PARTNER LANGUAGE DEVELOPMENT IN A TWO-WAY IMMERSION PROGRAM: EXPLORING TEACHERS' BELIEFS AND PRACTICES

BY

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DISSERTATION

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ABSTRACT

Two-way immersion (TWI) programs are an increasingly popular educational model designed to foster academic achievement and develop high levels of bilingualism, biliteracy, and sociocultural competence (Howard et al., 2018). TWI has been shown to be highly effective at promoting English-language development and academic content learning, as well as high levels of partner language (PL) fluency (Lindholm-Leary, 2001, 2018). Nonetheless, a number of concerns have been raised about the ability of these programs to fully meet students' needs. In particular, recent work has questioned how equitable these programs truly are and whether they promote or disrupt deficit-based thinking about bilingual speakers (Cervantes-Soon, 2014; Flores, 2016). From a linguistic perspective, research has focused much more heavily on English outcomes than partner language outcomes. However, the somewhat limited research on partner language outcomes that exists suggests that these may also be lagging, particularly in terms of morphological accuracy (Montrul & Potowski, 2007; Potowski, 2007). Research on immersion education has called for a counterbalanced approach that integrates language and content (Lyster, 2007). However, few studies have sought to describe how teachers view and approach this process in the TWI context, which is a unique environment because it includes both heritage language and second language (L2) learners (Cammarata & Tedick, 2012; Fortune et al., 2008). There is also only limited information on how professional development (PD) may guide this process (Lyster, 2018; Tedick & Zilmer, 2018).

The current project seeks to fill these gaps by using a qualitative case study of three TWI teachers' beliefs and practices and of two of these teachers' responses to PD and instructional coaching targeting the integration of language and content objectives. While the study is limited by the small number of participants and their particular teaching contexts, the results confirm a

number of findings from prior research (Cammarata & Tedick, 2012; Fortune et al., 2008; Walker & Tedick, 2000). In addition, the study provides novel insight into the particular ways that TWI teachers view and attend to PL development in both L2 and heritage language learners. In general, the teachers in the study proved to be highly dedicated and resourceful professionals who incorporated a diverse array of activities in their classes that were likely to foster students' PL development. They indicated a strong need for guidance and resources for balancing language and content instruction, and they were enthusiastic about receiving training. The beliefs they held at times showed evidence of misconceptions and deficit-thinking, and the PD and IC sessions highlighted the difficulties that TWI teachers face in equitably serving HSs in a mixed educational setting. Furthermore, the teachers' own linguistic backgrounds and education were highly influential in their beliefs and practices. Nonetheless, the study shows promise for training and coaching on integrating language and content in the TWI context. The results of this study have implications for teacher training, as well as for the design of frameworks and educational models designed for use in TWI classrooms (Collins et al., 2019; Guerrero & Lachance, 2018; Tedick & Lyster, 2020).

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To Clara, Mila, and Mom, with all of my love

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION.....1

CHAPTER 2: LITERATURE REVIEW.....4

CHAPTER 3: THE CURRENT STUDY.....26

CHAPTER 4: TEACHER BELIEFS.....38

CHAPTER 5: OBSERVABLE PRACTICES.....59

CHAPTER 6: EXPERIENCING PD AND COACHING.....104

CHAPTER 7: CONCLUSION.....179

REFERENCES.....204

APPENDIX A: BILINGUAL PROGRAM TEACHER QUESTIONNAIRE.....221

APPENDIX B: FFI COLLABORATIVE QUESTIONNAIRE 223

APPENDIX C: SAMPLE ITEMS FROM WRITTEN SPANISH TEST 224

APPENDIX D: PD STANDARD, TOPICS, AND AGENDA……...226

APPENDIX E: IMMERSION AND HERITAGE GRAMMATICAL DEVELOPMENT TEACHING STRATEGIES CHECKLIST…….....227

APPENDIX F: ONLINE PD SURVEY.....228

APPENDIX G: TIMELINE FOR PD AND COACHING SESSIONS.....229

APPENDIX H: DUAL LANGUAGE PARTNER LANGUAGE DEVELOPMENT STRATEGIES CHECKLIST 230

APPENDIX I: ELEMENTARY TEXTBOOK SERIES READING.....231

APPENDIX J: SOCIAL STUDIES READINGS 232

APPENDIX K: PARTNER LANGUAGE BOOKS FOR FREE READING.....234

APPENDIX L: ANCHOR CHART IN CLASSROOM.....235

APPENDIX M: DAY'S INSTRUCTIONS ON PROJECTOR SCREEN.....236

APPENDIX N: SAMPLE SOCIAL STUDIES COUNTERBALANCED LESSON.....237

APPENDIX O: SAMPLE SCIENCE COUNTERBALANCED LESSON.....239

APPENDIX P: INTEGRATING LANGUAGE OBJECTIVES INTO CONTENT.....243

APPENDIX Q: PRETERITE/IMPERFECT PRE-TEST……245

APPENDIX R: COUNTERBALANCED SOCIAL STUDIES LESSON.....247

APPENDIX S: SCIENCE CLASS ANCHOR CHARTS.....252

APPENDIX T: SCIENCE CLASS ADJECTIVE CLOUD FROM STUDENT NOTEBOOK..253

APPENDIX U: COUNTERBALANCED SCIENCE LESSON.....254

APPENDIX V: SCIENCE CLASS COUNTERBALANCED LESSON RUBRIC…….....257

CHAPTER 1: INTRODUCTION

More than fifty years have passed since the first U.S. two-way immersion (TWI) school was opened in Coral Springs, Florida. This innovative educational model was established to meet the needs of increasing numbers of Cuban immigrants (de Jong & Howard, 2009). Since then, TWI programs have proliferated and are now found throughout the country, with unofficial estimates suggesting there may now be more than 1,000 (Potowski, 2018, March). While details of implementation vary according to individual program design, the basic structure of the TWI model dictates that approximately half of the students speak the partner language at home and half of the students do not (Howard, et al., 2005). As subtypes of dual language (DL) education in general, TWI models are characterized as "enriched" programs that provide literacy and content to all students through both languages so that additive bilingualism is fostered along with academic achievement (de Jong & Howard, 2009; Hamayan, et al., 2013; Howard et al., 2018). Commonly recognized goals of DL include high levels of bilingualism and biliteracy, academic success in core subject areas, sociocultural competence, and critical consciousness (Cervantes-Soon et al., 2017; Howard et al., 2018). These multifaceted program goals distinguish DL programs from both typical monolingual education and other models of bilingual education. Their added complexity necessitates careful implementation, planning, and teacher training. To be able to meet these ambitious goals, DL and other bilingual educators need to be equipped with a variety of professional skills, among which are an understanding of the nature of bilingualism, knowledge of how to teach for biliteracy, and strong proficiency in the language of instruction (Aquino-Sterling & Rodríguez-Valls, 2016; Collins et al., 2019).

Research into partner language (PL) development in two-way immersion (TWI) programs suggests that these programs are highly effective at promoting English-language

development and academic content learning, as well as high levels of partner language (PL) fluency (Lindholm-Leary, 2001, 2018; Lyster, 2007; Steele et al., 2017). Despite this, concern remains about some issues of these programs, such as the degree to which they equitably serve all groups of students (Cervantes-Soon, 2014; Flores, 2016). From a linguistic perspective, both heritage speakers (HSs) and second language (L2) students reach functional levels of proficiency in the majority language and the PL, an accomplishment that has positive instrumental applications for both groups (Howard et al., 2004; Lindholm-Leary, 2001; 2018; Potowski, 2018). HSs in particular are noted to develop both languages to high levels, with Howard et al. (2004) reporting that HSs in TWI programs show balanced bilingualism by 5th grade. Nonetheless, the accuracy and complexity of students' PL development in TWI may be a potential area for growth. For example, Potowski (2005, 2007) found that L2 learners and, to a lesser extent, HSs in a TWI program in Chicago showed non-target-like performance with a variety of Spanish structures including preterite/imperfect, present subjunctive, *gustar*-like verbs, conditionals, and gerunds. Some HSs in Montrul and Potowski's (2007) study similarly had difficulties with grammatical gender, although the older HSs in their study did not show lower accuracy with gender than the younger HSs, which the researchers interpreted as a protective feature of the TWI program. On the other hand, Fortune and Tedick (2015) found that English-dominant TWI students showed progress between Kindergarten and Grade 2 and between Grades 2 and 5, but they stagnated between Grades 5 and 8.

These difficulties with PL development have led TWI scholars to recognize "a need for formal instruction in the second language" (Howard et al., 2018, p. 57). However, little research to date has explored how teachers view and enact PL instruction within the TWI specific context. Insight from immersion and instructed heritage language (HL) contexts may be enlightening, as

TWI classrooms include both L2 immersion learners and HL learners of the PL. In the general immersion context in the United States, findings suggest that teachers tend to focus on content rather than language and often struggle to understand themselves as teachers of the PL and to enact the work of fostering their students' PL development, often due to a lack of resources and support (Cammarata & Tedick, 2012; Fortune et al., 2008; Lindholm-Leary, 2001; Walker & Tedick, 2000). In the field of HL instruction, researchers have noted that many teachers both fail to understand the unique needs of HSs compared to monolingual native speakers and to devalue the PL varieties their HSs speak (Beaudrie et al., 2014; George & Salgado-Robles, 2018; Leeman, 2012).

This dissertation presents a study of the beliefs and practices that three teachers in a midwestern TWI program display toward developing their students' Spanish proficiency, particularly in terms of morphosyntactic accuracy and complexity, as well as two of the teachers' responses to professional development (PD) and instructional coaching (IC) on the integration of language and content instruction. Using interviews, surveys, classroom observations, student testing, and recordings of PD and IC, the study explores the teachers' approaches to PL instruction, the obstacles they face in enacting this instruction, how they view the linguistic needs and abilities of the L2 learners and HSs in their classrooms, and how they experience a number of PD and IC sessions focused on PL development in TWI. Implications for pre- and in-service teacher training and teacher-directed materials are discussed.

CHAPTER 2: LITERATURE REVIEW

This chapter provides an overview of prior literature relevant to the present study. To provide context, information on DL will be provided, as well as background on PL development in TWI. Because TWI serves both L2 learners and HSs, a review of key findings from the fields of instructed second language acquisition (particularly within immersion education settings) and instructed heritage language acquisition will be included. The chapter will then provide a summary of prior research on teachers' beliefs and practices in language and immersion education and PD in immersion education.

Two-Way Immersion

Years of research on TWI programs, particularly in the United States, have shown them to have significant academic, cultural, socio-emotional, and linguistic benefits for students (Genesee & Fortune, 2014; Lindholm-Leary, 2012; Lindholm-Leary & Genesee, 2014; Thomas & Collier, 2002). These benefits extend to HL speakers from PL homes, who might otherwise be placed in English-only instruction and lose the chance to study their home languages academically; they also apply to second language (L2) learners, who show much greater fluency in their L2 compared to students who study the same language as a foreign language in either elementary or high school (Lindholm-Leary, 2001). Perhaps the most striking result of these programs is that emergent bilingual learners of English generally perform at least as highly in English academic achievement as similar students who are placed in transitional or developmental bilingual programs or remedial English programs (Lindholm-Leary, 2001; Lindholm-Leary & Howard, 2008). Thomas and Collier (2002) conclude that dual immersion is the only program model that is able to help emergent bilingual students reach the 50th percentile in both PL and majority language subjects. Furthermore, TWI programs promote linguistic

development in a manner that allows emergent bilingual students to be integrated with majority language learners, thus breaking the cycle of segregation, stigmatization, and subtractive bilingualism that characterize transitional and pullout programs (de Jong & Howard, 2009; Howard et al., 2004). For students from majority language (English-speaking) or third language homes, research on academic performance in English has similarly found that students from TWI programs perform as highly as students in mainstream monolingual programs. Furthermore, their L2 skills have consistently been found to be higher than those of students from foreign language programs meeting a few times per week, particularly in terms of fluency and pronunciation (Lindholm-Leary, 2001). L2 students from TWI programs, while not generally identifying as bicultural, also show increased intercultural awareness compared to students who do not attend these programs (de Jong & Bearse, 2011).

The highly positive outcomes that have been shown for TWI programs thus far should not be underestimated, and their potential for closing the achievement/opportunity gaps for emergent bilingual learners and fostering additive bilingualism and intercultural awareness deserves promotion. Nonetheless, many researchers have also focused on examining the best ways to implement these programs to maximize their benefit. Notable concerns include the equitable treatment of students in these programs (de Jong & Howard, 2009) and ensuring a balance of English and Spanish use among students (Potowski, 2007). Another issue in this domain is PL development, the topic of the current study. While the paper takes the stance that this is an area that has room for improvement, it is worth reiterating that the overall effectiveness of TWI programs is very strong, and attempts to scrutinize the PL development of students in these programs are meant to add to their potential for comprehensive effectiveness rather than to undermine them. It is also important to note that efforts to improve PL development in TWI

should be contextualized within meaningful use of the language and look at ways of building upon students' existing strengths rather than promoting decontextualized or deficit-based perspectives. Finally, these efforts must be implemented carefully so that the overall benefits of these programs in terms of academic achievement and proficiency in both languages are maintained.

Partner Language Development

Research into PL development in TWI programs suggests that, in general, both HSs and L2 students reach functional levels of proficiency in both languages, an accomplishment that has positive instrumental applications for both groups (Lindholm-Leary, 2001). HSs in particular are noted to develop both languages to high levels, with Howard et al. (2004) reporting that HSs in TWI programs show balanced bilingualism by 5th grade. Nonetheless, despite general proficiency in their languages, a number of studies have also found that students in TWI programs show room for improvement in grammatical accuracy in the PL. This finding echoes those of seminal research in the Canadian immersion programs in the 1980s and 1990s. For example, Swain's famous (1985) Output Hypothesis was built on observations made by Harley and Swain (1984) that, despite years of input, students in French immersion schools in Canada continued to have difficulties with certain aspects of French grammar that differed from students' first language (L1), such as adverb placement.

A key study detailing this phenomenon in the TWI context was completed by Potowski (2005; 2007). In her work, she found that L2 learners and heritage speakers in an English-Spanish TWI program in Chicago showed inconsistent performance with a variety of Spanish structures including preterite/imperfect, present subjunctive, *gustar*-like verbs, conditionals, and gerunds. The L2 learners performed far worse than the HSs, but deficiencies for both groups

compared to monolingual controls were nonetheless significant. Montrul and Potowski (2007) expanded this work into grammatical gender. By and large, they found similar effects; however, the 9-11-year-old heritage speakers in their study did not show lower accuracy with gender than the 6–8-year-olds. The researchers interpreted this lack of decline with gender agreement as a protective feature of the TWI program. Findings by deJong and Bearse (2011) suggest that TWI high school students may be aware of the incompleteness of their Spanish grammar development in comparison to their English development, as self-perceptions of writing ability in Spanish were rated lower than in English for both groups.

Just as the initial findings of the Canadian immersion studies spurred a great body of subsequent instructional research, the findings of grammatical inaccuracies in TWI programs merit further study. Fortune and Tedick (2015) found that L2 learners in TWI programs showed progress between Kindergarten and Grade 2 and between Grade 2 and Grade 5, but they stagnated between Grades 5 and 8. This pattern could perhaps be avoided with greater attention to grammatical development. For example, Tedick and Young (2014) point out the potential dangers of encouraging communication without planning for accuracy, reiterating a prior researcher's concerns that doing so could encourage students to develop 'fluent pidgin' (Brumfit, 1984, p. 131, as cited in Tedick & Young, 2014). Brumfit's concern has been echoed by subsequent investigators. For example, Hernandez (2011) found that the TWI teachers in her study had noticed "students fossilizing incorrect grammatical structures in the primary grades that affected their discourse in Spanish in the upper grades" (p. 198), although Hernandez did not include examples of these structures.

For HSs in particular, the effects of TWI are a more complex and less explored topic. Researchers have debated the reasons that uninstructed HSs often show variable grammatical

competence in the first place, with predominant, evidence-based (although somewhat debated) theories suggesting that changes in input at the time that schooling begins lead to incomplete acquisition of certain structures and an eventual tendency toward English dominance (Montrul, 2002; 2008; Montrul & Potowski, 2007). Increased research into the instruction of TWI students will help to elucidate whether these changes can be staved off merely through continued input compared to uninstructed learners or whether form-focused instruction (FFI) is also necessary. Such research will lend to our current understanding of these speakers' linguistics systems, as well as to important applications for pedagogy and for theoretical questions related to the interface of explicit and implicit knowledge (Bowles, 2011).

Form-focused Instruction in Immersion Education

The general design of TWI programs, like other types of content-based instruction (CBI) and immersion programs, provides for greater concentration on meaning than language form. This design is of course crucial to the effectiveness of these programs and no doubt responsible for their general success in promoting fluency (Lindholm-Leary, 2001). Nonetheless, the difficulties with partner language development described in the previous section suggest that attention to form may have benefits for TWI students as well. One starting point for this effort may be the large body of research that has been conducted in Canada in response to the previously described deficiencies noted in L2 immersion students' linguistic development. For example, Swain's Output Hypothesis (1985) was instrumental in challenging the assumption that linguistic development would occur through access to meaningful input alone. FFI became a key area of research as well, and decades of studies on its inclusion in immersion programs have suggested that it does have overall positive effects, although these sometimes can be primarily short-term (Ellis, 2001). Regarding HSs in TWI, research on the effects of instruction on

linguistic development is very limited, and it cannot be assumed that instructional strategies will have the same effects on this population as for L2 learners (Potowski et al., 2009; Montrul & Bowles, 2010, 2017). Bowles and Torres (2021) recently completed a meta-analysis of 8 preliminary studies on instructed heritage language acquisition. While instructed heritage language acquisition is still very much a burgeoning field, PL development among HSs in TWI can be considered to fall under the instructed heritage language acquisition umbrella. In fact, current efforts to describe the curricularization of language in TWI and HL instruction are largely overlapping (Valdés, 2018; Valdés & Parra, 2018). In their meta-analysis, Bowles and Torres found a small effect size for the impact of instruction on HL learning (d = 0.57), which differs from the moderate effect (d = 0.96) that has previously been found for L2 learners (Norris & Ortega, 2000). However, they did find greater effects for elementary-aged HSs compared to adult HSs, as well as for language arts instruction compared to other types of instructions. Additional studies on HS children of a variety of ages and with diverse aspects of language are still badly needed.

In summarizing the types of FFI that are likely to be successful in DL education, the authors of the Guiding Principles for Dual Language Education (Howard et al, 2018) explain:

> …there is a need for formal instruction in the second language. However, this does not mean traditional translation and memorization of grammar and phrases. It is important to use a language arts curriculum that specifies which linguistic structures should be mastered (e.g., conditional verb forms) and how these linguistic structures should be incorporated into the academic content (e.g., including preterit and imperfect forms of verbs in history instruction and conditional and future verb tenses in mathematics and science). (p. 57)

How teachers implement this type of FFI is a trickier issue. Some educators rely on sheltered-instruction methods borrowed from the teaching of English as a Second Language (Echevarría et al., 2013), although some scholars believe that these do not have sufficient focus on linguistic development to be used for this purpose on their own (Domke, 2015). Others follow broader guidelines for biliteracy instruction, which encourage metalinguistic awareness of various areas of language including morphology and syntax through contrastive analysis (Beeman & Urow, 2013). At least two systematic frameworks for FFI have emerged from immersion research in Canada (Snow et al., 1989; Lyster, 2007). Lyster's (2007) model in particular is a potentially informative source of FFI strategies for TWI, as it presents a comprehensive set of recommendations for planning for language development in a CBI environment. This work stresses the need for instruction to be counterbalanced—that is, rather than decontextualized grammar instruction, incidental FFI, or complete inattention to form, Lyster recommends that content and FFI be systematically integrated and deliberately attended to. In this model (see Figure 1), both proactive and reactive strategies are planned for so that students have opportunities to engage in noticing, awareness, practice, and feedback that foster linguistic accuracy. Crucially, instruction in this model is explicit and occurs as an obvious break from attention to content so that students' memory of the instruction and awareness of its importance will be heightened. Nonetheless, it is integrated into content teaching, with recent research emphasizing the importance of this happening throughout the curriculum (Lyster, 2015). Furthermore, counterbalanced instruction emphasizes the types of form-meaning connections known to be difficult for L2 learners. This is a significant break from the decontextualized FFI often found in immersion programs' language arts classes, in which students are taught topics such as homophones and spelling outside of the context of their content instruction with

materials designed for native speakers (Lyster, 2007).

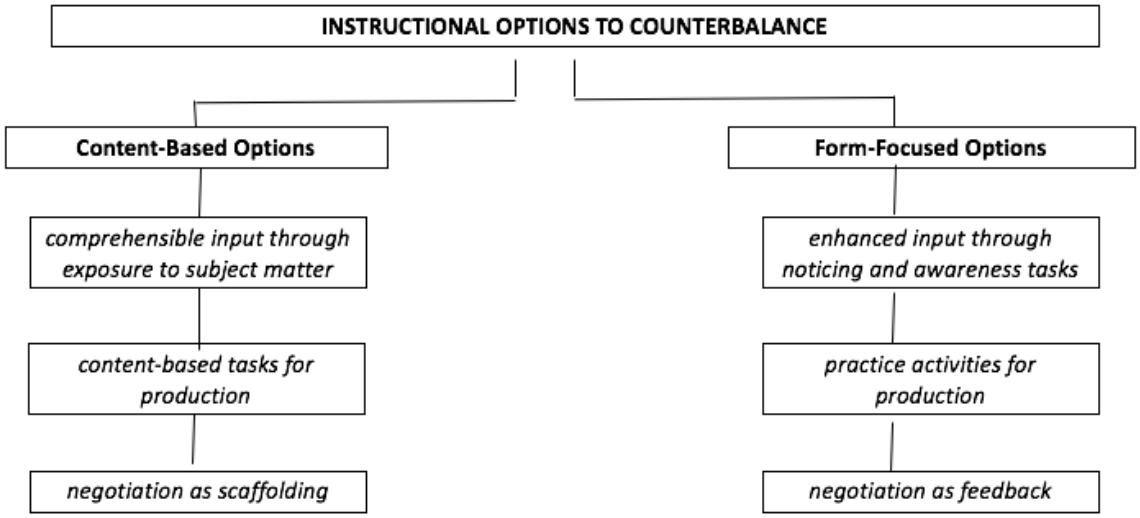

Figure 1: Instructional options to counterbalance (Lyster, 2007)

Lyster's counterbalanced model has been recognized as a good guiding framework for the integration of FFI into TWI programs by prior research (Tedick & Young, 2014), although it is important to note that the empirical research supporting counterbalanced instruction comes primarily from L2 immersion contexts. Recently, a collaboration between Lyster and Tedick (2020) has resulted in a guide and supplemental resource materials for teachers that include the counterbalanced model as a part of scaffolding for PL development in DL and immersion programs. An additional source of guidance may come from Ellis's (2001) taxonomy of FFI, which has since been applied to CBI settings (Zyzik & Polio, 2008). This taxonomy (Figure 2) breaks down FFI into three main categories depending first on whether instruction occurs in a context whose primary focus is on form (Type 1, "focus-on-form*s*") or in a context whose primary focus is on meaning, but with form attended to within this meaningful context ("focus-on-form"). The category of focus-on-form is then further broken down into planned (Type 2) versus incidental (Type 3) instruction (Ellis, 2001). Planned focus-on-form is intensive rather

than extensive, meaning that particular forms receive large quantities of attention so that their development is fostered. Incidental FFI is extensive, which means that a wide range of forms are covered as issues with them arise naturally in classroom interactions, but particular forms do not intentionally receive focused attention. For Type 1 activities, examples include explicit focus-on-forms (inductive or deductive rule learning), implicit focus-on-forms (memorization of models), structured input (VanPatten & Cadierno, 1993), pattern practice, and functional language practice. For Type 2 activities, Ellis describes enriched input, input flood, input enhancement, and focused communicative tasks. The Type 3 activities mentioned include pre-emptive focus-on-form (in a spontaneous context but before any error has occurred) and reactive focus-on-form (in response to perceived or actual errors) including recasts and prompts. Both recasts and prompts have been found effective for learning in different contexts. In content-focused immersion settings, some evidence suggests that prompts may be particularly useful (Lyster & Mori, 2006).

Types of Form-Focused Instruction

Type of FFI	Primary Focus	Distribution
1. Focus-on-forms	Form	Intensive
2. Planned focus-on-form	Meaning	Intensive
3. Incidental focus-on-form	Meaning	Extensive

Figure 2: Form-focused instruction (Ellis, 2001)

As research into FFI in TWI programs moves forward (both in terms of descriptive and experimental studies), all of the types of FFI described by Ellis should be considered so that knowledge will be built on what types of FFI are most effective in this context and theoretical questions underlying this issue will be elucidated.

So far, only a handful of instructional studies have taken place in the TWI context.

Tedick and Young (2014) conducted classroom research in a fifth-grade TWI classroom that employed counterbalanced FFI designed to improve students' ability to use preterite and imperfect past tenses correctly in Spanish. The activities described correspond to all three types of FFI in Ellis's taxonomy. For example, students highlighted preterite and imperfect forms in a reading passage and discussed the patterns they observed (Type 1), and specific meaning-based tasks were designed to elicit greater use of the target forms (Type 2). The teacher also increased her use of corrective feedback prompts (Type 3). Overall, results of this study showed significant effects on students' accuracy producing preterite and imperfect verbs in Spanish, with 74% of tokens accurate before FFI treatment and 92% of tokens accurate two to three months after treatment. One caution the researchers note, however, is that this improvement was likely inflated by students' tendency to repeatedly use exemplars they had memorized from the FFI treatment rather than the sometimes inaccurate but more creative constructions they had used before. Based on this, the researchers surmise that for the L2 learners "it is unlikely they improved overall in their rule-based production of the past tense/aspects," and they speculate that a "certain threshold of proficiency is necessary for FFI to have a positive, lasting impact. At the same time, perhaps students with lower levels of proficiency would benefit from FFI involving more controlled practice activities or a less complex grammatical subsystem, such as grammatical gender" (p. 803). Tedick and Young also call for future quasi-experimental research with a control group and pre-, post-, and delayed-posts tests in order to better tease apart the effects of intervention. An additional perspective to consider is the nature of the instruction provided in this study, as it would be interesting to compare the effectiveness of the more explicit intervention used in this study to more implicit varieties such as input flood, or varieties thought to act on the implicit system, such as structured input.

Complementing this work by Tedick and Young, the latter of these researchers completed another classroom study in a third-grade classroom (Young, 2016). This research was conducted collaboratively with the classroom teacher and focused on a functional approach designed to integrate language focus into the classroom curriculum. This was done through the integration of language supports designed to help students use more complex language without disrupting classroom routines. These supports included the displaying of a function chart with target sentences and phrases, partially scripted input that students could use to guide their interactions during group work, and differentiated vanishing cloze activities that required students to use the target language to describe their group interactions. In this study, the vanishing cloze activities were described as cloze activities that became increasingly more difficult as the unit progressed and for which the teacher provided differentiated options, although how the options were differentiated was not specified. As in the work by Tedick and Young, the activities seemed to bridge the three types of instruction in Ellis's taxonomy. Overall, the effects of this study were positive for the five focal students whose proficiency was measured. While quantified data was provided for individual students only, the researcher notes that students' overall oral proficiency increased as measured by mean length of utterance and subordination index. Results of a Systematic Analysis of Linguistic Transcripts (Miller et al., 2006) also showed that they increased their use of a variety of verb tenses. Finally, a key feature of this study was the effect it had on the cooperating teacher's attitude to FFI. By integrating the activities into existing meaning-based instruction, the teacher was able to change his perspective that FFI was not compatible with immersion. In addition, the teacher's attitudes toward his HSs changed; previously, he had believed that HSs were already fully proficient in oral language and did not see how instruction could benefit them, but after the treatment he acknowledged that they

benefited from language instruction as well.

Heritage Language Instruction

Regarding the instruction of HSs of Spanish in particular, few studies to date have empirically measured the effects of instruction on these speakers' linguistic systems (Montrul & Bowles, 2010; Potowski et al, 2009; Torres, 2018). Montrul and Bowles (2010) used explicit grammatical explanation and three practice exercises for which students received feedback and negative evidence (Type 1 activities) in order to see whether HSs' use of differential object marking was amenable to instruction. Results of the study showed positive effects. For example, in a production task, the instructed group showed an overall accuracy score of 93.1 compared to the uninstructed group's score of 75.2. Effects on acceptability as measured by a grammaticality judgment test (GJT) also showed positive effects of instruction. Potowski et al. (2009) likewise found positive results for Type 1 instruction. Their study compared traditional instruction based on output practice with processing instruction entailing structured input plus explicit instruction (VanPatten & Cadierno, 1993), and it included groups of both HSs and L2 learners. Results of the study showed significant results of both treatments for both HSs and L2 learners in terms of interpretation and production. However, these effects were much higher for L2 learners. Furthermore, only the L2 learners showed any effect of instruction on GJTs. Montrul (2012), on the other hand, points out that the low results on GJTs make sense in light of Bowles' (2011) finding that HSs tend to rely on implicit knowledge (perhaps regardless of subsequent instruction) and perform worse on explicit tasks such as written GJTs. In any case, the positive results on interpretation and production provide promising evidence that HSs can benefit from FFI.

Outside of empirical studies of heritage language instruction, there is a large body of

work dedicated to recommendations for within the classroom. Valdés (1995) began the work of establishing goals for heritage language instruction as a discipline. Since then, she and other researchers (Aparicio, 1997; Valdés et al, 2008) have expanded this work to include additional goals. The following seven goals are now widely recognized and promoted within the field (Beaudrie et al., 2014):

1. Spanish language maintenance;
2. the acquisition or development of the prestige variety of Spanish;
3. the expansion of the bilingual range;
4. the transfer of literacy skills;
5. the acquisition or development of academic skills in Spanish;
6. community building and the development of self-esteem; and
7. the acquisition or development of cultural awareness.

Beaudrie et al. also describe three general pedagogical principles that can help teachers to reach the seven goals listed above. These principles include incorporating top-down instruction that builds on heritage learners' global knowledge of the PL, sociolinguistically informed approaches to correction, and differentiated instruction that meets the diverse needs of all HSs in a class. Together, these three principles form important guidelines for heritage language instruction because they recognize the different assets that the students bring to the class and avoid the demeaning practice of telling HSs that their home language varieties are "wrong." On this particular issue, some researchers, such as Beaudrie et al., rely at least partially on an appropriateness model that encourages students to consider the contexts in which their home dialect might be more suitable and the contexts in which using a prestige form may better serve the students' communicative goals. Other researchers question the usefulness of appropriateness

models, suggesting that these may reinforce existing patterns of linguistic dominance and subordination, as well as fail to engage students in a critical examination of these patterns (Leeman, 2005, 2018). Researchers advocating a critical approach to heritage language instruction recommend activities that will foster student agency in making language choices and empower them to critically understand the social and political forces that underlie linguistic hierarchies. On the other hand, Beaudrie et al. make the further important distinction between dialectal characteristics of heritage learners' language and production of forms that are not used in their home language varieties. This latter category may include developmental or transfer-based errors such as those typical of L2 learners and may be more apt candidates for respectful correction.

Within the TWI context, ongoing research and teacher training can be guided by existing recommendations, as well as by the overall positive findings for different types of FFI for both HSs and L2 learners. It can also be informed by recommendations for integrating language and content in a counterbalanced method. Nonetheless, any interventional research or teacher training will rely on a thorough understanding of teachers' current beliefs and practices as they relate to linguistic development, as these ultimately must be negotiated in the implementation of new approaches or techniques.

Teacher Beliefs and Practices

Teachers' beliefs have been defined operationally as "ideas, thoughts, and knowledge that are expressed as evaluations of what 'should be done', 'should be the case', and 'is preferable'" (Basturkmen et al., 2004, p. 244). Common methods of studying teacher beliefs include interviews, surveys, think-alouds, and stimulated recall (Fang, 1996). In general, the study of teachers' beliefs supports the contemporary view that teaching is a cognitive rather than

merely behavioral activity. Teachers' beliefs are generally recognized as having the potential to impact their instructional practice, although in reality this relationship is inconsistent, whether that be due to the experience level of the teacher, practical constraints such as time, or for unexplained reasons (Basturkmen, 2012; Basturkmen et al., 2004; Fang, 1996; Farrell & Bennis, 2013; Russell & Kuriscak, 2015).

In the specific area of immersion teaching and dual language, a large body of research exists exploring teachers' beliefs and practices about aspects of instruction such as reading and literacy (Rueda & García, 1996; Sawyer et al., 2016), language separation and translanguaging (Hamman, 2018; Martínez et al., 2015; Palmer, et al., 2014), and linguistic and cultural diversity (Flores & Smith, 2009). In the US immersion context, a handful of investigations have looked into teachers' beliefs and practices as they relate to PL development. One of the first of these was Walker and Tedick's (2000) pioneering qualitative study of six immersion teachers, which aimed to shift the strain of investigation from examining only the products of immersion to also exploring the process through which teachers arrive at their pedagogical practices thus allowing teachers' voices to contribute to our understanding of immersion education. Data for this study was collected through conversations, interviews, and focus groups that were guided by both planned and unplanned questions focusing on a variety of issues in immersion teaching. One key theme that emerged was the difficulty the teachers perceived in balancing language and content, as well as their awareness of the need to more systematically plan for language development. Looking at teacher perspectives from a quantitative perspective, Lindholm-Leary (2001) surveyed 126 TWI teachers with a questionnaire that asked them to rate their agreement with a variety of statements using a five-point Likert scale. Of the questionnaire's nine different categories, one was language instruction. A few of the most salient results from that portion of

the questionnaire included that teachers sometimes, but not always, corrected errors, corrected pronunciation errors more than grammar errors, agreed that they had developed language objectives and activities to attend to errors, and at least sometimes explained grammar.

Fortune et al. (2008) analyzed five teachers' thoughts on the ways they balanced language and content, looking to more deeply explore the topics raised in the studies described above. In gathering data, they used interviews, recorded class sessions, teacher reflections on the class sessions, and a focus group. One of the main findings of this study was that, although teachers perceived themselves as "always attending to their students' language needs" (89), they in fact placed heavier emphasis on content instruction and saw covering content as their primary goal. Furthermore, they were aware that the additional need to teach language put pressures on them that non-immersion teachers do not have to deal with. Hernandez's (2011) unpublished dissertation, while only generally touching the topic of language instruction, lent support for this result, showing that teachers incorporated language objectives into their lessons and worked to balance their natural input with explicit instruction. Finally, Cammarata and Tedick (2012) conducted a qualitative study that was innovative both for its use of a phenomenological methodology as well as for including teachers who had already undergone training designed to aid them in integrating language and content. Their findings indicated that, after training, teachers expressed a turn toward seeing themselves more as both language and content teachers instead of primarily as content teachers. In addition, they expressed awareness of the additional pressures and challenges that immersion teachers face, a growing sense of isolation related to this awareness, an "awakening" about the interconnectedness of language and content, and a "stab in the dark" feeling of struggling with what language topics to integrate with their content instruction (p. 257). The findings of the study led to a variety of recommendations for supporting

immersion teachers and guiding them as they plan their instruction.

