuanced, critical understanding of translanguaging in bilingual education contexts. To me, it was essential to recognize that context matters and in order to fully realize the promises, translanguaging pedagogies had to be strategically and purposefully planned, designed, and implemented considering multiple contextual factors, such as imbalanced power dynamics among languages, learner background, program context, and lesson goals. To Ms. Li, she became more open to translanguaging pedagogies when getting to know more concrete ways of implementing translanguaging and realizing she had already been practicing translanguaging in small steps (although she did not have a name to justify her teaching practice at that time). She developed more awareness of the advantages of allowing for linguistic flexibility (instead of strict Chinese-only) in certain learning contexts and fostered agency to intentionally create translanguaging spaces in her classroom to maximize bilingual students' learning opportunities while maintaining Mandarin instructional space.

### **Critical Stage Three (Mid-December 2018 to Mid-January 2019):**

## Confusion/Reorienting Stage

As Ms. Li and I continued with opening up more translanguaging spaces to allow students to use English in Chinese class, we entered a stage (from mid-December 2018 to mid-January 2019) where Ms. Li felt “confused” or “exhausted” with emotional stress. On December 14, 2018, she texted me a message to express her lingering concerns after a school day (see Figure 5.5). Although I replied to her in a timely fashion, I was not certain about my answers and also got “confused” about how to best implement translanguaging pedagogies at that time (see Figure 5.6 – left). I later conveyed our text exchange to Sunny Lau and she helped me to unpack our confusion and offered possible paths to move forward (see Figure 5.6 – right).

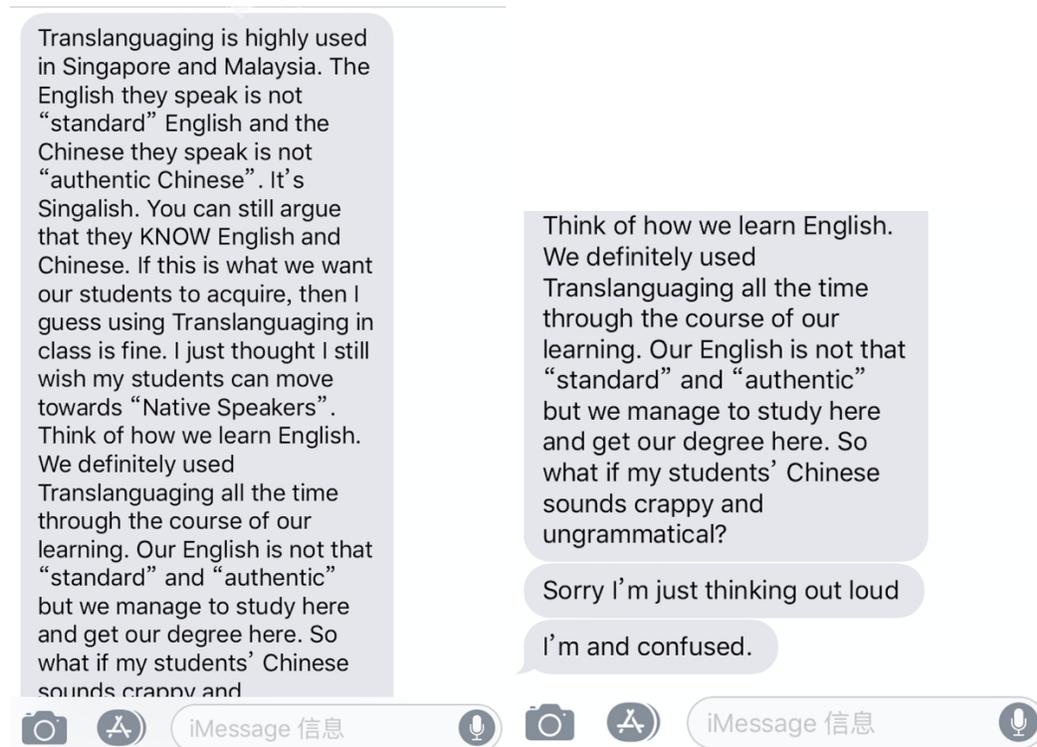


Figure 5.5 Ms. Li’s text message to me on December 14, 2018

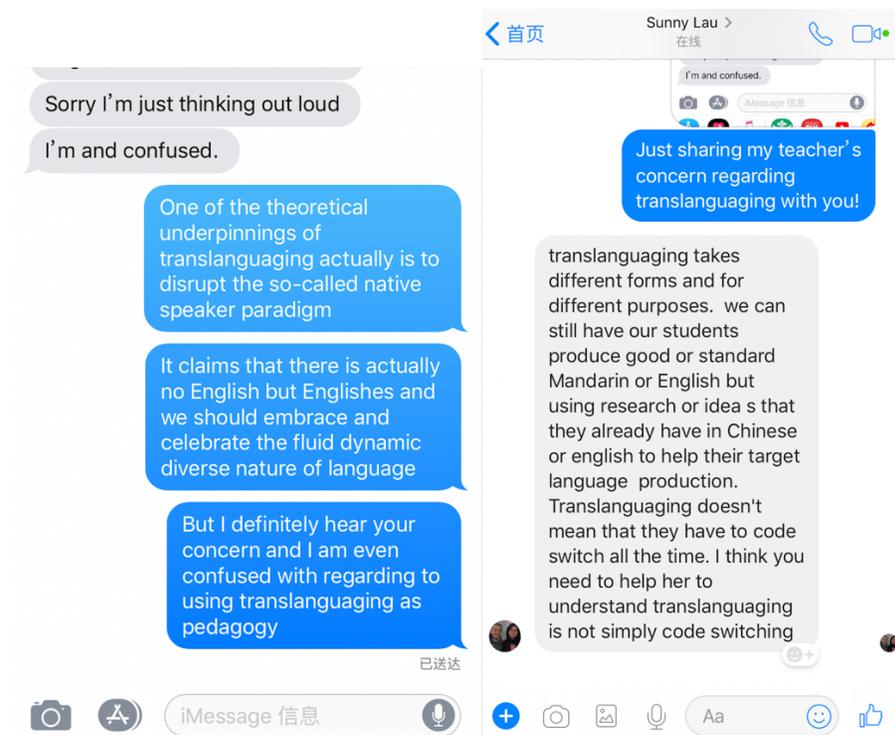


Figure 5.6 My reply to Ms. Li and Sunny Lau’s response to our exchange

In Ms. Li’s text message (Figure 5.5), she first referred to one typical example of translanguaging practice, “Singlish” which is a local language variety in Singapore (and Malaysia) that combines many linguistic features – mostly English and Mandarin as well as other languages (Cantonese, Hakka, etc.). Although Ms. Li recognized that “Singlish” speakers do “KNOW English and Chinese”, she critiqued that their language is neither “standard English” nor “authentic Chinese”. She thus worried that constantly engaging students in translanguaging or language-mixing practices may cripple their “pure” Chinese language development to meet the “native speaker” standard and lead to “crappy and ungrammatical” Chinese.

As a language-minoritized teacher, Ms. Li was in a daily dilemma grappling with both perspectives. On one side, she understood that translanguaging was a natural practice in the course of language learning (as both Ms. Li and I talked about our English language learning experience – how we drew upon Mandarin to help us learn English) and it could bring some

benefits to students' academic learning based on our co-design and implementation experiences. However, on the other side, she was still “haunted” by standardized language ideologies and linguistic purism (Martínez, Hikida, & Durán, 2015). As the label “Singlish” (and others like “Chinglish”, “Spanglish”) still carries negative connotations and social stigma, Ms. Li wanted her students to achieve the “nativelikeness” – to speak like a native Mandarin speaker and perform according to the social norms to succeed in the school and society (which are still operated by monolingual bias).

It was really challenging for Ms. Li to balance both sides as she was the person at the front lines or the metaphorical center of the classroom every day. Ms. Li also mentioned that our research increased her unplanned use of English in the Chinese classroom (like “slip of the tongue” moments). This caused stress and anxiety to her on an emotional level and on a pedagogical level, she felt exhausted and confused regarding the effectiveness of translanguaging pedagogies in improving students' Chinese language proficiency. During this stage, I also got confused and felt like that I was in the dark, trying to search for the light in the tunnel. Looking at my response to Ms. Li (Figure 5.6 – left), I was trying to disrupt her standardized language ideologies by validating “Englishes” (such as “Singlish”) and other fluid, dynamic linguistic varieties. My meaning between the lines was – we cannot say students' “mixed” Chinese as “crappy and ungrammatical”; instead, their use of Chinese represents their unique, creative, and even critical use of different linguistic features; it represents who they are and should not be simply defined from a deficit, monolingual/native speaker lens. However, I could not offer concrete pedagogical suggestions to address Ms. Li's concern at that moment because I was also pondering about the correlation between translanguaging pedagogies and Chinese language development given Ms. Li's classroom context and learner populations.

Consulting a third party or an outsider really helped me see through the problem. Sunny Lau's response (Figure 5.6 – right) re-lightened some of my previous perspectives – “translanguaging takes different forms and for different purposes”; it is more than code-switching and also “doesn't mean that [teachers and students] have to code switch all the time”. Translanguaging pedagogies needed to be strategically and purposefully planned based on contextual factors and it is equally important to maintain a “Chinese-only” space also so that “we can still have our students produce good or standard Mandarin” to meet the social standards. “Using research or ideas that they already have in Chinese or English to help their target language production” also reminded me that translanguaging needed to be used in combination with other pedagogical approaches – some of Ms. Li's existing effective teaching practices informed by Second Language Acquisition (SLA) theories should be continued, and we should not do/implement translanguaging for the sake of translanguaging.

This period was a bottleneck stage for both of us. Ms. Li and I experienced emotional stress and self-questioning. However, I would not consider this stage as regression because we both viewed tensions as opportunities to grow together and continuously had negotiations, reflections, and difficult conversations to develop our translanguaging “ideological space”. On January 11, 2019, I proposed a new perspective to help us “reorient” our design directions – not to impose translanguaging on the teacher but to consider the “added value” of translanguaging in teaching.

我在想咱们怎么 approach 这个 translanguaging。我记得 Ofelia García 说过不要 impose translanguaging，就是不要为了做 translanguaging 我现在加英文。因为我的目的肯定不是让 translanguaging exhaust you，就是为了做这个研究刻意加了很多英文，然后你觉得我加了我也没收到更好的效果，这样你觉得 translanguaging 没有很

有用。这个绝对不是我想看到的，就是 go back to your original teaching，如果你觉得你以前的方法能够足够达到让学生掌握 language 和 content 的，that's perfect，因为 Chinese immersion program 的目的是为了让学生用中文学习东西。所以我绝对同意这个 space 要 protect 好，不能用英文来抢夺学习中文的时间。但就是通过这个使用 translanguaging 能够加哪些 added value，我觉得这个是重要的。比如说像我们上次做的 exit ticket,你觉得那个会不会是一个 added value? 让他们用英文表示一下他们学到了什么，可以 holistically understand their content 和 language 在哪个 bilingual continuum。比如说你用英文给他们读故事，发现他们更感兴趣了，然后他们更愿意 participate 了，这个是你在进行中文讲课之后可以再加的这么一个小的单元。比如说 translanguaging transformation 对于他们的 identity development 会有帮助。我觉得这样你不会觉得累，反而会觉得用 translanguaging 使我的 teaching 更 flexible，我觉得现在我们可以从这个角度就是去看 translanguaging。

(English translation: I was considering how we should approach translanguaging. I remembered that Ofelia García said do not impose translanguaging [on teachers], which means do not add English for the sake of translanguaging. My purpose was not to let translanguaging exhaust you – not to force you to add much more English because of this research; if you add English forcedly, you would not feel translanguaging as an effective approach. This was definitely not what I would like to see. I think if you think that your existing/previous teaching practices [without adding much English] can help students master both language and content, that's perfect. You can go back to your original teaching. The purpose of Chinese immersion program is to let students learn content area knowledge in Chinese, so I absolutely agree that we need to protect this space, and do not

let English “rob” your Mandarin instructional time. But we can think about – what “added value” translanguaging can provide. I think this is important. For example, the exit ticket we did last time, do you think that’s an added value? We let them use English to express what they learned so that we can holistically understand where they were on their bilingual continuum in terms of their content and language proficiency. Or another example, you read English books to them and found that it increased their interest and participation; this is something you can add as a complementary unit after teaching lessons in Chinese. Or [we can] use translanguaging transformation to foster their [bilingual] identity development. I think you would not feel exhausted in this way and on the contrary, you would feel that translanguaging can make my teaching more flexible. I think we can approach translanguaging from this lens. (Our research planning/debrief meeting transcript, January 11, 2019).

To relieve Ms. Li’s emotional stress and unpack our confusion, I was reflecting upon our past co-design journey to see if I “pushed too hard” for opening up translanguaging space. I would not want our research become a real burden for Ms. Li and thus proposed the lens of “added value” to help us reexamine translanguaging as “icing on the cake”: on the basis of maintaining a Mandarin instructional space where Ms. Li can continue with her existing effective teaching practices to help students develop their Chinese proficiency toward a “native speaker” goal, we could “add” certain “English spaces” *strategically* and *purposefully* to get a fuller picture of students’ learning process, to maximize their learning opportunities, and to cultivate their identity and critical consciousness as a whole learner.

I reassured Ms. Li that the goal of experimenting with “more English” was not to reject or complicate her existing teaching practices to “exhaust” her, but to provide “added value” to

complement her approaches – to infuse flexibility into Chinese instructional space to better serve bilingual learners academically and socio-emotionally. This was in line with Sánchez et al.’s (2018) proposal for incorporating translanguaging allocation policy in DLBE, “The reframing (i.e., adding translanguaging documentation, rings, and transformation spaces) ... is *not* meant to *replace* existing language policies or to in any way work against (DLBE) programs. Rather, it is intended to *enhance* them, to offer the flexibility that is required to tend to the social and academic needs of all students who are becoming bilingual (p. 2, emphasis added).”

This “added value” perspective helped Ms. Li reevaluate our design from a macro perspective: translanguaging was more than simply adding English words on a sentence level and it needed to be used judiciously in tandem with other teaching approaches. Ms. Li recognized that “it was okay to go back to her original teaching” and she could continue with her past regular teaching practices (such as using multimodality without English) to help students develop their language proficiency in a “Mandarin-centric” space. Translanguaging or opening up space for increased use of English could function as an added layer to enhance both Mandarin teaching and learning. In our subsequent conversations, Ms. Li mentioned that she did see some “added value” of translanguaging in documenting students’ academic performances, as scaffolding, and in creating a safe space affectively so that all students with varying levels could participate. However, with regards to her confusion in the text message, she expressed that “我其实很想要看 data, 说真的, 就是虽然我们的研究是 qualitative 不是 quantitative, 但是我真的很想要知道说我到底真的在语言的部分可以帮助他们到什么样的程度。(English translation: Actually, I would really love to see data, seriously. Although I know our research is qualitative not quantitative, I really want to know to what extent translanguaging can help students with their language proficiency aspect.)” (January 11, 2019). It was a fair concern as

Ms. Li needed to constantly grapple with the tension between creating a flexible, multilingual space and reaching a monolingual-driven, native speaker social standard which has material consequences. Furthermore, this is also one of the critiques in the current translanguaging in bilingual education research – there is a lack of quantitative empirical evidence showing that increased use of English during minoritized language instructional time will benefit students’ minoritized language development (Ballinger et al., 2017; Fortune & Tedick, 2019).

While I echoed this concern, I shared my thoughts with Ms. Li, “我个人认为 translanguaging 从一开始出现这个 concept 就不是为了 increase quantitative data (English translation: I personally think since the very beginning, the emergence of the notion ‘translanguaging’ was not for the purpose of increasing[ing] quantitative data)” and “Translanguaging is more about *sociocultural*, more about how can we create an inclusive environment for everybody so that they can flourish in a safe learning space” (January 11, 2019, emphasis added). Meanwhile, to better address Ms. Li’s concern and facilitate different educational stakeholders’ buy-in of translanguaging pedagogies, I also argued that we do need more mixed-methods studies of translanguaging in DLBE contexts so that we have empirical evidence showing translanguaging could make our students “quantitatively not lose, qualitatively win something” (January 11, 2019; I learned this phrase from a conference I attended before) – it means that translanguaging would not have negative influence on students’ language proficiency development and could bring more benefits to other dimensions of student learning (such as content understanding, engagement, identity, and socio-emotional aspects). I believed that adding a quantitative layer to translanguaging studies could help researchers be more well-positioned to respond to some of the existing debates (e.g., Ballinger et al., 2017; Fortune & Tedick, 2019; Tedick & Lyster, 2019) and move the whole field forward.

Generally speaking, this was a challenging stage (mid-December 2018 to mid-January 2019) for both Ms. Li and me. We experienced from confusion to “reorienting” our lens to approach translanguaging pedagogies. As I argued previously, this stage was not a stagnation or a turn-back; rather, it further contributed to our development of translanguaging co-stance. To me, I understood more about the dilemma and complexities that Ms. Li (as a language-minoritized teacher) had to cope with in her everyday teaching practices, and started to envision an “added value” lens to facilitate translanguaging design in a flexible not exhausting way for practitioners: in the premise of maintaining the existing minoritized-language space, translanguaging spaces can be added strategically to soften the strict monolingual boundaries to foster an inclusive, heterogeneous learning environment for all students. In addition, Ms. Li’s concern also deepened my critical perspective toward translanguaging in bilingual education – while affirming the “qualitative” benefits that translanguaging could bring, we need more quantitative research addressing the effectiveness of translanguaging pedagogies in minoritized language development (to ensure that adding translanguaging spaces would not jeopardize students’ bilingual proficiency).

To Ms. Li, she gave a lot of thought to translanguaging pedagogies during this period of “dark days”. Her confusion, exhaustion, stress, and anxiety represented her tensions between embracing heteroglossic language ideologies and navigating standardized language ideologies. As a language-minoritized teacher, she was faced with routine challenges of creating translanguaging spaces (with the potential increase of English) while maintaining/protecting adequate Mandarin space (so that students can develop target language proficiency as a native speaker). It was an iterative process for her to develop an expanded understanding of translanguaging beyond code-switching and to foster the competence to judiciously and

strategically design different forms of translanguaging pedagogies. The “added value” lens mitigated her stress to a certain extent and redirected her to examine translanguaging from a macro perspective. While she reaffirmed some promises of translanguaging, one lingering concern was its relationship with target (minoritized) language proficiency development in DLBE contexts.

### **Critical Stage Four (Mid-January to April 2019):**

#### **Heart Opening/Perspective Expanding Stage**

After experiencing the “confusion/reorienting” stage, Ms. Li and I continued with our translanguaging design in and across different content areas based on Sánchez et al.’s (2018) proposal, “translanguaging thematic unit design”, and “added value” lens. From mid-January to April 2019, we went to a Professional Development (PD) workshop together, given by Dr. Tara Fortune featuring “immersion/dual language education in the U.S.” and engaged in continuous (difficult) conversations to discuss readings (e.g., Zheng, 2019) and negotiate our translanguaging co-stance. One critical moment was that Ms. Li gradually opened her heart to share with me why she had always wanted to “fight” against translanguaging pedagogies in her class.

因为我们只是一个 program，就是你来我的班上你进来就是学中文，就是讲中文，你走出去的时候就不是中文的世界了，全校的墙上看不到一个中文字，走出去见到的人除了这边有别的中文老师之外，但他们也不是他的老师，所以他们其他的所有老师都是说英文的，所以我觉得老实说我自己觉得有点被 excluded，这个界限是非常清楚的。但你去[a Spanish Immersion School]的时候，全校都是所有的 adults 都是 bilingual，就是真的彼此讲话的时候英文西班牙文流利转换，学生也是这样，然后大家都是 fluent in both languages, 所以那个的 translanguaging 我觉得会更明显或

者是更多的 benefit。整个学校的氛围就是这样，整个学校的装饰两个语言都有，他们的考试两个语言都非常重要，我们在这边的中文考试不重要嘛。学生其实可以感受得出来哪个东西比较重要，那比如说他今天在上中文课的时候遇到一个老师说“哦，我要把你带出去我要多上英文”，其实他可以感觉得到英文不行我有这个 support 有这个 extra time 要学英文，可是中文不行的时候没有人管他，没有人把他从英文班拉出去说你中文不行我要帮你补这个中文。所以各个这些 policies，所有大人在对待他们的方式都可以告诉他们这中文没什么重要啊，不用花那么多时间在那里，不会没关系啦，英文比较重要哦，考试都比较重要哦，你看我们我们要复习这个 state mandated exam，好玩的都是英文的，我们有 field trips，我们有这个 pajamas party 都是英文的，所以我觉得这种你觉得你没有直接跟学生这样说，但是这样间接地就让他们知道说英文比较重要，中文没那么重要... 因为这整个学校的氛围就是这样，整个大人在对待这个事情的时候就是这样。所以就是在提 translanguaging 这个部分的时候我一直有一种我要 fight 的感觉就是，我觉得身为一个老师我在各个方面都是被 squish to the corner 的那种感觉，所以你在跟我讲说我的班上要引用英文让他们可以这样这样的时候，我就觉得我的权利就已经被剥夺了，我的空间就已经被压缩到这么小了，你还让我在我的空间里面让他们用这个他们一天到晚都在用的语言还有他们觉得比较重要的东西。