In sum, research to date has indicated that knowing how to implement language instruction and what forms to focus on is a consistent challenge that speaks to the need for better support, planning time, and training for teachers. However, despite the significant insight that has developed regarding teachers' approaches to developing immersion languages, the studies so far have only partially teased apart how teachers view and approach this challenge in the particular context of TWI. Three of the studies cited above included participants from both TWI and one-way immersion contexts, but the results were not considered separately (Walker & Tedick, 2000; Fortune et al, 2008; Cammarata & Tedick, 2012). TWI programs are a unique situation in that they include both native speakers of the PL and students who are learning it. The studies described in this section and recent intervention studies previously mentioned (Tedick & Young, 2014; Young, 2016) have provided valuable information on teachers' beliefs and practices as they relate to the two groups of learners, but further understanding of this issue is needed. While the studies described above included a few TWI teachers, they focused more on the teachers' overall experiences rather than separately examining teachers' views regarding instructing HSs and L2 learners. Studies of beliefs about teaching HSs (generally outside of the context of TWI) have largely focused on the language ideologies that teachers have and how these affect their beliefs about what HSs need to learn. In particular, there has been a long-noted tendency for teachers to devalue HSs' varieties of the PL and to consider them inappropriate for formal and academic contexts (Beaudrie et al., 2014; Harklau, 2009; Leeman, 2012; Valdés, 1981), although some recent studies have shown that this attitude is shifting (Russell & Kuriscak, 2015). This latter study explored the beliefs and practices of preservice and inservice high school Spanish teachers and found that some common beliefs held by both groups were that HSs tend to

have trouble with grammar and mechanics and that it is difficult to differentiate instruction for HSs and to find materials that are engaging and useful to them. The teachers in this study largely expressed a belief in the need for more programs designed specifically for HSs. A few teachers in the study viewed HSs uniformly as fully developed native speakers, a perspective that might lead them not to recognize areas where some HSs can benefit from appropriate instruction. Similarly, an earlier study of K-12 teachers in California schools found that some teachers held the belief that HL development is the family's responsibility rather than the school's (Lee & Oxelson, 2006). A teacher in this study stated, "I think it's great [if students maintain their heritage language], but I can't do it. My job is to teach them English and get them ready to graduate" (p. 467). This lack of understanding of the need for teachers to actively support the development of HL learners' bilingualism has the potential to cross over into the TWI context, as was seen in Young's (2016) study of a Grade 3 immersion classroom described above. Whether or not TWI teachers' beliefs and practices tend to mirror those of HL teachers is a topic that merits further exploration. Overall, a more thorough survey of teacher's beliefs and practices related to teaching the different groups of students in TWI would be informative, particularly in terms of implications for teacher training.

Professional Development

To date, a few studies have reported the effects of PD on integrating language instruction in immersion settings. As previously mentioned, Cammarata and Tedick's (2012) study of teachers' beliefs and practices included teachers who had participated in PD on this topic and showed overall positive for training. More recently, Lyster (2018) described the large-scale PD projects he has overseen in Canada. Specifically, this paper details three studies that used his counterbalanced approach to integrating language and content. The second of the studies he

describes is particularly relevant to the present research in that one of his graduate students, Shahsavar-Arshad (2015), conducted an in-depth qualitative analysis of the teacher-participants' experiences. The basic design of this study was a sequence of five daylong PD workshops given throughout the school year for two years (two teachers participated both years). The participants were elementary teachers who taught social studies in L2 French. The PD activities included presentations on counterbalanced instruction and reactive focus on form, support for teachers as they created their own counterbalanced units, teacher implementation of the units in their classes, and stimulated recall sessions of recordings of the teachers teaching their units. Rather than using the typical sequence of noticing, awareness, and practice, counterbalanced instruction was presented in a slightly modified sequence emphasizing phases of Contextualization, Awareness, Practice, and Autonomy (CAPA), as shown in Figure 3. Additional data was gathered through questionnaires given to the teachers before and after the workshops and interviews during the first year, which is the year when Shahsavar-Arshad analyzed the teachers' experiences. Results of the qualitative analysis of the data garnered from these sources and the researcher's field notes showed that teachers' experiences were primarily characterized by enthusiasm, enlightenment, confusion, collaboration, satisfaction, and reservation. In particular, the participants appreciated the collaborative approach to learning to balance language and content instruction and felt that they benefited particularly from the process of implementing what they learned in their own classrooms.

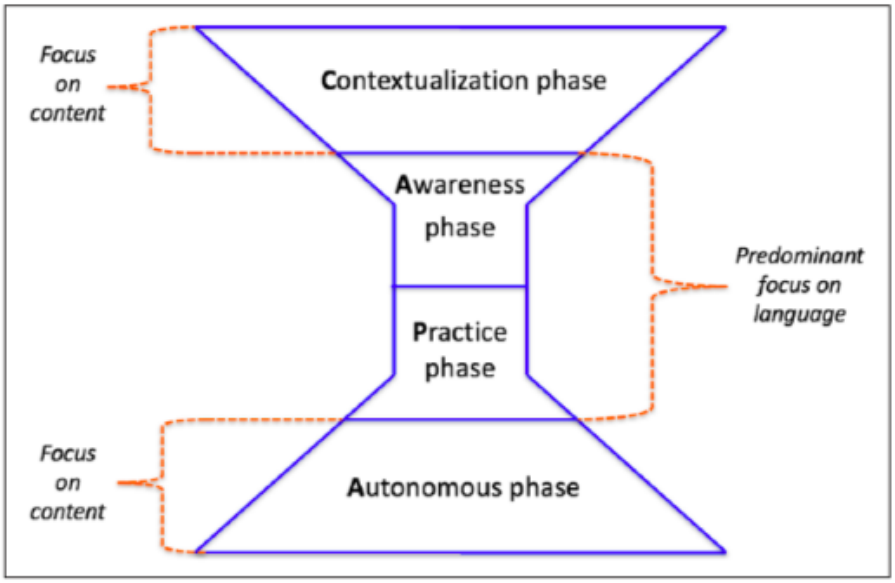

Figure 3: The CAPA sequence integrating language and content (Lyster, 2018)

Another recent study by Tedick and Zilmer (2018) sheds light not only on the effectiveness of large-scale PD on language instruction in immersion settings but also on the specific elements of PD that may be most effective for teachers. This study used a communities of practice framework to examine teachers' experiences in three 15-week courses that formed part of an online graduate-level certificate program for teachers in a wide variety of immersion and bilingual contexts. The aim of the study was to determine which assignments, and what features of the assignments, the teachers identified as having the most impact on their practice integrating language and content instruction. Data was gathered from an online survey in which teachers ranked the effectiveness of various assignments on their practice and from online focus groups, which were recorded. Results indicated that the assignments teachers found most helpful were characterized by four principal themes: meaningfulness, or direct relevance to the participants' teaching contexts; the inclusion of feedback from the course instructor and peers; enactment through applying what they were learning in their teaching contexts and analyzing videos of this application; and effecting change in students, or seeing positive changes in their

students' language. These results led the researchers to recommend that PD on integrating language and content in immersion settings should include models of previously developed outstanding work, a requirement to apply the content of the PD in real settings, constructive feedback from teacher educators and peers, and opportunities to collaborate and reflect.

Perhaps unsurprisingly, these recommendations for PD echo those found by a recent large-scale qualitative analysis of effective PD in a variety of learning contexts (Darling-Hammond et al., 2017). This analysis looked at 35 studies on PD that were chosen because they used an experimental or quasi-experimental design and showed statistically significant effects on student achievement. These studies were reviewed and coded for program characteristics. The results allowed the researchers to identify seven characteristics of effective PD:

1. It is content-focused, meaning that it is relevant to the participants' teaching contexts and discipline specific;
2. it incorporates active learning including the use of authentic artifacts and opportunities to design, try out, and participate in the learning strategies the PD describes;
3. it supports collaborative learning and the opportunity to create collaborative communities;
4. it uses models of effective practice including model lesson and unit plans, videos, and samples of student work;
5. it provides coaching and other support focused on individual teacher needs;
6. it offers feedback and fosters reflection; and
7. it is of sustained duration and offers sufficient time for teachers to learn and practice the key concepts.

As a final note on PD, while the more recent work on PD on integrating language

instruction in immersion settings has sought to respond to the "dearth of research on professional development (PD) experiences that positively impact immersion teacher practices" (Tedick & Zilmer, 2018), to my knowledge there is still no research to date that considers how PD may affect TWI teachers' beliefs and practices as these relate to the differing needs of their HSs and L2 learners. This study aims to fill that gap in the research.

CHAPTER 3: THE CURRENT STUDY

The current study responds to the need for additional research on partner language development in TWI programs by exploring existing practices and outcomes in a local TWI program and then exploring the process of enriching these through collaborative work with the teachers. The study took place during the 2017-2020 school years.

Research Questions

The project uses a case study analysis of three upper elementary and middle school TWI teachers and explore these teachers' beliefs and practices as they relate to the PL development of both L2 learners and heritage speakers both before and after PD and instructional coaching (IC). Importantly, the TWI program where this study is taking place is in its early years, with the cohort that began the program in first grade having just reached sixth grade at the start of the study. As a result, research in this setting provides a unique picture into the factors that contribute to the development of teachers' perspectives. The research questions that will guide this exploration are as follow:

1. What beliefs and practices do teachers in a TWI program display in relation to PL development?
2. How do teachers experience PD and IC on fostering students' PL development?

The primary design of this investigation is a qualitative case study. Case study research, which is primarily qualitative, "zeroes in on a particular case (an individual, a group, or a situation) in great detail, within its natural context of situation, and tries to probe its characteristics, dynamics, and purposes" (van Lier, 2005: 197). While van Lier points out that case study research was once considered less valuable than controlled experimental research because it was viewed as less generalizable, he disagrees with this assumption, emphasizing that

particularization is just as valuable as generalization, and that as long as context is accounted for, the results from a case study can enlighten many other situations. As described above, previous research into the topic of immersion teachers' beliefs and practices and the effects of PD has also relied on qualitative methodologies, including specialized techniques such as phenomenology (Cammarata & Tedick, 2012). For the present study, qualitative case study research was chosen for its ability to provide a detailed and nuanced picture of the ways that TWI teachers view and attend to their students' partner language development and how they experience PD on this topic. This level of nuance will be important in arriving at implications for future interventional research and/or teacher training recommendations.

In considering the types of classroom activities that are likely to facilitate partner language development, the current study adopts an interactionist framework. The interaction approach to instructed second language acquisition originally stemmed from Long's Interaction Hypothesis (1996) and is alternately referred to as a model, framework, and theory. Overall, this approach to instructed second language acquisition takes an integrative stance on the roles of input, interaction, output, noticing, and FFI in L2 acquisition (Gass & Mackey, 2015; Spada & Lightbown, 2008). While meaning-focused input is considered essential in this model, it is not considered sufficient. Instead, it is believed that learners must have the opportunity to produce output, negotiate meaning, receive feedback, and have their attention brought to form within the context of meaningful communication if acquisition is to be maximized. Recently, some researchers have also expressed concerns about which theories of SLA and bilingualism undergird bilingual education, and they espouse socially oriented theories as more suitable to recognizing students' linguistic assets (Valdés, 2015; 2018; Valdés et al., 2015). While the current study draws largely from an interactionist framework, it nonetheless views socially

oriented theories as complementary rather than oppositional (Tarone, 2010; Toth & Davin, 2016). Furthermore, the current project acknowledges and agrees with the importance of the concerns brought up by the aforementioned researchers. In particular, bilingual speakers are not analogous to two monolingual speakers in one mind. Therefore, while it is presumed that PL development should be an integral part of TWI, any attention to form should occur within the context of valuing and building upon students' existing linguistic repertoires rather than fostering monoglossic or deficit views.

In accordance with these beliefs, this study's examination of teachers' beliefs and practices was built on a sociocognitive perspective. As teachers shared their beliefs, practices, and experiences with the researcher, these were explored with the understanding that "neither language use nor language learning can be adequately defined or understood without recognizing that they have both a social and cognitive dimension that interact" (Batstone, 2010: p. 5). In other words, the social dimension of the classroom and the instructional techniques the teachers included were viewed as inextricably connected to the students' cognitive experience of language acquisition. In addition, a critical theory of education (Kellner, 2003) was drawn upon in analyzing the teachers' beliefs, practices, and experiences with PD and coaching, particularly as these related to the different groups of students in the class. A critical theory of education is based upon the premise that "a democratic and multicultural reconstruction of education needs to build on and synthesize perspectives of classical philosophy of education, Deweyean radical pragmatism, Freirean critical pedagogy, poststructuralism, and various critical theories of gender, race, class, and society while criticizing obsolete idealist, elitist and antidemocratic aspects of traditional concepts of education" (pp. 1-2). This theory was particularly important in exploring the ways in which the teachers' beliefs and practices were likely to either reinforce or disrupt

existing societal inequalities, particularly as these relate to the diverse linguistic practices of different groups of speakers. In this sense, the current project's work is compatible with recent scholarship investigating raciolinguistic ideologies (Flores & Rosa, 2015), which maintains that racialized speakers' linguistic practices are often viewed as deviant and stigmatized, regardless of their actual conformity to so-called "standard" forms. Similarly, as previously described, the current study adopts the belief that a sociolinguistically informed approach to correction (Beaudrie et al., 2014) is paramount in work with minoritized speakers including HSs.

Participants and Setting

The participants in this project were one upper elementary and two middle school TWI teachers from a single district. The singular pronouns 'they,' 'them,' and 'their' will be used to refer to each teacher without indicating gender. At the time of the study, the elementary teacher was responsible for teaching 50% of their content in English and 50% in Spanish, whereas the middle school teachers were responsible for teaching 100% in Spanish. The context of the middle school was particularly interesting because it had just received its first class of TWI students. Prior to the school year in which the research began, the middle school teachers taught in a transitional bilingual education program. At the time of the study, all three teachers' classes were largely composed of HSs, with between one and six L2 learners per class of 20-26 students. The three teachers were also native speakers or HSs of Spanish themselves. Teacher 1 grew up in the United States as a simultaneous bilingual who spoke Spanish with one parent and extended family and English with the other parent. Teacher 2 also grew up in United States but spoke Spanish at home with both parents. Teacher 3 grew up in a monolingual Spanish-speaking community and home environment and learned English while attending a bilingual school. All three teachers rated both their Spanish and English as "excellent/native." The teachers had

between 1.5 and nine years of teaching experience, all in a bilingual classroom. They had a variety of educational experiences including graduate course work in education. Teacher 3 had also completed an advanced degree in science. Background information for the teachers can be found in Table 1.

Table 1. Participants

Teacher	Grade	Subject	Years of Experience
1. Teacher 1	4	All subjects	1.5
2. Teacher 2	6	Social science	9
3. Teacher 3	6	Language arts, science	1.5

Researcher Positionality

The researcher in this study is a white, bilingual (L2 Spanish) teacher and doctoral student in second language acquisition. During the time of the study, she had approximately 17 years of experiencing teaching English as a Second Language (ESL), Spanish, and language arts primarily at the high school and university levels. Throughout her career, she has been dedicated to exploring effective, culturally responsive, equitable pedagogical practices that build on students' existing linguistic and cultural resources. Her interest in researching in DL and two-way immersion stemmed from her prior experience teaching ESL and Spanish to both L2 learners and HSs. In particular, she was interested in exploring the potential of these programs to develop high levels of bilingualism and biliteracy through linguistically sustaining and enriching practices. However, as an applied linguist with experience teaching ESL and Spanish but not DL, she positioned herself as an expert in some areas but a learner in others. In addition, her identity as a white researcher and L2 speaker of Spanish necessitated a delicate positionality as she was

primarily working with racialized Latinx bilingual students and teachers for whom Spanish was both their home language and an integral part of their cultural identity.

Data Collection

Table 2 describes the data collection that took place during the 2017-2020 school years. Data collected during the first year of the project was used to gain insight into the teachers' existing beliefs and practices both as they reported them and as evidenced through observations of their teaching. Written tests of students' Spanish grammar were also administered in order to provide a point of comparison with the teachers' descriptions of their students' morphosyntactic knowledge. During the second two years, data was collected to answer the second research question regarding how teachers experience PD and IC on fostering students' PL development.

Table 2. Data collection by school year

Year of Study	School Year	Data Collection
1	2017-2018	● Survey and interviews to gain insight into teachers' existing beliefs and practices ● Classroom observations and review of classroom materials ● Tests of Spanish grammar
2	2018-2019	● Recording of introductory professional development session ● Google survey on professional development
3	2019-2020	● Recording of second professional development session ● Recording of individual coaching sessions ● Compilation of teacher-and research-created materials

Data collection during the first year was gathered primarily through an online survey and in-person interviews with the teachers. The online survey was created via Google forms and distributed to the teachers via email. This survey (Appendix A) included a number of items taken from or adapted from the questionnaire Lindholm-Leary (2001) used in her study of teacher backgrounds and perceptions. It included a statement of consent to participate in research, nine questions about the teachers' language and teaching background, 15 items that teachers rated on a five-point scale ranging from 'strongly agree' to 'strongly disagree,' and six open-ended questions designed to elicit qualitative data. Two of the participants completed all sections of the survey, and one participant completed the first three parts but did not answer the open-ended questions.

The teacher interviews were conducted in person. One teacher participated in two formal interviews; of these, one took place immediately after they completed the online survey, and the other occurred a few months later after classroom observations were complete. The other two teachers participated in only one interview after the completion of classroom observations. In addition, the teachers and researcher occasionally engaged in informal conversations that were recorded as field notes to be analyzed qualitatively. During two of the four formal interviews, the researcher took notes on her notebook computer while the teachers spoke. However, because it quickly became clear that richer data would result from recordings of the teachers' exact words, the researcher solicited permission to audio record the final two interviews. All interviews lasted approximately 45 minutes to two hours. The two audio recorded interviews were transcribed in a verbatim style for analysis. The teachers spoke energetically and enthusiastically, and the recordings resulted in rich data: one transcription consisted of over 7,800 words and the other of over 14,100. While teachers' words were transcribed verbatim, they are presented here lightly

cleaned (for example, with some false starts and sentence fillers such as *um* removed) to enhance readability (Corden & Sainsbury, 2006).

The structure of the formal interviews followed three main procedures. First, teachers were asked to follow up on some of the answers they provided to the online survey. These answers were chosen based on their relevance to the research question. Second, the researcher led the teachers through a questionnaire of practices related to language instruction (Appendix B). This questionnaire was based on Ellis's (2001) taxonomy of FFI. Initially, it was intended to elicit quantitative data on the teachers' current practices in language instruction, the utility of which was described in the literature review. Nonetheless, during the first interview it became apparent that this data would be difficult to acquire, due in part to teachers' differing understandings of 'form' (for example, including punctuation and content-related terminology). Rather than insisting that teachers provide this quantitative data, the researcher allowed a description of the taxonomy to engender an open-ended discussion that became a source of qualitative data. As each instructional strategy was described, the teachers recalled a number of their own practices and described these at length in both broad and anecdotal fashions. Frequently the practices described did not correspond exactly to the strategy on the questionnaire, so the responses could not be tallied. Nonetheless, they provided a complex window into the teachers' beliefs and practices related to language development and teaching. Finally, the interviews also proceeded in a natural, open-ended fashion, with additional interview questions arising organically from the teachers' responses.

In order to gather supporting data and attempt to match the teachers' reported beliefs and practices with observable practices and student characteristics, two additional sources of data were gathered. First, during the first year, the researcher conducted 4-6 classroom observations

of each teacher, made over six hours of classroom recordings, and reviewed a number of classroom materials and planning documents. The classroom recordings were reviewed, and form-focused episodes were transcribed. In addition, short written tests of Spanish grammar were given to 4th, 5th, and 6th grade students (Appendix C). These tests were based on those used in Potowski's (2007) study of eighth grade TWI students' Spanish proficiency. The purpose of these tests was to provide a rough estimate of the accuracy of the teachers' perceptions of their students' abilities, as well as to provide one source of information on what linguistic forms might be good targets for instruction in the teachers' classes.

During the first semester of the second year of the study, data collection was temporarily placed on hold due to one teacher's experiencing a long-term family emergency. During the second semester, new data was gathered through the audio recording of a 1.5-hour PD session and a follow-up Google survey, both of which were given to the two middle school teachers in the study. The teacher who taught language arts and science during the first year of the study had since switched to teaching only science, which they also taught during the third year. The PD session contained presentation and discussion of key issues in the integration of language and content objectives and was specifically designed to respond to needs identified by the teacher and researcher during the first year of the study (Appendix D). It also allowed the teachers to analyze two counterbalanced lesson plans (Lyster, 2016) and a modified version of the Immersion Teaching Strategies Observation Checklist (Fortune, 2014) (Appendix E). Finally, the follow-up Google survey asked teachers to identify the components of the PD that were most useful to them and to identify the types of PD they would like to engage in in upcoming sessions (Appendix F).

During the third year of the study, the researcher used the data gathered from this survey

to work individually with the two teachers in determining topics for additional PD sessions and coaching sessions (joint and individual). These sessions were designed to meet the characteristics of effective PD identified by previous studies (Darling-Hammond et al., 2017; Tedick & Zilmer, 2018). In total, one additional PD session and 14 IC sessions were conducted with the two teachers (Appendix G). Data was gathered through recordings of the sessions and a review of the classroom materials that were created as a result of this joint work.

Data Analysis

Because of the small number of participants in the study, the results of the closed-ended survey questions used in the first year were compiled and reviewed, but they were not submitted to descriptive or inferential statistical analysis. Instead, they guided the researcher in conducting interviews with the teachers and provided a comparison point for the teachers' interview responses. The responses to the open-ended questions were combined with the notes and transcriptions from the teacher interviews and submitted to qualitative analysis. This analysis occurred in a cyclical fashion that allowed the researcher to inductively pinpoint common themes, as well as individual variation, in the teachers' beliefs and practices. During the initial review of notes and interview data, as well as during the process of transcription itself, the researcher took notes on common threads that emerged. After data was fully compiled, the teachers' responses were initially coded using an In Vivo system (Saldaña, 2012) that allowed the actual words of the teachers to capture their outlooks and perspectives. These In Vivo codes were then compared to the research question and relevant data was coded by category through a process of Focused Coding (Saldaña, 2012). Comparison and contrast of the categories found across the three teachers' data allowed salient themes to emerge. The written Spanish tests were graded for accuracy, and the percentage correct per form was calculated for the sixth grade,

which was chosen as the most appropriate comparison to the eighth graders used in Potowski's (2007) study.

In order to analyze the degree to which teachers' observable practices demonstrated strategies designed to foster PL development, the classroom recordings made during the first year were transcribed and submitted to a two-part analysis. First, the researcher used the Dual Language Partner Language Development Checklist (Appendix H) to note the observable ways in which individual teachers incorporated PL development strategies into their classes. This checklist was heavily adapted from selected portions of the Immersion Teaching Strategies Observation Checklist (Fortune, 2014). In addition, a five-hour portion of the recordings was selected based on the audibility and clarity of student and teacher speech. These five hours had approximately equal representation from the three teachers. All form-focused episodes from these selections were noted, and the rate of form-focused episodes per hour was calculated. This calculation was used to quantify the overall attention to form evidenced in the program.

Finally, the transcripts of the 16 recorded PD and IC sessions were qualitatively analyzed in order to identify salient themes and to answer the second research question about how teachers experience PD and IC on fostering students' PL development. For this qualitative analysis, the first cycle of coding followed a methodology known as Process Coding in which codes in the form of gerunds (verbs ending in *-ing*) are used exclusively in order to capture observable or conceptual action (Saldaña, 2012). Saldaña (2012) points out that "processes also imply actions intertwined with the dynamics of time, such as those things that emerge, change, occur in particular sequences, or become strategically implemented through time" (p. 96). As this analysis aimed to explore the teachers' experiences over the course of the 16 sessions, Process Coding was considered a particularly apt choice. For the second cycle, Focused Coding permitted salient

themes related to the second research question to emerge.

CHAPTER 4: TEACHER BELIEFS

Results of Survey on Beliefs and Practices

The results of the survey questions that were rated on a five-point scale are presented in Table 3. As mentioned, these responses were not analyzed statistically. Nonetheless, they were enlightening in a number of ways. First, they showed that the teachers tended to respond similarly to all questions, with only one item, number 8, eliciting answers that directly conflicted. This item asked teachers whether they accepted all attempts at student communication even if they were expressed incorrectly. One teacher marked agree, one marked disagree, and the third marked strongly disagree. This item hits on the topic of implicit and explicit feedback, an important issue in second language acquisition. Therefore, it was a topic that was discussed at length during the teacher interviews.

Overall, the key finding from the results of this portion of the survey was that these teachers are aware of their role as language teachers. For example, all three teachers disagreed with the statement "I rarely or never explain points of grammar to my students." In addition, all three of the teachers agreed (but did not strongly agree) with the statement "I have developed specific language objectives that I incorporate into content." However, the responses to these questions did leave some ambiguity due both to the wording of the items themselves and to some variance in the responses. For example, all three teachers disagreed with the statement "I fairly often, but not always, correct students' grammatical errors." This disagreement could imply that they rarely or never correct grammatical errors, or it could imply that they always correct them. In addition, a number of answers were rather vague. For example, two teachers marked "agree" and one teacher marked "neither agree nor disagree" to the questions of whether the bilingual program has content, academic, and language objectives by grade level. The same responses

were given for whether the teacher has developed activities to respond to students' language errors. The ambiguity of these answers and their direct relevance to the research question led the researcher to refer to them and inquire further in follow-up interviews.

Table 3. Responses to the survey questions rated on a five-point scale.

Item	Teachers' Responses
1. In the immersion classrooms at my school, students learn language at the same time they learn content.	*agree, agree, strongly agree*
2. Speaking and using both languages is valued at my school.	*agree, strongly agree, neither agree nor disagree*
3. Most students who complete the immersion program at my school will graduate speaking excellent (nativelike or near-nativelike) English.	*agree, agree, agree*
4. Most students who complete the immersion program at my school will graduate speaking excellent (nativelike or near-nativelike) Spanish.	*agree, agree, neither agree nor disagree*
5. I focus primarily on content and academic skills in my classroom.	*agree, agree, neither agree nor disagree*
6. I rarely or never explain points of grammar to my students.	*disagree, disagree, strongly disagree*
7. I fairly often, but not always, correct students' grammatical errors.	*disagree, disagree, disagree*

Table 3 cont. Responses to the survey questions rated on a five-point scale.

Item	Teachers' Responses
8. I accept all students' attempts at communication even if they are expressed incorrectly.	*agree, disagree, strongly disagree*
9. We have developed content and academic objectives by grade level for the bilingual program.	*agree, agree, neither agree nor disagree*
10. We have developed language objectives by grade level for the bilingual program.	*agree, agree, neither agree nor disagree*
11. I have developed specific language objectives that I incorporate into content.	*agree, agree, agree*
12. I develop activities to address consistent language errors that students make.	*agree, agree, neither agree nor disagree*
13. When I teach my classes, I speak naturally in Spanish.	*agree, strongly agree, agree*
14. The immersion program at my school benefits students from English-speaking homes and Spanish speakers equally.	*agree, agree, neither agree nor disagree*
15. I correct students' pronunciation errors.	*agree, agree, neither agree nor disagree*

Qualitative Results on Teachers' Beliefs and Practices

The overall findings of the qualitative study during the first year of the study present a portrait of teachers who use their resourcefulness and personal judgment in fostering PL development but who often feel unguided in terms of both how and what to teach. Similar to participants in prior research studies, these teachers express a need for additional collaboration across grade levels as well for greater resources to support their work. Regarding the needs of their students, they tend to see HSs and L2 learners very differently, with morphology being seen as a concern for English speakers but Spanglish and writing mechanics as concerns for their HSs. Their current practices in language teaching focus on both low- and high-level features such as capitalization and descriptive word choice, yet morphological development is rarely planned for. In the remainder of this section, detailed descriptions of these major themes will be discussed.

Resourcefulness and Judgment in Teaching Language

One of the more salient themes that emerged from the open-ended survey questions and interviews is the use of individual resourcefulness and judgment to plan for teaching language. The teachers confirmed the results of the closed-ended portion of the survey in that all three shared activities they have chosen to incorporate into their classes in order to work on partner language needs. They demonstrated high levels of professionalism in reflecting on their practice and striving to design lessons that will effectively meet their students' needs. For example, Teacher 2 shared their ongoing process of developing their curriculum, stating: "I had to create my own stuff, figure it out. Every year, that's what I've been doing. I keep making it better."

Due to the teachers' use of their individual resourcefulness and judgment in planning, notable variance occurs between the strategies that were used to develop language. For example, Teacher 2 had previously received PD training in workshop strategies that emphasize the

importance of conferencing with individual students, so individual writing conferences were their primary means of helping students to advance with their language development. They explained, “It’s important to meet with our students because we can get one to one with them and talk about, ok, this is what you need help with, this is how I’m going to get you there.”

As previously mentioned, Teacher 3 grew up attending a bilingual school located in a primarily monolingual Spanish environment. They described their own bilingual education as “super intense” and “very different” from the program they now teach in (referring to their own education, they remarked, “if you don’t know accents, you don’t graduate”). Reconciling how they were taught with how they believe they are now expected to teach was a repeated theme throughout their interview. “I guess call me old school,” they stated, “I’m more of an explicit language teacher than an implicit language teacher.” On a recent trip to their home community, this teacher had brought back workbooks designed for monolingual Spanish speakers and had undertaken the task of trying them out with their students, showing them to other TWI teachers, and evaluating whether they can be effective for their current students. They had also shown recent innovation in creating a supplementary worksheet for L2 learners that included fill-in-the-blank and sentence-writing practice on gender. This teacher expressed a preference for pulling out key grammatical knowledge and presenting it explicitly at the beginning of the year: “If I could, I would do a whole semester on grammar and then focus on writing, but the way that language is now done is more of mini-units as you go or you teach it inside the unit not explicitly but implicitly.”

Along these lines, all of the teachers expressed some understanding of the idea that language and content should be integrated, but they did not share any systematic strategies for pulling language from content. Teacher 1 explained:

> To expand on explaining points of grammar to students, last year I was less pointed/strategic about this teaching. Now, I do more of this through mini-lessons during our literacy block. I also do this as I am teaching and formatively assess that students are struggling in certain areas (a quick – 'I see this happening, I'm going to explain something').

At the middle school level, teachers frequently mentioned that linguistic development was "something that they should be doing in Spanish language arts" due to the challenge of needing to cover more content in the other classes. This echoed the "content takes center stage" theme that Fortune et al. (2008) found in their study of immersion teachers' experiences integrating language and culture. The teachers in this study did see language arts and content classes as connected, however. For example, when asked whether it would be possible to integrate activities designed to support linguistic development into content classes, Teacher 3 explained:

> ...content classes have more vocabulary, and they're more heavy in terms of information. So if I start adding sentence structure to that, they're just going to get lost. I feel language arts is so important, but it has to be kind of like sewn in a way that it helps the content classes that they're taking.

While reflecting on a similar question, Teacher 2 began by expressing the same perspective. However, they then continued thinking aloud, and new possibilities seemed to emerge for them. In this, they actively modeled the creative thinking that characterized the teachers' reflections overall:

> The thing is when you're trying to teach content it's a little hard for you to stop teaching content to teach the language. So I can see it happening in language arts

> where we can have little grammar activities. I could have them [in social studies], as long as they're on the topic of social studies, let's say of that unit. So for example if right now I'm teaching about *Grecia* [Greece], making some sentences that say *Grecia* and then have them either look for the accents or maybe I can change some of the feminine and masculine pronouns.

In addition to discussing specific planning for language development, teachers also described how they respond to student errors, which helped clarify the ambiguity of their answers to the Likert-scale survey question. As with their planning techniques, the three teachers demonstrated reliance on their own judgment and resourcefulness in this area. All three teachers showed sensitivity to the fact that students can become "self-conscious" when corrected, and, in accordance with prior research, they stated that they used recasts "all the time." Nonetheless, they varied in their beliefs and strategies regarding explicit correction, prompting, and metalinguistic feedback. Teacher 1 tended to eschew explicit correction during most oral communication, stating "I still, though, don't like to correct if they are communicating an idea for content." However, they did express willingness to explicitly correct the students when they made errors in writing with elements of language they had previously discussed. In these cases, they walked around the room and underlined mistakes while students wrote. They also occasionally corrected pronunciation orally: "If a student has said it correctly in the past and knows the 'appropriate' way to say it, I have them say it again." This teacher's hesitance to "strain motivation for that language by increasing their affective filter" was echoed by Teacher 3 who, when asked if they explicitly correct students responded "I try my best not to" and, when asked about prompting students, replied "I've caught myself doing that." As they reflected further, however, they revealed creative strategies for responding to student errors that avoided

making them feel self-conscious. For example, in addition to multiple uses of recasts and careful consideration of the tone they use when correcting, they also sometimes ask students to write their questions down so that they can determine whether the mistake occurs only orally or also in writing. Afterward, they are able to "correct it personally." Furthermore, they use personal judgment to determine which students need this and which students can be corrected orally:

> Each kid has a different way, and you have to be different with each kid. I have a kid that's very sensitive, so if I correct him he breakdowns [sic]. And I have another kid that I correct him and they're like *ha ha ha*, yeah that's right it's *la* brújula. And it's fine, so you have to know your kids before you're like jumping on correcting them immediately.

Similarly, Teacher 2 showed consideration for students' feelings, stating "sometimes, I'll say it out loud or sometimes I'll just go over and have that conversation with them." However, this teacher expressed the strongest belief in the importance of correcting errors, explaining that they use recasts "as often as possible" along with explicit correction and metalinguistic explanation "so that they can understand it" and "be like ahh, that explains that."

Feelings of Being Unguided

The finding that teachers rely on their resourcefulness and personal judgment in attending to PL development perhaps goes hand in hand with the belief they expressed that they are unguided in what or how to teach. Teacher 1 explained that they could "100% invent" the curriculum except for math and that they in fact relied on reading the report cards they had to send parents in order to know what to teach. Similarly, Teacher 2 called their curriculum "very free" and described how they translated an entire English textbook to Spanish their first year in order to develop some sort of curriculum. In responding to an open-ended survey question about

the bilingual program's standards, Teacher 1 wrote:

> In terms of developing objectives, they are arguably there, but it's been very unclear to me as a teacher (and from my understanding other teachers, too) what the expectation is for language development. In terms of content and language objectives for my students, our program does have them. I do not feel that they are explicitly communicated to me as the teacher, though. So, their implementation is not as effective as could be.

In a follow-up interview, they explained that they only knew that the program had set standards because they had heard them referred to in meetings. Later on, however, they mentioned participating in a three-day workshop over the summer that focused on creating alignment for the TWI program using The Spanish Language Development Standards: Kindergarten—Grade 12 (WIDA, 2013) and the *Common Core State Standards* (National Governors, 2010). Unfortunately, they did not consider the workshop particularly effective, in that everyone who participated worked on different grade levels, interpreted the standards differently, and in the end did not finish. The merging of WIDA Spanish Language Development Standards and Common Core standards nevertheless stands out as the basis of program-wide expectations, as the other teachers also referenced using these in creating their own curriculum. One of the teachers discussed reaching out to an administrator for guidance on adding language to their rubrics, which he had asked them to do, and stated that he replied by sharing particular WIDA standards they should use. When I interviewed Teachers 2 and 3, they were preparing to go to a conference that the district was sending them to and were "happy" to be receiving this support. Nonetheless, the feeling of being unguided was salient across all of their responses and is perhaps well encapsulated by Teacher 2's simple question: "I just want to know exactly what

to do... Is there something specifically to teach for language?"

Need for Additional Collaboration and Resources

As described in the literature review, "awareness of the 'over and above' nature of their work and lack of planning time" is a common finding among immersion teachers (Fortune et al., 2008: 85). In the current study these same issues came up repeatedly. When asked about planning for the integration of language and content, a typical response was "honestly we have not even been able to meet and talk about those types of things." In fact, all three of the teachers mentioned the lack of collaboration time, particularly with TWI teachers from other grade levels, and how this led them to be unsure of what teachers in lower grade levels had already taught or what they could expect from their students. Teacher 3 explained that "there is definitely a huge disconnect of what I expect a student to be able to do and what they are able to do because I don't know the situation over there [in the TWI elementary schools that feed into the middle school]." Interestingly, the majority of the topics that the teachers specifically mentioned incorporating into their classes (common and proper nouns, capitalization, punctuation, sentence types, dialogue, cause and effect) actually overlapped at the elementary and middle school levels, perhaps confirming the teachers' concerns about lack of articulation across the grades.