(English translation: Because we are only a program [part of the school], which means when you come to my class you learn Chinese, you speak Chinese, but when you go out it is not Chinese world anymore. You cannot see any Chinese characters on the school wall, the people you meet – even though there are some Chinese teachers from the

program, but they are not my students' teachers, so all of my students' other teachers [except for me] are [monolingual] English speakers. Honestly speaking, I sometimes feel like I am excluded because the boundary is very clear. But if you go to that school [Ms. Li was referring to a Spanish immersion school], all the adults in that school are bilingual. When they speak, they code switch between English and Spanish seamlessly and smoothly, and so do the students. Everyone is fluent in both languages. I think translanguaging [practices] are more visible and translanguaging [pedagogies] will bring more benefits in their context because the whole school atmosphere is like that, the whole school has decorations in both languages, and both languages are equally important in their tests. In my school, Chinese test is not important. Students can actually feel which language is more important, for instance, when they have Chinese class, there are always English teachers pulling them out, saying "Oh, I need to take you out for extra English tutoring". In fact, students can feel when they struggle with their English, they can get support and will have extra time to study English. But when they struggle with their Chinese, no one is pulling them out from their English class saying I can help you with Chinese tutoring. Therefore, all these school policies, the ways adults treat students, all these messages are telling them – Chinese is not that important, do not spend too much time there, it is okay if you are struggling, English is more important, [English] test is more important because we need to review the state mandated exam. All the fun stuff is from their English side – we have field trips and pajamas party in English class. So, I think although you do not tell students directly, these ways are already indirectly telling them English is more important and Chinese is not that important ... The whole school atmosphere is like this, and how adults treat Chinese immersion program is like this.

That’s why when we talk about translanguaging I always have a “fight” feeling. I feel like as a [language-minoritized] teacher, I have already been squished to the corner in every aspect. When you told me to increase English use in my class to let my students do this and that, I feel like my rights are deprived. My space has already been squeezed to very little, but you are still asking me to use the language they always use from day to night, the language they feel more important in my class.) (teacher interview transcript, February 12, 2019).

In this exchange, Ms. Li openly discussed why she had felt resistant or even opposed to translanguaging pedagogies from a contextual lens, which expanded my perspective to understand teachers’ complex process of developing (or not) a translanguaging stance. In addition to navigating the tension from standardized language ideologies (or native-speakerism), as a language-minoritized teacher in a U.S. Chinese immersion program, Ms. Li was also faced with structural constraints (or imbalanced power dynamics) from multiple layers – her classroom (micro), school (meso), and the society (macro) (Bronfenbrenner, 1979). All these socio-cultural-historical factors contributed to how she took up translanguaging.

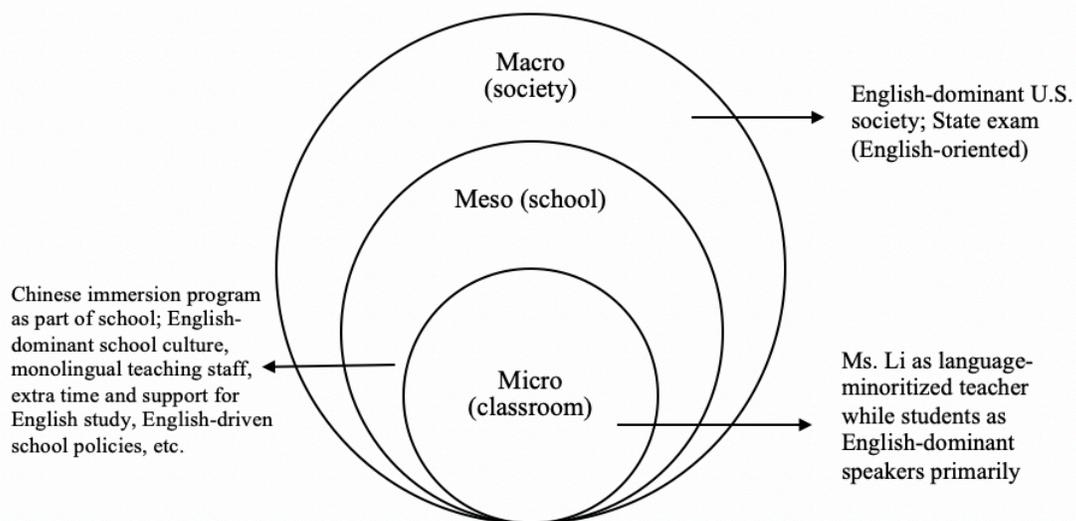


Figure 5.7 Contextual factors impacting Ms. Li’s take-up of translanguaging

As illustrated in Figure 5.7, the dominant influence of English came from every aspect. On a micro level, the majority of Ms. Li's students were English-dominant speakers in her class and students brought dominant language, culture, and ways of thinking and learning to her Mandarin instructional space. On a meso level, due to the Chinese immersion program as only part of the whole school, the main school culture was English-oriented and most teaching staff members were monolingual English speakers who did not share the same positive view toward bilingualism with Ms. Li. In addition, pull-out ESL services often occupied Chinese instructional time (some students were pulled out for extra individualized English tutoring in the middle of their Chinese class time based on my observation). Interesting activities were also usually organized from the English side (such as "field trips", "pajamas party"). These school policies overall reinforced the hegemonic status of English, which was already reflected in the U.S. society on a macro level. The high-stakes testing culture with monolingual bias (such as state mandated exam) in U.S. education policies further exacerbated the situation of minoritized language development. Therefore, as a language-minoritized teacher who felt "squished to the corner", Ms. Li developed a strong sense to protect her marginalized Mandarin instructional space – "the only Chinese world". When being asked to design translanguaging spaces to increase more use of English in her class, she "naturally" felt threatened and wanted to fight against the infringement of English.

Ms. Li's revelation of her innermost thought about translanguaging helped me recognize that "... the options teachers have to take up translanguaging pedagogy will invariably be shaped by the teacher's own identity and the sociohistorical context of her or his school and classroom" (p. 221), as Henderson and Sayer (2020) also point out in their study. This process deepened both of our beliefs and perceptions toward developing a *contextualized* view of translanguaging

in DLBE contexts so that we can enhance our designs to “work within and against the system” – to not only fit the teacher and learners’ needs considering multiple contextual factors but also challenge the monolingual, language separation structure.

Building on her unpacking of the contextual constraints and our design experiences so far, Ms. Li did admit that “我觉得 home language 不管在什么 context 之下都是很重要的，对我的小孩来说，他们的 home language 也很重要，他们的英文也很重要，英文不好的时候其实也很难把中文学好 (English translation: I think regardless of what context, the role of home language is very important. For my students, their home language, English is also very important. When you struggle with English, actually that will affect your Chinese learning too)” (February 12, 2019). Although Ms. Li tried her best to protect the Mandarin space, she recognized the importance of using home language (English) to facilitate students’ L2 (Mandarin) learning due to the cross-linguistic relationship and transfer (Cummins, 1979, 1981). She then expressed that her “ideal translanguaging design” would be moving beyond opening up translanguaging spaces in her Mandarin class only, but fostering collaboration between English and Chinese teachers: envisioning that they work together to plan thematic units across content areas from both sides and they coordinate their teaching at a similar pace. Ms. Li gave out two examples based on her past teaching collaboration experiences with a third grade English teacher (who had left the school at the time of our study):

- (1) 比如她在她的班上那个 reading 课的时候在教自传，她就会读一个美国历史上女英雄的自传，然后同时我正在教美国独立战争，你知道就是这种搭配，所以我在讲说，哦，那时候有一个女生叫 (Deborah Sampson)，然后她去打仗，然后学生就会说，哎呀，we read about her! 她怎么样怎么样。学生会知道说他们在那里学到的东西我们也在這邊学，然后他们 actually already learned something，然

后 they have a lot to tell me, 他们就会开始叽里呱啦地讲说, 你知道 Sampson 怎么样她其实是个女生, 她跟那个木兰很像, 她就打扮成像男生的样子, 因为她很勇敢 ... 但是那个时候我完全不用英文, 所以他们也知道他们要很非常用力用中文告诉我们他知道的事情, 然后他又刚在他的班上听了这个(Deborah Sampson)的故事, 所以他们非常努力地用中文来告诉我这个女英雄是谁。然后跟我在教的东西是非常有关联的, 而且他们很有兴趣。你说这个有没有 language separation, 有, 他还是跟那个老师在英文班, 也是跟我在中文班, 完全的 separate, 那个老师不会说中文我不说英文, 但我们在学的东西是一样的。而且英文在帮忙 support 在建立他们的 background knowledge, 就是他们英文老师在读这个女英雄的自传的时候就帮学生建立了一个 background knowledge, 等到学生进来我的班的时候, 诶, 我已经听过了我知道这个。

(English translation: For example, when the English teacher was teaching autobiography in her reading class, she would read an autobiography about a heroine in American history, and at the same time I was teaching American Revolution War. You know it's like this match. So, when I was talking about, "Oh, there was a girl called Deborah Sampson, and she joined the army and went to the war ..." and students responded, "Ah! We read about her! She's like ..." The students would know the things they learned from English class could be applied to here (Chinese class) and they had actually already learned something and they had a lot to tell me. They would rattle on, like "you know Sampson was actually a girl, she's like Mulan, she disguised herself as a man, she's very courageous ..." But in my class, I did not use English at all, so my students knew that they needed to try their best to use as

much Chinese as they can to tell me the things they learned. Because they just listened to the story of Deborah Sampson in their English class, they were able to try their best to tell me who the heroine was in Mandarin and this was connected to the things I was going to teach, they were very interested and engaged. Do you think there was still language separation? Yes, students were still in two separate classes (English and Chinese) with two separate teachers. The English teacher could not speak Chinese and I did not use English. But the things we learned had connections. English here served as a support to help students establish their background knowledge, which is when the English teacher read the heroine autobiography, she helped the students build their background knowledge. When the students came to my class, they had already heard of this concept.) (February 12, 2019)

- (2) 或者是我之前在教科学的时候，他们需要分析，就是我看到气象图怎么样然后他说首先，第一什么，第二什么，第三什么，最后什么，我们在这边看这些 chart，在英文班老师教你要怎么描述一个事情它有一个 sequence 的时候有时间顺序的时候有哪些联结词可以用，subsequently 这些东西，所以我在教的东西跟她的 reading 有关，我在教的东西跟她的 writing 有关，analytical writing，这样是一个很大的，这不但是 thematic，因为是他的语言课跟我的科学课或者是他的阅读课跟我的社会课嘛，对不对，这不但是一个大的 thematic，而且他还是跨语言的合作，这个才是最 ideal 的。