In addition to collaboration time, more general resources and support were also viewed as lacking. Teacher 1 wrote, "I often feel the need to 'pull teeth' (if I even have the energy to do so) to get the minor needs I see for myself, my DL colleagues, and my students," although they did note that the district has more Spanish resources than some other districts they had seen. They later explained that one of the disadvantages of the program is "lack of support for classroom teachers in regards to the extra work that needs to be done in a DL classroom (testing in two languages, translating documents, connecting with parents (although tried to be addressed by a

DL Family coordinator, there is more work than this one position can do).” Translation, in fact, came up frequently. In discussing language instruction, Teacher 2 responded “there’s different ways that I can teach grammar and language while still teaching content, but I need the time. And right now, most of my time is translating lessons.” At the time of the first year of the study, this teacher had actually taken to hiring a local college student to help them translate classroom materials so that they would be able to put their time into other efforts.

At the middle school level in particular, another resource that was frequently mentioned was the need for a teaching assistant (TA) in the room. This concern directly related to the teachers’ ability to foster linguistic development. Teacher 3 explained, “I wish I could sit one on one with all my kids like elementary teachers do. If I had a teacher that could teach while I would be one on one with practice, that would be the best thing ever. I would love that. Because I feel like in middle school we walk away from that.” The other middle school teacher echoed this thought: “I need to have conferences with them. And that is why I kept suggesting a TA. Because I need help.”

On a related note, both teachers note the vast linguistic diversity in their classrooms as a challenge to fostering partner language development and a reason they need a TA in the classroom. In addition to differentiating for HSs and L2 learners, the teachers mentioned having to accommodate recent arrivals from Guatemala who speak Q'anjob'al or Chuj as a L1 and can fluently decode (sound out) Spanish but not understand it. Another student whom both middle school teachers mentioned grew up with Spanish at home but attended another school district prior to this one that convinced him that he only needed English. As a result, in the current program he refused to speak or write any Spanish at all. As in most classrooms, the teachers also had to accommodate students with special needs.

Finally, books in Spanish were mentioned as a necessary resource that is lacking in the middle school classes. Teacher 2 explained:

> ...we need to enforce more reading. We need more reading books. We need more reading resources. Because I only have that tiny little bookcase on reading books in Spanish. And that's one thing that we need—providing all these supports for home, sending books at the house for parents to read. Because they don't see reading at home, the Spanish speakers. The English speakers, they do, but are they reading in Spanish at home or are they reading only English books? Maybe they need access to Spanish books. And the libraries here don't have a lot of Spanish books, which is very hard. I get it; it's so hard to get Spanish books. I struggle to get Spanish books. I have to go constantly to *México* to get Spanish books or we get them from Puerto Rico. So I understand it's hard, but we need our department to put more effort into finding us books in Spanish and the money, which I know is hard. Where is the money going to come from? But we need it.

This lack of reading resources was viewed as an added pressure by Teacher 3 as well, who explained how it led them to need to include more explicit instruction in class: "We don't have the facility for our students to access resources to improve the language outside of school. So I have to make every minute count here."

Different Perspectives on HSs and L2 Learners

On the online survey and in follow-up interview questions, teachers were asked to list the types of problems with Spanish grammar that they see in their students "from English-speaking homes" and "from Spanish-speaking or bilingual homes." For the L2 learners, the teachers listed problems with verb conjugations, gender, *gustar* (a dative experiencer predicate meaning

roughly *to like*), word order when it differs from English ("*favorito animal*"), mixing up present and past tense, and false cognates. For the HSs, the teachers listed Spanglish ("*parquear*"), accent marks, writing cohesive sentences, capitalization, punctuation, and "repetition of simple forms of verbs rather than a variety of forms to more specifically represent the situation (time/place)." This latter concern may be similar to Teacher 3's observation that the students overuse verbs such as "*dijo*" (said) rather than more specific verbs like "*gruñó*" (grunted) or "*refunfuñó*" (grumbled). Regarding the HSs in particular, the teachers did not seem to perceive any difficulties with morphosyntax. For example, when asked about whether heritage speakers make errors with complex grammatical forms, Teacher 2 responded "what I've noticed with the Spanish speakers is the Spanglish." Likewise, a similar question about whether HSs ever struggle with verb usage led to the following reflection from Teacher 3:

> It's less likely, but there have been some cases because I have some kids that, even though they're Spanish speakers at home, they mostly speak English with their siblings and so they also struggle with the Spanglish. So they would change a verb that's in English and make it Spanish adding an o at the end. And I'm like that's not a verb, you cannot use that. Like *puchó*. I'm like *puchó* is not a verb in Spanish. You know it's from push, it's like pushing, *puchó*. I'm like I'm sorry, I've never heard that being a verb. It's *empujó*. So sometimes it's not even conjugating, but it's some verbs get like completely Spanglished in there.

They continue, moving on to another concern unrelated to verb usage:

> *Puchó*, *jangueó*, *parqueó.* Entonces veo eso mucho entre los que están hablando español e inglés. Pero la parte que más me sorprendió fue puntuaje y run-on sentences. Decían y y y y, luego luego luego luego. Entonces, well if they don't

know how to put periods no wonder they have a huge sentence.

Similarly, Teacher 2 mentioned the term *nadien*, which is a stigmatized variation of the Spanish word nadie ("*nobody"*) used in certain Latin American dialects:

> ...for example, ok, *nadie*, some of them say *nadien*. And I'm like no, honey, you don't add the n. *Nadie*. It's not *nadien*. It's *nadie*. Um, so yes some of those I need to correct with the Spanish speakers. But that's because in México it's very common for some people to say *nadien* instead of *nadie*. I'm like, no honey. And I get it, it's like the small little towns, some of them speak that way. And I have to correct that, and say, ok, if you say that at home that's fine, that's home, but here it's *nadie*."

However, in addition to their primary focus on sociolinguistic characteristics of their HSs' speech, Teacher 2 was also the only one who reflected on the diversity of HSs' PL abilities and the possibility that some HSs could use additional help with the language itself. When discussing grammar instruction and HSs, they stated:

> Some of them need it because, especially now, we have some of our students whose parents were born here and whose Spanish is also limited. So we need to reinforce that Spanish with those kids. Because soon it will be, like their parents are also English speakers, and we can't rely that their parents are going to teach them the correct Spanish, so we need to do it.

Additional beliefs emerged among the teachers regarding how parental support affects HSs' and L2 learners' bilingual and biliterate development. Teacher 1 took a somewhat different perspective than the other two, focusing on how much of the L2 learners' development depends on their parents' keeping up Spanish exposure outside of school. They stated, "I've seen a couple

of English-dominant students who leave the program speaking less than fluent Spanish because of lack of interest in the language. Therefore, in class there is a lot of push on the end of the teacher to have them speak, but close to no Spanish is spoken at home meaning that the student is getting less input than ideal and leaving not quite fluent in Spanish." The other two teachers focused more on the academic support that characterizes the L2 learners' homes more than the HSs' homes. Teacher 3 described their feelings upon finding out that many of their HSs' parents have low levels of formal education:

> ...that's difficult, when your parents can't help you write your presentation. When your parents can't go over your *mito* to tell you what's right and what's wrong. And that broke my heart because it's like... student, have you read this to your parents? No, um, my mom wouldn't understand it. That for me was shocking. Or when I was asking parent-teacher, I was like, oh, have you seen the *mito*, have them read it to you, it's super exciting, it's a really good one. And they're like, oh yeah, she'll have to read it because I don't know how to read.

This teacher views L2 learners as having greater support than HSs, stating "native English speakers have a chance at least of having feedback more often than our Spanish speakers." They also see them as "very hard workers" who really "strive to improve the language" and have stronger overall literacy skills:

> ...the English speakers have a solid foundation on English writing. I can see it transfer in their Spanish. They write with capital letters. They put punctuation. They follow the usual grammatical things that you *should* when you're writing, and the Spanish speakers write as if they're talking.

The additional home support and academic preparedness that the teachers perceive in the

L2 learners has implications for their PL development and the types of practice that the teachers believe they can provide. Regarding the language difficulties that they sometimes have, Teacher 3 surmised, "I feel sometimes the English native speakers come across more troubled because they're trying to make this complex English sentence into Spanish and that's where they're like, well I really don't know how to put this in Spanish." However, because the L2 learners tend to finish their written work more quickly than the HSs, they are able to design extra practice for them, such as the gender worksheet mentioned earlier. Notable, they also use the differences they perceive among the students as an advantage when possible:

> [The L2 learners] also have a lot of extra time. Then I either give them practice, but a lot of them actually volunteer to help other students. He's like can I check someone else's work? I'm like hey, go ahead and check punctuation and capitals, so they would be helping the other students with capitalizing and punctuation, and then the Spanish speakers were helping them with gender and conjugation of verbs. So it was kind of like I set them up with a Spanish speaker so they could benefit each other.

Writing-focused Language Instruction

As mentioned, a great deal of overlap occurred between the language topics that teachers focused on at the elementary and middle school levels. Some of these topics represented basic writing mechanics such as capitalization, punctuation, and accent marks. Others represented higher-level rhetorical skills such as writing dialogue and structuring writing to describe cause and effect. Teachers mainly listed mini-units and grammar units in language arts classes as their approaches to teaching these topics. One teacher also implemented weekly language practice days in language arts on a day of the week when the class periods were shorter. These practice

activities varied but tended to rely on exercises from workbooks.

Interestingly, despite recognizing verbal morphology as a consistent problem for L2 learners, none of the teachers described any activities specifically designed to attend to this issue. This finding contradicts Fortune et al.'s conclusion that "the components of language that the teachers typically targeted can be summed up in two words: vocabulary and verbs" (2008: p. 77). Of note is that the participants in those authors' study taught more L2 learners of the immersion language than HSs (one of their participants was a TWI teacher; the other four were in one-way immersion schools, although in two of those schools around 25% of students were HSs). The much larger population of HSs in the current study might account for the teachers' reduced focus on verbs.

Despite not currently addressing verb morphology through specific activities, Teacher 3 had recently reached out to some elementary school teachers to figure out how they attend to verb forms. They described feeling that this issue is "a bit more complex. So I'm trying to find an efficient way of doing it." During their own bilingual education, they received formal instruction involving the completion of large verb conjugation tables, which they described as "not the easy way." When asked if that type of instruction helped them, they responded, "Honestly, no. I don't think that the kind of way in which they taught me helped me. Reading helped me. I read so much. [...] So most of my grammar came from books."

Despite this recollection, Teacher 3 is the same one who considers themselves "more of an explicit language teacher than an implicit language teacher." As described above, they also recently assigned some of their L2 learners an additional practice activity to improve their use of gender. This activity required the students to write the correct definite article for a series of nouns and then to write five sentences using them. When asked whether the activity was

effective, they noted only partial success:

> ...the majority of the ones that did the practice did very well. What I did notice is some of them, even though they wrote it correctly, when they were presenting, they were not saying it correctly. I'm like, but it says *los planetas* there; why are you saying *las planetas*? So I need to find then how to do it orally too so that they can get it from not only on paper but in their oral skills. That's where I was like what? How did this happen?

Here, this TWI teacher is facing a common dilemma for language teachers—how to create activities that actually act on their students' implicit systems and not only on their stores of explicit knowledge. When describing the L2 learners' troubles with irregular verbs and gender, they remarked "the exceptions are more learned through oral communication, oral exposure, or books." Teacher 1 also expressed intrinsic doubt about the ability of language instruction to improve students' implicit language. They stated, "No kid is going to speak differently because they know adjectives come after the noun. Maybe in their writing they notice it. Their language just comes naturally." Overall, the concept of using language instruction to develop oracy or bilingualism itself rarely came up, and the teachers instead focused on the goals of biliteracy and developing writing skills, which is a pattern Fortune et al. (2008) also noted with the language arts and social science teachers in their study. The assumption seemed to be that both groups of students learn the language itself from "exposure" and grammar in terms of writing ability from instruction. As an illustration of this, Teacher 2 mentioned the importance of writing conferences with L2 learners and of helping them to spot their errors through reading aloud. They explained, "for the English speakers I definitely have to read it out loud to them, and they catch their own mistakes as I read it. Because they hear it and are like that doesn't make

sense." While this is a common technique in writing instruction, it is interesting that the teacher finds it so effective with L2 learners because it is built on the premise that the L2 learners do have a correct mental representation of the PL grammar but are simply not producing it when they write.

Results of Spanish Grammar Tests

The results of the written grammar test results for sixth grade are presented in Table 4. Results showed that HSs were more proficient than L2 speakers on all grammatical forms, although they did not score 100% accuracy for any of the grammatical forms. HSs were strongest with gender (94% accuracy) and weakest with the tests of *gustar* (15%). L2 speakers were strongest with preterite/imperfect (58% accuracy) and weakest with *gustar*, past subjunctive, and subjunctive (0%). The two recent arrivals (RAs) who took the test scored 100% for four of the six forms. The exceptions were *gustar* (62%) and preterite/imperfect (81%). In terms of variability, the HSs' scores varied considerably on all forms with standard deviations ranging between 11% for preterite/imperfect (M = 81%) and 46% for past subjunctive (M = 58%). L2 speakers varied much less, with standard deviations of 0% on three of the tested forms. They did show variability with conditional (M = 33%, SD = 29%) and preterite/imperfect (M = 58%, SD = 31%).

Table 4. Mean written grammar test results for sixth grade in percentage correct

Form	Heritage speakers (n = 18)		L2 speakers (n = 3)		Recent arrivals (n = 2)	
	M	*SD*	*M*	*SD*	*M*	*SD*
1. Conditional	56	33	33	29	100	0
2. Gender	94	16	49	8	100	0

Table 4 cont. Mean written grammar test results for sixth grade in percentage correct

Form	Heritage speakers (n = 18)		L2 speakers (n = 3)		Recent arrivals (n = 2)	
	M	*SD*	*M*	*SD*	*M*	*SD*
3. *Gustar*	15	22	0	0	62	34
4. Past subjunctive	58	46	0	0	100	0
5. Present subjunctive	84	23	0	0	100	0
6. Preterite/imperfect	81	11	58	31	81	27

The results of these grammar tests show that, although the teachers in the study perceived only their L2 learners as needing to further develop their verbal morphology, the HSs in their sixth-grade classroom also showed highly inconsistent knowledge of the tested forms. The types of errors that the HSs showed varied as well. For example, one item designed to elicit a conditional verb form required students to complete the sentence stem "Si los maestros no dieran nada de tarea, nosotros…" Some of the HSs' non-target answers included "estamos feliz," "estubieramos jugando," "amaremos a los maestros," "estaremos feliz," "disfrutamos nuestro tiempo," and "no aprendiamos mas." Another item designed to assess students' use of *gustar* asked them to translate "My cousins like Coca-Cola." Some of the HSs' responses included "Mis primos les gustan la Coca-Cola," "Mi primos le gusta Coca-Cola," "Mis primos le gustan Coca Cola," "Mis primos le gusta la Coca-Cola," and "Mis primos le gusta Coca-Cola."

Chapter Summary

This chapter has provided answers to the first research question of the study, "What beliefs and practices do teachers in a TWI program display in relation to PL development?" by

providing a qualitative analysis of teachers' beliefs and practices as they were described to the research through online surveys and in-person interviews. Results were triangulated through written grammar tests given to sixth grade students. Overall, this chapter has shown that TWI teachers are resourceful, reflective practitioners who, faced with a lack of guidance and resources, bring their own judgment to play in designing activities to integrate language and content instruction. Nonetheless, the lack of guidance leads them to occasionally develop perspectives and practices that are not supported by research or that may represent unintentional deficit outlooks toward their HSs or a misunderstanding of their linguistic needs.

CHAPTER 5: OBSERVABLE PRACTICES

The previous chapter discussed teachers' beliefs and practices as evidenced from interviews and surveys and triangulated with student grammar tests. The current chapter builds upon this information by providing an analysis of how strategies for fostering PL development were or were not incorporated into the classroom instruction that the researcher recorded during a series of observations conducted during the first year. During these observations, the researcher made note of strategies, activities, and materials that were likely to foster PL development in both HSs and L2 learners. As described in Chapter 3, an interactionist framework supports the idea that PL development can occur through a variety of means including comprehensible input, meaningful output, opportunities to interact and negotiate meaning, explicit or implicit linguistic feedback, etc. Research on teaching for biliteracy also stresses the importance of metalinguistic and cross-linguistic awareness (Beeman & Urow, 2013). In recent years, translanguaging pedagogies have been recognized as vital to promoting asset-based, heteroglossic views of students' bilingualism (García & Wei, 2014). Furthermore, work with HSs emphasizes the need for sociolinguistically appropriate approaches to correction and for engaging students in activities that promote critical language awareness. This chapter provides a report of how the teachers did or did not demonstrate these practices during the class sessions the researcher observed.

Partner Language Development Strategies

This section will report on an analysis of approximately 7.5 hours of class time that was recorded in the three teachers' classroom. Approximately 2.5 hours were analyzed per teacher, which comprised three lessons each from Teachers 1 and 2 and four lessons from Teacher 3. As previously described, these observations were analyzed according to the Dual Language Partner

Language Development Strategies Checklist (Appendix G). This checklist was originally designed for use during the PD and IC sessions that occurred during the third year of the study and will be described in the next chapter. The original version was selected and heavily adapted from Fortune's Immersion Teacher Checklist (2014). In particular, key elements of the original checklist were selected based on the researcher's estimation of their importance for fostering PL development within the DL context. In addition, some important missing components were added. These components were related to more critical approaches to DL instruction and are especially important factors to include in TWI contexts that serve HSs (whereas Fortune's checklist was more concerned with L2 development in immersion contexts). An example included the item which asked whether the teacher "shows respect for language diversity and variation, including students' home language varieties, and encourages student agency in selecting desired forms." For the purpose of the present chapter's analysis, the checklist was expanded to include aspects of TWI PL instruction that go beyond the more limited topic of the PD and IC sessions. In expanding the checklist, one resource that was utilized was Tedick and Lyster's Self-Assessment Rubric for ImDL Teachers (2020). Another resource was the DL pedagogy guide *Teaching for Biliteracy* (Beeman and Urow, 2013).

Here the results of this analysis are presented according to the 22 components of the Dual Language Development Strategies Checklist (Appendix G).

Opportunities for Students to Listen to and Comprehend Auditory Input

Results of the analysis showed that this component was very well-represented in the three teachers' classes. In all three, the auditory input primarily came from two sources, the teacher (including a TA and an instructional coach in Teacher 1's class) and the students themselves. Teacher 2 also included a commercially produced video in Spanish in one of their lessons.

In Teacher 1's class, the activities recorded during the three days of lessons included a discussion of an upcoming field trip; a class conversation in which the teacher, TA, and students shared their alegrías and preocupaciones; a whole-class vocabulary analysis of the word *patrón*; two sessions of guided/independent reading including two small groups led by the teacher; an activity in which the teacher guided the students in analyzing photographs as metaphorical mirrors and windows; a lesson on internet etiquette led by the teacher and an instructional coach; and a class discussion about gossiping and tattling. During all of these activities, the teacher's voice was prevalent but punctuated by contributions from the students, and they spoke almost entirely in Spanish showing high fidelity to the language separation practices used in the district. In Teacher 2's class, the activities included student presentations on different Chinese dynasties, a quiz on ancient China, time for students to work on written paragraphs that would be part of a museum-style presentation they were going to give in an upcoming class period, time for the teacher to conduct individual writing conferences with students, setting up the classroom and group stations for the museum presentation, and watching and taking notes on a commercially produced video in Spanish. In this class, the student presentations and video brought in more input other than the teacher's voice. In addition, this teacher's class contained more periods of silence than the other two teachers' classes. For example, in the first class recording, the students copied down the information their classmates presented to the class. During this work, the class was largely silent. Nonetheless, Teacher 2 spoke in Spanish throughout all class periods and frequently gave extended instructions and guidance even during the student presentations and video. In Teacher 3's class, the activities included a whole-class reading of a Taíno myth, time for students to answer questions about the myth in groups or individually, group work in which students completed a table analyzing and comparing the elements of different myths the class

had read, a drawing for a prize from a class reward chest, time for students to work individually on completing a graphic organizer for a myth they would write independently, and time for students to complete their second draft or begin typing their final version. Again, the teacher's voice was consistent throughout the class periods. Even during individual and group work time, their voice could be heard guiding students and providing instructions. Like Teachers 1 and 2, Teacher 3 was for the most part consistent in remaining in Spanish through their classes.

Opportunities for Students to Read and Understand Text

This component of the checklist asks whether the TWI teacher provides "plentiful opportunities for students to read and understand text in the partner language." Results of the analysis showed that this varied significantly among the teachers and class sessions. In Teacher 1's class, three sessions of independent/guided reading were observed. During these sessions, many students read short readings that came from the classroom textbook series (Appendix I) or from the online leveled news article source Newsela. One reading group read from a novel called *El club de los raros*. In Teacher 2's class, students did not engage in any extended reading during the recordings. However, they used readings from the internet to complete their presentations on Chinese dynasties. In addition, students' notes in social studies were primarily provided through short readings that the teacher shared with the researcher as can be seen in Appendix J. In Teacher 3's class, the students read and discussed a variety of myths from different cultures such as the Taíno myth read during the first recorded session and additional myths analyzed during the second session, which the students had read previously and the teacher gave them copies of to refer back to.

Of note under this component is that all three of the teachers' classrooms were filled with printed text in the PL. This text appeared in the form of pedagogical and administrative

information that was posted throughout their rooms. There were also many books available in the PL for free reading. An example from Teacher 1's classroom can be seen in Appendix K.

Quality of Auditory and Written Input

While students in TWI undoubtedly need plentiful opportunities to engage with auditory and written PL input as a minimum requisite for PL development, it is also crucial that this input be "accurate, varied, and appropriately compelling and complex," as this component of the checklist measures. Here, variation was again found both among the teachers and within the individual teachers themselves. This variation could have implications for the ways in which students' PL development unfolds.

In the three teachers' classes, it was generally noted that the input was compelling to students, as all students were actively engaged in the lessons that the teachers designed, such as in listening to their classmates' *alegrías y preocupaciones*, discussing the Taíno myth, and taking notes on the video. In terms of variation and complexity, these characteristics similarly were not measured quantitatively. However, the overall impression was of language that was appropriate for students of each grade level and not intentionally simplified or sheltered. Of note is that some of the key forms that students were found to struggle with in the language tests were present in the three teachers' spoken input. Examples included preterite (Teacher 1: "Ayer encontré algo muy raro"), imperfect (Teacher 2: "Tenemos para [la definición de] *caravanas*, grupos de comerciantes que iban en la misma dirección"), *subjunctive* (Teacher 2: "Después de que hagan eso, tenemos que terminar nuestro párrafo"), past subjunctive (Teacher 3: "Pero él nunca podía cerrar los ojos para que pudiera vigilar las cuevas") and, to a much more limited extent, conditional (Teacher 1: "También podrías, como, pegarlo de vuelta") and *gustar*-like verbs (Teacher 3: "Ustedes saben que a mí me gusta empezar a leer").

In spite of the general quality of the input that the teachers provided to students, an area of inconsistency was the accuracy of both the auditory and written input that the students were exposed to. While much of this input was correct, such as the examples provided in the last paragraph, many written and spoken errors were also noted. Some of these were present on anchor charts and signs displayed permanently in the classroom, whereas others were spoken.

In Teacher 1's classroom, examples of errors in written text in anchor charts and posters displayed daily for the students included "preguntar un compañero," "hay puntuación correcto," "redaca un idea completo," along with many missing accent marks. A photo of one anchor chart with some of the errors noted in the permanent classroom displays is provided in Appendix L. During the recorded sessions, a number of errors were noted in the teacher's speech as well. Errors recorded during the first session included "un página," "un lección," and "pueden agarrar el tuyo." At one point, the teacher indicated to the students that they wanted them to say "prioritize" in Spanish and, after receiving a variety of choral responses, repeated back "prioritarizar." In addition, during the first session, the teacher had projected written instructions for the day on the projector screen. This message contained a number of written errors including the sentence "Dejen el agenda de esta semana en tu carpeta de tarea. Lo voy a ir levantándolos cuando chequeo la tarea" (see Appendix M). In this message, along with errors in gender assignment, agreement, and mood, the teacher showed a lack of knowledge of the difficulties with referential and sociolinguistic variance in second person pronouns that romance language immersion students have been shown to have, as well as a lack of awareness of the confusion that can occur if multiple forms are used interchangeably (Harley et al., 1987). Throughout the message on the projector, the following mix of verb forms were used to address the students: three verbs in the singular, informal tú form (escribe, limpia, asegúrate), one form in the singular,

informal vos form that is used in certain parts of Latin America (practicá), and two forms in the plural ustedes form (guarden, entreguen). The single sentence shown above used both an ustedes and tú form: “Dejen el agenda de esta semana en tu carpeta de tarea.” Of note is that one of the other teachers in the program fairly consistently used the formal, singular usted form when addressing their students collectively, adding to the mix of forms the students might hear throughout the program.

In the second recorded session, Teacher 1 again produced errors in their speech such as “un reflexión,” “les pedí que uso sus fotos,” “después de que la ves,” “estábamos todos los veinte minutos mirando la foto,” “qué te dice maestr[x] muchas veces cuando mantengamos un tema y decís no tengo más para decir,” “ese voz,” “vocito,” and “vocicito.” The written input they provided also contained some errors, such as a worksheet that read “Tres preguntas que esta foto te ha sido pensar.” While providing spoken input, the teacher corrected themselves on a few occasions. Examples included “¿Y quién se acuerda de los, las fotos?” and “Estoy viendo los mismos manos, las mismas manos.” Interestingly, during the interviews, this teacher commented that “No kid is going to speak differently because they know adjectives come after the noun,” and yet in correcting themselves they are likely modeling the use of explicit knowledge (of gender agreement rather than word order) to monitor and correct their own language. In the third recorded session, errors in the teacher’s speech were again noted. An example is “el tema de gustar uno de otro,” meaning “the topic of liking each other.” Of note again is that the teacher did include many correct examples of difficult target forms. In this, their input provided an inconsistent model of both accurate and inaccurate forms. An example from one sentence in which this could be seen was “No hace falta que alguien, un adulto, vaya y habla con esa persona.”

In Teacher 2's recorded session, accuracy was generally more consistent. In particular, frequent examples of difficult forms such as the subjunctive were frequently noticed (for example, "al primer grupo que presente" and "El título puede ser un poco más grande, como 24, pero lo demás quiero que sea del tamaño en que lo puedan entender las personas que van a estar leyendo"). At times, there was some inconsistency with accuracy. For example, during the second recorded session, the teacher asked the class "¿Hay alguien que ha terminado y está listo para que yo ayude a revisar sus papeles?" Furthermore, it should be noted that the teacher consistently used some forms that are not considered "standard," in particular second person plural verb forms ending in -s (*hicistes*, *leístes*). While the incorporation of these forms into the TWI classroom is not something to be avoided, this teacher ironically shared during the interviews that they believed that *nadien* and lexical forms that represent contact with English (i.e., Spanglish) should not be used in the classroom. This indicates that they were not aware of more critical approaches that allow students to explore and question the power dynamics that lead some forms to be stigmatized. An additional observation from this teacher's classes is that they provided ample input with some particular forms that the students struggled with. In particular, students' difficulties with use of the verb *terminar* and the ways that the teacher provided feedback on this form will be discussed during a subsequent section of this chapter. During the first recorded class session, it was observed that Teacher 2 used the verb *terminar* correctly 13 times (frequently telling students "pinky si terminaron," indicating that they should raise their pinky finger if they were finished taking notes). Nonetheless, the teacher did provide one example of an incorrect use of this term, asking students during the third recorded session "Ok, ¿terminados?" This inconsistency in the input likely adds to the motivation for including explicit instruction and feedback in the TWI context. In addition,this teacher at times alternated

the use of *tú* and *usted* with individual students. Although this is not uncommon, it perhaps should be addressed explicitly with the students, especially considering the inconsistent modeling of second person pronouns that other teachers in the program such as Teacher 1 may provide.

A review of some of the written materials provided to the researcher by Teacher 2 (Appendix J) suggested that, as they worked to translate materials from English to Spanish, their primary focus was on conveying the meaning of the content to students rather than providing accurate modeling of language. As an example, the following teacher-translated text on Canopic jars of Egypt contains three errors of preterite and imperfect:

> El vaso con cabeza de babuino representaba a Hapi. En este vaso se almacenaban los pulmones. Duamutef fue representado por un chacal. Este vaso albergó el estómago… El corazón y el cerebro no se colocaron en vasos. El corazón se consideraba el centro del alma.

The presence of these errors in such a short passage suggest that the teacher was likely unaware of the importance of correctly using preterite and imperfect when discussing the past in Spanish nor of the possibility of using their social studies content teaching to foster their students' development of this linguistic skill.

In general, it was observed that Teacher 3 had very few errors in the oral input they provided with students. Most of these were very small and could be considered examples of sociolinguistic variation such as stating "habían diferentes conflictos." A couple of the errors were a bit unexpected, particularly coming from a native speaker of Spanish (for example, "Aquí me gusta cómo empezaste como si vayas a decir el problema, pero no lo estás diciendo aún"). Nonetheless, the overall impression was of oral input that was highly accurate. The written input

observed seemed similarly so, with the exception of accents marks and punctuation. In the oral input, it is notable that the teacher occasionally alternated between past and present tense while talking about literature. Although this is a common practice, previous research has noted that the tendency to switch tenses may affect the amount of past tense input that students in immersion settings receive (Swain, 1996).

The results of the student grammar tests indicated that the most difficult form for students was *gustar*-like verbs. A final comment on the variety and accuracy of the teachers' input is that third-person forms of these verbs were very infrequent in the input, only appearing three times from all three teachers (Teachers 2 and 3). On each of these occasions, the dative case marker *a* was missing from the teachers' production. For example, Teacher 3 told a student, "El sol no le gustó eso," and Teacher 3, in helping students to guess what something was, said, "Algo que se come, ustedes les encanta comer que es negrito." While it is possible that the loss of the dative case marker may represent emerging sociolinguistic variation (Pascual y Cabo, 2016), it is regardless significant that the form appeared infrequently since this may at least partially explain the results of the student grammar tests.

As mentioned, much of the input in the three teachers' classes also came from the students themselves, both in terms of auditory input and, to a lesser extent, written input displayed during presentations or shared during peer editing. Inevitably, this student-produced input included frequent errors. This was particularly prevalent in the elementary class, possibly due to the younger age of the students, increased opportunities for students to interact spontaneously, and greater proportion of L2 learners in that class compared to the middle school classes. For example, the following excerpt of student-produced input was taken from the elementary class discussion of the students' *alegrías y preocupaciones*: "Todos los otros

personas estaban usando sus teléfonos para como ver dónde es tráfico y dónde no. Y cuando todos no como ven una parte con no, con, sin tráfico, como todas van ahí. Entonces, el parte con tráfico no tiene tráfico no más."

Scaffolds to Aid Comprehension of Auditory and Written Input

This component asks whether the teachers utilized scaffolding to aid students in their comprehension of auditory and written input. Such scaffolds could include slowed speech, increased use of gesture, use of visuals, pre-teaching vocabulary from a reading, etc. (see Tedick & Lyster, 2020, for more examples). During one session with Teacher 1, the use of this type of scaffolding was noted on numerous occasions through a small guided reading group session. The teacher utilized targeted questioning to aid comprehension of written text, provided the definition of a vocabulary word (*aplastar*), and aided students in visualizing the reading in order to better comprehend it. Similarly, Teacher 2 used scaffolding during the video they showed in one observation session. Here, they asked students to define key vocabulary words from the video, which they played twice to aid comprehension. As the students worked, the teacher guided them in understanding the definitions and provided examples of words the students might not know such as *bandido*.

In Teacher 3's language arts class, they used a number of scaffolds to help students understand the myths they read. In the first observation session, they displayed the text on a document camera and moved their finger along as they and the students read aloud. They then paused frequently to discuss the meaning of the text with the students, stating for example, "Gracias por leer. Da una pausita. Vamos a comprender lo que estamos leyendo." They then asked prompting questions such as, "Por qué le quitó los párpados? ¿Quién sabe qué son los párpados de un ojo? Vamos a empezar por ahí porque ese nombre está bien largo. ¿Qué son los

párpados?" After reading the myths, the students also answered comprehension questions. In subsequent sessions, they filled out a graphic organizer remembering the elements of some of the myths they had studied. The class also worked together to write a cactus myth based on the camel myth they had read.

Opportunities for Students to Produce Oral Output through Varied Activities

This component of the checklist evaluates whether teachers incorporate opportunities for students to produce oral output through varied activities such as role plays, drama, debates, and presentations. In Teacher 1's class, frequent interaction was observed, which will be described in another section. In addition, students were observed presenting the drawings that they did to depict the vocabulary word *patrón*. These presentations were impromptu in nature. In Teacher 2's first class session, students in groups went to the front of the class to give slideshow presentations to their classmates. During these presentations, it was unclear whether the students were presenting in their own words or using language that they found on the internet to answer complete sentence stems on a planning worksheet. In addition, each student in the group presented around one sentence of the presentation. While they were told that they should not read from the presentation and instead look at the audience or briefly use a notecard, their language was nonetheless identical or extremely similar to the language written on the slide. In the second two class sessions, students were preparing for a bilingual museum simulation activity in which they would have to present information about an artifact without reading from a paragraph they would have to write about the artifact beforehand in English and Spanish. In Teacher 3 class, some interaction was observed (as will be described below), but no opportunities for oral output otherwise.

Opportunities for Students to Produce Written Output through Varied Activities

This element of the checklist asks about opportunities for students to produce written output through varied activities such as journaling, expository and persuasive writing, dictation, and creative writing. Teacher 1 asked the students in their small reading group to write an inference and a prediction related to the text they were reading. In addition, during their second class session, they incorporated an activity in which all students were asked to write a story about different photographs that they looked at, using the photographs as either a window into a new way of experiencing the world or a mirror of their own experience. In Teacher 2's class, students wrote the presentations that they gave to the class in the first recorded session, although again it seemed possible that this language may have been copied from the internet. In the second session, students took a written quiz and they then worked on their artifact paragraph, which the teacher gave some students individual feedback on. During this class period, the teacher also gave instructions for another writing assignment that the students would have to do in the next class session when the teacher would be absent and the students would have a sub. For this assignment, the students would have to answer the question "What was the most impressive invention?" giving their opinion and two reasons why. In the third session, the students took notes on the video that they watched, defining the terms that they had written on their papers. For this activity, the teacher told them what to write and then gave them additional information and examples.

In Teacher 3's Spanish language arts class, students produced written output during all four recorded sessions. In the first, they answered comprehension questions about the myth they read in complete sentences. The questions included complex verb forms including preterite, imperfect, and past subjunctive (for example, ¿Qué hizo Macocael que hizo que Yocajú se

enfadara?"). In the second session, students filled out a graphic organizer that would aid them in writing their own myth by helping to ensure that they were including different essential elements of the genre. In the third session, students began writing the first draft of their myth, which they would be doing over the course of two days. In the fourth session, the students who had finished all parts of the second draft (including an introduction, problem, and solution) wrote their final draft on the computer. Everyone else in the class was supposed to finish their second draft.

Opportunities for Students to Interact and Communicate Spontaneously

In Teacher 1's class, opportunities for students to interact and communicate spontaneously in Spanish were well represented. In the first class session, the teacher began with a circle time in which students shared their alegrías y preocupaciones. This conversation allowed students to interact with both the teacher and TA, as well as with each other, while sharing personal information such as their Thanksgiving plans and what they did the night before. Interaction also occurred in the vocabulary activity that followed in which students analyzed the word patrón and talked about its connections or lack thereof with English. Later during this class session, the teacher also facilitated spontaneous academic conversation between members of a guided reading group while they were answering comprehension questions. They told them, "usando el contexto, hablen entre ustedes. Yo no estoy, soy parte de la conversación, ¿vale?" Later, they reminded them, "[Lx] maestr[x] no va a hablar. Y todos tienen que estar de acuerdo." When one of the students provided an answer to a question later and no one responded, the teacher guided the other students to interact by saying " [Nombre del estudiante] acaba de decir algo. So ¿estamos de acuerdo?" When one student responded, "uh huh," the teacher again prompted, "Vale. Le vamos a comunicar eso, ¿no?"