(English translation: Or another example, when I was teaching science [unit on weather], students needed to analyze the weather chart and to describe [their observations] using first ..., second ..., thirdly ..., finally ... [in Mandarin]. When we

were looking at charts in my Mandarin class, the English teacher was teaching my students how to describe an event, how to describe things in sequence, and what connectives we can use such as “subsequently” these words. So, the things we learned was connected to her English reading class; the things we learned was also connected to her writing class – analytical writing. This was not only thematic because her reading/writing class was connected with my science or social studies class, but also cross-linguistic collaboration. I think this was the ideal design.) (February 12, 2019)

Although Ms. Li did not name her collaboration with the English teacher as “translanguaging pedagogies” at that time, she now realized this would be her “ideal translanguaging design” in her context as she got to know more about the different forms translanguaging can take. By cultivating collaboration between English and Chinese sides, both teachers can help students make explicit connections between their two named languages (as one integrated system instead of two completely separate worlds) and facilitate different types of cross-linguistic transfer (Cummins, 1979, 1981) to promote bilingual, biliteracy development and content knowledge acquisition, such as transfer of concepts, as in the first example Ms. Li gave – background knowledge transfer between ELA and CLA/Social Studies, and transfer of specific linguistic elements and strategies, as in the second example – the use of sequence connectives in ELA writing and science analysis. This collaboration can form a dynamic, organic translanguaging flow across both English and Mandarin instructional spaces, which could also help Ms. Li protect her very limited Mandarin space too.

It was a pity that we could not put Ms. Li’s idea into actual design because of the current contextual constraint: there was no collaboration culture between English and Chinese teachers in her school and according to Ms. Li, some English teachers even held negative attitude toward

Chinese teachers by seeing them as job competitors, a problem that was also identified in Sung and Tsai's (2019) study. Although we did not have adequate time to initiate English-Chinese teacher collaboration in my translanguaging design study, Ms. Li's idea offered a promising future research direction for me and expanded my view toward approaching translanguaging from a macro perspective: we could break down and go beyond (as in "Trans-") not only the separation boundaries among content area subjects such as creating "translanguaging thematic unit design" or "translanguaging transformation" spaces, but also the boundaries between English and Mandarin classes (as Ms. Li pointed out) to re-imagine new pedagogical possibilities for bilingual learners (my memo on March 5, 2019).

As both of us developed a "contextualized" view of implementing translanguaging in a minoritized language instructional space considering situational factors and an "expanded" understanding of translanguaging pedagogies as more than language alternation (or code-switching) between two named languages in teacher-student conversations, we engaged in more in-depth dialogues to negotiate our translanguaging co-stance in Mandarin/English DLBE contexts. We talked about the importance of parent engagement and that home-school could also form a dynamic, integrated translanguaging flow in which parents can help their children establish background knowledge in English and students can practice "translating" ideas into Mandarin in Chinese class, such as our "Culture Day Project" (March 19, 2019). We also discussed the relationship between translanguaging implementation and grade level in DLBE programs. Based on her Kindergarten teaching experience, Ms. Li believed that translanguaging spaces should not be allowed (or should be very minimized) in language-minoritized instructional space in earlier grades (such as K-1 or 2). This was due to two reasons: (1) the things learned in Kindergarten are very concrete concepts (such as color, food, animals, body

parts, and five senses) which can be easily explained in body language or via total physical response (TPR) activities and pictures without the help of English; (2) maintaining a Chinese-centric space in earlier grades could help students form a habit of using Mandarin as much as possible. However, as learning concepts would get more abstract and complex in upper graders (from third grade), translanguaging spaces could be incorporated but need to be designed strategically (March 26, 2019). In response to Ms. Li, I reaffirmed the importance of protecting Mandarin instructional space and agreed with the principled use of English depending on learning tasks regardless of grade levels. I also introduced that some scholars have also theorized the notion of translanguaging to include multimodality (e.g., Li Wei, 2017; Pennycook, 2017; Lin, 2018), which may extend the meaning of translanguaging pedagogies to encompass flexible use of both linguistic and semiotic/multimodal resources (in that case, TPR in Kindergarten could be considered as “translanguaging” as well).

To summarize, this was an exciting stage (mid-January to April 2019) for both of us to expand our perceptions toward translanguaging and bilingual education. Ms. Li started to feel more secure and comfortable to share her inner thoughts – why she had a sense of “fight” against translanguaging pedagogies. Through unpacking the contextual constraints and reflecting upon our past co-designs, we both developed a more nuanced understanding of translanguaging in language-minoritized instructional space in DLBE programs and engaged in interesting dialogues on the interaction between translanguaging, grade level, and multimodality. First, we both agreed on the importance of protecting Mandarin instructional space given the sociohistorical English dominance from every level (micro – classroom, meso – school, and macro – society). Second, it was a (continuous) balancing act between creating translanguaging spaces and maintaining a “Mandarin-centric” space because we did recognize the value and

necessity of utilizing students' home languages or their whole linguistic repertoire in academic tasks. Based on these two shared understandings, both Ms. Li and I envisioned different ways to strategically and purposefully integrate translanguaging spaces within our Mandarin classroom and across both English and Mandarin sides, such as translanguaging thematic unit design (our "Culture Day Project", "Language/Culture Portrait") and English-Chinese teacher collaboration (Ms. Li's "ideal translanguaging design"). Although we did not have the capacity to translate all of our ideas into reality, it was really helpful for us to (re)think about and (re)evaluate designing translanguaging pedagogies from a "contextualized", "macro", and "trans" perspective – translanguaging design is bounded by multiple contextual constraints and "always needs to be considered against the *background of continuing inequalities, predominant discourses, local circumstances, and personal considerations*" (p. 7, emphasis added), as Jaspers (2018) argued; it is more than code-switching or language alternation in dialogues ("micro") but has the potential to transcend different socially constructed boundaries in DLBE contexts, such as subject matters, language separation spaces, and home/school dichotomy. (Re)imagining translanguaging design in this way could form an organic, dynamic flow of using different linguistic resources within and across spaces to facilitate bilingual learners' cross-linguistic transfer and socio-emotional development.

#### **Critical Stage Five (May to June 2019): Summarizing Stage**

As our co-design came to an end from May to June 2019, Ms. Li and I started to engage in final reflections on our beliefs and perceptions toward translanguaging pedagogies. From May 9-11, Ms. Li went to an annual conference called the National Chinese Language Conference (NCLC) in San Diego. According to the conference website, it "provides a high-profile platform for sharing new ideas and best practices in the fields of Chinese language teaching and learning,

Chinese arts and culture, and U.S.–China educational exchange” (NCLC, 2019). Attending this conference was sponsored by the school and part of Ms. Li’s yearly professional development training. In addition to participating in practitioner-driven presentations and interactive workshops, Ms. Li also visited several local Chinese immersion programs and schools in the west coast. On May 14, 2019, thinking about her conference experience and our translanguaging design study, Ms. Li shared that,

我去了(NCLC)之后其实发现自己太 protective，就是对中文学习这块，那我觉得是因为这边的氛围，就是我觉得西岸那边我也不是第一次发现，西岸人比较 friendly，西岸对于语言文化是比较开放的。我们相对更保守，其实我在这个学校大家一直觉得很 diverse，我去 San Diego visit 两所学校，一个是 elementary 一个是 middle IB 的，我觉得他们的小孩我真的是没法 distinguish 他们是哪一个种族的，他们不只是 ethnically，他们语言很多种，西语的地位也很高，那边有更多的小孩学中文是第三第四语的，我们班大部分小孩中文是第二语，然后英文是非常 dominant，然后这边英文老师又很注重英文是最重要的，然后对双语的理解非常不够。那个是我参观那些学校从来没有感受到的，然后因为我在这个地方教，变得我非常 protective 我自己的 space 跟语言使用的 space，但是是不是最好其实还有待讨论。但我会觉得因为我在这个环境之下所以我必须做出这么 protective 的选择。

(English translation: After attending the NCLC, I actually found I was very over-protective in terms of Chinese language study. I think this was due to the atmosphere/context here. It was not my first time to find that, people in the west coast are friendlier and the west coast is more open to language and culture diversity. We are more conservative. People in my school always think [our student populations are] very

diverse, but compared to the two schools I visited in San Diego, one elementary and one middle IB school, I think their kids are not only ethnically diverse – it’s so hard for me to distinguish their ethnicities, but also speak multiple languages. The social status of Spanish is very high there, and there are many kids who learn Mandarin as their third or fourth language. However, the majority of students in our class speak Mandarin as their second language and their English is very dominant. And our English teachers think English is the most important and have a lack of deep understanding of bilingualism. This is something I did not sense at all in those schools I visited. Because I am teaching here, I have become very protective of my own space, my Mandarin instructional space. I don’t know if this is the best way and this is actually still subject to discussion. But I think because I work under this environment, I have to make a choice to being very protective.)

(Our research planning/debrief meeting transcript, May 19, 2019)

Ms. Li’s constant reflection on if she was being over-protective of her Mandarin space further proved that her stance or take-up of translanguaging was shaped by her sociolinguistic context. Compared to her school visit experience in San Diego (or broadly speaking, the west coast), she felt that her school context here was more “conservative” – monolingual/English-centric and lacking in true embracement of language and culture diversity and bilingualism. Although she understood that sticking with Chinese-only rule strictly may not be the best way, she had to protect her Mandarin space that was already on the margins.

To what extent we can open up translanguaging spaces was a “forever” question we were struggling with in a language-minoritized instructional context. We did find it helpful to work with our guiding translanguaging framework – Sánchez et al.’s (2018) translanguaging documentation, rings, and transformation spaces, in addition to the perspectives we developed in

the previous stages (such as “thematic design”, “added value”, “macro” and “trans-” lens). In our final research meeting on June 4, 2019, I asked Ms. Li to share her general thoughts on and some major principles of designing translanguaging pedagogies in her classroom context. Ms. Li started with:

我觉得生活中的 translanguaging 是一个自然发生的现象，那当然会 depends 看你生活在什么地方和你周遭的人是怎样的人嘛，所以它是很自然流动的。但是在课堂上，我真的还是觉得不能让它自然流动。我觉得你真的要使用你真的是 extremely consciously about how you use it, where you allow it。

(English translation: I think translanguaging is a naturally occurring phenomenon in daily life, and of course it depends on where you live and what people surround you, so translanguaging naturally flows [across spaces]. However, in class, I really think that we cannot let it naturally flow. I think if you want to use it, you need to be extremely consciously about how you use it, where you allow it.) (June 4, 2019)

Ms. Li pointed out two important things: (1) translanguaging practices are natural language practices in bi/multilingual communities; it is the way how bi/multilinguals communicate with each other (e.g., in our research meetings, Ms. Li and I translanguaged all the time); (2) however, when teachers decide to use translanguaging as a pedagogical approach in classroom, he/she needs to strategically create translanguaging spaces to “control/monitor” students’ use of their whole linguistic resources (when, where, and how) in academic tasks. This was in line with my belief too – translanguaging design needs to be purposefully and systematically planned to suit the sociolinguistic context, learner population, lesson goals, to name a few, in DLBE programs (my memo on June 4, 2019).

Building on this, Ms. Li continued with summarizing her principles of implementing translanguaging pedagogies in language-minoritized classrooms:

(1) 一定要有 clarity 在活动里，比如读可以英文，说必须中文等等。(English

translation: There must be clarity in activities, for instance, you can read in English but you must speak in Mandarin, etc.)

Broadly speaking, it is important to explicitly let students know or to clarify when and where to allow English use, as in the case of strategic alternating languages of input and output or in “Culture Day Project”, when to use Mandarin and when to use English in different steps.

(2) 频率不能太高。(English translation: Frequency shouldn't be too high.)

From my understanding, I think she meant that the overall frequency of using English cannot be too high given that it is still very important to protect Mandarin-centric space.

(3) 我觉得 translanguaging 的 purpose 也很重要。(English translation: I think the purpose of using translanguaging is also very Important.)

In other words, teachers need to understand why to use translanguaging in certain academic tasks – what the learning goals are and if the use of translanguaging is meaningful and helpful to achieve those objectives.

(4) 我觉得 meaning negotiation 也很重要。我要让我的学生知道我的 expectation,

比如在小组讨论的时候 at least try their best, 我没有要求百分之百，但是我会看到他们的 effort。我觉得 effort, you're willing to put yourself in an uncomfortable situation because you didn't know that language that well, so you're constantly negotiating meanings in yourself and when you're talking to your friends, 所以 at

least I see that effort。我允许他们 translanguaging，但是自己尽量保持一个 target language model。(English translation: I think [the process of] meaning negotiation is also very important. I need to let my students know my expectations, for instance, they need to at least try their best [to use Mandarin] in their small group discussions. I didn't ask for 100% [use of English], but I need to see their effort. I think effort, you're willing to put yourself in an uncomfortable situation because you didn't know that language that well, so you're constantly negotiating meanings in yourself and when you're talking to your friends. So, at least I see that effort. I allow their use of translanguaging [in conversations], but I will try my best to remain a target language model.)

This was a key principle that Ms. Li emphasized multiple times along our ideological journey. She was strongly against teacher's use of direct/concurrent translation approach. Instead, she would like to foster a meaning negotiation or knowledge co-construction space to “push” students figure out the meanings themselves or with their peers, using Mandarin as much as possible. She allowed students to draw on their whole linguistic resources (to translanguage) in the process of negotiating meaning while she would remain a target language model to provide recast or other forms of corrective feedback in teacher-student dialogues. She pointed out that it was very important to take efforts to go through this “uncomfortable” process in L2 learning to develop language proficiency. This reminded me of the “*allow but not announce*” principle she discussed in our critical stage two.

- (5) 这点我没有做到，但我觉得也许我可以试试看，就是跟小孩讨论和说清楚为什么这个部分我让他们用英文，为什么这个部分我让他们用中文。可以跟小孩讨

论目的。(English translation: I didn't do this [in our research], but I think maybe I can try this later. I can have conversations with my kids to discuss why I ask them to use English for this part and why to use Mandarin for that part. I can discuss the purposes with my students.)

This was a very interesting idea that Ms. Li proposed – to raise students' awareness of why we use (or not use) translanguaging in certain learning tasks. I think discussing the rationale with bilingual students could bring the translanguaging *corriente* strategically to the visible level and help learners develop a better understanding of the roles of and connections between L1 and L2 to facilitate their bilingual development. This provided me with more thoughts for future research directions.

What Ms. Li elaborated above also captured most of my beliefs and perceptions toward translanguaging. It was a balancing act to integrate translanguaging spaces in a systematic and principled way while maintaining a Mandarin-centric space. Looking back our co-designs informed by the Sánchez et al.'s (2018) framework and our emerging perspectives, we both saw some benefits brought by translanguaging designs and linguistic flexibility, such as cultivating a safe, inclusive space affectively so that all students could participate, functioning as differentiated scaffolds in small group tutoring, making content knowledge more accessible, raising students' metalinguistic awareness, and developing their bi/multilingual identities and critical consciousness. However, one lingering concern shared by Ms. Li and me was – if translanguaging pedagogies can really help students develop their target (minoritized) language proficiency in U.S. DLBE contexts. Based on some existing research evidence (e.g., Fortune, 2001; Fortune & Ju, 2017; Tedick & Young, 2016), Tedick and Lyster (2019) posit that it is unlikely that increased use of English through translanguaging will improve the minoritized

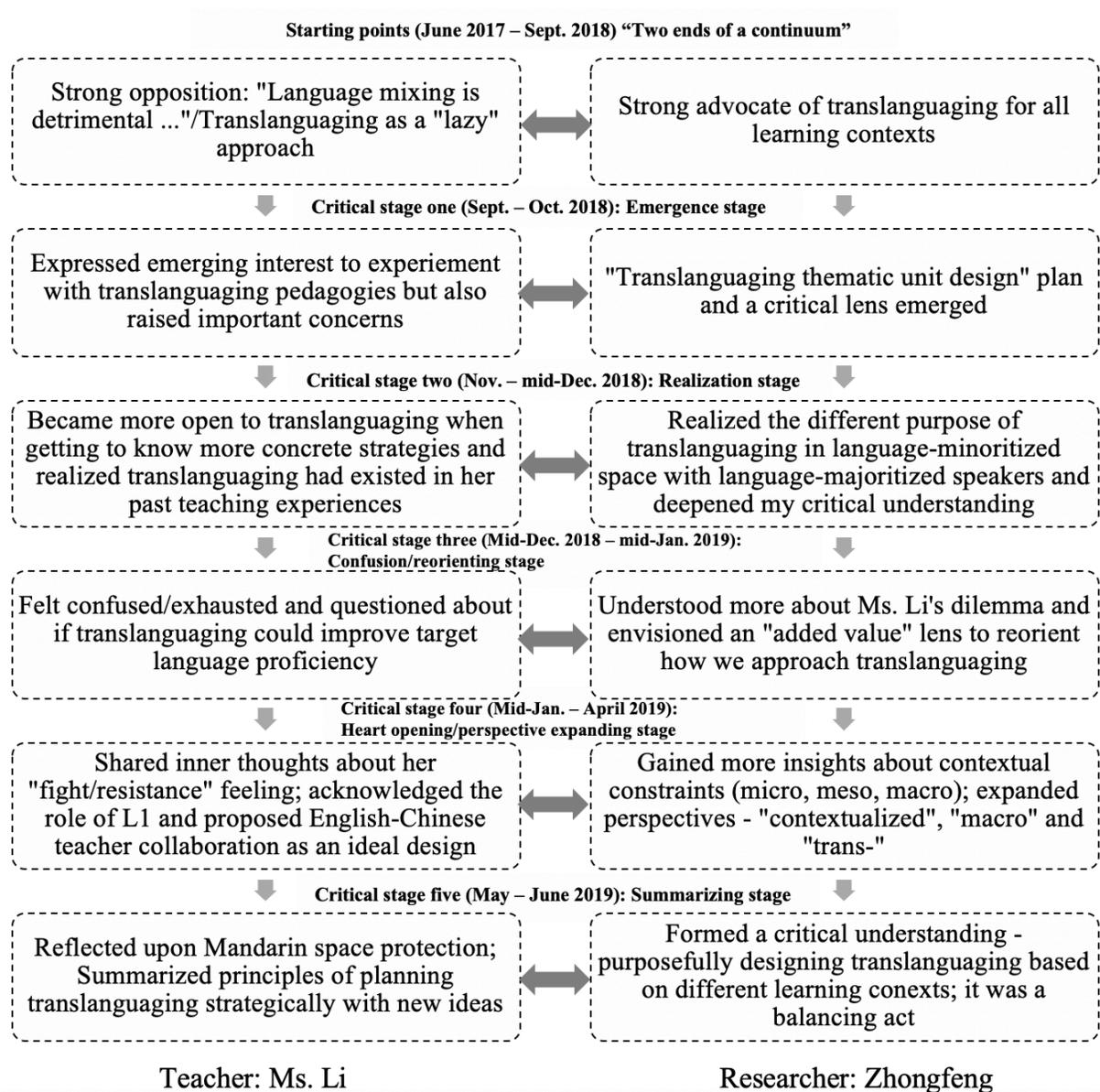
language proficiency outcomes among students in immersion/dual language programs. We hoped that future empirical research could look into this issue by adopting mixed methods to show the effectiveness of translanguaging in all dimensions of learning – if it could make our students “quantitatively not lose, qualitatively win something”.

At this final stage, it was really interesting to see that Ms. Li and I had reached many consensuses in terms of strategic and purposeful translanguaging design, its benefits and challenges, compared to our starting (almost the opposite) stances. Ms. Li’s continuous sharing of her contextual constraints really helped me foster a critical lens to (re)examine translanguaging pedagogies and the difficulties facing minoritized language development in U.S. bilingual education. Instead of romanticizing translanguaging as a panacea or a “one-size-fits-all” approach to all learning contexts, we as researchers need to develop a contextualized view to customize and optimize translanguaging pedagogies in different learning contexts. At the same time, in the process of experimenting with various translanguaging designs in and across content areas, I expanded Ms. Li’s perspective that translanguaging can take varying forms (not just code switching in utterances) and judicious use of translanguaging or opening up space for whole linguistic resources could maximize students’ learning opportunities. What’s more, Ms. Li could articulate her own principles of designing translanguaging and even generated new ideas about how to “better” integrate translanguaging pedagogies in DLBE contexts (such as English-Chinese teacher collaboration from critical stage four, and discussing the rationale of using translanguaging with students).

### **Coda: Final Summary**

This chapter took a longitudinal perspective to chart our ideological journey in response to my third research question: “In what ways does the process of developing translanguaging

spaces affect the teacher's and my beliefs and perceptions of translanguaging and bilingual education?". Given the participatory nature of my study, Ms. Li (teacher) and I (researcher) developed our translanguaging co-stance together by collaboratively, respectfully, and openly discussing and negotiating our beliefs and perceptions regarding translanguaging and bilingual education. During this process, we drew on each other's expertise, positioning ourselves as co-learners, to reflect upon our co-designs and make informed decisions on how to enhance them.