In the second class session, the students interacted by brainstorming in pairs about the

ways in which certain photographs were ventanas or espejos into their own experience. In addition, another small group conversation took place during guided reading. In the third session, the students again had a class meeting in which they talked informally about topics such as the sole of a shoe that the teacher had found in the classroom the day before and about whether it was appropriate to gossip about which students had crushes on others. Again, there was small-group discussion during guided reading time.

In Teacher 2's class, interaction did not seem to be intentionally incorporated into the class sessions, although it did occur at times. In the first and second sessions, students were able to interact individually with the teacher (ask them questions, etc.), although this was limited to a few students. In the third session, the same thing occurred while students were preparing the room for the upcoming museum, although it was noted that many of the students spoke English to the teacher in this context. In addition, students were able to interact with each other during this somewhat freer time (typically the class was very controlled and students did not chat off topic with each other), but English seemed to dominate the chatter.

In Teacher 3's first recorded session, there was frequent teacher-student interaction in the form of primarily teacher-initiated questions about the myth they were reading. Most of these questions ("¿Quién sabe dónde queda el Caribe?", "¿Cómo se creó este dios?") elicited fairly short, correct or incorrect answers. When students were answering the written comprehension questions after the reading, the teacher did invite interaction between students. They said, "Si usted quiere discutir las contestaciones en su mesa, por favor puede hacerlo, pero mantengan las voces, verdad, bajitas porque somos muchos aquí." Some limited student-student interaction was observed at this point, in addition to student-teacher interaction as some students asked the teacher for help. In the second class session, the teacher again used recall-level questioning to

help students recap what they were learning (for example, "¿Qué tipos de personajes estábamos viendo en los mitos?"). Again, quiet interaction at the students' tables was invited but not required. Using on student as an example, they explained, "No quiero que usted le esté gritando a la mesa de [nombre de otro estudiante], '[nombre de estudiante], es el minotauro.' Ok, no. Está trabajando en su mesa. Si su mesa tiene una duda, usted puede levantar la mano, y yo le ayudo." During this activity, the students seemed to be working mostly in Spanish. At times, some more extended discussion emerged. For example, one student quipped, "Si las niñas presumidas se convierten en algo, ¿por qué mi hermanita no se ha convertido en nada?"

During sessions 3 and 4, students were able to talk to the teacher during whole group time and as they worked individually on their drafts, but they were discouraged from talking to each other. Teacher 3 told the students that this was individual work because they did not want all of the myths to end up the same as they had in a prior class session. Some students collaborated anyway during this time, discussing the plot of their myths. When this happened the first time, the teacher told them, "Shhh. Yo dije que era individual." They also asked some students to write their name in the behavior warning area of the chalkboard because they were talking, explaining to one individual student, "Estás limitando tu creatividad si estás compartiendo. Ayer era de compartir. Hoy es más individual para que sea más original." Originalidad, they explained, was going to be a part of the students' grade. Later, a student asked the teacher how to begin their myth and a classmate chimed into help. The teacher responded, "Shh, por favor estoy hablando con él." In the fourth session, some students were working at the computers to type their myth. At this time, some interaction and collaboration between two students was noted and seemingly encouraged by the teacher, but they told them and the class, "Las personas que están en las computadoras tienen que estar completamente calladas. Las

personas que están escribiendo tienen que estar completamente calladas. Es bien difícil escribir con ruido. Es muy difícil escribir. Estoy tratando de ayudar a otras personas, so tienen que estar calladitos trabajando. Eso les aplica a ustedes también. Calladitas trabajando."

Scaffolds to Aid Production and Increase Accuracy and Complexity

Across Teacher 1's class sessions, specific scaffolds such as sentence frames or graphic organizers were not readily noted, although in the first session they did offer to begin an inference sentence for a student in the reading group and wrote it on a paper. In Teacher 2's first class session, the presentation that the students gave seemed to have been created with sentence stems that students completed on a worksheet. In addition, during the presentations the students filled in information from them. This notetaking seemed to be scaffolded and perhaps even constrained by the worksheet the teacher had given them. During one presentation, they addressed the audience and said, "Me imagino que solo están escribiendo hierro y acero, ¿verdad? Que esa es la respuesta. Recuerden, es de que aprender a tomar solo la información importante que necesitan para contestar. Eso es lo que también estamos practicando, lo que ustedes hicieron." In the second session, scaffolds for production were not specifically noted. In the third session, the teacher told the students exactly what to write in their notes as definitions for the terms they learned about in the video.

In Teacher 3's class, more scaffolding for written production was incorporated. In the first session, they modeled how to answer the first two comprehension questions. For example, they told the class "La segunda pregunta dice '¿Qué otros dioses fueron creados?' Y usted puede decir, Los otros dioses que Yocajúl creó fueron' y me dice los nombres." In this, they were modeling a complex structure in active voice that was built off a question in passive voice. In the second session, the students used a graphic organizer to first analyze all of the myths that they

had read and then plan their own myth. This graphic organizer was focused more on content than language. The teacher explained, ""Esto lo va a ayudar porque usted va a llenar un organizador gráfico de su mito que usted va a crear encontrando estos elementos, diciéndome qué personajes usted va a tener, diciéndome qué entorno va a tener su mito, que problema va a haber en su mito, etcétera." In the third and fourth sessions, the teacher mentioned a model myth that they had written with the students in a previous class. In addition, they provided individualized scaffolding for students numerous times as the students worked on their own myths. For example, when one student asked "¿Cómo empezamos nuestro mito?" the teacher replied "¿Cuándo ocurre tu mito? ¿Presente, pasado, futuro? ¿Cuándo pasó?" When the student replied, "antes," the teacher asked, "¿Pasó antes de ahora? So, ¿pasó en el pasado?" The student responded "sí," and the teacher said, "Pues, ¿Cómo tú hablas cuando algo pasó en el pasado? Si me fueras a decir algo." The student offered "¿Había una vez?" and the teacher replied, "Puede ser 'había una vez,' puede ser 'hace mucho tiempo.' The student expanded by suggesting, "en este lugar había." The teacher modeled, "En el desierto hace mucho tiempo atrás. En el mar hace mucho tiempo atrás." Supported by this scaffolding, the student proceeded to begin writing. Working with another student, Teacher 3 modeled the need for verb tenses to match the setting of the story. They explained, "Empieza. Si está en el pasado, tienes que utilizar esos términos del pasado. Hace mucho tiempo atrás antes que los humanos caminaran en la tierra…" With another student, they modeled how to show a character's thinking. The student, an L2 learner, had asked, "What do you do for thoughts?" The teacher replied, "¿Para pensamientos? Puedes decir 'pensaba eso adentro.'" Throughout the lesson, as they modeled the ways that different parts of the myth could be written, Teacher 3 also simultaneously provided models of complex and accurate language that the students could incorporate into their own myths. For example, after

explaining to a student how they could start their myth, the teacher then modeled how to describe the action in the past: “Y luego dime, poco a poco, dime qué está pasando, ¿verdad? Porque cuando estábamos leyendo Teseo y el minotauro, el cuento no fue, Teseo entró al laberinto, encontró el minotauro y le metió la espada. ¿Verdad? No, fue poco a poco. Teseo entró al laberinto. Estaba oscuro. Los pasillos eran largos. No había señal del minotauro. De repente escuchó un rugido.” With another student, they explained, “Puedes decir, ‘se dieron cuenta de que las cosas cambiaban. El árbol ya no estaba ahí.’ En el camino ya llegando hacia el árbol, ¿de qué se dieron cuenta? Lo tienes que decir: ‘Cuando llegaron ahí, vieron que el agua no estaba ahí, solamente había,’ y me escribes qué se veía. ¿Ok?” Helping a student to conclude their myth, they provided guidance with a complex relative clause, “Ahora aquí para el final, me dices, ‘Esta es la razón por la cual los pájaros,’ ¿verdad? ‘...tienen alas para volar.’ Esa es tu última oración.”

Specification of Content-Obligatory and Content-Compatible Language Objectives

This element of the checklist asked whether the teacher appeared to have established content-obligatory and content-compatible language objectives. Of note here is that the definition of language objectives can vary significantly depending upon the model being followed. In some models, language objectives take a more functional approach (Echevarría et al., 2013). Looking at language objectives from this angle, it is possible that the teachers in the study incorporated a number of content-obligatory and content-compatible language objectives into the lessons that were observed and recorded. For example, in Teacher 1’s classes, students discussed, read, and wrote about a variety of academic topics. In Teacher 2’s classes, students presented and wrote about different topics in social studies. In Teacher 3’s classes, students engaged in narrative reading and writing, as well as discussion about literature.

Nonetheless, the current study takes a viewpoint of language objectives that considers both language functions and the linguistic forms that are necessary for or compatible with the content objectives. This approach corresponds with recommendations originally developed by Snow et al. (1989) and since refined by other researchers. For example, the formula for language objectives promoted by the Center for Advanced Research on Language Acquisition (CARLA) is "Students will use X (language structure) to do Y (functions) with Z (words/word groups)" (Center for Advanced Research on Language Acquisition, 2022a). If language objectives are considered from this angle of including both function and form, then it is more difficult to identify any content-obligatory or content-compatible objectives in the observed lessons. The one exception is the vocabulary word *patrón*, which was seemingly an objective in Teacher 1's class, although it was not immediately clear from the lesson how this related to the class content. In Teacher 2's class, the teacher provided feedback on form to some students during individualized writing conferences. However, this feedback seemed to represent purely incidental FFI that was very broad and directed to any issues that the teacher noted in the students' writing rather than specifically tailored to forms that related to the content. Similarly, during the third recorded session in Teacher 3's class, a student asked the teacher how to write something correctly, and the teacher responded, "Para el borrador no importa. Vamos a hacer eso el lunes. Para el borrador, simplemente escribes, ¿ok? ...Tú escríbelo como tú sepas hacerlo y si no sabes, está bien porque lo vamos a aprender el lunes. Lo que quiero es tus pensamientos, ¿ok?" The implication seemed to be that an incidental, reactive approach similar to Teacher 2's would be taken with any linguistic needs the students evidenced in their writing.

Differentiation of Language Objectives

This element of the checklist evaluates whether teachers differentiate language objectives

to meet the needs of individual students & groups of students (Spanish home language, etc.). Throughout all of the classes observed, no differentiated objectives of any kind were noted for groups of students or individuals.

Opportunities to Assist Students in Noticing Accurate, Complex Language

Noticing of accurate, complex forms is considered by some researchers to be essential to acquisition (Schmidt, 1990). In these classes, the teachers were generally not observed helping the students to specifically notice complex forms in model texts or spoken language. The one potential exception to this was Teacher 1's drawing the students' attention to the accent mark in the word *patrón*, which they were studying as a class.

Not only did the teachers not draw students' attention to accurate, complex language, but Teacher 1 was observed actively pushing a difficult form out of the way in order to focus on content, which is consistent with previous research on immersion education showing that content rather than language tends to be teachers' primary focus (Fortune et al, 2008). This occurred when the teacher read the following line from a reading aloud and then asked a HS they were working with a question about the content: "El barro podría deslizarse colina abajo a gran velocidad y aplastar todo lo que encontrara a su paso.*"* When the student responded to the question, they changed the correct past subjunctive form to present indicative: "...porque acá dice que… aplastar todo lo que encuentra en su paso." The teacher asked a follow-up question about the line. As they asked the question, they paused at the problematic form and asked the student to clarify what the reading said: "¿Qué imagen estás haciendo cuando lees eso de aplastar? ¿Le aplasta todo en su…? ¿Qué dice? ¿Aplasta todo…? " The student began to respond, stating, "Lo que está en... ," and the teacher completed the sentence, repeating the error the student made earlier before quickly shifting the focus back to content: "lo encuentra en su paso. So ¿qué estás

imaginando?" Three minutes later, when reading the passage aloud again, they changed the problematic form to a different incorrect substitution: "El barro podría deslizarse colina abajo a gran velocidad y aplastar todo lo que encontrará a su paso.". In doing this, the teacher seemed to be focused almost entirely on the meaning of the reading passage rather than on form. It also seems unlikely that they were aware that the past subjunctive may be a difficult form for their students and one that may warrant incidental or planned instruction.

Although Teachers 2 and 3 were not observed similarly pushing form out of the way in the recorded sessions that formed a part of this analysis, a similar incident did occur during a class session with Teacher 3 in which the researcher took notes. Here, students who were reading aloud to the class struggled with three different verb forms in the past subjunctive: *sirviesen*, *hiciesen*, and *injuriasen*. In all three cases, the teacher said the word correctly and the student repeated it. In no case did the teacher provide information about the meaning or form of these verbs, despite the indication from students' struggling that they might be unfamiliar with them. In one case, as soon as the student repeated back *sirviesen*, the teacher responded "muy bien" and then immediately moved on to a question about the meaning of a noun in the myth, asking "¿qué significa un diluvio?

Evaluation of Language

This component of the checklist asks whether teachers evaluate student language for each lesson and unit. This was generally not noted in the teachers' lessons, although Teacher 2 did provide individualized feedback on some of the students' museum paragraphs. Teacher 3 similarly mentioned that they would be giving students feedback on the second drafts of their myths. Nonetheless, it was not evident that students' language would be evaluated according to any pre-established standard or rubric.

Feedback on Development and Accuracy of Oral and Written Language

This element of the checklist assesses whether teachers provide feedback on students' oral and written language. In Teacher 1's class, in general no feedback was provided on oral accuracy. During the circle-time conversations, oral errors were frequently noted. For example, one student describing a car trip stated "Era mucho tráfico," and another student followed up by asking "¿Dónde es tráfico?" The only time that the teacher did occasionally provide feedback was when students incorporated words in English into their discussion and the teacher offered the Spanish translation. Otherwise, meaning took full priority over form, even to the point of pushing difficulties with form out of the way in order to keep the focus on meaning, as was described in the previous section.

In Teacher 2's class, little feedback was noted on oral speech. One exception was an oral recast of a student who stated "Estoy terminado," which will be explained in further detail in the next section. In addition, another recast was noted when one student was giving a presentation during the first class session and, presumably misreading the presentation, said "casó" instead of "causó." On this occasion, the teacher corrected by stating "causó," and the student repeated it back and continued the sentence. In addition, at one point the teacher admonished that "Algunos se nota que no pidieron que alguien les ayudara a revisar su escritura," implying that errors had been present in the students' presentations and likely also in their oral presentations, as these consisted mainly of speaking the words on the slides verbatim from memory. In the second class session, the teacher provided feedback to individual students on their written paragraphs. Here, they emphasized the importance of reading allowed as a method of finding errors. They explained to the class, "Me voy a sentar ahorita aquí y si ustedes quieren que se lo revise, vienen conmigo aquí a la alfombra para yo ayudarles. Una manera en que yo ayudo para revisar es que

lo leemos en voz alta. Porque si ustedes leyeran su trabajo en voz alta, ustedes mismos encontrarían sus errores. So, tenemos que leer en voz alta." In the third class session, feedback on oral or written language was not noted.

In T3's language arts class, no feedback was noted on students' oral language. At various times, the teacher alluded to feedback that they would give them on the various drafts of their myths. In general, the implication seemed to be that this feedback would primarily be on content (or perhaps discourse) rather than form with the goal of helping the students develop more intricate, complex myths. At times, some feedback on the content of the myths was provided during the class. For example, they told one student, "Aquí lo que tienes está muy bien. Aquí lo que te está pidiendo es que el narrador comience a narrar como 'A long, long time ago, hace mucho tiempo.'" Later, the teacher provided positive feedback to another student, ""Me gusta. Me estás haciendo sentirme mal por ese personaje." They also guided a different student in adding more details to their writing: "Ok, aquí. Ahí dice, 'por fin pensó en algo,' excelente, 'y creó las armas.' Acuérdate que este mito es todo alrededor de lo que crea. Aquí creaste las armas en una oración. ¿Qué usó para crear las armas? ¿Qué fue lo que hizo? ¿Cómo diseñó las armas? ¿Cómo él pensó en diseñar esas armas? ¿Te acuerdas de cuando leímos la creación del hombre? Estaban pensando y pensando y pensando cómo es que iban a crearlo y tenían varias ideas. Eso es lo que quiero para esa parte. No tienes que borrar todo; puedes hacer una flecha y escribirlo aquí abajo."

Respect for Language Diversity and Variation and Encouragement of Student Agency

This element of the checklist asks whether the teachers show respect for language diversity and variation, including students' home language varieties, and, when appropriate, encourages student agency in selecting desired forms. In general, the teachers were accepting of

all students' language without providing any critical feedback. One exception is in Teacher 1's class when a student used the term "el mall" (pronounced as an adapted loan word, /mol/) and the teacher recasted with "el centro comercial." In Teacher 2's class, the teacher themselves was observed using a few forms that are features of non-dominant varieties of Spanish, including those spoken by many of the students. For example, they used second person preterite forms ending in "s' such as "hicistes." They also used the term "haiga" instead of "haya," informal expressions such as "por fis" for "por favor," and a non-standard use of the verb *dejar* followed by another verb in the present indicative ("Espérenme un momentito por fis; nada más dejen cierro la puerta."). They also used regional-specific vocabulary such as "chaparro" for "bajo" ("Solo que hay que tener cuidado, voy a necesitar buscar una escalera porque estoy chaparrita), and they accepted this vocabulary from students as well, such when students used the verb "ocupar" to mean "necesitar." In Teacher 3's class, a similar acceptance of student variety was noticed. The teacher themselves evidenced some regional-specific language, such as the positioning of subject pronouns before verbs in interrogative sentences (for example, "¿Por qué tú crees que él quiere crear personas enemigas?"). In addition, they use the term *grado* to refer to the grades students receive on assignments, although they also varied this vocabulary with a term more frequently considered "standard," *nota* ("Necesito todos sus papeles aquí. Si no, no puede tener grado. Yo le pongo cero. Las notas se entregan el lunes por la mañana.").

Inclusion of Varied, Effective Feedback Techniques

Research has shown that different types of feedback may have different levels of effectiveness depending on the context and learner characteristics (Lyster & Mori, 2006). This element of the checklist assesses whether the teacher incorporates a variety of these techniques such as providing elicitation, metalinguistic clues, clarification requests, repetition, recasts,

explicit correction, and non-verbal cues. In Teacher 1's class, recasts of English vocabulary were the only type of feedback observed. In Teacher 2's class, some variety was noted in the way that they provided individualized feedback on a few students' writing in the second recorded session. For example, working with an individual student, they prompted about capitalization, reading the student's writing aloud and then asking prompting questions: "'Las máscaras faciales de Ópera Pekín.' ¿Sabes que Ópera Pekín es un sustantivo propio? So, ¿qué le tienes que hacer a Ópera Pekín?" Afterward, they provided explicit information, "Los sustantivos propios tienen que ser mayúsculos porque son nombres." With another student, they skipped the prompting and went directly to explicit information, telling the student, "Ok, una cosa, usted sabe que cuando termina una oración y empieza la nueva, ¿qué tiene que hacer? ¿No sabes qué hacer cuando terminas una oración y empiezas una nueva? Ok, pon atención. Necesitas espacio, y necesitas poner una letra mayúscula." Later, a student made a correction to their writing as they read aloud, and the teacher provided confirmation, "Muy bien, te distes cuenta que te faltaba una coma." At times, they prompted by giving the students choices. For example, they said to one student, "'Y cuando alguien la tenía puesta, se significa…' ¿'Alguien la tenía puesta se significa' o '...alguien la tenía puesta significa'?" Similarly, they asked an L2 learner, "¿'El colores' o 'los colores'?" Other examples included "¿'Empezó usarlo' o 'empezaron a usarlo'?" and "¿'En la 15 siglo' o 'en el siglo 15?'" Prompting also occurred via vocal tone, for example "Hay dos pájaros y ¿muchos plantas?" After the student made the correction, they confirmed, "Much*as* plantas fértiles. Bien." At times, the teacher explicitly corrected word choice: "Tal vez, coraje no, tal vez valor. 'Tenía valor para pelear.'" Later, working with a HS, they provided explicit correction along with an explanation: "'El contenedor de pluma'…plumas, porque es más de una." Before the correction, the student had had this error written twice in their essay. The teacher corrected one instance, and

the student corrected the other.

At one point during these writing conferences, the teacher provided an oral recast of an African-American L2 learner who told them "Estoy terminando" by repeating back "¿Estás—has terminado?" When this student's conference began, the teacher started by addressing the same error as it had also appeared in an email that the student had sent the teacher. The teacher told the student, "Empecemos con tu correo. ¿'Soy'? No, 'estoy'. O 'estoy ter'—no, 'he terminado con mi párrafo'. O, 'ya terminé con mi párrafo.'" Nonetheless, it should be noted that later in the same class session the student asked "Maestr[x], ¿los que están terminados, podemos presentar usando el proyector?" and no feedback was given. Of note as well is the way that the teacher provided feedback to *accurate* language: as they continued working with this student, they showed they were impressed by the student's paragraph and expressed incredulity that the student had written it themselves. They told the student, "Muy bien. ¿Quién te ayudó?" When the student asked, "Hmm? What do you mean?" the teacher again repeated the question but then acknowledged that the student had done the work on their own. They said, "¿Alguien te ayudó? Awesome! ¿Tú hiciste este trabajo? ¿Solito? ¡Increíble! Increíble. Tiene buena información. ¿Me puedes decir un poquito de, este, un poquito más describiendo cómo los encontraron?"

In the third recorded class session, there was one instance of a recast after a student asked, "¿No eran como personas que protegieron el ruta?" The teacher replied"¿La ruta?" When the student responded "mmhmm," the teacher reacted to the content of the message, "No. Teníamos soldados." As is common with recasts, it is unclear if the student understood this as such or only as a question confirming the content of their question. However, during this class session there was one interaction that provided evidence for possible uptake of a correction that occurred in the previous session. Here, the teacher asked a student about the topic they had

written about for the museum activity, and the student responded “el contenedor de plumas,” showing possible learning of the need for the noun *plumas* to be in plural form in this context.

In Teacher 3’s first recorded class session, recasts occurred frequently during discussion of a myth that the students and teacher read together. For example, when one student answered a question by stating “se formaron a una cosa llamada nebulosa,” the teacher stated back, “Se formó de una cosa llamada nebulosa. ¿Y qué pasó con estas nebulosas?” Similarly, when a student answered a question with “el parte negro,” the teacher replied “Muy bien, la parte, verdad, adentro de los ojos, los párpados.” On one occasion, it was possible to see how recasts were the chosen form for grammatical issues whereas more explicit attention was provided to vocabulary. Here, a student answered one of the teacher’s questions by saying “es para que están peleando.” The teacher recasted, “Para que estén peleando. ¿Y por qué él quiere que estén peleando? ¿Qué él dice, que él quiere probar?” Here, the student replied “Si están, like, they’re brave?” and the teacher asked back, “¿Si son brave? ¿Cuál es la palabra ‘brave’ en español? ¿Quién lo ayuda? ¿Cuál es brave?” When another student responded “valiente,” the teacher replied, “Valientes. Él quiere probar, muy bien [student name], si el pueblo es, verdad, valiente, si es bueno. ¿Verdad?”

In sessions 2 and 3, feedback on student language was not noted. However, in the final class there was an instance in which a student asked for feedback and the teacher supplied it. The student asked “¿Es ‘por la hambre que tenía’ o…?” and the teacher told the student “por el hambre que tenía.”

Differentiation between Feedback on Form Versus Meaning

This section of the checklist asks whether the teachers specifically differentiate between feedback on form versus meaning. As an example, teachers might say, “I like that idea. How

might you say it more precisely?" In Teacher 1's class, this was not noted. In Teacher 2's class, it was very clear that the purpose of the writing conferences was for the students to receive feedback on the form of their paragraphs, as was evidenced by the students' making corrections. As noted in the previous section, when the teacher recasted "la ruta," it was unclear if the student distinguished this as feedback on form or simply clarification of the meaning of the question. Similarly, in Teacher 3's first class session, there was no way to tell (even for the researcher) if the teacher's recasts were intentional feedback on form or simple affirmations of the content of the students' responses. In their third class session, they reacted to a student's writing by saying, "Esa es una buena manera de empezar. Sí, muy bien." Here, it appeared that the feedback was on content, although it was somewhat ambiguous. In general, all feedback was content oriented—for example, "Esa es una buena creación." In the fourth session, the teacher explicitly guided a student to focus on content for the time being, explaining that they would receive feedback on form during peer and teacher editing. The student told the teacher, "My writing sucks, though. I didn't know how to spell words." The teacher's response is "Tu escritura es una cosa. Tu creatividad es otra, ¿verdad? Yo lo que estoy buscando es la creatividad tuya. Las escrituras las vamos a arreglar cuando tu otra persona te lea tu papel y te ayude."

Incorporation of Activities to Build Metalinguistic and Cross-linguistic Awareness

This element of the checklist asks whether the teachers intentionally incorporate activities to build metalinguistic and cross-linguistic awareness—for example, discussion of cognates or activities such as the Bridge where the students and teacher intentionally transfer skills learned in one language to the other (Beeman & Urow, 2013). In Teacher 1's class, there was specific discussion of the work *patrón* and whether it is a cognate. The meanings of "pattern" and "boss" were both discussed. The teacher also specifically asked the students whether they could use the

"estrategia de sufijos y prefijos" to determine the meaning, and they identified that it was a noun. In the second session, there was a discussion of the word *ético* and whether it is a cognate. In addition, they discussed how *sensible* is a false cognate with the English word *sensible.*

In Teacher 2's class, an activity to build metalinguistic and cross-linguistic awareness was specifically noted in the museum activity that the students were preparing for in the second and third class session. For this activity, the students had to write paragraphs about an artifact in both Spanish and English. In addition, members of the school who were both bilingual and monolingual in English would be attending the museum presentation, and the students had to be prepared to provide information and answer questions in both languages.

In Teacher 3's first class session, they included a written activity about petroglyphs that incorporated both languages, although it was not clear from the teacher's description of the activity that the goal was to promote cross-linguistic awareness. Instead, the English served as an aid for students who might not have all of the needed vocabulary in Spanish. They told the class, "Aquí al lado aquí hay unas palabras, y usted va a tratar de aparear los petroglifos con la palabra. Está en inglés y en español la palabra por si usted no sabe la palabra de español tan bien que la de inglés." In later sessions, no specific incorporation of activities to build metalinguistic and cross-linguistic awareness were noted, although the teacher did at times use English to help the students with their writing—for instance when they suggested a way of beginning a myth as "a long, long time ago, hace mucho tiempo."

Inclusion of Activities to Build Sociolinguistic and Critical Language Awareness

This part of the checklist asks about the inclusion of activities to build sociolinguistic and critical language awareness among students. For example, students could study different varieties of Spanish and examine how there are different ways to say things in different regions

and among different groups of people. In addition, they could explore the ways in which language and language varieties are tied to issues of power and justice. No activities of this type were observed in any of the teachers' classes.

Balances Protected Space for the Partner Language with Welcoming Translanguaging

This element of the checklist asks to what degree the teacher judiciously balances providing protected space for the PL to develop with welcoming and leveraging translanguaging practices among students. This is an important balance to strike because, without providing a protected space for the PL, it is likely for the social hegemony of the English language to encroach into the classroom and deny students opportunity for input, output, and interaction in Spanish. On the other hand, language separation policies that are too rigid take on a monoglossic outlook that ignore research on the nature of bilingualism, send a deficit-oriented message to bilingual students, and prevent students from leveraging their full linguistic repertoire in an academic context (García & Wei, 2014). One guide to striking this balance skillfully is *Translanguaging in dual language bilingual education: A blueprint for planning units of study* (Solorza et al, 2019), which provides suggestions on how space for translanguaging may be thoughtfully planned for.

In all three of the teachers' classes, it was clear that they largely provided a protected space for the language by adhering to the district's language allocation policies. In the upper elementary classroom, this meant that Teacher 1 used primarily Spanish during the Spanish portions of the day. In the middle school classrooms, this meant that Teachers 2 and 3 used primarily Spanish at almost all times. Despite this, the teachers showed somewhat inconsistent reactions to English use when it occurred, and little to no intentional incorporation of translanguaging was observed

Teacher 1 seemed to vary their approach to students' use of English vocabulary while speaking in Spanish. At times, they accepted terms without recasting or acknowledging that the students had used English. Examples include students' use of "field trip," "paper bag," "un Thanksgiving feast," "like a rattlesnake pattern," and "estás como mucho pressure." Complete sentences with intrasentential codeswitching were also produced by students and accepted by the teacher. As an example, during guided reading in the third recorded class session, a student explained why a character did not stutter around small children by saying, "Porque ellos no le van a hacer burla y otros niños como más older kids le pueden hacer burla a él." At other times, Teacher 1 recasted words given in English. Examples include "el centro comercial" for "mall" (or the loanword "mol"), "mundo" for "world," and "castigar" for "in trouble." Occasionally, they seemed to struggle a bit with phrasing during recasting. In the latter example, the student had described reasons why some students tattle by saying, "Yo creo que también como con unos hermanos y hermanas como están tattling por hacer que la o el otro o la otra está como in trouble." The teacher replied, "Sí, quiere casti- que el otro se castiga, que yo castigo a esa persona." Another strategy that the teacher occasionally employed was asking the class how to say things in Spanish. For example, at one point while a student was sharing, they asked, "¿Cómo se dice sleepover?" At another point, a student corrected another who spelled the word "pattern" using English letters (the student exclaimed, "¡en español!"). In response, the teacher asked the class, "¿cómo se puede decir eso?" and a number of students chimed in to spell in Spanish. In the second class session, it became even more apparent that the students were aware of the language separation policy and noted translanguaging (codeswitching) as contrary to this. During a discussion between the teacher, an instructional coach, and the students about some videos they had watched about internet etiquette, a student offered their idea about why they

watched the videos. They said, “Creo que es porque yesterday we were kind of, um, saying, we were kind of off topic.” Hearing this, a classmate asked, “Wait, are we talking in Spanish or in English?” and the instructional coach responded “español ahora.” Despite this response, translanguaging continued during this conversation as students tried to work out their emerging knowledge of online etiquette. For example, one student explained, “Si como borras un comment que no es como nice o apropiado unas veces. Es como si escribes eso comment pero no quieres, um, post it y, um, like you post it por accidente.” At another point during this conversation, Teacher 1 specifically allows a student to switch into English after they ask permission. The teacher had asked the student to explain what ético means, and the student responded, “Como, umm, si estás como bien, pensando que si es como si va a … Yo no puedo cómo explicar en español. ¿Puedo decirlo en inglés?” After the teacher responded “sí,” the student said, “like when you’re like thinking like how does this make the other person feel. Like not just thinking about yourself, thinking about, like, other people’s minds and other people’s feelings.” The teacher then affirmed the content of this message in English and recasted it in Spanish, “So similar to ‘is it positive?’ Estás pensando en la perspectiva del otro.” During this conversation, a student also brought up commenting on others’ online work when they forget to write in the assigned language, and the teacher acknowledged that it would be ok to mention this once by saying “no te olvides de hablar español,” but not to keep telling the other student repeatedly.

In Teacher 2’s class, the most notable incorporation of translanguaging included the bilingual museum simulation described in the last section. While giving students a reminder to write these paragraphs in both languages, they both affirmed the value of the bilingualism or multilingualism of the students and modeled translanguaging in their affirmation. They explained, “Pero lo tienen en dos idiomas porque recuerden que nuestros invitados no todos van

a ser bilingües como nosotros. Not all of them are cool. ¿Ok? Nuestro cerebro es increíble, tiene dos idiomas. Algunos tres. Algunos cuatro." In the third session when students were decorating the classroom, the teacher occasionally responded to student questions in English by using English themselves, but then they quickly transitioned back to Spanish. They also sometimes recasted students' use of English. For example, one student asked them "Imperio Mongol es la, la, the last?" and they responded, "Sí, la última."

In Teacher 3's class, similar strategies were observed, as their main response to students' incorporation of English was to respond back partially in English but largely in Spanish. In addition, they at times prompted students to say things they had said in English in Spanish, and they also at times translanguaged themselves, which may have had purposeful pedagogical value. In the first class session, students worked together to answer comprehension questions and seemed to be permitted to discuss their answers, which they wrote in Spanish, in either English or Spanish, although this was not directly stated by the teacher. As an example of the teacher's use of Spanish when students spoke English, a student asked the teacher "Wait, we can finish tomorrow?" and the teacher responded "¿Podemos terminar mañana?" When the teacher responded "sí," the student answered the question. Similarly, they prompted students to speak in Spanish by asking them how they would say what they said in Spanish. For example, at one point the teacher asked a student "¿Y de ahí iban a salir quiénes?" When the student responded "good people," the teacher asked "¿Cómo se dice eso en español?" and the student responded "buenas personas." Eliciting a more complete answer in terms of content, the teacher asked "buenas personas, ¿y…?" and the student responded in Spanish "malas personas." Similarly, when a student responded, "He came late to the cave" to a question the teacher asked in Spanish, the teacher replied, "So, 'came late to the cave.' ¿Cómo decimos eso en español?" The student

supplied, “¿Llegó tarde a la cueva?” and the teacher confirmed “Llegó tarde a la cueva. ¡Excelente!”

With their own translanguaging during the first session, a key purpose seemed to be to help the students to better understand the myths that they read. Speaking about a god in one of the myths, they explained to a student, “He created the sun to be the leader. Él creó el sol para ser el líder de todos los taínos. So, le dijo al líder, ‘Voy a fregar esto. Te toca vigilar.’ It’s like me telling you, ‘I’m going to have a baby and you’re going to babysit.’” Similarly, when a student was struggling with a question about the coquí, the teacher explained, “Coquí is a frog. Coquí es un sapito que es solamente en Puerto Rico. Está solamente en Puerto Rico.”

In the second session, the teacher seemed to somewhat switch from the practice observed in the first session by establishing a firmer boundary around the use of Spanish. They began the class by telling the students, “Como estamos en lenguaje de español, yo quiero que usted esté hablando en lenguaje de español la mayoría del tiempo. Como siempre está esperado.” During this class session, the students spoke mainly in Spanish during group work but incorporated some English as well. In the second session, group work was not observed, but the teacher generally allowed students to speak to them in either language. Again, they responded mostly in Spanish but utilized some English at times before switching back. In addition, at one point when an L2 learner spoke to them in English regarding what preposition to use in a sentence, they suggested “It’s Spanish, try in Spanish,” yet did not insist and stayed focused on the question when the student continued in English. At the end, when the student agreed that “para” (rather than “a”) would be correct in the sentence “El plan era para hacer un planeta,” the teacher responded “muy bien.”

In the third and fourth sessions, the teacher demonstrated some possible additional uses

of their own translanguaging. One seemed to be to facilitate natural interaction between them and the students. For example, when discussing whether a student needed to redo an assignment, they said "You told me it was not here, ¿Verdad? Tú me dijiste que no estaba aquí. I mean, no me molesta que hagas todo el trabajo." They also employed translanguaging while responding to student misbehavior. When two students were playing around, the teacher said to them, "Why are you touching each other? Both of you." One of the students said "I wasn't touching him," and the teacher responded, "Why is he touching you? Solo fue mi imaginación, ¿verdad?" Sometimes they also used lexical borrowings. For example, at one point they said "ningún chance" with the English pronunciation of *chance*.

Use of Questioning that Encourages Extended Discourse and Higher-order Thinking

This element of the checklist asks whether teachers ask questions that allow students to respond in open-ended ways that will allow them to develop grade-level extended discourse in the PL and use the PL for higher-level thinking skills such as hypothesizing and developing arguments. In Teacher 1's class, some of the questions that came up in the first class session required thinking, but in general these all had a correct answer (for example, while discussing vocabulary, they asked the students, "¿Cómo sabemos que es un sustantivo?). In the second session, the teacher used significant wait time with the questions they asked the students (such as "¿cuál es el propósito de esta actividad?") in order to encourage the students to think deeply about the question and answer in an expanded way. In addition, they specifically reminded students that, when they felt they had nothing else to say, they needed to "profundizar." It was clear that the students had heard this before and that it was a part of their routine, and the teacher explicitly modeled how to do this as they wrote about the photographs they were analyzing. In the third class session, the teacher's use of questioning to extend students' discourse and thinking

was particularly clear during the small guided reading group. During this conversation, they asked the students "¿Por qué dice esto el papá a Hugo: '¿Sabes que cuando un tartamudo le habla a un niño o a un perro, no tartamudea?'¿Qué está diciendo?" In discussing this with students, rather than accepting only the first answer, they continued asking follow-up questions in order to deepen the students' understanding and encourage them to make connections to their own lives. For example, they responded to a student, "Ahhh. A veces cuando estás leyendo...lees en voz alta enfrente de la clase en clase, y empezás a tartamudear o empezás a no saber qué es lo que estás haciendo. ¿Por qué pasa eso?" In total, Teacher 1 asked 21 follow-up questions related to this one question in order to extend student thinking.