*Figure 5.8 Our ideological shifts*

Figure 5.8 reiterates our ideological shifts – from our various starting points to the five main stages that we went through together (also see Figure 5.1). Although the presentation appears in a linear, paralleled way, the full process of developing translanguaging co-stance was iterative, interactive, and bumpy, filled with confusions, emotional stress, and difficult conversations. At the very beginning, Ms. Li and I held almost the opposite views toward translanguaging. However, we embarked on this journey with open mindsets and were willing to embrace change and ambiguity. Along the way, we listened to and mutually informed one another and we saw tensions as opportunities to grow. Gradually, we developed shared understandings with a more comprehensive, critical, and contextualized lens to approach translanguaging pedagogies in DLBE programs. We also generated new ideas and questions for future research consideration. Overall, it was through the process of continuous action, reflection and evaluation “juntos/together” (García, et al., 2017, xii) that both Ms. Li and I (as teachers and researchers) came to question and understand better what minoritized language instruction in DLBE means and how translanguaging can be put to use for the best education purposes within the contextual parameters, affordances and restrictions.

## **CHAPTER 6 DISCUSSION AND CONCLUSION**

In response to the need for adopting flexible bilingual pedagogies in DLBE programs to leverage bilingual learners' full linguistic repertoires as resources (e.g., de Jong, 2016; de Jong et al., 2019; Somerville & Faltis, 2019), this study looked at how Sánchez et al.'s (2018) translanguaging allocation policy framework could be strategically and purposefully designed in a third grade Mandarin/English DLBE classroom where the majority of the students were English-dominant speakers. It illustrated that designing translanguaging pedagogies in a language-minoritized space was a challenging task replete with tensions, confusions, and difficulties, needing to grapple with both implementational and ideological spaces (Hornberger, 2005) together. However, this study also showcased that researcher-teacher collaboration made this task achievable and manageable; it facilitated the whole process and turned tension moments into growing opportunities to unleash and realize the potential of translanguaging pedagogies among student participation in DLBE contexts.

In the first part of this chapter, I will highlight three aspects from the findings and discuss them in connection with the landscape of translanguaging research in bilingual education: implementational and ideological spaces, researcher-teacher collaboration, and student participation. Then I will discuss the implications of the study for translanguaging theory and pedagogy. After this, I will explicate the limitations of the study and propose future research directions.

### **Implementational and Ideological Spaces**

This study illustrated the complex, discursive process of developing translanguaging pedagogies in a Mandarin classroom (situated in a U.S. Mandarin/English DLBE program), coping with both implementational and ideological spaces. Findings from Chapter 4 described

different types of translanguaging activities in the classroom implementational space and demonstrated how context affected forms and shapes of translanguaging designs. “Context” here should be understood from a multi-layered perspective and encompasses micro- (e.g., lesson objectives, content area, and classroom), meso- (e.g., school, family, and community), and macro- (e.g., society) dimensions. Different contextual factors determined how much agency (Palmer, 2018) we could exercise and how much “wiggle room” we had for the integration of translanguaging spaces. Overall, it was a balancing act to create flexible bilingual spaces while protecting the Mandarin instructional space and prioritizing students’ use of the minoritized language (Mandarin) given the societal dominance of English (macro) and our learner groups as English-dominant speakers (micro). In addition to offering “free” language spaces where students were allowed to mobilize the totality of their linguistic resources flexibly (such as exit tickets) for meaning making, Ms. Li and I also designed “structured” translanguaging spaces to regulate students’ use of L1 and L2 to maximize their Mandarin output (such as adding criteria to CLA and Science formative assessments, and explicitly stating when to use English and when to use Mandarin at the different stages of the “Culture Day Project”).

Our translanguaging designs further confirmed the importance of taking contextual factors into consideration when designing translanguaging pedagogies in implementational spaces. This is in line with Fortune and Tedick’s (2019) recent call for “context matters” (p. 27) – “it is critical to take the local context and program model into account when considering the appropriateness of translanguaging pedagogies” (p. 38), along with many others’ arguments (Cenoz & Gorter, 2020; Lau, 2020; Zheng, 2019), such as “translanguaging [pedagogical] practices can and must take different forms depending on the contextual needs” (Lau, 2020, p. 57). Given the unique context of U.S. DLBE programs where language separation is necessary

for different reasons (de Jong, 2016), our findings showed that translanguaging spaces need to co-exist with target language-centric spaces (instead of one replacing another), and Sánchez et al. (2018) provides a feasible guiding framework that supports the separation of the two named languages while infusing flexibility into instruction and assessment. This echoes Hamman's (2018) notion of fostering a *critical* translanguaging space in DLBE programs which requires educators to take a critical examination of language hierarchies within particular sociolinguistic spaces so that flexible language spaces can be intentionally integrated while the focused language instructional space (especially language-minoritized ones) is also privileged.

In addition to implementational space, designing translanguaging pedagogies also needs to grapple with ideological space. As teachers are at the metaphorical center of DLBE classrooms, it is critical to unpack their language ideologies and develop their translanguaging stance (García et al., 2017) to facilitate translanguaging designs in DLBE contexts. The extant research has provided insights in understanding articulated and embodied language ideologies of DLBE teachers (Martínez, Hikida, & Durán, 2015; Henderson & Palmer, 2015; Henderson, 2017) and shows that an individual's language ideologies could be multiple, nuanced, and even contradictory with regards to translanguaging, being constrained by societal, institutional, and policy contexts. Therefore, it may be an iterative, complex process of embracing a translanguaging stance. This study served as the first step to approach a teacher's language ideologies from a longitudinal perspective to analyze her belief shifts or perception changes (if any) during the process of experimenting with translanguaging design. Findings from Chapter 5 demonstrated that Ms. Li's ideological journey toward translanguaging pedagogies was bumpy and encompassed many nuances, complexities, confusions, and iterations (see Figure 5.1 in Chapter 5 for a review): from strong opposition at the very beginning to gradually realize

translanguaging had existed in her past teaching practices to feel confusion about translanguaging and L2 language proficiency to expand her perspective and reach shared understandings of translanguaging with the researcher. This cyclical and discursive developmental process resonates with the most recent findings in Liu, Lo, and Lin's (2020) study showcasing a teacher's complex belief changes on using translanguaging pedagogies in her English for Academic Purposes (EAP) course at a university in China.

It should be noted that Ms. Li's development of translanguaging stance did not happen accidentally or in vacuum. There were two important factors contributing to this ideological journey. First, Ms. Li was open-minded from the get-go (though she and I firstly held almost the opposite stances toward translanguaging). Her openness to changing philosophy and practice and willingness to collaborate with a researcher (me) set the foundation for us to start experimenting with translanguaging pedagogies in small ways. These preliminary design moves in turn deepened Ms. Li's reflective and reflexive thinking about translanguaging and gradually fostered her (emerging) translanguaging stance. This was in line with what Menken and Sánchez (2019) found in their study: even though some teachers had not yet taken up a translanguaging stance, this did not preclude them from trying translanguaging strategies in their classrooms, and their formation of "a translanguaging stance resulted from [their] starting with 'baby steps.'" (p. 762). Second, my way of conducting research, researcher-teacher collaboration facilitated Ms. Li's ideological shifts toward translanguaging. Our equitable forms of dialogue and listening set the stage for us to be able to have difficult conversations, to loosen up to share inner thoughts and concerns, and to negotiate a translanguaging co-stance. I will further discuss the affordances of researcher-teacher collaboration in more detail in the next section.

### **Researcher-Teacher Collaboration**

Different from the traditional way of classroom-based research or design-based research (DBR) in which researchers were seen as the knowledge holder and imposed a top-down intervention on the teacher and students, researcher-teacher collaboration posits that the roles of researchers and teachers are porous: both parties are treated as legitimate brokers of knowledge (Paugh, 2004) contributing to dialogic theory building and knowledge co-construction. This equitable and collaborative partnership challenges the power dynamics between researchers and teachers and strengthens research-teaching nexus and reciprocity (McKinley, 2019; Rose, 2019) in translanguaging pedagogies. Informed by this, designing translanguaging pedagogies in this study was not an individual or a unidirectional process, but a collaborative, dynamic, complex process involving Ms. Li and I to negotiate and develop a translanguaging **co-stance**, plan and build a translanguaging **co-design**, and continuously adjust and make translanguaging **co-shifts** (García et al., 2017).

Findings from Chapter 4 and 5 showed that researcher-teacher collaboration created a win-win situation for both Ms. Li and I to grapple with different dimensions of contextual factors and to negotiate and expand our discursive ideological space: it not only empowered Ms. Li as a teacher to develop her agency as a classroom language policymaker but also helped me as a researcher to understand the “messy” classroom realities and design contextually relevant pedagogies. This would not have been possible had the research design been enforced in a top-down manner. Many other researchers working in the field of promoting translanguaging (or broadly speaking, multi-/pluri-lingual pedagogies) in classrooms have also documented the affordances of researcher-teacher collaboration in their studies (e.g., Galante et al., 2019; Lau, 2020; Aitken & Robinson, 2020): Lau and Van Viegen (2020) specifically “highlight fieldwork as methodology (ways of doing) and onto-epistemology (ways of being and knowing) through

which university-based researchers work alongside teachers and immerse themselves in these communities to better understand and address teaching and learning needs” (p. 5, original emphasis). Liu, Lo, and Lin (2020) found that researcher-teacher collaboration could be an effective professional development model to engage in-service English for Academic Purposes (EAP) teachers in developing translanguaging pedagogies; by involving teachers in more discussions and reflections on the use of students’ L1 (and other relevant issues), researchers could provide stronger support for teachers to debunk monolingual ideologies (or linguistic purism) and adopt a translanguaging paradigm that may be more appropriate for their local practices. I stand in solidarity with these educational researchers based on the findings from my study and also advocate for researcher-teacher collaboration as one promising way (though not the only way) to generate **evidence-based, practitioner-informed, and context-appropriate** applications and knowledge of translanguaging in DLBE programs. It should be noted that this collaboration may take different forms in terms of research methodology – for instance, participatory design research (PDR as in my study, Bang & Vossoughi, 2016), participatory action research (Fine et al, 2003; Whyte, 1991), collaborative action research (Park, 2006), and transformative action research (García & Kleyn, 2016). However, they all share some common goals, for instances: to (a) understand the nuances of translanguaging pedagogies across learning contexts, (b) provide opportunities for dialogic theory building and knowledge co-construction, enabling sustainable change, and (c) further resist the researcher-practitioner and theory-practice divides in our profession (Lau & Stille, 2014; McKinley, 2019; Rose, 2019).