In Teacher 2's classes, questions to extend student discourse and thinking were not noted. In the third session, the teacher provided extended examples and explanations for the definitions the students heard in the video, but these were all teacher generated rather than produced by students. In Teacher 3's first class session, they used extensive questioning to facilitate students' comprehension of the myth they were reading. Many of these questions elicited lower-order thinking (simple comprehension of the text), but a few required more extended thinking and discourse. For example, the teacher asked, "¿Por qué tú crees que él quiere crear personas enemigas?" This question elicited a couple of sentences from a student as a response. In the second and third sessions, the questions all seemed to have a correct answer that the teacher was looking for. However, some did have slightly longer responses required such as "¿Qué explica el mito?" In the fourth session, the students were writing their own myths, which required extended written discourse and creativity. During the class, the teacher asked individual students questions in order to encourage them to develop this further and add additional details. For example, speaking with one student, they said, "Ok, ¿me puedes describir dónde vivían? Porque aquí me

dices que viven en un campo [...] ¿Cómo era ese campo? ¿Ok? So, acuérdate que yo no puedo leer tu mente. So, estás escribiendo eso y yo me tengo que imaginar qué tú estás pensando. So descríbeme ese campo. ¿Era un campo grande, era un campo desierto, era un campo con muchas flores, un campo con animales? ¿Cómo era ese campo?" When the student responded back "pequeño," the teacher again prompted, "Un pequeño campo. ¿Alguien era dueño de ese campo? Tú puedes desarrollar eso aquí."

Inclusion of a Variety of Interactive Groupings

This element of the checklist asks whether the teacher makes use of a variety of interactive groupings such as dyads, think-pair-share, small groups, etc. The groupings can facilitate increased interaction and give more students a chance to actively participate than would be possible in a whole-group setting. In Teacher 1's class, they included a different guided reading group in each class session. In addition, they used a turn-and-talk partner strategy in the second class session in order to facilitate all students' participation in a discussion of how pictures can represent windows and mirrors into one's own experience. In Teacher 2's class sessions, interactive grouping was not noted, although students had worked in groups in order to prepare the presentations that they gave during the first session. In addition, they would be interacting with the guests at the museum simulation event they were preparing for in the second and third class sessions. In Teacher 3's class, students were able to work in small groups during part of the first and second class sessions in order to complete their written work. In the third and fourth sessions, interactive grouping was not noted and students were instructed to work individually. Nonetheless, two students collaborated productively in typing the draft of one of their myths, as will be described in the next section.

Promotion of Learning from and with Peers

This portion of the checklist asks whether the teacher promotes learning from and with peers, such as through establishing peer editing and peer tutoring activities. In Teachers 1's and 2's classes, this was not noted. In Teacher 3's class, this was not noted in the first two class sessions. As was previously described, in the third session, peer assistance was intentionally shut down. This occurred when a student asked how to begin a myth. A classmate chimed into the discussion with "O puedes empezar con 'un día'" and the teacher told them "Shh, por favor estoy hablando con él." In the fourth session, however, the teacher told a student who had finished early that he was the "ayudante oficial" and that his job was to help others as they finished their second draft or typed their essays. In addition, two students, one a HS and the other an L2 learner, were observed collaborating to type the L2 learner's myth. During this collaboration, the HS dictated the handwritten myth to the L2 learner who typed it on the computer. As they worked, the HS provided feedback on the L2 learner's work. For example, at one point they told them, "No c*oma*. When you put a y [English pronunciation] you don't put the *coma*." When the student did not seem to respond, they repeated themselves, "when you put a y you don't put a comma." At this point, the L2 learner responded back in a somewhat impatient tone, "ok," and the HS said, "I'm just telling the truth." The L2 learner then said, "Yeah, you said that already." A couple of minutes later, the HS told the L2 learner, "Why did you put 'preguntaba'? You should put 'Hayse le preguntó a Camacho.' Toward the end of class, they said "send it to me and I'll correct it at home." The L2 learner replied that they could do most of it themselves. The two kept working together up to the bell, and the HS reminded the L2 learner at the end of the session "You forgot to put the title here."

Focus-on-form Episodes

As previously described, in addition to the checklist analysis of the recorded session, another way that the current practices of the teachers in this study were analyzed was through a calculation of the number of form-focused episodes that occurred per hour in a five-hour segment of the classroom recordings. Results of this calculation showed that there were five form-focused episodes in five hours of recordings. Although an exact calculation of the rate proved difficult because some parts of the recordings were inaudible, the rough rate was one form-focused episode per hour. All of the form-focused episodes were recasts of student speech, although it was not clear whether the teachers were intending to recast students' errors or simply repeating the students' message to verify the accuracy of the content of the students' responses (for example, in question-and-answer sessions about literature). During the five hours of recording, ten episodes of explicit correction of students' writing were also noted, an average of two corrections per hour of instruction.

Summarizing Strengths and Areas for Growth

Table 5 summarizes the overall impression of the findings generated through the analysis of the teachers' classroom practices. In the three teachers' classes, a number of strengths and areas for growth were observed. Notably, these were not consistent from teacher to teacher but rather varied. In addition, it was noted that the strengths and areas for growth observed during the classroom visits were not necessarily the same as those indicated by the teachers in the interviews that were qualitatively analyzed in the previous chapter. This highlights the importance of triangulating data on teachers' beliefs and practices and indicates a number of directions for PD, as will be discussed in the next chapter.

Table 5. Observable Practices According to Checklist

The two-way immersion teacher:	**Well Represented**	**Evident**	**Not Evident**
1. Provides plentiful opportunities for students to listen to and comprehend auditory input in the partner language	T1 T2 T3		
1. Provides plentiful opportunities for students to read and understand text in the partner language	T1 T3	T2	
2. Ensures auditory and written input is accurate, varied, and appropriately compelling and complex	T3	T2	T1
3. Provides scaffolds to aid comprehension of auditory and written input when necessary		T1 T2 T3	
4. Incorporates opportunities for students to produce oral output through varied activities such as role plays, drama, debates, presentations, etc.		T1 T2	T3
5. Incorporates opportunities for students to produce written output through varied activities such as journaling, expository and persuasive writing, dictation, creative writing, etc.	T3	T1 T2	
6. Creates opportunities for students to interact and communicate spontaneously in the partner language	T1	T2	T3
7. Provides scaffolds to aid production of oral and written language and increase accuracy and complexity		T2 T3	T1
8. Specifies content-obligatory and content-compatible language objectives for each lesson/unit			T1 T2

Table 5 cont. Observable Practices According to Checklist

			T3
9. Differentiates language objectives to meet the needs of individual students & groups of students (Spanish home language, etc.)			T1 T2
10. Creates opportunities to assist students in noticing accurate, complex language in oral and written form			T1 T2 T3
11. Evaluates language for each lesson/unit			T1 T2 T3
12. Provides feedback on development and accuracy of both oral and written language		T2	T1 T3
13. Shows respect for language diversity and variation, including students' home language varieties, and, when appropriate, encourages student agency in selecting desired forms		T1 T2 T3	
14. Uses a variety of effective feedback techniques such as elicitation, metalinguistic clues, clarification requests, repetition, recasts, explicit correction, and non-verbal cues		T2	T1 T3
15. Differentiates between feedback on form versus meaning, e.g., "I like that idea. How might you say it more precisely?"		T2	T1 T3
16. Incorporates activities that help students build metalinguistic and cross-linguistic awareness	T1	T2 T3	
17. Includes activities that build students' sociolinguistic and			T1

Table 5 cont. Observable Practices According to Checklist

critical language awareness			T2 T3
18. Judiciously balances providing protected space for the partner language with welcoming and leveraging translanguaging practices		T1 T2 T3	
19. Plans for and employs questioning techniques that encourage extended discourse and foster higher-order thinking	T1	T3	T2
20. Makes use of a variety of interactive groupings such as dyads, think-pair-share, small groups, etc.	T1	T3	T2
21. Promotes learning from and with peers, e.g., peer editing, peer tutoring		T3	T1 T2

In all of these teachers' classes, the clearest strength in terms of the conditions necessary to foster PL development lay in the auditory input that the teachers provided to their students. All three teachers were generally faithful to the language allocation plan and spoke almost entirely in Spanish during all observed class sessions, thus helping to ensure that the students' exposure to the PL reached or closely approached the target amount (i.e., 50% of their school day). In addition, in all three classes students had opportunities to read and produce written output in Spanish. Respect for language diversity including students' home language varieties was generally noted as well, as teachers were accepting of all student language produced during the recordings and used some of these varieties' features as well. They also fairly judiciously balanced providing protected space for the PL with welcoming and leveraging translanguaging practices, as while they spoke mostly in Spanish themselves, encouraged students to speak in

Spanish, and incorporated reading and writing in Spanish, they also utilized English at times for different pedagogical purposes and allowed space for students to think and respond in the language of their choosing even when working on assignments that would be submitted in a particular language.

Some key areas for growth emerged in common among the teachers. In particular, the teachers did not appear to have specified content-obligatory and content-compatible language objectives, assuming these are considered to include a focus on both function and form. Likewise, no differentiation of language objectives of any kind was noticed, and the teachers did not assist students in specifically noticing accurate, complex language in either oral or written form. In addition, the teachers only evaluated language in an occasional and reactive manner rather than providing targeted evaluation of specific forms. Overall, these patterns suggest that linguistic form played little role in the teachers' classes and that the predominant focus was instead on meaning and content.

Looking at the teachers as individuals, in Teacher 1's class, the most notable strength was their ability to foster student output and interaction and to extend student discourse and higher order thinking through judicious use of questioning, wait time, and explicit instruction. These strengths allowed their students the opportunity to expand and develop their Spanish discourse and provided opportunities for the teacher to also provide feedback on form, although the teacher was not observed taking advantage of this. In Teacher 2's class, a key strength was their provision of feedback on students' written and oral language. This feedback included some variety (both explicit correction and promoting). In addition, the teacher made it clear when they were providing feedback on form rather than meaning. A negative, however, might be found in the surprise they showed at one African American L2 learner's accurate writing. Discussion of

this will follow in a later chapter. Teacher 3's particular strengths were the plentiful opportunities that they provided for their students to produce written output, as well as the generally highly accurate oral input that they provided consistently.

Chapter Summary

The findings of this chapter indicate that these teachers evidenced a variety of practices that were likely to positively impact their students' PL development. This supports the finding of Chapter 4 that teachers exercise their resourcefulness and judgment in planning for the integration of content and language instruction. On the other hand, they all showed areas for growth (some in common and some individually) that could potentially be developed through high quality, personalized PD and instructional coaching. The next chapter will present an overview of the researcher's attempts to provide this enrichment, as well as a qualitative analysis of the teachers' experiences engaging with and applying it.

CHAPTER 6: EXPERIENCING PD AND COACHING

The preceding two chapters sought to answer the first research question of the present study, "What beliefs and practices do teachers in a TWI program display in relation to PL development?" These chapters presented analyses of the beliefs and practices that the teachers in the study reported and of the behaviors that they demonstrated in recorded observations of their classes. Results of the analyses showed that the teachers displayed a variety of beliefs and practices, including many that were likely to have a positive impact on their students' PL development, bilingualism, and biliteracy. However, they also showed opportunities for growth, particularly in terms of the following areas:

1) knowledge of specific systematic strategies and rationale for incorporating FFI;
2) understanding of asset-based, sociolinguistically appropriate approaches to heritage language instruction; and
3) knowledge of strategies and rationale for incorporating increased opportunities for interaction, output, and varied feedback.

In light of these opportunities of growth, the current chapter presents a description and analysis of a sequence of sixteen recorded PD and IC sessions that the two middle school teachers in the study, Teachers 2 and 3, participated in over the course of nine months. This chapter seeks to answer the second research question in the study, "How do teachers experience PD and IC on fostering students' PL development?" In order to do this, the chapter will first offer a description of the PD and coaching sessions including the content, process, and products that these involved. It will then provide a qualitative analysis of the teachers' experiences during the sessions.

Description of PD and Coaching

Context and Participants

As stated, the participants in this part of the study included the two middle school teachers, Teachers 2 and 3, as Teacher 1 left the district after the end of the first year of the study. The PD and coaching started at the end of the second year and ended unexpectedly in January of the third year when one of the teachers went on sudden personal leave and then ended up leaving the district during the start of the COVID-19 pandemic. Due to the pandemic, the school district suspended all research activities for the remainder of the third year of the study and into the subsequent year as well. As a result, some of the planned PD and coaching sessions were unable to be completed with the remaining teacher. At the start of the second year of the study, Teacher 3 made a transition from teaching both DL science and Spanish language arts, which was the class that was used for the observations analyzed in Chapter 5, to teaching DL science exclusively. In their interview, they shared that they incorporated language instruction primarily in the language arts class, so the task of integrating content into DL science was new to them. Teacher 2 was still teaching DL social studies. The PD and coaching sessions took place mainly during the school day during a common planning period in Teacher 3's classroom.

Content and Process

The PD and coaching sessions are outlined in Appendix G and consisted of two PD sessions with both teachers and 14 IC sessions with both teachers or either teacher individually. The PD sessions were planned one-hour presentations, whereas the IC sessions varied in length (anywhere between 10 minutes to one hour) and involved collaborative planning to apply the content of the PD sessions to the teachers' classes based on observed student needs.

The goals of the PD sessions were to provide an overview to the fundamental motivations

and principles behind integrating sociolinguistically appropriate language objectives with content objectives in immersion or DL settings, as well as to provide frameworks and examples of how this can be done in contexts similar to that of the teachers in the study. The teachers were given space and opportunity to grapple with the material and were asked for feedback about whether and how they believed the content of the sessions could be applied to their own teaching contexts. During the PD sessions, the differing linguistic needs of the diverse learners in the teachers' classes were kept at the forefront of all discussions.

Appendix D describes the standards, topics, and agenda of the first PD session. The presentation began with a brief summary of PL outcomes in TWI along with possible reasons that these may not be as high as they could be. Reasons discussed included lack of opportunities for students to produce extended output in the PL, lack of exposure to some types of language (such as conditional verbs, formal register, etc.), and lack of explicit instruction on troublesome forms. In discussing how explicit instruction could be included in class, the researcher highlighted the difference between proactive and reactive attention to form. Proactive attention to form was defined as lessons planned to address errors, whereas reactive attention to form was defined as reacting to errors as they come up in students' speech and writing. For proactive attention to form, Lyster's counterbalanced instruction (2007), and specifically the CAPA sequence (2016), was recommended as a well-researched approach with potential to be successfully adapted to the DL context. The teachers were given a basic overview of the history and fundamental structure of this approach to incorporating FFI into content-focused classes. They also reviewed and discussed two counterbalanced lessons used in prior research in Canada (Lyster, 2016; Lyster & Provençal, 2022) and brainstormed forms that might be content obligatory or compatible with their own classes. As a part of this, the researcher presented the

results of the Spanish tests that the students took during the first year of the study so that the teachers could discuss how counterbalanced instruction could be used to foster continued development of those forms. For reactive attention to form, the researcher presented both implicit and explicit approaches. The explicit approaches to feedback presented included overt correction and metalinguistic feedback. The implicit approaches included recasts and prompts. Prompts were broken down into metalinguistic clues, clarification requests, repetition, repetition with rising intonation, and elicitation. Findings on the effectiveness of recasts vs. prompts and on when it is best to use each of these types of implicit feedback were discussed. In particular, recasts were recommended when content is new to the student, when the error is beyond the student's current abilities, when the context is likely to allow the student to notice the focus on language, and/or when the error is phonological in nature. Prompts were recommended when the student is already familiar with the form, when the error is caused by a binary distinction such as his vs. her, and when the error is recurrent. Beyond proactive and reactive attention to form, the researcher also discussed the importance of providing ample opportunities for students to produce open-ended language such as through discussion, as this helps students to develop oracy skills and provides opportunity for the teacher to offer feedback. The Immersion and Heritage Grammatical Development Teaching Strategies Checklist (Appendix E) was presented as a useful tool for helping the teachers integrate practices likely to develop students' PL skills. The teachers were given time to read through this checklist, ask questions, and discuss how they might be able to use it in their own classes.

After this presentation and discussion, the topic of the first PD session then switched to HSs. HS was defined as "a student who is raised in a home where a non-English language is spoken, who speaks or merely understands the heritage language and who is to some degree

bilingual in English and the heritage language" (Valdés, 2000) The researcher presented an overview of the general characteristics of childhood L1 acquisition, focusing on how it is generally universal, uniform, and successful when the L1 is the dominant societal language, but how more variability is typically found in the case of minoritized languages. In particular, the researcher discussed the pattern of subtractive bilingualism in which speakers of minoritized languages become dominant in the majority language and show incomplete acquisition or attrition of their home language due to societal and educational systems that are designed to promote monolingualism. Intergenerational loss of the home language was discussed, as was the tendency for older siblings to have stronger proficiency in the home language than younger siblings. Within the context of these sociolinguistic tendencies, Beaudrie and colleague's (2014) goals and principles of HL instruction were presented. The seven goals, which were developed by Valdés (1995) and Aparicio (1997), are language maintenance, acquisition or development of a prestige language variety, expansion of bilingual range, transfer of literacy skills, acquisition or development of academic skills in the HL, positive attitudes toward both the HL and various dialects of the language and its cultures, and acquisition or development of cultural awareness. The first of the three principles is top-down instruction, which means that teachers should begin by planning meaningful projects and tasks, rather than starting from a list of vocabulary and grammar points. Bottom-up instruction can be incorporated as needed at the beginning, middle, or end of a project. The second principle is using sociolinguistically informed approaches to correcting students' language production. This means teachers must be able to distinguish dialect features from errors due to incomplete acquisition or attrition. Finally, the third principle is differentiation due to the diverse backgrounds, experiences, goals, and proficiencies of HSs.

Digging into the second principle, the researchers presented some examples of linguistic

forms that are sociolinguistically valid features of different Spanish-language varieties, including Spanish of the United States. These included lexical influences from language contact between Spanish and English such as *troca*, *carpeta*, *grado*, and *parquear*. They also included regional language features that are also stigmatized in countries outside of the United States: ending second-person singular forms in the preterite tense with *s* (*estudiastes*, *fuistes*), the use of *haiga* for *haya*, and the use of *nadien* for *nadie*. The researcher and the participants discussed what sociolinguistically informed approaches to correction might look like in the classroom. In particular, the researcher presented Beaudrie et al.'s (2014) example of the three ways that a teacher could respond to a student's use of "ain't" and "y'all" in the class. The first (not recommended) is telling the student that these forms are wrong. The second (also not recommended) is simply asking students if there are other ways to express what they want to say with these forms that are more appropriate for an academic context. The third, sociolinguistically appropriate option is for the teacher to "incorporate these uses into the class lessons in ways that acknowledge their value and also illustrate the types of contexts in which alternate forms are required, and what these forms are" (73). The researchers recommend having students discuss when these forms are acceptable as well as actually preferred and to think about whether they would be appropriate, and what the consequences of their use would be, in settings such as job interviews or with friends. While this approach is certainly more affirming and sensitive than telling students that their language varieties are incorrect, appropriateness models, as this approach can still be ascribed to, may still perpetuate social inequities and power imbalances that lead some language varieties to be stigmatized as "non-academic" or inappropriate for certain contexts based on the societal dominance or oppression of their speakers (Flores & Rosa, 2015). Thus, in order to encourage the teachers to move beyond this, critical language awareness

(Leeman, 2015) was presented as an important component of heritage language instruction. This approach guides students in understanding the political and social reasons why some forms are considered appropriate and others are not so that students can be better informed in making their own linguistic choices and responding to linguistic discrimination they may face now or in the future.

The final topic of the presentation during the first PD session was differentiation. The researcher emphasized again the diversity of HSs, as well as the importance of ensuring that TWI does not cater to the needs of L2 learners at the expense of HSs in the classes (Valdés, 1995). The researcher briefly discussed ways that content, process, and product can be differentiated, and the group discussed how differentiation is especially important so that instruction remains relevant, engaging, and challenging for all students and HSs do not end up completing lessons on things they already know.

After the presentation, the teachers were given time to review and analyze two same counterbalanced lesson plans that were translated into English from the original French (Lyster, 2016; Lyster & Provençal, 2022). One of these was a social studies lesson on the streetcars of Montreal (Appendix N) (Lyster & Provençal, 2022), and the other was a science lesson on space stations (Appendix O), which was used in a study by Day and Shapson (1991) and described by Lyster in his French handbook on counterbalanced instruction (2016). Teachers also analyzed a modified version of the Immersion Teaching Strategies Observation Checklist (Fortune, 2014) that was adapted to focus exclusively on the integration of language instruction into immersion settings and to incorporate recommendations for teaching HSs (Appendix E). This was an earlier draft of the Dual Language Partner Language Development Strategies Checklist used as a tool of analysis in Chapter 5 (Appendix H). After these analyses, the teachers were given time to

connect the resources and information to their own teaching contexts and to provide feedback on what they had found useful. Finally, the teachers answered a Google survey that asked them to identify the specific components of the PD that were most useful to them and to choose the types of PD they would like to engage in in upcoming sessions (Appendix F).

The topics and agenda of the second PD session were built in direct response to the teachers' answers to this survey. The results of the Google survey showed that both teachers found the PD useful and were interested in continued sessions more personalized to their individual instruction. To the question of what elements of the PD session they had found most useful, one teacher marked all six of the options, and the other marked all but sociolinguistically informed approaches to instruction. Neither of the teachers marked any elements of the PD as not useful. On the question of what topics they would like to learn more about, one teacher marked counterbalanced instruction, the immersion teaching strategies checklist for language development, and seeing example lesson plans of counterbalanced instruction. The other teacher marked these three along with ways to react to errors and learning about what language forms students struggle with. This teacher marked that they would find these three additional activities useful: help planning a counterbalanced lesson (language lesson) in one of their classes, coaching on providing more opportunities for students to produce the PL, and coaching on creating learning objectives that correspond to a content lesson. The other teacher marked all of the other options for additional activities as potentially useful. Finally, in the open-ended portion of the survey, this teacher emphasized that they would like to see example lesson plans in Spanish, which is a sentiment they also echoed during the PD. The other teacher was interested in also exploring how language can be evaluated in a content class. Before the second PD occurred, the researcher also held two IC sessions with Teacher 2 in order to better understand the teachers'

instructional contexts and to brainstorm what types of linguistic forms might be good targets in supporting the students' linguistic development.

The key question the second PD sought to answer in collaboration with the teachers was "How can we teach language and content at the same time?" To begin, the researcher presented the general characteristics of successful language and content integration: it's intentional and explicit, it does not consist of decontextualized lessons, and it incorporates opportunities for the students to produce sophisticated language (oral and written). After the teachers and researcher talked about what these ideas mean, the researcher presented two planning phases that are necessary in order to meet these goals. The first phase is when teachers choose the language elements they will focus on, and the second stage is planning for instruction. In choosing target language elements, teachers consider the content curriculum (content standards and objectives), any relevant language development standards such as the WIDA Spanish Language Development Standards (2013), and their own evaluation of the students' linguistic strengths and needs. With these factors in mind, teachers should then begin to create language objectives that are either obligatory for the content they are teaching or compatible with it (Snow et al., 1989). In addition, target forms should be those that represent a difference between the two languages and are difficult to learn implicitly. Furthermore, they should not be forms that represent dialectal variation (*haiga*, *nadien*, etc.) or features of language contact such as loan words, calques, and code-switching. These forms should be studied with more sociolinguistically appropriate/sensitive instruction such as critical language awareness.

As an example of how to choose what forms to teach, the researcher asked the teachers to imagine a TWI science class in which the content objective of a given unit was for students to compare how plants grow differently under different conditions. Some of the language that

would be obligatory for this unit is plant-related vocabulary and comparison words such as *más*, *menos*, *mayor*, and *menor*. Content compatible language might include verb forms that allow us to discuss the hypothetical past, which in Spanish is the pluperfect subjunctive and the conditional perfect (as in, for example, the sentence *Si la planta hubiera recibido más luz, habría/hubiera crecido más rápido*). In this example, the language objective could be phrased as "Students will use the pluperfect subjunctive and the conditional perfect to make predictions about how the plants would have grown if they had been grown under different conditions". This objective states the forms that students need to use and describes what they will use them for, which is the relationship to the content.

After discussing how to choose what language forms to teach and how to write language objectives, the focus of the PD moved to how to plan language instruction to meet these objectives. The researcher emphasized that language instruction should be both proactive and reactive. For proactive instruction, counterbalanced instruction (Lyster, 2007) was recommended as one systematic approach. The three steps of counterbalanced instruction were given as contextualization/noticing, awareness, and practice. The latter category was divided into guided and autonomous practice. As a note, in later works (Lyster, 2018, Tedick & Lyster, 2020), these stages are described as the CAPA sequence referring to contextualization, awareness, practice, and autonomy, whereas in earlier works (Lyster, 2007) they were described noticing, awareness, and practice. The contextualization stage was presented as the tie between content and language objectives. This is when students are exposed to written or oral examples of the target forms in the context of the content. During this time, the focus of the lesson is on the content. Students read or process the information presented for its meaning and relationship to content goals. Nonetheless, the key forms are highlighted visually (with colors, underlining, etc.) or orally

(with spoken stress, etc.). As an example, the teachers looked at an excerpt of a passage called "Un colon en Nouvelle-France" (Lyster & Provençal, 2022) and discussed what the content of the class where this was used likely was. They also analyzed the use of underlining and bolding of components of the target forms, which in this case was gender agreement of nouns and articles in French. The awareness stage was defined as the moment when a teacher makes an intentional and obvious shift away from content in order to draw students' attention to the target forms that are compatible with or obligatory for this content. Through an inductive process, the students explore target forms, activate their noticing, and try to discover the rules that underlie the linguistic patterns they observe. At this time, they can make comparisons between the two languages of instruction. The teacher guides them in the process and can provide metalinguistic information so that students are better enabled to understand how the target form works in the provided context. As an example, the teachers reviewed an activity used to draw attention to the possessive determiners (White, 1998). This activity included a passage that used the possessive determiners *his* and *her*, along with the pronouns *he* and *she* to describe a king and his daughter. The target forms were enhanced in the passage, and a question asked who the underlined word referred to in some of the key sentences from the passage (for example, For **her** birthday, **he** had given **her** a golden ball.) The teachers and the researcher discussed what this example activity was trying to teach and how it would meet this goal.

After discussing the awareness phase, the researcher moved on to a discussion of practice and the difference between guided and autonomous practice. Guided practice was presented as opportunities to practice the target forms such as games and exercises, whereas autonomous practice was defined as opportunities for the students to use the target forms in an autonomous way within the context of the content. The researcher explained that during the autonomous

practice stage, the use of the correct forms is part of the evaluation and is typically incorporated into the rubric that the students are graded on. As an example, students in the science class described earlier might write a report making predictions about how the plants would have grown if certain conditions had been different (*cómo hubieran crecido las plantas si ciertas condiciones habrían/hubieran sido diferentes*). Being able to correctly use the target form in order to accomplish this task would be one component of the rubric upon which the students are graded.

In addition to the CAPA sequence, other factors that were discussed as important to proactive language instruction included interaction and output in the classroom, differentiation, and making bilingual connections. In encouraging interaction and output in the classroom, the researcher pointed out that the quality of questions that the teachers use is very important. They should be open-ended questions with opportunities for students to explore ideas, make connections, defend their opinions, make hypotheses, etc. These types of activities not only provide plentiful opportunities for in-depth language use, but they also encourage higher order thinking skills, which are essential components of high-quality TWI programs and equitable education for multilingual learners in general. In addition, the students should interact with their classmates and the teacher in both planned and spontaneous ways so that they can develop both interpersonal and presentational language skills. In addition, rich interaction and output create opportunities for the students to receive different types of linguistic feedback and correction. Differentiated instruction was emphasized because of the great variation in students' language backgrounds in a bilingual classroom. The language objectives, learning process, and products were highlighted as elements that can be differentiated. Because it is important to ensure that language instruction remains relevant and challenging for all groups of learners, it might be

necessary for L2 learners and some HSs to work homogeneously on more basic grammar and vocabulary while other HSs might be able to bypass this work and instead focus on enrichment activities. If this is the case, then heterogeneous grouping can still occur later as students return to focus on content or discuss elements of language such as voice, style, variation, critical language awareness, and activities fostering bilingual connections that are valuable for all learners. In discussing bilingual connections, examples of activities such as bridging and cognate study were briefly discussed (Beeman & Urow, 2013).

After the presentation of these elements of integrating language and content instruction, it was the teachers' turn to apply the concepts to their own teaching discussions. First, they were asked to discuss a content objective from one of their classes. They were then asked to identify content-obligatory and content-compatible language that would work with this objective. Using this language, they then were asked to write a language objective that followed the formula "The students will use _____ to _____." They were asked to discuss what the teaching process would look like including the stages of contextualization, awareness and guided/autonomous practice. In order to facilitate this discussion, teachers were provided with a worksheet (Appendix P) that could lead them through this process. In addition, the worksheet asked teachers to consider how they would include language evaluation within the content evaluation (rubric, etc.), how they would provide feedback to students, and how they could follow up on this lesson in future learning. It also incorporated reflection on differentiation in every stage of the planning process.

The fourteen IC sessions that followed up on the second PD were meant to extend the process described above and to help the teachers implement a counterbalanced language lesson in their own classes. The researcher strove to make these sessions as accommodating to the teachers' needs and schedules as possible, and she positioned herself as a planning partner and

collaborator. As described, the two teachers sometimes met with the researcher together, and at times the teachers met with the researcher separately. Because the IC sessions were collaborative in nature, a great deal of time was spent reflecting on the teachers' individual teaching contexts and the needs of their students as they related to their content. The processes through which each teacher planned their counterbalanced researcher took different courses. For Teacher 2, the process largely involved co-planning discussions about student needs, target forms, and the CAPA sequence lesson. At the teacher's request, the researcher designed the materials that were used and the teacher implemented the lesson and provided feedback. The process with Teacher 3 was slightly different because they already had certain language objectives in mind for their content. In addition, this teacher took a more active role in designing some of the materials for the counterbalanced sequence. They then sent the materials to the researcher for edits and comments and revised them accordingly. Greater discussion of variance in how the two teachers responded to the IC sessions will be found in the second part of this chapter, which provides a qualitative analysis of the teachers' experiences.

Products

As described, the PD and IC sessions with the teachers produced two multi-day counterbalanced lessons. In Teacher 2's social studies class, the chosen linguistic form for the counterbalanced lesson was the aspectual difference between preterite and imperfect in the Spanish past tense. This form was chosen because it was obligatory to the content objective of describing and comparing the lives of early humans including hunters and gatherers and the first farmers. In particular, Teacher 2's student growth objective (a district requirement) for the year was to improve their students' ability to write evidence-based arguments related to the content. The prompt they planned to use for one of their assessments was "Who lived better--hunters and

gatherers or early farmers?" Preterite and imperfect was a fitting grammatical focus for this content objective because it is challenging for both L2 learners and many HSs and represents a difference between English and Spanish. In addition, use of these forms would be necessary in order for students to complete the content objective of the writing prompt. In order to confirm that this linguistic form was appropriate for the particular students in Teacher 2's classes, a short pretest was given, which was based on an online fill-in-the-blank activity (Kuczun Nelson, 2007) (Appendix Q). Results of the pretest confirmed that most students showed variability with these forms and did not get all answers correct.

The complete counterbalanced lesson that Teacher 2 used can be seen in Appendix R. At the teacher's request, all materials were created by the researcher so that the teacher could see how this would be done. In accordance with guidelines for this methodology (Lyster, 2007), the lesson, while related to the content, represented an obvious break from the focus on content to a focus on form. This was meant to make it clear to students the purpose of the lesson and to indicate to them where they needed to draw their attention. The first phase, contextualization, consisted of a reading passage about the first humans. This passage was typical of those the students received in their social studies class, and the students read it first for content and then answered meaning-based questions about the information contained within. Crucially, the target forms, preterite and imperfect verbs, were visually enhanced (imperfect was underlined, and preterite was highlighted) in order to bring students' awareness to these forms. After the content-focused portion of the lesson, the teacher handed out the counterbalanced lesson worksheet, which prompted the students' shift in focus away from content and onto language.

The first activity in the lesson, the awareness phase, asked students to draw their attention to the linguistic forms in the passage. The question asked (in Spanish) "How do we describe the

past in Spanish? In the passage you just read, some verbs in the past are underlined and others are highlighted. Find four examples of each type. Begin to reflect on how they are different in terms of how they describe the past." The worksheet then provided a t-chart in which students could list the different types of verbs. Afterward, some brief fill-in-the blank notes gave students the names of the two types of past tense and showed some decontextualized examples. It also brought explicit attention to the fact that in English we only have one past tense (*caminaba* and *caminé* can both be translated as *walked*). The teacher led the students through this note-taking stage and then used the worksheet to ask students to reflect on the difference themselves (an inductive approach to grammar teaching), asking "In your opinion, how are the imperfect and preterite different?" Space was provided for students to write their thoughts, as well as to write about other thoughts that their classmates shared when the class talked about this together. After this first part of the awareness phase, a more explicit lesson was provided through a Youtube video that directly explained the difference between preterite and imperfect in Spanish. While watching the video, the students had to complete guided notes (fill-in-the blank information directly taken from the video) with key information.

The first part of the practice phase of the lesson was also taken directly from the video. It consisted of an engaging story the narrator in the video told about when she and her family found a family of cats living in their home. The students were required to put the verbs in parentheses from the story in the correct form. Afterward, the practice phase shifted back to the social studies content the students were learning in order to make it explicitly clear how this form was needed in the content and why they were learning it in their social studies class. Students were given sentences about the first humans and asked to decide if each sentence "describe qué pasaba (el imperfecto) o qué pasó (el pretérito)" ("describes what happened regularly (imperfect) or what

happened (preterite).” The students then had to describe hunters, gathers, and farmers. They were provided with a list of verbs that are often but not always used in the imperfect in this context (such as “eran”), as well as a list of verbs that are often used in the preterite (“comenzaron”). Students were given space to describe hunters and gatherers with at least one verb in the imperfect and one verb in preterite and then to describe farmers with the same forms. This guided practice activity represented the end of the lesson and was all that was able to be implemented in the social studies class before research activities were suspended. If research had not been suspended suddenly, the teacher and researcher would have incorporated additional practice activities such as games and moved on to an autonomous practice phase in which the students would have used these forms in the content of evidence-based argument writing following a gradual release of responsibility. The teacher would have first co-created an evidence-based argument with the students, and correct use of preterite and imperfect would have been incorporated into the rubric for the assignment. Eventually, students would have completed at least two additional evidence-based arguments using these forms, first in pairs and then independently. In addition, the teacher and researcher planned to assess individual students’ progress with these forms and to cycle back to guided practice and awareness activities with small groups of students as needed. The teacher also planned to create more materials on their own as they became more comfortable.

The product created in Teacher 3’s class was a counterbalanced lesson on using adjectives to make qualitative and quantitative scientific observations, which was a key content objective of sixth grade science. Unlike Teacher 2, Teacher 3 created a significant part of the lesson themselves and shared it with the researcher who made comments and suggested an additional grammar focus. In addition, in accordance with the needs of the lesson, two

grammatical elements related to adjectives were incorporated into the lesson--placement of adjectives within noun phrases and gender agreement.

For the contextualization stage of the lesson, Teacher 3 created a reading in which they described a mystery animal using objective, scientific language without specifically naming it. To contextualize this description, they wrote (in Spanish) "Every year, many biologists travel to different places in the world and discover and name new animals that exist in those habitats. The science of discovering and naming the living world is called taxonomy. Recently, a new mysterious animal was described that converts its prey in zombies! This species is found in the Mekong River in Thailand. Dr. Michael Ohl was the entomologist who observed and described this animal in detail. Let's read the description of the scientific observations and learn more about it." This was followed by a detailed passage that intentionally used multiple noun-adjective combinations to describe the mysterious creature (for example, "patas largas y flaquitas," "antenas curvadas," and "aguijón filoso"). After reading the passage, students were directed to circle the descriptive words in the reading (adjectives such as "curvadas" and "filoso"). Next, they were asked to draw a picture of what they thought the animal looked like. They were instructed to label their drawing using the parts of the animal and descriptive words (for example, "patas largas"). The worksheet instructed them to be careful with the order of the words and asked them to consider whether it was correct to say "negra cabeza" or "cabeza negra." The teacher modeled this for the class before allowing them to work independently. This stage represented a small awareness and practice activity on the placement of adjectives. Because this is a topic with which students vary significantly, the teacher circulated the room in order to monitor students' work and provide individualized support to students who were struggling. After completing this activity, the students were asked to find five qualitative and five

quantitative observations about the animal within the passage. Finally, they were asked to complete another awareness and practice sequence in which their attention was brought to the way that the endings of descriptive words often change (as in *largo*, *larga*, *largas, largos* or *verde*, *verdes*). Students were provided with some examples from the passage and then asked to explain why they thought these endings can change (what it depends upon). Afterwards, there was space for them to write the explanation that the teacher gave after listening to the ideas of the students in the class. Finally, the students were asked to practice by completing some noun-adjective phrases from the reading with the correct ending for the descriptive word (some of which did not end with o or a) before the class went over the answers and discussed the reasons why the different endings were correct. In addition, the teacher added a component in which the students had to put "O" if the observation was objective and "S" if it was subjective.

In building off this lesson, Teacher 3 completed some follow-up practice activities in their class. Photos of anchor charts created during two of these can be seen in Appendix S. In one activity, they brainstormed descriptive adjectives using the five senses as a guide and translated the adjectives to English in order to create a bridge between scientific skills in the two languages. In another activity, they explicitly modeled how to describe animal parts in Spanish. Here, they created an anchor chart called "Describiendo Partes de Animales" ("Describing Animal Parts") in which they listed a number of animal parts in black. They then used a red marker (the same color that the word "describiendo" was written in) to work with the class to add adjectives that would describe these parts. During the activity, the teacher drew attention to the placement of the adjectives after the nouns and to the gender and number agreement between them. If research activities had not been cut short due to COVID-19, additional autonomous activities were

planned. For example, the teacher was planning an activity in which students would have had to use precise quantitative and qualitative language to describe mystery objects that they placed inside a box where students could only observe them through touch or scent. They had also planned to continue work with this type of scientific description throughout the rest of the school year and to incorporate differentiated grouping that would allow students who needed additional practice with using adjectives to work on this in a small-group setting.

Qualitative Analysis of Teachers' Experiences with Professional Development

The preceding section presented a description of the context, content, process, and products of the PD and IC sessions that occurred during the second and third year of the study. The current section aims to explore how the teachers experienced the PD and IC by presenting a qualitative analysis of the session recordings. As previously described, the 16 recorded sessions were transcribed and those transcriptions underwent a cyclical coding process that involved ongoing reflection along with two formal coding procedures, Process Coding and Focused Coding (Saldaña, 2012). While the teachers' experiences were coded simultaneously so that common patterns could be identified, their individual identities were also considered during the coding process so that the nuanced ways in which they differentially experienced the PD and IC sessions could be described. In the end, four key themes were identified as characterizing the teachers' experiences: showing openness and engagement with PD, reflecting on students' language development, alternating insecurity with taking ownership, and evoking their own linguistic and educational histories.

Showing Openness and Engagement with PD

One of the most salient themes to emerge from the qualitative analysis of the PD and IC sessions was the teachers' openness to and engagement with the experience. The fact that they

were willing to give up so much of their valuable time (one planning period per week) speaks to their admirable commitment to expanding their professional knowledge and skillset. Throughout the course of the 16 sessions, their statements also confirmed this open attitude and active interest in the topic, both explicitly and implicitly.

During the first PD session, the teachers showed their eagerness to engage with the PD by taking notes, asking clarifying questions, and making connections to their professional and personal experience. As described, the presentation opened with a discussion of prior findings on PL outcomes in TWI. The teachers immediately began connecting to this by sharing examples from their classes including their students' struggles with concepts such as gender and *gustar*. Throughout the rest of this session and all subsequent sessions, this form of engagement became a pattern as the teachers interacted with the topics by actively reflecting on the language patterns they had seen among their students and also in their own language and that of their families (see subsequent sections for additional description and analysis of these themes). In addition, the teachers showed their engagement by asking a number of clarifying questions and volunteering examples during the PD presentations, analyses of sample materials, and IC sessions. For example, during the analysis of Lyster's counterbalanced materials, the teachers clarified whether a language function should be a part of the objective, asked what streetcars are, analyzed the quality of the content objectives in the materials, inquired about the explicit instruction that was a part of the lesson, and shared where they were confused by the goals in the sample.

The degree to which the teachers engaged did vary somewhat, with Teacher 3 tending to go more in-depth in the ways in which they connected the lessons to their own teaching contexts. For example, when asked about the forms they could imagine choosing for a counterbalanced lesson in their content classes, they responded with the following reflection:

> I mean, when they're talking about their observations, their observations are going to be in past tense, like 'yo observé que…' and so, unless they're doing it continuously, like if they're taking annotations as they're doing the experiment, they have to know whether or not it's present form or past form. Also, when they're talking about predictions, predictions are done before the experiment and so there are future forms. So in the same lab report you'll have three different tenses of actual observations so they have to be able to switch that voice in the lab reports, which has proven to be very difficult for the kids.

Here, it's clear that the teacher is trying to think deeply about the forms that are obligatory for their content, as their thinking moved from one form to another and they recognized the three tenses that are necessary in a single lab report. On the other hand, Teacher 2's response to the same prompt was more tentative. They stated simply, "Well it's all past tense because it's history." While this answer does show engagement and connection to their content, it also indicates that their willingness or confidence in relating the content of the PD to their goals for their students in a detailed fashion was somewhat more limited (at least externally) than that of Teacher 3.

Another way in which the teachers demonstrated their engagement with the PD was in their excitement about getting data on their students' PL development. For example, at the end of the first PD session, Teacher 2 shared the part of the presentation that had impacted them most. They explained, "what was really strong is seeing those results. Like that for me was like, ok, there is a big difference, and we need to address it." This enthusiasm for data also came up during the IC sessions. During one of the early sessions, Teacher 2 recalled the test results they

had seen during the first PD session and the value they had found in them: “I remember last time, so you gave them some type of test. Right, is there something we can give them at the beginning of the school year that can guide us into, ok, what are the lessons that we should be covering, what are some of the areas that we saw often that we want to fix?” During one of Teacher 3’s IC sessions, they showed the same interest in data. When the researcher suggested giving a repeat of the grammar tests to students who had been tested during the first year in order to see how they had developed over time, Teacher 3 responded, “I mean absolutely. For me, any data you want to acquire. I mean as long as it’s legal, then we’re good, right?”

Throughout the PD and IC sessions, the teachers’ openness and engagement was evident in statements directly welcoming the researcher’s plans for counterbalanced instruction to begin as soon as possible and in verbal receptiveness to her ideas and suggestions. For example, in the early stages of the IC sessions, Teacher 2 told the researcher, “I do, I wanna try whatever the plan is that you’re envisioning, let’s go for it. But I want to start sending you lessons, or if you want to plan with me so we figure out what you want me to add to it.” Similarly, they later stated “Ok, so what I want to know is what do you want to do? What do you envision doing? So we can start working on that because I’m already starting to plan my first unit and my readings and I just wanna know which grade you want to work with and what you want to do.” This teacher specifically made the request to meet weekly, stating “I would like to meet with you once a week to start working on lessons.” When at one point the researcher expressed a desire not to make the counterbalanced lessons too overwhelming, Teacher 2 responded “I don’t mind, if you do it.” Throughout the IC sessions, some of the responses that the two teachers gave to the researcher’s ideas included, “that would be great,” “that’s a good idea”, “I can see that,” “I agree with you,” “I’m open to suggestions,” and “I’m taking any suggestions.” Even when discussing the

possibility of incorporating some differentiation with a topic that had previously been difficult for Teacher 2 themselves (accent marks), they replied "We can try. We can try."

As mentioned earlier, some variance was seen in the teachers' enthusiasm in terms of the amount of time that each spent thinking about the counterbalanced lessons and creating materials on their own time. This variance will be explored in greater detail in a subsequent section.

Reflecting on Students' Language Development

The second theme to emerge from the qualitative analysis of the PD and IC sessions was that teachers were consciously reflecting on their students' language development, at times in response to researcher questions and other times spontaneously. This manifested in two particular ways. First, the teachers reflected on the students' existing levels of PL proficiency and speculated on the causes behind this. At times, the teachers shared their perceptions of the different groups of students. In addition, they reflected on the DL program at the elementary level and offered opinions for changes they believed would be effective. The second way in which teachers reflected on students' PL development was in thinking about the types of language that was necessary for their content objectives and to what degree different types of instruction would be useful for different groups of learners.

Regarding the students' backgrounds, one observation that the teachers made was that the students who were in sixth grade during the second and third years of the study (the second and third cohort of TWI students at the middle school) had lower PL abilities than those of the first, particularly for the L2 speakers of Spanish. For example, Teacher 3 reflected "out of the native speakers [of English]… the class that I had in sixth grade when you evaluated them [the first cohort], those English speakers have been the highest Spanish I've had." Similarly, they also remarked positively about the HSs from that cohort, sharing that "we had some native Spanish

speakers that were also very good; you could clearly see that there was a lot more dominance in terms of world language as well." In reflecting on why, one observation they made related to the socioeconomic and educational level of the students' parents. They stated "yeah, I feel like there was a higher amount of [university] professors' students. I mean, I lost them this year to [a selective enrollment school]. They all left to [the selective enrollment school] this year." However, they also remembered that "some of those kids did come from [the DL feeder elementary school with more economic and racial diversity among the L2 learners], so I don't know socioeconomically if there were any kids that came from backgrounds that weren't like professors' kids and that sort of thing." In addition to stronger morphosyntactic proficiency, the teachers also believed the first cohort had a better attitude toward the PL. Teacher 3 explained, "The seventh graders [first cohort], they really like the idea of having two languages, but the sixth graders kind of resent that second language a lot. Like 'oh I didn't even want to be here.' Like, then why are you here? 'My mom made me.' And so, I'm like, there is no fostering of the second language."

Referring to the third cohort of students, Teacher 2 explained that "I think some of them might be worse [than the second cohort]," and Teacher 3 stated, "I believe this is probably the lowest in Spanish I've ever had." However, some exceptions were noted. For example, Teacher 2 described one student in the third cohort's independence with the language: "She is an African American English speaker. She's more willing to try Spanish than the African Americans from last year. Like the ones from last year, they don't want to say anything in Spanish, but her? Today I said [a sentence], but I said it in Spanish with 'contaminación.' And I said, 'Do you need me to help you spell it?' All these conversations are happening in Spanish, and she's like, 'No, yo puedo.' And I'm like 'wow, [student name], I'm very proud of you.' Like, I love to see that."

Thinking about the language needs students might have in relation to content, both teachers showed reflectiveness, although in somewhat different ways. Most of Teacher 2's observations revolved around general patterns of errors that they had noted in their students' production in previous classes. For example, the L1 form that the teacher suggested incorporating into their class was *gustar* because they had noted a number of students who used it incorrectly at the beginning of the school year. Other forms they brought up included structural errors caused by mistransfer of English expressions ("ya fin" and "yo fin" for "I'm done" and "estoy hambre" for "I'm hungry"). In addition, when the researcher asked them to consider whether they could think of anything in particular that they thought really affected their social studies curriculum, Teacher 2 replied, "the only thing, it keeps coming back to the *la*, *el*--it always goes back to that because I have to correct that all the time." However, at first they did have trouble, while trying to begin to brainstorm the counterbalanced lesson, in recalling the content-obligatory forms that the students might have struggled with. The researcher asked "Have you noticed anything in particular in terms of language that you feel is lacking from this project from the students?" and Teacher 2 responded "I honestly don't remember...Like, it's been a year since I've done it. And I don't think I've kept a copy of them." Interestingly, during the IC sessions, in addition to showing increased attention to students' linguistic development in terms of their production, Teacher 2 also showed increased attention to their linguistic development by paying attention to the input that the students would receive. While meeting with the researcher, they spontaneously brought up written materials they were preparing for their classroom and asked for assistance. They asked the researcher, "I have a question for you. I need help with my word wall. It's prehistoria so this is the word-wall for sixth grade. It's the study of time before history was written, so sería el estudio de tiempo antes de que se escribió la historia o antes de

que se escribiera la historia." When the researcher answered "se escribiera," the teacher responded, "That's exactly what I was thinking—se escribiera. Antes de que se escribiera la historia. When I was reading, I was like *hmm*."

Like Teacher 2, Teacher 3 noted that in general students had difficulties with gender, although they noted that these occurred most frequently with non-transparent forms such as "el planeta." They explained: "They say 'la planeta,' 'la mapa.' When it ends on that vowel that's supposed to have that different gender, that's when they struggle the most. Usually, la mesa because it ends in 'a,' they're gonna use 'la mesa.'" However, the observations that Teacher 3 made about students' language tended to be more tightly intertwined to their content objectives than those of Teacher 2. For example, in thinking about the students' use of verb forms and the difficulties they had had in the past, the teacher shared the following:

> I mean, when they're talking about their observations, their observations are going to be in past tense, like "yo observé que..." And so, unless they're doing it continuously, like if they're taking annotations as they're doing the experiment they have to know whether or not [it's] present form or past form. Also, when they're talking about predictions, predictions are done before the experiment, and so there are future forms. So in the same lab report, you'll have three different tenses of actual observations, so they have to be able to switch that voice in the lab reports, which has proven to be very difficult for the kids.

During the IC sessions, Teacher 3 was very focused on their goal of helping their sixth-grade students learn to make objective scientific descriptions. As a result, their observations centered around students' needs in this area--namely, vocabulary, the order of adjective-noun

modifications (problems such as “mi favorita música”), and, later (after the researcher asked about it), gender agreement. Regarding vocabulary, Teacher 3 reflected on students’ difficulties during their lessons:

> And I notice that when I tell them, “I need you to do observations not inferences,” right, so observation is like you are observing and you have to describe. You can’t say, “Oh, it’s lemon.” It’s an inference, so the kids...didn’t have the words. Some would say it in English like, “Oh, I think it’s sticky.” “How do you say sticky in Spanish?” “Oh, it smells sweet.” “How do you say sweet in Spanish?” And I’m like, these are native English speakers and Spanish speakers that didn’t have these descriptive words in their own language.

Thinking about how this affects their content and their ability to assess their students’ understanding, they explained, “And so I don’t want that anymore. Like I wanna make sure that we build that vocabulary while we’re doing science. I can see the content knowledge but also see that they’re being able to communicate their knowledge because if they can’t communicate what they know, then how am I accurately grading them?” This teacher’s observations about students’ difficulty with adjective placement came as they were thinking about how the students use the vocabulary that they are teaching. They stated:

> And so I’m kinda explicitly teaching adjectives in order to provide them with one the vocabulary to correctly describe things, but I also notice that, not only do they struggle with the vocabulary for descriptions, they also struggle in how to write it in a sentence. So I got, for example, when I did the stuff to get to know them “Mi favorita música es,” “Mi favorito color

> es." And so I was wondering if it was too much to do this and add also a segment in which the adjective comes after a noun. And I think because they're used to "my favorite music is" they just translate it to "mi favorita música es" instead of "Mi música favorita es." ¿Me entiendes?

This reflection became the basis of the counterbalanced lesson that combined the skills of describing an object scientifically and including correctly ordered noun-adjective pairs. When the researcher asked whether Teacher 3 thought that some of the students might also struggle with gender during the lesson, they responded "Yes, yes, yes. I've been actually thinking about that because they might not actually make the adjective match the sustantivo. They don't know that if the sustantivo is, let's say, male in this case then the adjective has to follow that same concept." This reflection led them to look for samples of students' work (particularly L2 speakers in this case) to determine whether that should also be an area of focus.

The design of both teachers' counterbalanced lessons included time for students to reflect metalinguistically about the underlying rules in the lessons' language forms prior to receiving direct instruction. While the sudden end to the research project did not allow Teacher 2 to get to the point of reviewing students' answers after the lesson, Teacher 3 was able to do so with the researcher. The conversation showed that they were thinking about the students' PL proficiency in different ways, considering both what the students' productive abilities were and also what the students understood and could articulate about how the language works. For example, they noted some students who made mistakes such as "un aguijón filosa," as well as students who were able to describe correctly. Looking at the work of some of the students the teacher considered strong in Spanish, they recognized one of the student's innate understanding of the grammatical rule despite not having the grammatical terminology. They observed, "These two are probably my

most proficient in Spanish in that class. So, 'lo que yo pienso, cambia por la manera en que empieza la oración como las, el, los, también por cuántos objetos hay.' And this was his explanation before mine. So I know that there's some language awareness there happening for him to come up with. He didn't express it like as singular and plural, right, or gender, but he's still aware that the article has something to do with, with how it ends and also how many there are." On the other hand, they noted another student who struggled to understand the rule: "Like this one, she was not, even though her Spanish is really good, she couldn't really figure out why. For her it's like it just makes sense that way. But she's not aware of why it makes sense. Do you know what I mean?" They also reflected on some students who were confused in general, sharing one student's answer about why some adjectives end in "a" and others in "o": "Creo que es como si solo una persona se termina en un o. Si hay más de una persona es a." The teacher reflected on this student's understanding: "So she had something with o and a, but apparently if it was singular they would use a, and if it was plural they would use o" and recognized that the student was confusing gender with plurality. They also noticed that the student had used an "s" on an adjective modifying "aguijón," which was a further indication of a misunderstanding that could affect the student's ability to make scientific descriptions correctly.

In general, the teacher reflected that when they went over the rules with the students, the reaction showed correct metalinguistic awareness: "They were like, 'ooooh that makes so much sense.' It's like, 'well, I knew it was that, but I just didn't know how to put it in words.' Like a lot of that." On the other hand, they reflected on the fact that a few students did not seem to understand the lesson:

> There were some students who were like whaaaat. Like, I can tell some students over there were like still confused. These guys were also

> struggling a little bit. On my second class, I have a couple of tables that struggle. Usually they use, even though they're not categorized as SPED [special education], my SPED co-teacher is constantly having to help them. One because their language is very low. And two because for some reason their comprehension is also very low. But I'm guessing if you're low in language your comprehension might be low.

A challenge that Teacher 3 reflected on while brainstorming the practice stage of their counterbalanced lesson related to the ways in which students' vocabulary and grammar knowledge are intertwined and how vocabulary affected both the students' learning of content and grammar. For example, when considering looking online for resources that would allow extra practice with the grammatical focus of the counterbalanced lesson, the teacher explained that extra practice materials were challenging for their students because they did not understand the vocabulary. For example, they shared some fourth- and fifth-grade workbooks they had brought back from a predominantly monolingual Spanish-speaking culture that would be too difficult for the students because they contained words such as *rebaño*, *añora*, *caña*, and *castaño*. They reflected on the difficulty of modifying practice lessons: "I have to put them in a vocabulary that they understand, and that's where I find most of the time it's time consuming because I have to be like, oh, this is a great practice, let me sit down and modify all of it, so that they can acquire the language. Because otherwise it's not something that they can work on their own. And it's something that I have to explain and I have to model so that they can do it on their own."

Another way in which the teachers demonstrated increased reflection about students' PL development was through explicit discussion of HSs' linguistic development--including

identification of both existing strengths and needs. For example, when discussing the overall makeup of their classes, Teacher 2 noted the variability in student PL proficiency, using pronunciation and how "natural" the students sounded as a proxy for linguistic competence. They explained, "Well, if we're going to do sixth grade, I only have in that class one, two, three, I think four [L2 learners], and then I have like another three or four whose parents are Spanish speakers, but they seem to be more English speakers. The kids, their Spanish, even when they speak, it sounds like they have an accent. And then I have other ones whose Spanish sounds more natural, so, I think we are going to have a good amount of students who are going to need that differentiation." At times, the teachers needed to be reminded to consider the needs of their HSs rather than focusing primarily on the needs of the L2 learners. For example, when Teacher 2 responded that the only linguistic need they had seen that affected the social studies curriculum was the use of "el" and "la," the researcher asked them whether they were referring to the L2 learners, and the teacher responded "yes." This led the researcher to suggest that differentiation would thus be necessary in order to prevent the HSs from receiving instruction that they did not need. As another example, during one IC session, Teacher 3 and the researcher discussed including a possible fill-in-the-blank activity. When the researcher asked the teacher whether they thought the activity might be too difficult for their HSs, Teacher 3 responded: "With this sixth grade even my native speakers are a little bit low in some of the grammar forms. They have the oral better than the written. So I still think that it will be a good practice. I could see two or three that would probably be a little bit more advanced, and for those then maybe take them straight there instead of, like, inserting them. But I think the insertion still helps them with building the vocabulary, so I would still have them do it because there's two layers right in the insertion. One, you have to make sure that you're seeing them go the right place or where they

go, but they're also using the vocabulary for descriptive words to put them in the right place. So I figure it's a double layer practice: one, using the correct description words and, two, them seeing where the adjectives goes." Here, Teacher 3 is showing how they are first assuming that all of the HSs in the class can benefit from the same activity. Afterward, they reconsider and reflect on two or three students who may not need the grammar practice. However, as they find additional value in the activity due to its incorporation of descriptive vocabulary, they see it as suitable for the entire class.

Interestingly, although during the interviews in the first year of the study the teachers did not seem to identify any morphosyntactic needs among their HSs, the process of engaging in the PD and IC sessions seemed to swing the pendulum in the other direction, with the teachers tending to express that most of their HSs' morphosyntactic needs were on par with those of their L2 learners. Only once did a teacher independently suggest that some of the language lessons might be too easy for the HSs. This happened when Teacher 2, reflecting on the use of *gustar*, which is a topic they had originally suggested for counterbalanced instruction at the beginning of year 2, remarked that "I think some of our advanced Spanish speakers are going to be like, oh that's easy... But our English speakers need it." Aside from this exception, however, both teachers tended to view the morphosyntactic needs of L2 learners and HSs as approximately equal. For example, at one point, the researcher and Teacher 3 discussed the order of noun-adjective pairs, which the teacher had chosen to incorporate into their counterbalanced lesson. Reminding them of the possible need for differentiation, the researcher asked the teacher whether they had noticed this need among all of the students. The teacher's response was that "I had only four not do it in sixth grade." When the researcher responded somewhat surprised, the teacher confirmed, "Yes. All of my heritage speakers in sixth grade, their Spanish level is not as high as

the previous group. They do have vocabulary, but they just struggle putting it in order." Similarly, when the researcher surmised during a different session that the HSs might find the gender agreement component of the counterbalanced lesson very easy, the teacher responded, "You'd be surprised. I keep finding surprises." To illustrate this, they shared an activity they had done that day in which students had had to describe a picture on the board with objective and subjective sentences. They noted a number of errors the students had produced including "El dibujo es bonita" from a student that the teacher described by saying "This is a Spanish speaker but is very dominant in English" and "La pintado es ficticio" from "a very dominant Spanish speaker." After sharing the examples, they told the researcher, "I wanted to see so you can see the different levels of Spanish. So I don't think this would be too easy. I feel like even dominant Spanish speakers might gain something from it because there's still some inconsistencies." Another time when the researcher expressed some concern that a scrambled sentence activity might be somewhat easy, particularly for the HSs, Teacher 3 responded, "I'd rather do it first and see if it's too easy." After the researcher and Teacher 3 reviewed students' work with adjectives prior to the counterbalanced practice, the researcher observed that some of the HSs seemed to already be strong with some of the grammar. Teacher 3 responded: "And that's why I decided to do this first, because I wanted to see what their level of describing was at this point since we've been covering cualitativo, cuantitativo, cualitativo, cuantitativo[...] I'm seeing that these students are not struggling as much with the location of the adjective as much as last year, like last year was. The native English speakers are still struggling with it, so I still have to cover it." However, they also pointed out later on that "I can't tell that all native speakers do [use adjectives correctly] because they did it as groups [...] I would have to have one that's individual, which is the last lab that they have. They have to do an individual, and then that would give me where

they're at, technically." Teacher 2 similarly showed a general belief that HSs had similar morphosyntactic needs to L2 speakers. While they and the researcher were planning the counterbalanced lesson on preterite and imperfect, the researcher suggested differentiating for some of the HSs and having them work on higher order writing skills while the students who needed the grammar focus worked on the practice component of the counterbalanced lesson. The teacher replied, "I mean, just thinking about that class, I don't see anyone who has just recently arrived to this country that might have a good background in Spanish. I think most of them were born here—maybe one or two are not from here." Here, they are expressing a belief that only recent arrivals can have full mastery of grammatical topics instead of recognizing the variability that is typically found among HSs. A possible reason for this is influence from the data that the researcher shared during the first PD session. Greater exploration of this possibility will follow in the next chapter.

Notably, during one of the later IC sessions when Teacher 3 was considering some counterbalanced work on future tense that they would like to incorporate into upcoming units, they expressed an outlook on their HSs that was particularly asset-based, in that it recognized their existing strengths with the language. The teacher said, "Those who are Spanish speakers have the advantage that they kind of hear it, and so they're orally more aware of future tenses. But for native English speakers that's going to be something that's harder because if their comprehension is not there or their grammatical awareness is not there, future tense is going to be like, what?" However, this asset-based outlook is not consistent. Later in the same interview they reflected on the PL development of different groups of students':

> I mean the ultimate objective is for them to become biliterate, and I see that when native English speakers are really strong in their first language they have very good Spanish

> skills, but when students struggle in their first language, when it's English, they have a really hard time with dual language. And I see the same with dual language speakers, like with Spanish speakers. When their Spanish, when their first language is not Spanish, let's start with that, like Guatemalan students, they struggle a lot, obviously because it's not their language. But with some students that are Spanish speakers, they are not very strong in either Spanish or English, and so they struggle a lot.

Here, the teacher is expressing the view that some students might not be strong in either language, a deficit-oriented outlook that devalues bilingual language practices (Flores, 2016).

Moving beyond morphosyntax, a notable change that occurred in the second and third years of the study was that the concerns about HSs' sociolinguistic varieties of Spanish that the teachers emphasized during the interviews in the first year of the study did not resurface during the IC sessions. The only time that these forms came up was during the PD when the researcher shared information about how certain so-called "errors" (Spanglish, forms representing sociolinguistic variation, etc.) are actually sociolinguistically valid and require different treatment in class (for example, lessons based on critical language awareness) than other "errors" related to incomplete acquisition or attrition. During the IC sessions, the teachers did not mention any issues with these forms at all. Likewise, while during the interviews in the first year the teachers expressed views that the HSs were less academically prepared than the L2 learners, this came up very infrequently during the IC sessions. Once, reflecting on an individual student, Teacher 3 stated "He's really low in Spanish, though, in terms... He's very good orally, but written and reading, it's a huge struggle. But orally he can communicate." In addition, when discussing the teaching of accent marks, they stated, "Some of the native speakers got it really quickly, like, remember when I was teaching the sixth grade? You came in. People like, actually,

got it. People that came from Mexico got it really fast. Like [student name] got it really fast. Like native speakers. Some got it really fast. Some English native speakers were really good at knowing the rules, like [student name] knew the rules by heart. But some days [...] they relied on me pronouncing the word for them to be able to apply the rules." Here, they are sharing the strengths of the recent arrivals and L2 speakers but not mentioning any for the HSs. On the other hand, at another point while discussing an individual student who spoke Spanish at home, they stated "this guy is really good with his Spanish." They went on to describe how his "his sentence structure is pretty elaborate compared to the other students that I have here. He can do run-on sentences in Spanish, and I don't usually get run-on sentences in Spanish unless it's y, y, y, porque, porque, porque." Looking at a sample of his work, they said "Tiene hasta acento. El aguijón. I don't usually get kids that put accents, even though I've been displaying them. They don't usually add them in their writing. But he does. So he has more like, I think, awareness of the language than others."

In speculating on why students' PL proficiency was the way it was, the teachers mentioned three main possible causes: lack of exposure, students' birth order in their families and the quality of elementary instruction in the DL program. Teacher 3 showed an awareness of the societal factors that affect HSs (in particular, the hegemony of English in the US) when they stated, "Our Spanish speakers here speak in English all the time, so it's very hard to develop a strong L1 when you're constantly bombarded by English." When discussing vocabulary, they stated "One of the things I thought, well, maybe it's exposure. If they're not exposed or in any way having to use those words in their daily lives, then maybe that's why they don't know them." Teacher 2 reflected on their own educational experience and how the hegemony of English influenced them, as will be described in the last section of this chapter. Regarding birth

order, in a joint session, the teachers surmised that this factor might be responsible for the lower partner PL proficiency that they observed among the second and third cohorts of students. Teacher 3 stated "the younger siblings have better dominance of English and a lot less dominance in Spanish [...] they say like the firstborn has more dominance of the native language. I don't know if that's true but I'm actually seeing it in my classes." As an example, they described a particular pair of siblings they taught: "I had one student and now I have the sister, and the student that I had before was really good in both languages, but the sister is very dominant in English versus the Spanish. I have to constantly translate vocabulary for that student, and I'm like 'but you're a native Spanish speaker, it's like, what's going on?'" However, one exception Teacher 2 noted was the African American student in the third cohort who showed strong independence with Spanish. Describing their older sibling, they said, "Her sister was one I used to teach last year, and her sister was one of those that refused to use Spanish. That's why she's not in our program anymore, because she refuses to do Spanish."

Regarding the students' DL education in elementary school, Teacher 2 surmised, "Also, it's not just about the background, but it's also the teachers they had. Because most of the kids that were in our program had some of the Spanish teachers, from Spain. But by the time these kids started growing up more, the sixth grade, the Spain teachers were gone, because they only had a visa for three years." Here, the teacher is referring to a program that brought teachers from Spain to the bilingual program to teach for a limited time and suggesting that those teachers provided a stronger education in Spanish, although they do not elaborate on why. In addition, during the second year the teachers shared their belief that the students in the second cohort were not sufficiently encouraged or required to use Spanish independently in elementary school. Teacher 3 explained: "I also feel like there was an overuse of support, and now the kids expect to

be all given to them. Literally that's how I feel. These kids just literally sit there and stare at you, and I'm like 'what are you waiting for?' 'Well I can't do this by myself.'" Teacher 2 agreed with them, stating "Yeah, seriously, these kids just…yeah." Expanding on their thoughts, Teacher 3 shared, "I'm like, the heck you can't do it by yourself. Tell me what you need. 'I don't know.' I'm like, I give support, if you tell me what you need. You need a word bank? I'll write you a word bank. But you need to tell me what support you need to be successful. I'm not going to give you all the support assuming that you can't do it by yourself. And I feel like the overuse of support has created this helplessness. And they tell you 'I don't know how to speak Spanish.' You may not be proficient at Spanish, but you have to know how to speak Spanish, you've taken five years of Spanish at this point. You know?" The teachers also shared that when they insisted that the students use Spanish, the students would "get attitude," "like they completely reject Spanish." This showed up in particular in the students' writing. Teacher 3 explained, "If they're not expected to write Spanish down there, then they come here and they get super offended when we have them write in Spanish. And so we need students that are willing to take risks, and willing to use their language, their target language." Teacher 2 agreed with the importance of ensuring students felt comfortable taking risks. They stated, "they need to feel like it's okay to take the risk down there, because that's where you encourage them. That's where they start. When they get to us, they should already be open to making those mistakes." Later, when Teacher 3 was preparing to give their counterbalanced lesson, they shared the worry that they and the students would have trouble completing the entire lesson in Spanish. They explained, "I don't know why, but it's constantly. I have to constantly remind them in Spanish, and they ask me questions. Like 'I'm sorry, did I hear English? I don't respond to English.' But you have to because otherwise, todo el tiempo. Todo el tiempo en inglés. Pero yo creo que es porque siempre

hablan inglés en elementary and quinto grado, they're not used to like speaking Spanish all the time, especially in an academic setting. And so, se frustran. They're like 'ugh, I don't know how to say it.' Then try it. I can help you. You can raise your hand. I'll help you. Ask your peers. '¿Cómo digo…?' and tell them in English. And then they can help you, pero tienes que tratar en español. Tienes. It's a constant battle."

Looking toward the future, Teacher 3 in particular felt that it would be valuable to include the types of counterbalanced language instruction discussed during the PD and IC sessions in the elementary DL program. They explained, "if we create that awareness, that language awareness when they're in elementary, I feel that it's easier to them to acquire the skills as we go." Talking about vocabulary, they stated, "I'm guessing they do not do this kind of activities in elementary, so I feel like I should tell elementary school teachers that this would be like a Spanish language arts science activity that they should be able to do. I think it's necessary at the elementary school level. Not at the middle school level. I can definitely teach it at middle school in a more advanced way, but when we're learning what patas, ojos, nariz is. They didn't know what joroba was. Then how [far] back do I have to go to teach them this skill?" Reflecting on their own counterbalanced lesson, they explained the positive effect they saw for their students but expressed a desire for future students to come in having already completed some of it:

> I think this was really cool. I think I'm going to stick to this. [...] Because I think, these kids if they keep coming lower, this is something that they're going to have to have regardless because we're going to make observations. What I'm wondering is if this is something they could do in fifth grade so by the time they come here it's not let's teach all of this. [...]

> I feel like we could do this and then have like an elementary version of it to kind of get them involved, and so by the time they get to sixth grade, they have the skill and we can go to more advanced like how to determine the endings and how to like really be descriptive about things. That would be my future hope. That we can get them ready first. And then we can go more advanced into Spanish in the middle school level.

Alternating Insecurity with Taking Ownership

The third theme to emerge from the qualitative analysis of the PD and IC sessions was the tendency for both teachers to alternate showing insecurity about blending content and language instruction with moments in which they took ownership over the process and began to tailor it more precisely to their own lessons and students. Overall, Teacher 3 showed more confidence in the process as they actively created a number of materials and mini-lessons related to the counterbalanced lesson. This teacher's greater confidence may be related to their educational and linguistic history, as will be explored in the next section. Nonetheless, both teachers at times expressed nervousness about the process and at other times were active in guiding and personalizing the instruction.

On multiple occasions, Teacher 2 was specific about their need for the researcher to model counterbalanced instruction by designing the first lessons for them. At the start of the first IC session during the second year, they explained, "Ok, so, for me social studies is teaching the content. However, I want to do this, so I need you to sit with me and we type or write down, or whatever, ok, this is what I'm going to say to the kids, this is what I'm going to do in front of the kids. This is when I need to steer away from content for a second, talk language, and then, ok, now I'm gonna go back to content. Because the other day I needed to teach the content, but I

want to steer for a second to the language." When the researcher clarified "So a script would be the most helpful thing for you?", the teacher exclaimed, "Yes, a script! Just for the first lessons until I get the hang of it where, like, 'oh yeah now I know what I've got to do!' I need that first."