### **Student Participation**

Li Wei and García (2016) point out that, “To date, much translanguaging research has been conducted on the language education of minoritized students, whether in bilingual or

second language programs. There is now a need to also conduct research on translanguaging in other educational contexts with *dominant language students*” (p. 11, emphasis added). In response to this, my study expanded the focus of learner groups and examined English-dominant bilingual learners’ participation patterns within and across different teacher-initiated, purposefully designed translanguaging spaces in a Mandarin/English DLBE program (also broadening the linguistic representation of DLBE research). Based on the findings from Chapter 4, it was evident to see that these students were able to demonstrate a fuller understanding of content knowledge and to develop emerging metalinguistic awareness in academic tasks, and students with varying levels of Chinese proficiency felt safe and included to participate for knowledge co-construction and develop their positive bi/multilingual identities, to name a few. These promising affordances of translanguaging pedagogies were in line with the extant studies primarily focusing on teachers and students’ naturally engaging in translanguaging practices (e.g., Gort & Pontier, 2013; Gort & Sembiante, 2015; Palmer et al., 2014; García-Mateus & Palmer, 2017) with a few on teachers’ intentional design of translanguaging pedagogies in (English/Spanish) Language Arts classrooms in Spanish/English DLBE contexts (Martínez-Álvarez & Ghiso, 2017; Martínez-Álvarez, 2017; Hopewell, 2017; Johnson, García, & Seltzer, 2019). The positive learning outcomes of bilingual students further affirm that bilingual teachers can and should continuously seek ways to integrate translanguaging pedagogies into their named language classrooms while maintaining them separate. As García and Lin (2017) argue that, “Only by using all the features in their linguistic repertoire will bilingual students become virtuoso language users, rather than just careful and restrained language choosers. Only by assessing bilingual students on the full use of their linguistic repertoire ... will we understand their capacity for meaning and for achieving” (p. 127).

There were also some unique challenges when translanguaging spaces were created for this group of learners (i.e., dominant language students). First, students' inevitably increased use of English in a language-minoritized space made it very challenging to maintain the status of Mandarin. This resonated with Zheng's (2019) findings in her classroom ethnography, "When various linguistic and semiotic resources are encouraged in this Chinese immersion classroom, one prevalent affective response from students is their resistance against using Chinese. Students spoke English most of the time and often preferred easier modalities (i.e. English text and Pinyin) over Chinese characters in their writing" (p. 10). Hamman (2018) also observed the similar language practices in a Spanish/English two-way DLBE classroom, "the practice of engaging in translanguaging ... generated a more English-centered classroom" (p. 37). Because currently there is still a lack of empirical evidence showing increased use of English through translanguaging will improve the minoritized language proficiency outcomes among students in DLBE programs (Ballinger et al., 2017; Tedick & Lyster, 2019), we found that translanguaging could also be problematic and needs to be designed with caution and careful planning. Second, due to the privileged backgrounds or social status of these students, we found it important to *repurpose* translanguaging pedagogies. Different from the social justice agenda of translanguaging pedagogies to legitimize language-minoritized students' home languages/cultures and empower their identities (García & Li Wei, 2014; García & Kleyn, 2016), translanguaging in this context is less about "legitimizing", "empowering", "honoring", or "affirming" dominant language students' cultural and linguistic resources, but more about raising language-majoritized students' multilingual/multicultural awareness and critical consciousness (Cervantes-Soon et al., 2017; Palmer et al., 2019) and expanding their perspective to appreciate and respect minoritized languages and cultures. Our study served as the first step to probe into

how these pedagogical purposes could be achieved through intentionally creating translanguaging spaces in a Mandarin/English DLBE classroom. We implemented activities such as language/culture portrait and “privilege” and “empathy” activity (see Chapter 4 for a review). We believe that it is critical to cultivate dominant language students’ awareness and ability to “read the world” (Freire, 1970) and challenge the existing social hierarchies and inequalities, and hope that there will be more studies in the future to look into how translanguaging pedagogies could foster their criticality (Li Wei, 2011) – for instance, critical consciousness, critical language awareness, and critical literacy in DLBE contexts.

### **Implications of the Study**

This study provided a qualitative analysis of the translanguaging activities Ms. Li and I co-designed (what they were and how they varied across content areas), the student participation in those spaces, and our ideological shifts. It illustrated the interrelated processes of (co)stances, (co)designs and (co)shifts between researcher-teacher collaboration in iterative cycles to reject context-blind acceptance of translanguaging pedagogies and design flexible bilingual spaces in strategic and purposeful ways to enhance student participation in a Mandarin/English DLBE program. The ultimate goal was to generate authentic and sustainable knowledge for both researchers and practitioners and new theoretical and pedagogical understandings of translanguaging in DLBE contexts. In this section, I will discuss the implications of this study from two aspects: implications for translanguaging theory and for translanguaging pedagogy.

#### **Implications for Translanguaging Theory**

García and Lin (2017) point out that there are two theoretical positions on translanguaging, “On the one hand, there is the *strong* version of translanguaging, a theory that poses that bilingual people do not speak languages but rather, use their repertoire of linguistic

features selectively. On the other hand, there is a *weak* version of translanguaging, the one that supports national and state language boundaries and yet calls for softening these boundaries.” (p. 126, emphasis added). In other words, the strong version posits that bilinguals have one unitary linguistic repertoire (Otheguy, García, & Reid, 2015) and languages actually do not exist and are invented categories (Makoni & Pennycook, 2007) while the weak version recognizes the socially constructed boundaries of different named languages while arguing for creating flexible linguistic spaces (Vogel & García, 2017).

This study supports the weak version of translanguaging theory and argues that a weak theoretical position would be more applicable and sustainable to reframe and transform the traditional language allocation policy in U.S. DLBE programs. As illustrated in Chapter 4, although it is beneficial to create translanguaging spaces to maximize bilingual students’ learning opportunities, it is equally important to maintain the boundaries between translanguaging “wobble room” and “Mandarin-centric” space to ensure adequate opportunities allocated to students to practice their Mandarin/L2, i.e., when and where to use translanguaging/English (and when and where to use Mandarin only). In addition, the weak version of translanguaging theory could also support the implementation of cross-linguistic analysis activity (or the “Bridges”) in DLBE class to raise students’ metalinguistic awareness. Arguing for a completely unitary linguistic system and rendering the linguistic boundaries invisible (i.e., the strong version of translanguaging) would jeopardize the language-minoritized space and limit students’ L2 development opportunities to some extent in DLBE contexts. Thus, this study echoes the weak version of translanguaging theory and demonstrates that we should recognize and maintain the language boundaries while softening them and leveraging students’ dynamic bilingualism as a resource.

Regarding the current theoretical debates about whether bilinguals have only one unitary repertoire (see more in Chapter 2 and Otheguy, García, & Reid, 2015, 2018; MacSwan, 2017, 2020), I argue that the weak version of translanguaging theory seems to provide a middle ground that is beneficial to DLBE: to protect the status and development of minoritized languages, named language boundaries need to be retained and recognized at the social (classroom) and internal (student's brain) levels (Galante, 2020) and it is “not one single completely unified system” (Lin, Wu, & Lemke, 2020, p. 50); to center on bilinguals' sociolinguistic realities, these language boundaries also need to be softened and seen as permeable and “it is not two completely separate systems” either (Lin, Wu, & Lemke, 2020, p. 50). A “healthier” or more robust translanguaging theory needs to embrace the tension (Turner & Lin, 2020) without simply erasing the named language boundaries because they have real and material consequences for students' bilingual and biliteracy development.

### **Implications for Translanguaging Pedagogy**

Translanguaging pedagogy represents a flexible bilingual pedagogy to support what bilingual learners *do* with language and engages students in performing academic tasks utilizing their entire linguistic repertoire (García & Lin, 2017). It offers a counter-narrative to the strict language separation policy in DLBE programs by infusing flexibility into monolingual instruction and assessment, such as “translanguaging rings as scaffolds, translanguaging documentation for authentic assessment, and translanguaging transformation to liberate bilingual learners' creative voices and critical consciousness” (Sánchez et al., 2018, p. 49). This study supports translanguaging as a promising pedagogy by offering empirical evidence in a different context – a third grade Mandarin/English DLBE classroom where the majority of the students were English-dominant speakers.

However, it is important not to romanticize translanguaging pedagogy as a one-size-fits-all approach or a panacea. Firstly, translanguaging pedagogies need to be carefully and strategically planned and it must take different forms based on different contextual factors (Cenoz & Gorter, 2020). Our study suggests that the social status of teachers, power dynamics among the named languages, learner groups, content areas, learning objectives, to name a few, all play an important role in guiding to what extent and how translanguaging spaces can be created. Secondly, while affirming the promises that translanguaging pedagogy can bring to bilingual students, we need to be cautious with not overstating the transformative potential of translanguaging pedagogy (Jaspers, 2018) in DLBE contexts. For instance, there is still a lack of empirical evidence in the current literature showing increased use of English through translanguaging will improve the minoritized language proficiency outcomes among students in DLBE programs (Ballinger et al., 2017). It is thus necessary to put on a critical lens when designing and implementing translanguaging pedagogies: not to assume it as the panacea to fix everything in the classroom (it needs to be used in tandem with other effective teaching approaches) and not to overgeneralize its affordances across all learning contexts.

To judiciously and cautiously promote translanguaging pedagogies in DLBE classrooms, this study suggests that researchers and teachers should work together in an equitable manner. It is through the process of action, reflection and evaluation “*juntos/together*” (García, et al., 2017, xii) that both researchers and teachers come to question and understand better what translanguaging pedagogy means and how it can be put to use for the best education purposes within the contextual parameters, affordances and restrictions. It is also through the process of reciprocal inquiry with distributed expertise that both parties develop collective forms of “transformative agency” (Haapasaari, Engeström, & Kerosuo, 2014) in which they expand their

repertoires of practice to include new identities, inclusive of a “holistic, professional, researcher-practitioner perspective” (McKinley, 2019, p. 6).

For researchers, instead of imposing a translanguaging intervention in a top-down, unidirectional fashion in a DLBE classroom, they need to be “honest brokers of alternatives” (Jaspers, 2019, p. 95) in which they present new (or innovative, alternative) ideas as *one* (not *the*) way and are attentive to teachers’ (and other educational stakeholders’ if have) desires, needs, concerns, and feelings; they should listen to and leverage teachers’ knowledge and expertise and co-create a change-enhancing context without being impositional (Lather, 1991). This positioning will help researchers stay close to the “ground” (i.e., the teacher and students) and grapple with the “messiness” of classroom realities: they need to develop a deeper understanding of the contextual factors and critically discuss and negotiate the feasibility and practicality of implementing translanguaging pedagogies with teachers together (instead of romanticizing a one-size-fits-all approach).

For teachers, they can and should position themselves as (critical) language-in-education policymakers (Palmer, 2018; Henderson & Palmer, 2020) in their classrooms who holds expertise for knowledge co-construction and agency to engage in transformative pedagogy to challenge the strict language separation structure in DLBE programs. By working closely with researchers in an equitable partnership and sharing their voices and stories actively in the inquiry process, teachers can not only unpack their complex language ideologies and expand their understanding of translanguaging pedagogies, but also feel validated and empowered to generate genuine concerns and context-appropriate ideas to push forward the experimentation with translanguaging pedagogies (Galante et al., 2019; Liu, Lo, & Lin, 2020).

Finally, I should also mention that researcher-teacher collaboration also has the potential to cultivate long-term relationship between both parties to enact lasting change of translanguaging pedagogies to contexts. In our case, although I finished my data collection in Ms. Li's classroom in June 2019, we still kept in touch and had ongoing conversations about translanguaging. I revisited the classroom several times (September to December 2019) and saw that Ms. Li developed her own principles on when and how to use translanguaging pedagogies; she also applied it to other grades (i.e., a fifth grade Mandarin classroom) she was teaching at that time. In addition, we also submitted a conference proposal together to National Chinese Language Conference (NCLC) 2020<sup>10</sup>. We wanted to share our research with a wider audience to gain more insights and meanwhile to find sustainable ways to make translanguaging pedagogies an integral part of our classroom spaces.

### **Limitations and Future Research Directions**

While acknowledging the contributions of this study, there are some limitations and unanswered questions that warrant further inquiry. Firstly, this study focused on student participation more from a horizontal perspective to analyze their average or general responses within and across the three intentionally created translanguaging spaces (i.e., translanguaging documentation, translanguaging rings, and translanguaging transformation). This provided evidence of the affordances of translanguaging pedagogies to some extent; however, it may overlook challenges, difficulties, and some unique benefits (both academic and socio-emotional aspects) that translanguaging could create or bring to individual learners. Future research should conduct more in-depth individual case analyses to trace the impact of translanguaging

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<sup>10</sup> Our conference proposal was accepted in January 2020. However, due to the outbreak of COVID-19 in the U.S., NCLC 2020 got cancelled and we did not get a chance to present our research on translanguaging design. We were planning to try it again in 2021.

pedagogies on bilingual learners' participation (or learning experiences in a broader sense) from a vertical or longitudinal perspective: e.g., to see if one student's participation patterns will shift during the process of creating translanguaging spaces in a DLBE program. These individual case analyses should also look into learners' profiles in detail, such as their grade level/age and language, ethnic/racial, and socioeconomic background, and investigate how these factors might interact with their participation in translanguaging spaces. This will help researchers and practitioners to further develop contextualized translanguaging strategies to address different learners' needs and create a more equitable, heterogeneous learning environment for all.

Secondly, while the qualitative nature of this study provided a detailed picture of what happened among the three parties – the teacher, students, and researcher (me) in the process, it still did not answer one question (which arose several times from my conversation with Ms. Li and is also one of the main critiques in the literature of translanguaging in DLBE): Can translanguaging pedagogies improve the minoritized language proficiency outcomes among students in DLBE programs? Future research should adopt mixed-methods design or conduct more quantitative analyses (e.g., experimental-control group design) to seek the correlation between the use of translanguaging pedagogies and students' target language proficiency development (both English and the minoritized language) or their academic achievement in DLBE programs. Providing quantitative evidence of student learning outcomes will move the whole field forward and facilitate the implementation of translanguaging pedagogies at a broader scale.

Lastly, due to the reality constraint, this study could not design translanguaging spaces through English-Mandarin teacher collaboration. This is an exciting idea (it was Ms. Li's ideal design; see more in Chapter 5) that is worthwhile to be put into practice because it not only

makes connections among different content areas, but also builds relations between the two separate classroom spaces to potentially facilitate students' content and linguistic transfer. Future research should experiment with this design in classrooms (if the school/program ecology permits) to study how English and LOTE teachers could work together (this may look different in self-contained classrooms where one teacher is responsible for both languages), what translanguaging activities could be envisioned and implemented while minoritized language spaces are protected and maintained, and how students may participate in those spaces, to name a few. In addition, there were also certain pedagogical purposes that Ms. Li and I envisioned translanguaging could help us achieve (but we did not get a chance to realize them or did not address them in depth): such as to increase language-majoritized students' critical language awareness and develop their critical literacy skills, and to further foster their social justice consciousness due to their privileged backgrounds. Further research should continue to develop more strategic and purposeful ways of utilizing translanguaging pedagogies with language-majoritized and language-minoritized students in DLBE programs. This will benefit practitioners and administrators who work in different types of DLBE programs (e.g., one way or two way, early-exit or late-exit) to make possible a more equitable and dynamic vision for educating all bilingual students (Seltzer & García, 2020).

In conclusion, while affirming translanguaging as a promising pedagogy to bring more learning opportunities to bilingual learners in DLBE programs, translanguaging pedagogical practices can and must take different forms depending on the contextual factors (Lau, 2020). These practices need to be *strategically* and *purposefully* implemented to support bilingual learners' academic and socio-emotional development but also tempered in favor of the minoritized language in order to circumvent the societal language imbalance that favors

majoritized-language use. Designing translanguaging pedagogies is a challenging task involving (re)negotiation of both implementational and ideological spaces; however, researcher-teacher collaboration can make this meaningful and achievable. Not only can the design and implementation process benefit both parties to grow, but also can it bring new possibilities to potentially transform monolingual instruction and assessment and enable a more dynamic, learner-centered model in DLBE programs focusing on how students actually do and practice bilingualism.

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## Appendix I

### An overview of the curriculum and a timeline of translanguaging activities

Design Cycles	Timeline (Month)	Chinese Language Arts (CLA) ←	Science	Social Studies →
#1 (September to December 2018)	September	Pinyin (the Romanization of the Chinese characters)	Weather and climate ▪ <b>Read English books</b>	Map
	October	Computer and bilingual dictionary use; basic words and sentence structures		
	November	Moral values (“ <i>The same world</i> ” and “ <i>What’s beauty</i> ”)		
	December	Weather and climate (“ <i>Smart buildings</i> ”) • <b>Exit ticket</b>		▪ <b>Read English books</b>
#2 (January to June 2019)	January	American history (“ <i>May Flower</i> ”) and Multiculturalism (“ <i>Chinese Dragon</i> ”/ “ <i>Lion</i> ” and “ <i>International Culture Day</i> ”) • <b>Story retelling task</b> ▪ <b>Cross-linguistic analysis</b> ○ <b>Culture day project</b> ○ <b>Language/culture portrait</b>	Force and motion • <b>Test on forces</b>  ▪ <b>Watch English videos</b> ○ <b>Pen-pal project with a HK school</b>	Puritan and Pilgrims ○ <b>“Privilege” and “Empathy” activity</b> ○ <b>Culture day project</b> ○ <b>Language/culture portrait</b>
	February			
	March	Conjunction words, Social equity and justice (“ <i>MLK</i> ” and “ <i>American government</i> ”) ○ <b>Pen-pal project with a HK school</b>		
	April	Force and motion (“ <i>Magic Magnet</i> ”) ○ <b>Pen-pal project with a HK school</b>	American revolution ▪ <b>Read English materials</b> ○ <b>Pen-pal project with a HK school</b>	
	May	Life cycles (“ <i>Nine-year old</i> ” and “ <i>The growth diary</i> ”) ○ <b>Pen-pal project with a HK school</b>		
	June		Charles River explorations • <b>Exit ticket</b> ○ <b>Pen-pal project with a HK school</b>	

• **Translanguaging documentation**

▪ **Translanguaging rings**

←→ refers to some translanguaging rings implemented across the whole design cycles and all content areas (including allowing students to translanguaging in whole class discussion, English translation for instructions on the worksheet, bilingual vocabulary list, English use in individualized instruction)

○ **Translanguaging transformation**

## Appendix II

### Semi-structured interview questions/protocol

*The following prompts are leading questions for the semi-structured interviews. The actual follow-up questions and sub-questions are subject to change based on participants' response to the initial prompts.*

For teacher:

1. How do you define translanguaging strategy/space in your teaching?
2. Tell me about your experience of designing and implementing translanguaging spaces.
  - What translanguaging strategies have you used in your classroom?
  - What successes have you enjoyed when implementing translanguaging spaces in your classroom?
  - What challenges have you encountered when designing and implementing translanguaging spaces?
3. How has translanguaging been helpful (or not) to your teaching? If so, in what way? If not, why?
4. Has your belief/attitude toward translanguaging changed? If so, in what way? If not, why?
5. Will you recommend other teachers to use/adopt translanguaging strategies in their classrooms? Why?
6. What questions do you still have about designing/implementing translanguaging?

For focal students:

1. Tell me about your experience of learning Mandarin.
  - What's difficult and what's easy for you?

- What helps you?
  - Are you practicing some Mandarin at home? / How often do you practice Mandarin at home?
  - Do you think it is hard to learn Mandarin? Why?
  - Do you like learning Mandarin? Why?
2. Do you use English in Mandarin classes? If so, when? Give some examples.
  3. Do you think using English will help you learn Mandarin in Mandarin classes? Why?
  4. What do you think of Ms. Li's use of English in Mandarin classes (e.g., showing English videos, using English words sometimes)?
  5. Do you want Ms. Li to use English or allow you to use English sometimes in Mandarin classes?
  6. Do you use Mandarin sometimes in English classes? If so, when? Give some examples.
  7. What are some ways that you think can help you better learn Mandarin?
  8. Are you a bilingual or multilingual person? Why?
  9. I also ask students' opinions about one specific translanguaging project we did in class (do you like it/what part did you enjoy/what part did you find challenging).

### Appendix III

#### Class observation protocol

Date	Content Area: CLA/Science/Social Studies
Class Duration:	
Class Topic:	
Main Events (what happened in class – in sequential order):	
Translanguaging Design Activity (key language/literacy events):	
Translanguaging Moments/Shifts (naturally occurring):	
Teacher and Students' Artifacts collected: Y/N	
My Memo/Reflection:	

## Appendix IV

### Transcription key for original text in excerpts

#### Transcription key for original text

text utterance in original language

**text** word spoken with emphasis

*text* original utterance in English

“text” quoted or read text

[text] clarifying text not spoken by informants

(inaudible) utterance that cannot be clearly heard

... longer pause

text - utterance that is cut off