As the sessions continued, the teacher was eager to get the counterbalanced lesson planning started so they could integrate it into their content instruction. In one of the early sessions, they told the researcher (as described earlier), "Ok, so what I wanna know is what do you want to do? What do you envision doing so we can start working on that because I'm already starting to plan my first unit and my readings, and I just want to know which grade you want to work with and what you want to do." In general, despite the insecurity that they expressed about planning the counterbalanced lesson independently, Teacher 2 nonetheless took ownership of the instruction in this way, by creating parameters and explicitly guiding where in the content the language lessons would be incorporated to ensure that they fit into the existing instructional structure of their class. Guiding statements provided by Teacher 2 include "So now is the time for us to decide what we would like to bold on those readings," "So that's where I want us to get started with," "I want us to start working on the reading in this lesson that we talked about with my unit de primeros humanos because that's where I'm going to have readings," and "Let me also show you something else that is going with my SGO [student growth objective]. That is what I want you to see because I think this is the part where we can talk about language." As they guided the process in this way, they also continued to be vocal about the support they needed from the researcher. For example, during one IC session, they stated, "On Monday, I can start working on highlighting those. Is it possible for me to send you, let's say, the first reading? And you do that for me? So we can look at that and then the second and the next reading. I do it, and then I can send it to you, so you can verify." Later, they said

again, “Can we do it together with the first reading? [...] Let’s do next Tuesday. Hopefully by then I should have the reading, and we can go through it so I can practice this with you.” During one of the final IC sessions after they had given the counterbalanced lesson to the class, they were also proactive in asking the researcher if they could “grade it together” or “go through it together to see the results.”

Another way Teacher 2 took ownership of the process was by making specific suggestions for the lesson. One of the first suggestions they made was for a pretest that would help guide the process of planning to integrate language and content instruction. They explained, “I remember last time, so you gave them some type of test, right? Is there something we can give them at the beginning of the school year that can guide us in, ok, what are the lessons that we should be covering, what are some of the areas that we saw often that we want to fix?” They also believed that the pretest would be the best way to include differentiation in the counterbalanced instruction. They told the researcher, “That’s why I need to give them that test, so that we can see and when I bring the test to you, we can grade them together. We can do that. Ok, let’s pair this native speaker with this English speaker, or even these native speakers...let’s pair them with this speaker. We can do that.” Another suggestion they made was to include a graphic organizer as a way to blend the awareness stage of the CAPA sequence with the instructional techniques and routines the students were used to their content instruction. The teacher explained, “What I want to do is a graphic organizer for the reading comprehension, the historical part of it. But if you want to guide me on what we can do for the language component, I would appreciate that.” Similarly, they suggested formatting the language lesson so that it would fit in the interactive notebooks the students used for their content. They said, “One thing that I like to do is use my interactive notebook because then if they have a question they can always go back in their

notebook to find the answer [...] I would like to have at least a place [...] where they can see what is imperfecto and [...] pretérito and then what are some examples for each."

A suggestion to include a rubric came up as the researcher and Teacher 2 co-planned together using the CAPA worksheet (Appendix P). The teacher said, "For number eight [of the worksheet], I have the EBA rubric, but I want to add a part to what we are going to be concentrating on this year, so if we can also try to work that out Tuesday. [...] I can go ahead and work on it and save it in a separate document where we can edit it, and we want to add that component that we're working on [...] It's content, but we are able to add language to it." For the autonomous practice stage of the CAPA sequence, Teacher 2 suggested using an evidence-based argument that they planned to include in their class as a part of their student-growth objective (a requirement of all teachers in the district). As the researcher and the teacher discussed the prompts that would be included throughout the school year, they realized that some of the prompts worked well with the preterite-imperfect language focus (for example, "Do you think it was easier to be rich or poor in ancient Rome?" and "Was the Hammurabi Code a fierce set of laws?"), but others did not ("Would you rather live as a hunter-gatherer or in an agricultural community?"). Here, the teacher independently suggested altering the topics. They said, "If we need to change it, we can do that. We can do something like 'Was the life of an early human better as a hunter-gatherer or in an agricultural community?'" The researcher agreed with this suggestion, and the topic was changed for the autonomous practice exercise. Another idea that Teacher 2 contributed was to use a checklist and highlighting during the autonomous practice stage. They explained, "So, I want to do like a checklist of things that need to be included in the EBA [evidence-based argument] and maybe assign a color. Like yellow is my thesis, green is my evidence, red is my reasoning. And then, we can do something like purple is the words that I'm

learning like grammar or structure that I'm being asked to do." Afterward, they explained how they would model using this checklist and the highlight colors to ensure that all components were being integrated into the writing assignment.

Going beyond just making suggestions, on a couple of occasions Teacher 2 took ownership of the process of integrating language instruction into their class by making independent decisions about what they and the research had discussed. For example, at a couple of initial IC sessions at the beginning of the second year (prior to the start of more cohesive co-planning following the PD on counterbalanced lessons), Teacher 2 had discussed their desire to incorporate instruction on *gustar* into their introductory lessons. While they and the researcher had discussed a proactive way of doing this, in class the teacher took initiative in deviating from the plan to incorporate a more reactive, personalized response. They explained after the fact:

> I ended up doing it a little different for my first lesson, well my first day of school. When they were writing down sixth grade, they had a to-do list, I walked around to see who were the ones who needed the help and it was the English speakers once again, but I was able to explain it to them each individually, and they were able to fix it. But yes, I think I may need to work with them individually, like as a group [...] because all of the Spanish speakers, I think, I mean one didn't know how to say 'a mí me gusta.' I had the English speakers, a few of them who were writing 'yo me gusta,' and so I tried my best to explain it to them, and they got it. But I'm going to give them another activity where we can verify that. I want to see if they got it.

As another example, the teacher also rejected one suggestion the researcher made for including a

practice exercise in the CAPA sequence. This practice exercise would have entailed including an activity in subsequent content readings (after the reading used for the contextualization and awareness phases) in which students would have had to choose the verb form that best completed some blanks in the reading. The teacher, committed to the need for these readings to be used for content, told the researcher they did not think this was a good idea. They said:

> But if we do that for these readings then we're taking away the purpose of them learning the content. I think that it could be smaller readings, like not this. We're going to concentrate on content here. But if I were to do a smaller reading, on another topic... So for example, [...] for the Mesopotamia unit I have different unit readings. So maybe for one of them, like la cultura de Mesopotamia. Just that one because it's a smaller reading just on that. I can see us being able to take away some of the words. [...] And it comes in a little booklet, and they already have the fill-in-the-blank with content, but we can also do a fill-in-the-blank with the grammar.

The researcher agreed with the teacher that this made sense. However, when she mentioned that the teacher could just give the regular non-highlighted version of the readings, the teacher again took ownership of the process by protesting "Oh, I don't mind if it's highlighted. This is a moment for them to start seeing it." They explained, "That's what I'm saying. This unit, it's okay if they start paying attention to highlighted [grammar forms]—why are those highlighted? Mesopotamia is where we're actually going to start removing if that's what you want. I'm ok with that, but I wouldn't do it this unit." When the researcher asked if it was ok for her to highlight all three passages, the teacher responded "Yes! Yes."

When it came time to deliver the first lesson, Teacher 2 shared their nervousness lightheartedly with the researcher and Teacher 3. Turning to Teacher 3, they said "Hey, [teacher name], you want to teach it for me?" Teacher 3 responded, "What do I have to teach?" Teacher 2 said "Imperfecto y…" and hesitated as they tried to remember the other term. Teacher 3 completed the sentence "pretérito e imperfecto?" The researcher then tried to reassure Teacher 2 that it was not necessary for them to feel pressured to teach everything flawlessly and explain everything perfectly. She also explained that just knowing what the process of integrating language was like for Teacher 2, even if it felt uncomfortable or unnatural, would still be useful information. Teacher 2 responded to this saying, "I'll try, I'll try." Teacher 3 told them, "You got this." Teacher 3 laughed and said "No, I'm going to convince you to do it later."

Despite this insecurity, when reflecting after delivering the lesson, the teacher showed greater confidence. When asked whether they had felt comfortable delivering the lesson, they replied, "It was a little strange, but I liked the way you had the--like it was really easy for me to be able to teach it because you basically had everything there. I just had to follow it, and I liked that at the end we were able to connect it back to the social studies part. So, like I said, it felt a little strange because I don't usually teach this in social studies, but it, just the way you had it, was just easy for me to go through it." They also described how they improvised during the lesson by playing spooky music during a fill-in-the-blank practice activity that told the start of a scary story (Appendix R). They explained, "The kids were, like, super excited about that scary story, and they're like 'we want to listen to it,' and I'm like 'no, I'm so afraid, I'm so afraid,' like I was like acting." In summary, they said, "So yeah. It was good. It was good. I think it was good. What do you envision to be the next lesson? So do you want to look at the results first before you think about it?" When the researcher broached the topic of when Teacher 2 would be

ready to begin creating counterbalanced lessons themselves, they replied, “I think I need more practice so that I am able to do it. So maybe, maybe like two more units on help from you, and then hopefully the next units I can do on my own [...]I just need help with a little bit more, and then we’ll figure it out.” As the researcher and Teacher 2 made plans to review the students’ work together and create the next practice exercises, the researcher asked them if there was anything else that they thought would be good for the students to do that would work well in their classes to help them to do better with the language component. The teacher thought and, again taking ownership of the lesson, suggested, “I think more practice. Maybe a sort of some kind where, which ones are palabras pretérito and which ones are, what was the other one?” The researcher replied with “imperfecto” and asked whether the students did well with manipulatives. The teacher agreed and restated their suggestion, “I think a sort would be good for practice.”

As previously described, the key difference between how the two teachers took ownership of the process of integrating language and content was that Teacher 3 was more independent than Teacher 2 in creating materials and mini-lessons that supported students’ language development in the counterbalanced lesson. This included both designing pre-lessons and being sure students were ready for the counterbalanced lesson and incorporating spontaneous language and content integration (unplanned FFI). As previously described, they were also the one who came up with the topic for the language focus, using descriptive language and the order of noun-adjective pairs, although through discussion with the researcher the element of gender agreement was also added.

From the beginning of the IC sessions, Teacher 3 showed an emerging vision for where they wanted to take the language integration lessons in their class. This vision was tied tightly to their principal content goal of helping their students make scientific descriptions, and they

reflected constantly on students' language needs within this context. As previously described, their initial observation was that as they were planning for their lessons on scientific description for sixth grade, they noticed that the students struggled with having the vocabulary necessary to produce accurate descriptions and also with knowing how to "write it in a sentence." As a result, they wanted to add a language lesson that would help the students in knowing that "the adjective comes after the noun." During the first PD session, Teacher 3 requested "a list of like content topics that we could teach in Spanish so that it's easier for me to look at my content and be like 'Oh, I can match these two really well'." They explained that "adjectives came to me just because I struggled so bad last year teaching observations. It's like I asked them to do quantitative and qualitative observations and like 'maestr[x], how do you say this? maestr[x], how do you say this?' And then they would also write it incorrectly in the sentence and I had to literally stop and be like ok, let's write. Let's do an adjective cloud in Spanish and write both English and Spanish words." Similarly, they reflected, "How are you describing things if you don't know the words? So, I found that there was this huge gap, and so I wanted to, before we jump into the observation cycle, maybe do like a small introduction to adjectives and descriptive words." Describing one specific experience they had with their students, they told the researcher, "I have several practices. One is in groups where they have to make this insect. As a group, they make three descriptions for the insect, and they have to write it in a sentence like 'El insecto tiene alas. El insecto es verde.'Y así sucesivamente. But then at the end when they actually do their lab it's by themselves, so by the lab, they have two objects to describe, and they should be able to write those in the correct way with the correct adjectives. [...] Last year I had 'El verde insecto' instead of 'El insecto verde.' So those are the things I kind of want to clean up as they participate." Later, they summarized, "so that's why I want to be able to do it, because, for all

these observations, they're writing and they're talking and they're communicating, and I want them to do it correctly."

As they described their process of thinking about how best to merge language and content instruction, they explained, "I'm just trying to figure out how can I fit and merge these two together because I feel they go hand in hand. [...] For them to be able to do good observations, they need to know descriptive words and, I'm noticing that they don't have the vocabulary for it. And also the way to write it correctly in a sentence if they were to create, for example, when they do the lab reports. [...] They have to write in complete sentences like, 'The object is rough.' Discussing the activities such as the adjective cloud that they incorporated into their class (see Appendix T), they reflected "so, that's not technically science, but it's a way of getting them more comfortable with these words. But other than practices like that, I don't know like what—how long, for example, this mini unit on adjectives should be, and what are the things of adjectives that I should focus on just for them to be able to use it in context you know? Like in the science context."

Throughout the IC sessions as Teacher 3 and the researcher actively worked on answering these questions and creating a counterbalanced lesson that would incorporate all of the teacher's goals for their students, Teacher 3 continuously demonstrated ownership of the process by coming up with and implementing multiple ideas for activities to focus on language, particularly in terms of practice activities and activities that would prepare the students to be ready for the CAPA lesson. In one of their first individual IC sessions, they independently worked to develop the language objective that would guide their counterbalanced lesson. They stated, "So, I want to find a way to incorporate descriptive words and how to use them properly while they're making observations. So that's my my objective, so I want to add—like usually it's

like ‘yo puedo hacer observaciones usando mis cinco sentidos.’ I need to add the language component to it, ¿verdad? So it would be like ‘yo puedo hacer observaciones usando mis cinco sentidos describiendo objetos correctamente en la oración.’” As they and the researcher developed the corresponding plan over the course of various IC sessions, Teacher 3 both suggested ideas in order to see what the researcher would think and provided descriptions of ideas they had implemented independently between sessions.

As an example of the former, the teacher suggested a fill-in-the-blank adjective that would help the students produce adjectives to describe nouns. They stated that they could provide a sentence starter that said “El color de la manzana era.” The next steps would be to “then put like in parenthesis ‘escribe un adjetivo de color’ and then have them fill in the blanks and then that would be like a scaffold because I’m writing the sentence for them. They’re just inserting adjectives and maybe they can see where the adjectives should be in the sentence before I have them then describe them.” As another example, they suggested “I was thinking of giving like scrambled sentences, and so the kids would have to de-scramble the sentence to make it correct and that way that would be a way for me to evaluate them putting the adjectives versus sustantivo en el lugar correcto [...] pero las palabras ya están ahí solamente las tienen que poner en sus lugares correctos. Yo creo que eso es un primer paso antes de escribir una oración.” Elaborating, they explained, “Estaba pensando prácticas de poner adjetivos y sustantivos y los tendrían que juntar el adjetivo correcto con el sustantivo correcto. No vas a decir verdad, por ejemplo, [...] el limón es dulce. El limón no es dulce. Es very agrio. Pero it’s like a practice of el sustantivo con el adjetivo y luego ver esa oración con esos dos but scrambled and putting it together.” For the grammatical gender, they considered including additional opportunities to practice more difficult situations such as adjectives that modify more than one noun as in “La

cabeza y el abdomen son negros." They explained: "I was just thinking that we could add like a couple practices over there of that or a separate sheet of when you combine two, what gender will have what adjective?"

Another idea they had for more autonomous practices was "an activity where the kids have a post-it note on top of their animal, and there's like 30-something animals and each of the students get one, and they have to use this chart to come up with adjectives to describe it. And then, they slowly build a descriptive paragraph, this mystery animal, and they read it out loud and the other kids have to be able to guess what animal it was." When running this idea by the researcher, they showed how they also took ownership of the counterbalanced process by planning for differentiation. For example, they mentioned including 'el panda' in the activity, and the researcher commented that that was a tricky one. Teacher 3 responded, "I'm assigning each kid an animal on purpose with that in mind because I thought about that." Some of the other activities that Teacher 3 suggested to the researcher had to do with the contextualization phase of the CAPA sequence. In particular, they suggested presentations of the target in short contexts. For example, in sharing their first idea, they said "so maybe have an object and a picture of the object and then a description written next to it [and] in bold the adjectives." Similarly, to build vocabulary, they suggested "I was thinking of doing like not readings per say, like not have a whole reading again, but have tasks in which there's different scenarios like 'Lucia is observing this in the lab and she finds that the object is es pegajoso y verde' [...] Then we highlight those descriptive words and it's like, you know, 'Does someone know what these mean in Spanish and in English?' and kind of slowly add them to a chart as we go."

In addition to taking ownership of the process of integrating language and culture by suggesting their own ideas, Teacher 3 was also able to do so through the way that they ran with

the researcher's feedback and adapted it to their needs. In particular, on the couple of occasions where the researcher mentioned a potential pitfall in the teacher's plans or made a suggestion, the teacher contemplated the feedback and carefully made independent decisions about how to alter their plans in response. For example, another early idea that the teacher had for the contextualization stage of the CAPA sequence was to provide students with a simple reading passage that involved description but that was decontextualized from the subject of science. They described this idea as follows: "So what I was thinking about if I were to introduce it to this group that we're supposed to be doing a reading where I'm describing things like this kid walking in the city And the like, oh, cuando Juan iba caminando, like caminó a su escuela, escuchó un perro ladrar bien alto. And like just talking about and describing the things around this kid and then having us highlight words that were describing things, and so maybe going like that first, and it's like, ok, can we categorize these words with our senses? What things did he hear? And let's describe them. You know, so I thought about something like that to start like a little story." After they shared this idea, the researcher reacted by explaining that she thought it was great to start with a little story; however, she expressed concerns that the story might be too decontextualized from the topic of science and suggested that the lesson might flow better for the students (and better correspond with the guidelines of the counterbalanced instruction) if the story were related to science–for example, if it told about a scientist finding a mysterious animal, such as when Darwin discovered unique animals living on the Galapagos Island. As the researcher provided this feedback, Teacher 3 showed thoughtfulness and continued ownership of the process by responding "mhmm" and immediately suggesting additional ideas related to science: "We could talk about how some scientists discovered this bacteria that eats plastic. Or something in the astronomy. They like astronomy."

As the planning continued, the teacher shared their ideas and the thought process they went through in deciding what to make the story about. They explained their initial thinking, "So, I could probably do a story that has more to do with science [...] I about the story [should] be more casual just because then there are words that they're more likely to know because I'm worried by using the science ones that there'll be more technical language in terms of the descriptions of the objects." However, they then explained, "but maybe I can, but maybe not water it down but make [the science reading] simple." In thinking of science topics, they brainstormed aloud topics such as dissecting a frog, black holes, and fungi "because this is a living organism and it looks like a plant, but it's not a plant." They also brainstormed using different topics with different students, explaining "And I'm thinking of using penicillin because it's bacteria, but it kind of looks like it was mold, and he let the experience run, so he left it open, that learning. That sometimes good science happens with accidents is cool. And then it has a lot of uses, and it could be very descriptive. So I'm thinking of either going for an animal, which would probably be easier, or maybe I should use that as differentiation for those who probably need something a little bit easier and then doing something a little bit more elevated in terms of descriptive words for those students that are a little bit further." In the end, they summarized "It's double the work, but it's usually worth it. But I really like the idea of using science because it makes more sense than just Juanito walking down the street, you know. So I really like that idea." Ultimately, the topic that Teacher 3 chose was the jewel wasp, and they independently prepared the contextualization and awareness activity in Appendix U in which students read a passage about a mysterious animal. In the teacher's original draft, the students were directed to circle the descriptive words and create a drawing of what they thought the animal looked like, and list five qualitative and five quantitative descriptions from the reading. After creating this

activity, the teacher submitted it via email to the researcher for review. The researcher returned the document with a few comments and additionally added some components that would allow increased awareness of the targeted grammatical forms. This included instructions for the students to label the animal parts in their drawing with the parts and descriptive words paying attention to the correct order (for example, patas largas), as well as a section on grammatical gender (Appendix U). The researcher then sent the draft back to the teacher for comments. At their next IC session, the teacher responded, "I loved your grammatical, la práctica gramática. Creo que es muy buena. So la dejé ahí."

Another topic that led Teacher 3 to take ownership of the process after receiving feedback was that of exceptions to the general rule of adjective order. In the passage about the wasp that the teacher made for the contextualization stage of the CAPA sequence, the teacher naturally included some instances in which an adjective modifying a noun was positioned before it in order to indicate that it was an inherent quality of the noun. When the researcher pointed this out, the teacher went through a process of deciding what they wanted to do about this. At first, they reflected that "So, what I'm thinking is, I'm probably gonna switch the exceptions just because this is the initial reading." They started to do this but changed only some of these exceptions. Midway through the process, they told the researcher "Mostly, I changed the ones that had to do with the animal because that's the ones that they're gonna focus on." However, ultimately, they had a change of heart and decided to leave them. They explained, "I left those naturally maybe to point them out as exceptions because I talked about maybe for the advanced, maybe I can point out, hey, can you find something that is a descriptive word that is before its noun and see if they can find those and highlight them. [...] And this is a discussion I wanna have after they find them. I want the kids to come to the board maybe and write some of the ones that

they found and then talk about the order of how they are like can someone notice where the descriptive word is versus what it's describing and kind of highlight that out."

Similarly, Teacher 3 took ownership of the decision-making process when the researcher pointed out that some of the sentences the teacher was hoping to elicit from the students during a summative autonomous description activity (sentences with noun-adjective pairs) might not come naturally in most contexts. For example, it would be more natural in a simple description context to say "La cosa es amarilla" than a sentence with "la cosa amarilla." Teacher 3 contemplated this and agreed with the observation. A suggestion that they then proposed was to include a "scaffold–like me putting the structure first and then they insert the adjectives where they go and then switching from that then writing the whole sentence." Later, they also suggested creating "a sentence stem to create inferences." They explained that they wanted to create "like an inference sentence stem. I can actually use it to model how they put an inference together and that way the adjective [goes]. Even though it's not super natural for all sentences we use outside of science, for the science observations it would work, and maybe it would be a guideline as a regular language tool to be able to speak correctly and write correctly." One suggestion the researcher made was that if the students had to compare objects then it would be natural for them to use the noun-adjective constructions that the teacher wanted to focus on. The teacher initially seemed to agree with this suggestion and provided a potential example: "El objeto redondo va a flotar mientras que el objeto triangular se hundirá." However, upon thinking about their content goals for the student on this particular activity, they reflected that the language objective might not actually be appropriate. They explained, "Well, for the SGO [student growth objective] I don't have to include a language objective." However, they nonetheless expressed a desire for students to continue improving their language in a different

context. In this, they showed that they were taking ownership of the context for integrating language and content and choosing which activities were compatible with the chosen FoF. They explained, “For the SGO, it doesn’t have to have the language component, but in order for them to effectively manage them and and be able to succeed in all the other science—like the science mini-labs where they’re gonna be observing [...] that’s where I’m gonna evaluate the language use [...] the SGO is for for them to be able to show that they can do observations.”

Another way that Teacher 3 took ownership of the process of integrating language and content was in deciding how to implement the awareness stage of the CAPA sequence. Their first idea was to have the students “circle descriptive words [...] like words that describe other things and them giving them some time that they could work as a table, circling them down, reading it out loud, and highlighting the correct ones.” They explained that the liked the idea of “letting the table try to figure it out and see their discussions.” Their strategy for providing guided feedback for the students would be “letting them circle with pencil but then me highlight all the words and having them highlight the correct ones.” Later, their idea evolved, and they decided they as they did the reading with the students they would highlight the body parts and then make “a two-column table on the board and we can together put the body parts by themselves and find the descriptions that go with the body parts.” When the researcher pointed out this would be a good way to visually see the grammatical components, the teacher agreed that it would show “which one ends in ‘a’ and which one ends in ‘o’ with the noun.”

In addition to coming up with activities for the CAPA sequence, another way that Teacher 3 took ownership of the integration of content and language was by taking steps to ensure that their students were prepared for the CAPA lesson before they implemented it. One way in which they did this was by having students take a formative assessment with an online

quiz game (Kahoot) in which they had to determine whether descriptions were qualitative or quantitative. After giving the assessment, they stated “I have about 5% that are still not getting it. So I think I’m gonna do just a little more practice at this point because they really need to know the difference between those two. So, I might have to look into [starting the CAPA lesson] next week.” When Teacher 2, who was present during this IC session, asked them, “You’re not willing to move on? I mean, you got 95% of the kids doing it,” they responded “No, this will set them up for the rest of the year. Without observations, we can’t even do science.” They elaborated by explaining their plan to get their students ready, “I’m going to review those first four concepts [qualitative, quantitative, subjective, and objective descriptions] before we actually move into descriptive words and adjectives because they need to understand difference before we actually just jump into descriptive words. I think I want them all to be on board and ready when we engage in this because I feel the level of complexity is higher than just knowing if an observation has numbers or it has a quality. If they can’t differentiate the two, how are they going to find descriptive words?” In addition to this formative assessment, as mentioned the teacher also had students build their vocabulary through creating an adjective cloud (Appendix T). They also reviewed animal body parts and had students practice scientific drawing by looking for their favorite animal on the computer, drawing it in a scientific style, and labeling it. Afterward, they surmised, “so I think now we’re ready. But before, I don’t think it would’ve really happened.” In addition, they took ownership delivering the CAPA lessons by deciding how they would present the contextualization stage: “So, básicamente lo que estaba pensando hacer mañana para la lección era básicamente decirles de esta investigación que un científico hizo. Introducirles la investigación, entonces que él usó estas palabras descriptivas para poder enseñarle al mundo cómo se veía porque solamente él lo había visto. Entonces eso es la razón

por la que los científicos tienen que ser tan descriptivos cuando están describiendo los objetos que están investigando. De ahí pensaba leer en voz alta este primer párrafo para que ellos sepan qué es lo que estamos haciendo, dónde estamos y de qué científicos estamos hablando."

As previously described, after the initial counterbalanced lesson (the contextualization, awareness, and initial practice activities), Teacher 3 continued to show ownership of the process by creating their own additional practice activities such as anchor charts up until instruction was interrupted due to COVID-19. They explained their reasoning for including English in the five-senses adjective chart: "there's not really many cognates as adjectives, so it's harder for them to come up with the words or translate the words for them in their heads. Like squishy, like it's not, dark doesn't have a cognate, rough is not a cognate, smooth is not. There is such an insane lack of cognates in adjectives that it's very hard for them to kind of know the word that goes with it." The anchor charts, they shared, would be helpful in this and future units. They explained, "I leave the anchor chart up so that [we will have them] when we're doing observations, like when we do chemistry there's several labs in which they would be doing observations."

A final component that the teacher took ownership in creating independently was a rubric for the counterbalanced practice activity (Appendix V). This rubric primarily focused on content and included creating a scientific drawing, making inference, identifying quantitative and qualitative observations, and knowing the difference between objective and subjective observations. In addition, the teacher added a component for language that was divided into gender (o/a), plurals (os/as), and exceptions (es). The teacher explained that the exceptions: "excepciones son las 's' los que son 'ágiles' en vez de 'ágilas' o 'ágilos.' I feel like that would be like a higher, higher achievement." The teacher intended to use this rubric with the students to determine "what they were able to do and what they were not able to do."

A final way that Teacher 3 showed ownership of the counterbalanced instruction process was by actively reflecting on language teaching in the TWI context and asserting their evolving ideas about what this should look like. In general, their ideas showed significant evolution since the interviews during the first year of the study, perhaps as a result of the PD session as well as other because of other PD the teacher had participated in since the first year. For example, at the end of the first PD session, they stated "And I think it has to happen, too, instead of doing it just explicitly teaching grammar, to incorporate the grammar and incorporate everything into the lesson. And I see the advantage of it, and I actually went to a PD and that was all about like including language objectives to your lessons. And I totally, I like these examples because it kind of tells me like, oh, this is how could you kind of merge and integrate them. And I think in the middle school, we could totally take advantage of that between the content classes."

On multiple occasions throughout the IC sessions, they similarly reflected on their original motivation for choosing the language focus of the CAPA sequence. During these reflections, they showed ownership of the process through their strong conviction about the relationship between language and content. For example, they explained:

> Yeah, and I mean the reason that we're doing this is because when we do the lab, the SGO [student growth objective] is basically they're going to have an object and they have to name the object, and they have to describe the object and measure the object. So if I put a block, I don't want them to be like 'la bloque es pesada.' 'La bloque,' you know? Lke they need to be able to write it correctly as 'un bloque'. 'El bloque pesa 23 kilogramos,' let's say for example. 'El bloque es cuadrado,' no 'el bloque es cuadrada.' So those are the types of writing that I'm aiming for, so when we describe objects, we can describe an object and we use

> the right terms. Are they all going to make it? Probably not, but at least I aimed for it so we're doing content and also practicing our language correctly and scientifically. So no sé. [...]Obvio no va a ser que ya todos saben cómo hacer adjetivos. No todos saben el género de cada adjetivo, con qué sustantivo va, pero al menos quizá cuando estén escribiendo pueden pensar, 'espérate, déjame tomar un tiempo y a ver si esto es lo que debo escribir como adjetivo.'

As another example, they described one of the practice activities they intended to incorporate into the unit on observations in which the students were going to have to describe different houses and other students would have to read their descriptions and guess which houses they referred to. Reflecting on the importance of language during these lessons they said, "Aunque lo hagan correctamente, pueden decir que la casa es negro o la casa es cuadrado. So because then [the other students] are going to be reading that and it's wrong. I don't want them to have them read that because then I don't want them to assimilate that: 'Oh, this is correct because someone wrote it.' You know what I mean? So, for that, that's why I'm doing this."

After implementing the first few stages of the CAPA lesson, as previously described they concluded, "I think this was really cool. I think I'm going to stick to this." Their beliefs about how language objectives should be integrated into content showed a strong change from what they described during the first year of the study, when they had said they would prefer for language to be taught isolated from content at the beginning of the year and primarily in the Spanish Language Arts class. After implementing their CAPA lesson, they shared their overall impression: "I'm really excited to involve more language in science. It's taking me longer. Usually, I would have been like halfway through physics now. But, you know, it's what I really need it at this point. I do like the merging of language and content. I think it's really useful. And

[the students] need it [...] If we're not going to teach explicit grammar, we still need to involve it in content. I think it's more meaningful when it's in content. For them, it makes much more sense in content. So hopefully I can involve more of this stuff in my lessons so that it kind of merges."

One of the specific benefits they identified in incorporating language into content instruction was that it allowed them to better assess students' content knowledge. They explained that without teaching language, "Am I really then testing the content correctly? They might know, it but they just might not know how to write it or how to say it." As a result, they concluded, "So in dual language, you have to be able to marry those two [language and content] at some point. If they can't communicate, then I am not addressing or I am not measuring content correctly."

Another way that Teacher 3 showed ownership of the process of integrating language and content, was in making plans to follow up on the CAPA lesson they did with their student in future units of instruction. They explained:

> So what I was thinking is, whenever there would be an opportunity for this to be revisited, kind of make them go back to "hey, remember when we did this" and kind of have like that mini-refresher. Like, remember when we talked about the planets, how they're gonna start doing posters for their planets? So before we end up doing posters for the planets, we can be like "ok, let's try to talk about some of the observations that you can do about the planets and how you would phrase those in a sentence." However, we do have the problem of "los planetas," so we're going to have to talk about some of the exceptions. So reinforce that skill there, but at the same time moving a little bit forward.

In addition, they described how they would bring in differentiation as well. They said, “I also think I might do some exit tickets or some activities where this is involved. Just as like practice skills, and those who have it, fine, it’s easy for them, and those who don’t can still work on it.” In conclusion, they said, “So moving forward, I would like to still reinforce it before we get to the final where it’s writing posters and presentations.”

Even beyond wanting to revisit the topic of the CAPA lesson that they developed with the researcher during the IC sessions, Teacher 3 showed additional ownership of the process by describing a different content topic that they recognized as having a content obligatory language form that they planned to incorporate lessons on in the future. They told the researcher:

> Right now, we’re talking about predictions, and it’s future tense. So now I think I’m going to have to merge predictions with future tenses. This semester, I don’t think I have the time to develop that because we’re right now doing it. That’s where we move on from here. We’ve started doing inferences and predictions because we move from observations to inferences and predictions. And inferences and predictions are technically the same thing except that inference is something that you’re assuming now, and prediction is something that you assume is going to happen next. And so they have to know the difference between writing something in present tense and something in the future tense.

Despite not having time to implement a full CAPA sequence on this new topic that year, the teacher nonetheless described how they had incorporated spontaneous, incidental focus on form into their content lesson. They explained:

> So today I had a really good argument with one of the students. He’s like, “Oh, a good prediction would be ‘La niña piensa que se va a meter en problemas.’” And

> I was like "Wait, you say 'la niña piensa', so she's thinking right now about how she's gonna get in trouble. So technically that's not future tense. That's an inference. You're inferencing that she's thinking right now." I'm like, "She's making the prediction, but if you remove the 'piensa,' si tú dices 'La niña se va a meter en problemas,' that's a prediction that you're makin [...] So I had to give like a mini-lesson: if you say "va a" o "van a," it's going to be something that's happening. But then there's the way of also saying "molestarán."

They also recognized, however, that teaching about the future tense would be a challenge for them in terms of their preparation to teach grammar. They said, "I don't think I have the idea or the way to teach how they're going to change that verb per se in the future tense. You know what I mean? Because there's so many verbs."

Going beyond even their own teaching, Teacher 3 also showed ownership of the process of integrating language and content by expressing a strong desire to help the elementary teachers in the district to be able to incorporate language into content as well so that the students would be more linguistically prepared for middle school. They explained, "I'm guessing they do not do these kind of activities in elementary. So I feel like I should tell elementary school teachers that this would be like a Spanish language arts science activity that they should be able to do. I think it's necessary at the elementary school level. Not at the middle school level. I can definitely teach it at middle school in a more advanced way." They explained that they believed the way to do this was through collaboration with the elementary school teachers and communication with them about the needs they saw in the students. They said, "I think it would be a good idea. You know, this is what we see. This is what you could do down there. They need like a workshop. I teach them how to do it scientifically." They summarized, "I cannot tell elementary teachers how

to do their job. I have no idea what they put up with down there.[...] But I would like to like give them whatever they need for that to happen."

Despite Teacher 3's general confidence and initiative in creating the language component of the CAPA lesson and wanting to move forward with counterbalanced instruction, they also at times expressed a need for guidance as well as some insecurity. One way in which this manifested was in frequently asking the researcher for her opinion on their ideas. Some of the language that indicated their need for guidance included when they asked or told the researcher, "I'm not sure if that's good or not," "¿Qué usted recomendaría?" "You think that would be a good technique?" "Does that make sense?" "I just wanted to run it by you if you think that idea would be good," "If you could give me feedback on it that would be cool," and "Do you think it's a good plan?" Some of the specific topics they asked for guidance on were how to address students' lack of vocabulary knowledge while completing the reading for the contextualization stage, whether to have the students complete the reading individually or aloud with the group, what categories of adjectives to teach (if any), whether to pretest the students before beginning the lesson, and whether to pre-teach body parts before doing the CAPA lesson. In addition, they asked the researcher to provide them with feedback on the elements of the CAPA lesson that they created. On one occasion, they explicitly expressed the importance of having the researcher confirm their preferences. After having found a practice activity that included categorizing adjectives into different types, they asked the researcher whether she thought they needed to include this in their science CAPA lesson. When the researcher replied that she believed the point of this particular lesson was to use adjectives correctly rather than learn to categorize them, Teacher 3 responded, "I'm glad you said that. I was hoping you would because I'm like, I don't want to go into the different adjectives. I don't think I'm ready to teach all the different type of

adjectives." When the researcher again agreed that she did not think this was necessary, the teacher responded, "Ok. Thank God."

Similarly, the teacher twice expressed a fear that they would somehow make a mistake with the lesson and ruin it. Once, when they were telling the researcher about how they had been considering having students make a two-column table of the mystery animal body parts and the adjectives from the reading, they shared that they were waiting for the researcher's approval before moving forward with this plan so that they did not mess it up. They explained, "I was like 'I'm gonna tell [you] before I sabotage the whole thing.'" Similarly, in the IC session that took place before the teacher delivered the first part of their CAPA lesson, they told the researcher, "I don't wanna mess up. I don't wanna be the reason why it gets messed up."

After they had implemented in the CAPA lesson and collected the students' work, another topic that Teacher 3 let the researcher know that they would like help with was evaluating the students' work, which, again, was due to the teacher's having some level of insecurity with the process. They told her, "I just wanted to know how you wanted to evaluate these because I would like to see the perspective of how you evaluate language. I can evaluate content, but you know having a better understanding of what to look for in language would be a very good idea. [...] Maybe we can grade them together and see what other practices we could do or what other things we should focus on. What successes do they have? What things do we need to work on? If that's ok with you."

Evoking Their Own Linguistic and Educational Backgrounds

The final finding in the qualitative analysis of the PD and IC sessions was that, during the process of learning to integrate language instruction into their TWI classes, both teachers repeatedly evoked their own linguistic and educational backgrounds, making comparisons and

contrasts with the experiences of their students and those found in prior research. They also reflected on how their own experiences influenced their ability to actively teach language in addition to content.

During the first PD session, while learning about HL development and the tendency for HSs of Spanish in the United States to develop dominance in English, Teacher 2 shared "I have to agree. I feel like I can read English faster than I can in Spanish. At home, I'll [speak] Spanish. And at school, it's all about the English." On the other hand, they reflected a different family experience that showed that this was not the case for all HSs. They explained, "But it depends on the case. Because my sister is first generation, right? Both of my sisters are first generation. My sister [name], her kids have Spanish so weak, so weak. But yet, [my other sister], because I told her what to do because I was studying at the same time and I was like "'no, do this,' and so [that sister], her daughters are fluent in Spanish. But also fluent in English. They've gone through a dual language program in [name of city], a two-way program there, but they, at home, only speak Spanish. So, they read and write both languages." Teacher 3 responded to this personal anecdote from their colleague by telling them, "But now you have to start to tell them to write technical stuff in Spanish." Teacher 2 agreed with this advice, saying simply "yes."

As previously mentioned, Teacher 3 grew up in an environment in which Spanish was the dominant societal language, and they learned English through bilingual schooling. They reflected on how the tendencies for language dominance among the two languages vary in that context:

> If you see bilingualism in [my home community], it's the opposite right? Because you're exposed to Spanish all the time. And so, the only class I got in Spanish was Spanish, but it was explicit Spanish. It was like, why give you all this content in Spanish when you have it around you? Let's

> give you the rules so you know how to navigate it on your own. And so our language as we develop, we kind of stay even until we get to high school because in high school, it's like super focused in English. And then our English is not super strong, in some cases like public schools, for example, English is not, but in private actually it stays really close together because they had a graph like that [the one the researcher showed with typical patterns]. It's really close, really close, really close until you get to high school, and then it's like, the English starts taking over. Because they're starting to prepare you for college, to leave, because nobody stays in [my home community]. So it's just very interesting to see here the dominant language takes over and over there, the dominant language stays on top, because of what you're surrounded by. And so it's really interesting.

On the topic of birth order and its effects on HL proficiency, Teacher 2 again found that their family was an exception. They said "Actually, it depends on the family once again. In my family, I would say the younger… [One sister's name] and me." The researcher asked if this was because the teacher had made an effort such as by living abroad. The teacher responded, "Yes, but not only that. It's definitely sticking with the Spanish while my siblings, socially, they spent so much time with the English that their Spanish is very weak." Again, Teacher 3's experience was different because of the different context in which they grew up. They remarked, "I mean, I'm the oldest, but I was also raised in a place where you were always surrounded by Spanish except for school. In school it was mostly English if you went to a private school or a Catholic school. So it's [...] different. I didn't have that happen with my siblings because we're all in the

same place with the same language, so for me, when I first heard about it [the effects of birth order], I was like 'huh' because I didn't experience any of that [...] but I can see it in my students happening."

During the discussion of the importance of sociolinguistically appropriate approaches to correction, Teacher 2 again made a connection to their own family. This connection was related to the term "nadien," which, during one of the interviews in the first year of the study, they had mentioned was something that they corrected with their HSs by telling them "ok, if you say that at home that's fine, that's home, but here it's *nadie*." In the context of the PD session, the researcher mentioned "nadien" as a term that represented dialectal variation and that required more sophisticated pedagogical treatment (e.g., critical language awareness techniques) than the CAPA sequence could offer. At this point, Teacher 3 asked "Who uses *nadien*?" Teacher 2 responded, "Oh my god yes, it's so common! It's so common!" When Teacher 3 again asked, ¿*Nadien*? Really? I've never heard of it in my life," Teacher 2 told them, "Go to my house and you'll hear my dad say *nadien*."

One of the moments during the PD and IC sessions that most clearly illustrates the theme of evoking one's own linguistic and educational backgrounds was an exchange in which Teacher 2 showed vulnerability by opening up to the researcher about their own linguistic insecurity with Spanish and, to a lesser degree, English. This occurred during an IC session when the researcher and teacher were planning to administer some pretests in Teacher 2's social studies class. In the midst of planning, Teacher 2 told the researcher, "I would also like to take your test." They then elaborated on their reasoning:

> Because I learned Spanish at home. My Spanish was enforced at home. At school, they didn't really use my home language to improve my English, so I really don't

> feel like I've been given the chance to be fully bilingual. Like this type of program [TWI] didn't exist for in [my community's] public schools. So I feel like I was failed. Like, I could have been fully bilingual in both languages. I don't feel I'm strong in either/or. And that sucks. Like, I don't know *acentos*. I can't hear the *acentos*. I don't know where the acentos go, and, I mean, that's why I went to live in Ecuador to improve my Spanish, and it helped a lot. My goal is this summer to go to Mexico to continue because I want to be really good in Spanish, but I also wanna be good in English. Do you get me?

In the teacher's view, their difficulties with Spanish were related to their tendency to read in English. They stated, "I read a lot of English, and I don't read a lot in Spanish. I think I need to put more effort into reading in Spanish, so I would like to take that test, and I want you to be very honest with me. I want to see what mistakes I made." Later on, they elaborated: "Even as an adult, I can pick up an English book and eat it in one day, but Spanish, I'm like, 'Why do I have to read?' And I have to keep going because I do really feel like I'm really low on the reading in Spanish [...] And that's why I wanna go to México. I wanna find books there, and content books I think are better for me. I know the content, so like history, I can read. But I want to be able to pick up a book in Spanish in México and be able to read it [...] If you have any suggestions of what I can read, I would gladly look up stuff because I wanna improve in Spanish." When the researcher and the teacher began talking about different works of literature written in Spanish, the teacher reflected on their college experiences taking literature courses in Spanish. They explained, "That's what made me realize, oh, I really need to work on this Spanish. Like, I have it. I can communicate. But I don't think I can read it professionally." In addition to their feeling insecure about Spanish, the teacher's insecurities also extended to their English. Referring to the

language tests the researcher was going to give, they said, “And if you could do one in English for me, I would appreciate that, too.” When the researcher seemed surprised that the teacher would doubt their abilities in English, they responded, “I do think that I need to improve. I don’t know. Maybe I’m just a harsh critic of myself [...] I don’t think I’m good enough in either of the languages.”

During the following IC session, the researcher mentioned that accent marks might be a potential source for differentiation for some of the students who had already mastered the language instruction topic. Again, Teacher 2 brought up their own linguistic background and what they had told the researcher previously. They said, “I don’t feel confident doing accents because, like I told you last time we met, I don’t even know where they go.” When the researcher offered to teach them, they responded, “I rely a lot on my phone fixing the accents for me, so I don’t feel confident teaching them accents. In Ecuador, they tried to explain it to me, and I’m like ‘explain it to me.’ And they’re like ‘how come you can’t hear it?’ I’m like ‘I can’t. I cannot hear what you’re talking about.’”

Teacher 3, who was also present during this IC session, shared their perspective on how Teacher 2 felt and connected it to their own experience. They said, “It might be a being-comfortable thing, and teachers don’t feel confident teaching it. I mean, I’m guessing. I would feel the same. I’m not comfortable teaching commas. I put a lot of commas everywhere. Commas are not my strength, or like punto y coma. I don’t even know where those go. But other things in Spanish, I’m pretty good at. Just punctuations and c’s and s’s. I still to this day confuse where c’s, z’s and s go in Spanish. I have to go to [another teacher], and I ask her like ‘where does the c go?’ And she helps. So there's some strengths, and there’s some weaknesses.”

Turning to Teacher 3, another time that they evoked their own experiences during the PD

and IC sessions was when they and the researcher were discussing nouns that have non-canonical grammatical gender. They reflected, “I think you acquire those through reading. Basically, when you’re exposed to reading and you read it multiple times, it just sticks, I think. I feel like I don’t remember getting any exception grammar rules when I was learning grammar. I think we would encounter them and then we would discuss them, and then it was like you just did it by how you spoke it. You wouldn’t say *la cometa*. You would say *el cometa*. You say *los planetas*, but when you’re exposed to reading it it’s easier to kind of modify.” In general, reflecting on their own experiences, they described three factors that they felt aided in developing their high level of bilingualism: strong bilingual schooling, exceptional levels of family support, and the strong base in their L1 (Spanish) that they developed in their home community. Regarding the former, they said “my school prepared kids to be biliterate, absolutely. Every single student that graduated from my school, my high school, ended up going to either university or they ended up going to university out here. So they went to college regardless if it was in Spanish back home or in English out here. Obviously, the ones that went out here had stronger English. They were able to pass the SATs and stuff like that.” Their personally had a very positive experience with English: “I was very successful at my school in terms of language, particularly English. I actually preferred English in school than Spanish, maybe because we were forced to have two hours of Spanish, and I was like “ugh, Spanish. We’re like, why do we need so many hours of Spanish if I speak Spanish all the time?” Their own experience with Spanish was not only due to their schooling, however. They also recognized that their family support for their bilingualism gave them a particular advantage. They stated, “For me, I think my parents tried to overdo it because, my dad, when he tried to go to college, he went to New Orleans, and he struggled with English so bad, and he struggled with math so bad, because it was also in English. So he really

struggled with the language, and I think he tried to compensate so that I wouldn't go through the same thing. So I feel like even though my school did prepare me a lot, my dad also overcompensated. I remember he spent a lot of days working overtime so he could buy me this Mother Goose and this Teddy Ruxpin. You would put a cassette, and they would read to you in English because my dad was afraid that he would read to me bad English. He was so afraid that he was just going to teach me bad English that he spent his money and bought me this goose that would talk to me at night, and it would just read in English. I had a Teddy Ruxpin that would read to me stories, and I would go with the books and I would just follow the reading with the book in English."

In addition to school and family support, Teacher 3 also mentioned the strong base in Spanish they got from their home community: "I feel also that the support around [my home society] because everybody speaks Spanish, and they're so strict about the Spanish, you develop a really strong first language. In sum, they described the three factors of school, home, and society as going hand in hand. They said, "Not everybody can have a Mother Goose that reads to them at night right, like I can't say that. [My dad] would force us to watch all the movies in English, which was a struggle because I was trying to read subtitles when I was little. So I feel like it does have to do with the [school bilingual] program, but it also has to do a lot with your surroundings."

In addition to evoking their own linguistic and education background as a child, they also reflected on the preparation they received in their university bilingual education certification program and how it affected their ability to teach TWI science. They explained, "The problem is I did elementary, so my licensure is in elementary with a certification in middle school. But the bilingual department there doesn't teach you to do dual language at a middle school level. [...]

It's aimed for an elementary degree, so I learned to do like bridging and all that at the elementary level, so when I'm up here teaching science all the time, I'm like how do you even do this bridging? Like most of the examples are using bridging doing cognates, and I'm like when I'm teaching science at this level, I can do cognates, but I don't feel that fills the gap or really bridges to an extension." The lack of preparation for their specific teaching context that they received in their certification program explained their motivation for participating in the PD and IC sessions, as well as in other PDs. They told the researcher, "I feel like I don't have the preparation or the training to do a fully dual-language secondary. So that's why I'm trying to learn as much as I can, so I can incorporate these things into my lessons and be able to move in that direction because ultimately that's where I want to move. I want to be able to do true dual language techniques, so that's what I'm hoping for."

Chapter Summary

In sum, this chapter has answered the research question "How do teachers experience PD and IC on fostering students' partner language development?" The teachers who participated in PD and IC showed strong openness and engagement with the process. They were enthusiastic about receiving training on integrating language and content instruction, which is logical as PL development is a key goal of TWI but an area in which all three teachers expressed feeling distinctly unguided. As the teachers engaged in this PD, they showed a consistent reflection on students' language development, which indicated increased consciousness of language and its relationship to academic content. Both teachers also took ownership of the process in different ways and at different times, although this alternated with expressions of insecurity that indicated the need for IC to be ongoing and consistent. Finally, both teachers evoked their own linguistic and educational backgrounds as they engaged with the PD and IC and seemed to experience it

through this distinct, individualized lens. This finding suggests that teachers' own identities, language backgrounds, competencies, and ideologies are at the heart of their ability to develop their students' bilingualism and need to be explored and built upon as a part of the PD and IC process.

CHAPTER 7: CONCLUSION

Discussion of Study's Findings

The findings gathered in this study shed light on the beliefs and practices that TWI teachers evidence in relation to the challenge of fostering PL development, as well as the ways in which these teachers respond to PD and instructional coaching. The present chapter will begin with a discussion of the key findings from each of the previous three chapters.

Chapter 4 showed that the teachers who participated in this study are conscientious and innovative, bringing their resourcefulness and judgment to play in planning for students' PL development. However, as in prior immersion research, one of the key findings is that they need more guidance on how and what to teach. On their own, they demonstrate resourceful and innovative thinking, but this sometimes leads them to conclusions that may not be supported by prior research such as separating language and content, attending to language in a decontextualized fashion, relying exclusively on recasts to provide linguistic feedback to students, and using sociolinguistically inappropriate approaches to correcting HSs' language. In addition, the teachers seemed to see only three options for feedback—avoiding it, recasts, and explicit correction—and they also demonstrated a tendency to believe that only written language needs to be corrected. This indicated a need for the teachers to develop a greater understanding of the history of FFI in immersion research and an increased understanding of the ways that PL instruction can be meaningfully integrated into content instruction.

Another finding of Chapter 4 was that as TWI teachers take on the challenging task of attending to their students' linguistic development practical supports and resources are also necessary. The finding that TWI teachers spend much of their time translating materials is not new: for example, one teacher in Cammarata and Tedick's (2012) study mentioned translating

over 50 pages during the course of the school year. In the current study, Teacher 2 was paying a college student to help them with this arduous task. When asked whether the district knew this was happening and whether they had offered to assist, they said that they were aware but that "there's no one that has said, hey, we have some money; we'll help you with that." This finding is not only troublesome because of the burden that translating places on teachers but also because it casts doubt upon the quality of written input that students receive, as was seen in the review of materials conducted during the first year of this study. If students are to have access to high quality text, then programs need to provide professionally produced Spanish-language materials or pay for highly proficient professional translators to aid teachers in translation. Furthermore, teachers clearly need additional support in the classroom in order to differentiate for their students' diverse linguistics needs, particularly at the middle school level. These findings support prior recommendations for trained instructional assistants (Lindholm-Leary, 2001).

A final important contribution of Chapter 4 is that it provides information on TWI teachers' beliefs and practices as they relate to HSs and L2 learners. As described, prior research has shown that heritage speakers and L2 learners have both different orientations to and abilities with the PL, although overlap exists (Montrul, 2008; Bowles, 2011; Montrul & Potowski, 2007). In addition, teachers have a tendency to devalue HSs' linguistic varieties while simultaneously failing to recognize that they may have other linguistic needs. The teachers in the current study identified very different needs among the two groups of learners. In particular, they generally did not mention any morphosyntactic difficulties among their heritage learners and viewed their linguistics needs as centering primarily on writing mechanics. As briefly mentioned, Young (2016), in her recent classroom intervention study, noted that the teacher she worked with was at first unaware that heritage speakers might have partner linguistic needs beyond literacy, asserting

that they already "have the oral language" (p. 266-267). Nonetheless, after her study was complete, he had a "breakthrough" regarding this topic, realizing that "not only is [language instruction] good for [heritage speakers], and they're excited by the higher language and thinking about it more advanced, but it needs to be direct with them. It needs to be as direct with them as it is with [L2 learners]" (p. 267). The results of the written test in the current study showed that the teachers were correct in their assessment that heritage speakers have fewer morphosyntactic difficulties than L2 learners. However, the results also showed that, unlike recent arrivals and similar to the eighth graders in Potowski's study, they did not reach 100% accuracy on any of the targeted forms. Rather than focusing on morphosyntactic development or other aspects of PL instruction such as vocabulary development, the teachers in this study were more concerned with eliminating uses of Spanglish and stigmatized dialectal variations. Sadly, this perspective has been found to be common among bilingual educators (Román et al., 2019). Such a view represents a sociolinguistically inappropriate approach to PL development that fails to recognize natural linguistic variation or to empower students to consider why some varieties are stigmatized and others given privileged status (Beaudrie et al., 2014; Cervantes-Soon et al., 2017; Leeman, 2018).

Socioculturally, the TWI teachers in this study also viewed their HSs and L2 learners very differently in terms of their home backgrounds and academic preparation, seeing L2 learners as having greater knowledge, work ethic, and home support. A growing field of inquiry involves the educational inequity that may exist in many TWI programs (Cervantes-Soon, 2014; Flores, 2016; Valdés, 1997). For example, Palmer and Henderson (2016) found that the teachers in their study viewed TWI students (combined HSs and L2 learners) as having higher abilities than one-way immersion students who were exclusively HSs. The implications of these findings

in the current study will be discussed in the following section.

In Chapter 5, an analysis of the recordings of classroom observations supported the finding that teachers exercise their own resourcefulness in attending to students' linguistic development. In particular, the teachers were found to have varying strengths in components of instruction likely to facilitate language development. Teacher 1 was adept at providing opportunities for students to produce extended oral output, and they used questioning techniques to promote critical thinking and interaction. Teacher 2 utilized writer's workshop strategies in order to provide individualized feedback on form. Teacher 3 provided students with large amounts of highly accurate oral input and also incorporated plentiful scaffolded opportunities for students to read and write in the PL. On the other hand, all three of the teachers showed similar areas for growth. In particular, they did not seem to specify any intentional objectives related to linguistic form. Likewise, they did not encourage their students to notice or analyze complex, accurate language, and the intentional evaluation of language use was largely absent. While Teacher 2 provided explicit correction and some prompting during their writer's workshop conferences, feedback was otherwise missing from the teachers' observed practices or relegated to recasting that may or may not have been intentionally targeting form. The analysis of the form-focused episodes showed that teachers attended to form in students' speech at a rate of once per hour. This is significantly less than rates of up to once per 1.5 minutes that have been seen in Canadian immersion (Sheen, 2004). The errors observed in their language and the tendency to push form aside to focus on meaning suggested that they were at least partially unaware of what forms may present difficulty for their students and of the benefits of incorporating targeted, integrated attention to these forms.

A positive that was noted during the observations is that the teachers all seemed

accepting of sociolinguistic variation (or at the least, no counterexamples of this were observed), which was favorably inconsistent with the more sociolinguistically inappropriate approaches to correction that they expressed during the interviews analyzed in Chapter 4. Likewise, they also balanced providing protected space for PL development with welcoming and utilizing translanguaging. At times, however, this perhaps could have been done more strategically. For example, when the student in Teacher 1's class asked if they could describe something in English because they did not know how to say it in Spanish, the teacher could have asked them to say what they are able in Spanish and use English for the rest, as has been documented in other classroom research (Ascenzi-Moreno, 2018), although some translanguaging scholars might discourage this practice as constraining students' agency in the use of linguistic resources (Solorza et al, 2019). In addition, the teachers' approach to incorporating translanguaging could have included specific strategies designed to help students leverage their bilingual repertoires such as those recommended in various guides to translanguaging that have been made available online through the City University of New York (CUNY-NYS Initiative on Emergent Bilinguals, 2021).

An interesting finding from Chapter 5 is that, although in the interviews analyzed in Chapter 4 Teacher 3 expressed a belief that L2 learners were stronger than HSs with writing mechanics, the recorded interaction in their classroom between a HS and an L2 learner showed the opposite. In the interview, the teacher stated that "the English speakers have a solid foundation on English writing. I can see it transfer in their Spanish. They write with capital letters. They put punctuation. They follow the usual grammatical things that you *should* when you're writing, and the Spanish speakers write as if they're talking." However, in the recorded interaction, it was the HS who corrected the L2 learner's use of a comma before the word "y," as

well as the missing title to their story. This was in addition to commenting on the L2 learner's incorrect use of the imperfect past tense in their narration (the HS said to their classmate, "Why did you put 'preguntaba'? You should put 'Hayse le preguntó a Camacho.'). This observation is significant because, although the HS in question was a particularly high-achieving student, it still shows the ease with which HSs in general are characterized by deficit perspectives and L2 learners are looked upon more favorably in terms of their academic knowledge. In addition, this interaction shows the implicit morphosyntactic knowledge that HSs possess to varying degrees. Rather than being highlighted and built upon, this asset was largely overshadowed during the PD and IC sessions within Teacher 2's classroom. All of this speaks to the necessity of intentionally maintaining HSs' strengths and needs at the forefront of planning and reflecting on PL development in TWI.

Finally, while differing perspectives on Black and White L2 learners of Spanish did not surface during the interviews conducted during the first year, Teacher 2 expressed some surprise (but also encouragement and positivity) at two African American students' strong use of Spanish during a classroom observation and in a reflection made during an IC session. During the IC session, they also acknowledged that the African American students in their classes seemed to resist speaking Spanish more than the other students. This speaks to the recognized need for more equitable perspectives and practices to be fostered for these learners as well (Palmer, 2010; Scanlan & Palmer, 2009).

Chapter 6 of this study provided a description and analysis of how Teachers 2 and 3 experienced PD and IC on fostering students' PL development. A key finding is that these teachers were incredibly open and enthusiastic about receiving this training, willingly giving up a planning period every week and making room in their curricula for incorporating

counterbalanced lessons. In addition, they each took ownership of the process in different ways, even when also sometimes evidencing insecurity to varying degrees. As the teachers participated in the PD and IC, they showed strong consciousness of their students' language development. Not only did they reflect on the PL patterns that they had noticed in their students in general, but they also reflected on the relationship between the content they teach and language and on how content and language objectives complement each other. In general, they seemed to become more aware of language, as was noted in the question from Teacher 2 about whether *se escribió* or *se escribiera* was the correct form to use in classroom materials they were creating.

As the teachers reflected on students' PL development during the PD and IC sessions, a change was noticed in how they seemed to view the two groups of learners. In the interviews during the first year of the study, the teachers did not identify any morphosyntactic needs among their HSs, instead focusing on problems they saw with the use of Spanglish or issues with writing mechanics. The first PD session included a brief discussion of why sociolinguistic variation is not an appropriate topic for correction. When the teachers filled out a Google survey about future PD afterward, neither of them marked sociolinguistically appropriate approaches to correction as a topic they would like to learn more about. While their motivations cannot be determined from the Google survey, it's possible that the brief coverage in the first PD session was sufficient to change their outlooks and future behaviors as during subsequent PD and IC sessions, the concerns about HSs' use of Spanglish did not resurface. Instead, the teachers' outlooks on HSs' morphosyntactic needs changed significantly, with both teachers tending to express that most of their HSs' morphosyntactic needs were on par with those of their L2 learners and the researcher having to occasionally express concerns that differentiation for more advanced HSs was necessary. This tendency was clearly noticeable when the researcher

expressed such a concern to Teacher 3 before one lesson, and the teacher responded, “I’d rather do it first and see if it’s too easy.” During a subsequent IC session when they were reflecting on whether this had been the case, they stated, “the native English speakers are still struggling with it, so I still have to cover it.” While this is perhaps accurate to some extent (especially if their means of covering it was going to be in a differentiated manner), it nonetheless harkens back to Valdés’s (1997) caution about the potential for the needs of students in TWI settings who are learning the PL to overshadow those of students who come from homes where the PL is spoken (i.e., the needs of English-dominant L2 learners overshadowing those of Latinx bilingual or emergent bilingual students).

Finally, one of the key findings from Chapter 6 was that PD and IC sessions related to fostering students’ PL development caused both teachers to continually evoke their own linguistic and educational backgrounds. For Teacher 3, this recollection was generally positive and allowed them to think about the societal and familial forces that had allowed them to acquire their own exceptionally high level of bilingualism. This helped them make comparisons with their students’ situations and think about the types of instruction or resources that would benefit their students’ PL development. For Teacher 2, their experience evoking their own linguistic and educational background was at times neutral or positive, such as when they discussed how they had helped provide their sister with advice in developing her children’s bilingualism. At other times, however, the experience of beginning to incorporate language instruction evoked vulnerable feelings of inferiority or insecurity about their background. Teacher 2 also frequently showed insecurity with the process of designing counterbalanced instruction, expressing a need for the researcher to take the lead in creating materials until they felt more confident, which is perhaps an effect of having painful feelings about their linguistic background evoked. The most

obvious moment when the researcher could see this was when Teacher 2 asked if they could take the PL test they were planning to give the students. At this time, they expressed a number of statements that indicated they had an internalized deficit orientation to their own bilingualism. Regarding their own Spanish and English, they said, “I don’t feel I’m strong in either/or. And that sucks." When the researcher expressed surprise, they said, “I do think that I need to improve. I don’t know. Maybe I’m just a harsh critic of myself [...] I don’t think I’m good enough in either of the languages.” As they reflected, they did not put all of the blame on themselves but rather recognized that they were hurt by the lack of bilingual education available to them, stating “"I really don’t feel like I’ve been given the chance to be fully bilingual." They also expressed insecurity about accent marks, an area that HSs have previously been found to feel insecure about and want to improve (Mikulski, 2006).

Implications for Teacher Training

The implications of the findings from this study are relevant to bilingual teacher training at both the pre-service and practitioner levels. In particular, the results suggest that TWI teachers need specific training to prepare them for the integration of language and content instruction, as well as sustained support including resources and ongoing embedded PD and instructional coaching from trained professionals.

In general, how practicing teachers should be provided with guidance on integrating language and content is a question that needs to be carefully considered, especially since the degree to which teachers should be involved in curriculum design is debated in general (Handler, 2010). In the past, some researchers have recommended that programs provide teachers with a linguistic syllabus that is planned at the program level and articulated across grade levels (Lindholm-Leary, 2001; Lyster, 1987). Such a syllabus would ideally be aligned to a

comprehensive, standards-referenced curriculum and include supporting materials such as textbooks and online resources. However, such a curriculum would have to be carefully designed to allow teachers flexibility in implementation. As Teacher 3 described, "[students'] needs are so different that if you give me a shake and bake curriculum, it will work with one group and it will miserably fail in another." While the summer workshop that Teacher 1 described participating in did not end up helpful in their view, regular across-level planning and collaboration of this sort is clearly desired and viewed as necessary. In addition, Cammarata and Tedick (2012) recommend that programs employ a curriculum coordinator who can support teachers as they plan and instruct. They furthermore stress the importance of ensuring that administrators themselves understand the process of integrating language and content instruction so that they can guide and evaluate teachers' development of language-specific objectives. A handful of pedagogical frameworks exist that could be useful for balancing language and content in immersion and bilingual classrooms (Beeman & Urow, 2013; Lyster, 2007; Snow et al., 1989; Tedick & Lyster, 2020); however, in the first year of the study, the teachers did not indicate awareness of any of these strategic frameworks. In addition, it appears that teachers would benefit from an increased understanding of prior research on FFI in immersion settings, including guidelines for how to provide feedback (Lyster & Ranta, 1997). The finding of insecurity displayed by both teachers during the PD and IC sessions also speaks to the need for training to be sustained, consistent, and led by knowledgeable, supportive instructional coaches who can work regularly with the teachers.

The finding that the teachers in this study view their HSs as less academically prepared than their L2 speakers and sometimes tend to attend more to their L2 learners' needs has urgent implications for ensuring pedagogical practices related to PL instruction are relevant to and

beneficial for both groups of learners. Writing research outside of immersion education has pointed to the tendency for teachers working with lower income populations to focus on low-level skills such as grammar and mechanics at the expense of more complex topics such as style, voice, and connections to authentic readings (McCarthey & Mkhize, 2013). In a TWI context serving largely low-income heritage speakers, this pitfall must be strategically avoided. Specifically, any attempts to attend to either group's morphosyntactic needs or to foster HSs' skills in writing mechanics should be carefully designed so as not to detract from higher level development (Lindholm-Leary, 2001; Harper & de Jong, 2004; Valdés, 1997). Efforts to expand or refine students' PL development, including in terms of morphosyntax, should also be wary of the misguided view that HSs must attain monolingual-like outcomes, as such a goal would be incompatible with research on the nature of bilingualism (Valdés, 2018). Teachers should also be encouraged to adopt a critical approach that will encourage their students to explore issues of power and (in)equality and how language is inextricably tied to these dynamics (Leeman, 2018).

Unfortunately, because the PD and IC sessions had to end suddenly in the third year of the study, it was not possible to specifically incorporate elements of sociolinguistics or critical language awareness into the teachers' counterbalanced lessons. However, as an example of how these implications could have been applied in Teacher 2's class, in discussing the preterite, dialectal variation could have been critically incorporated. For example, the students and teacher could have explored the use of second person singular preterite forms ending in *-s* (*hablastes*, *vinistes*) including where these forms are used and by whom, what the "standard" alternative is, why these forms developed (logical analogy with other second person forms), and how their use has been historically stigmatized. These forms would not have been presented as incorrect, and the teacher's goal would not have been to erase them from students' speech and writing. Instead,

the teacher could have encouraged students to think critically about the denigration of these forms and the social and political forces that have driven this. The teacher could then have encouraged students' agency in determining which forms they would use by employing a more critical approach than the traditional appropriateness model (Leeman, 2015, 2018). Some students who used these forms would perhaps have chosen to continue to do so in all or most contexts and would thus have been armed with an understanding of their linguistic validity; others might have chosen to begin employing standard forms in specific situations depending on their audience and rhetorical intentions. All students, however, would have been empowered with increased metalinguistic and sociolinguistic understanding of the Spanish past tense and the ability to apply this knowledge in a variety of academic and familiar contexts.

Regarding the pre-service level of teacher preparation, all three of the teachers in the current study were certified through university-based bilingual teacher certification programs; as a result, these findings have implications for the design of such programs. In particular, an important question is whether contemporary versions of these programs are sufficiently tailored to support the goals of DL education (as opposed to transitional bilingual education, which focused primarily on academic success in English) with its emphasis on the development of high levels of bilingualism, biliteracy, and sociocultural competence. The current study suggests that, in order to meet these goals, bilingual education programs need to instill a strong understanding of bilingualism and sociolinguistic variation, give teacher candidates time to reflect on their own language and background, collaborate with world language departments to offer teacher candidates personalized opportunities for PL development, and promote heteroglossic and asset-based outlooks on language development while still incorporating instruction on diverse instructional techniques that will allow teachers to build upon their future students' language in

all areas including morphosyntax, vocabulary, discourse, etc.

Regarding the role of teachers' own linguistic backgrounds in this work, the current study showed that the process of integrating language and content instruction caused teachers to bring their own linguistic and educational backgrounds to mind. For Teacher 2, this revealed deep-seated insecurity, which corresponds with prior research showing that bilingual educators' preparation to teach in the partner language (typically Spanish) often falls short, which leads them to feel uncertain about their abilities to use the language for academic teaching purposes (Guerrero, 1999, 2003a; Zúñiga, 2019). In addition, this teacher's view of themselves as not being strong in either language shows the influence of a view of bilingualism that does not correspond to contemporary, heteroglossic outlooks (Ciriza, 2020; Collins et al., 2019; España et al., 2019; Musanti & Rodríguez, 2020). One implication of these findings is that pre-service teachers should have the chance to explore their linguistic histories and bilingual practices, while at the same time building their knowledge of bilingualism and sociolinguistics. For example, recent scholarship (Collins et al., 2019; Nuñez et al., 2020) has described how bilingual education courses can incorporate opportunities for teacher candidates to explore their own bilingualism and language journeys through narrative writing and autobiographical projects contextualized within asset-based, dynamic conceptualizations of bilingualism.

In addition to providing space for teachers to explore their own linguistic histories and ideologies, it is also important to recognize that many teacher candidates may not, in Teacher 2's words, have "been given the chance to be fully bilingual." As a result, their explorations of bilingualism and their own linguistic and educational histories need to be complemented with opportunities to build upon parts of their PL that may be underdeveloped due to English hegemony in the United States. A number of researchers have begun exploring how bilingual

educators' PL abilities can best be expanded in their pre-service programs. In a body of research spanning over twenty years, Guerrero (1997, 1999, 2003a, 2003b, 2021) and colleagues (Guerrero & Guerrero, 2009, 2013, 2017, 2020) have attempted to tackle the issue of bilingual teachers' preparation to teach in Spanish. This line of research has looked at the issue from a broad, systemic perspective that considers the educational use of Spanish at the K-12, undergraduate, graduate, and professoriate levels as intimately related. These researchers advocate for multiple bilingual education courses to be taught in Spanish and for there to be strong collaboration between bilingual education and world language (Spanish) departments in order to offer courses designed specifically to prepare bilingual educators for teaching in Spanish. Furthermore, these researchers are concerned about the hegemony of English in the field of bilingual education and aim to encourage bilingual teacher educators to elevate the status of Spanish in the field. Guerrero (2021) summarizes:

> There is clearly something wildly amiss when the most learned and critically conscious professors of bilingualism and bilingual education have normalized the use of English as the medium of instruction for the preparation of Spanish-English bilingual education teachers. How can we even begin to understand the Spanish language needs and competencies of our students when our own Spanish language practices and experiences are essentially suppressed and invisible (p. 4).

Specifically, these researchers challenge bilingual education professors to publish articles and classroom materials (e.g., bilingual education textbooks) in Spanish in order to subvert the hegemony of English in the field. They also advocate for national and local transdisciplinary collaboration on how best to develop bilingual teachers' Spanish competencies, including what strategies most effectively meet this goal.

Recently, the topic of effective strategies has been explored by a number of researchers who have described the activities they do in their bilingual education courses in order to build on their teacher candidates' Spanish. Aquino-Sterling (2015, 2016) has emphasized that bilingual teachers' Spanish needs go beyond general language learning to include teacher-specific pedagogical language competencies such as the ability to explain a Spanish Language Arts lesson using content-appropriate vocabulary. In his courses, he designs tasks that allow teachers to practice these skills. For example, in one class his teacher candidates must respond in writing to a hypothetical student's question about the difference between *hiato* and *diptongo* in her learning of how to use accent marks in Spanish. The teacher candidates then receive feedback on the clarity of their expression and metalinguistic knowledge of Spanish. Díaz and Garza-Reyna (2019) describe a series of oral and written activities they incorporate into their Spanish-language bilingual education courses. These activities are similar to those used by other researchers (Collins et al., 2019); examples include oral presentations of lessons, written reflections, language learning narratives, authentic children's literature, timed essays, etc.

Importantly, Diaz and Garza-Reyna (2019) join other bilingual teacher educators (Aquino-Sterling & Rodríguez-Valls, 2016; Collins et al, 2019; Rodríguez-Mojica, 2019; Zúñiga, 2019) in advocating for an approach to developing teachers' Spanish that also honors their existing cultural and linguistic assets and language backgrounds. Specifically, they state that it is important to "take a nondeficit approach, acknowledging and respecting our students' knowledge and language varieties while finding ways of building from their strengths" (p. 113). Some of these educators aim to legitimize regional varieties of Spanish and corresponding vocabulary (*troca*, *nadien*, etc.) that have historically been stigmatized despite their linguistic validity. Others go one step further by making space for teacher candidates to explore their own

linguistic trajectories and to use all of their linguistic repertoire (Spanish, English, or both) in class as they see fit. This welcoming of teacher candidates' translanguaging (García & Wei, 2014) is a growing strategy that can help to honor teacher candidates' linguistic practices and those of their future students and to overcome the linguistic insecurity that other researchers have noted many teacher candidates feel. Researchers who incorporate these practices strive to integrate the authentic development of Spanish oracy and literacy with intentionally making space for the potentially transformative experience of exploring and engaging in translanguaging. Results of some of these courses have shown "increased confidence using Spanish and incorporating Spanish into their instruction and planning," "understanding of translanguaging as a transformative language practice and teaching approach," and a "sense of raciolinguistic ideologies and advocacy of bilingual education" (Collins et al., 2009, p. 11). Zúñiga (2019) summarizes the cumulative effects of this type of approach:

> The healing process is crucial to fully developing one's professional identity and confidence; healing must be synchronized with continued development. We teacher educators must challenge and support our teacher candidates as they identify their linguistic knowledge gaps and move forward. We must also do this for ourselves. In other words, rather than chastise, support; rather than pity and complacency, develop and foster their and our pedagogical Spanish language competence, all the while remembering, of course, that supporting the learning of "pedagogical" Spanish is really about engaging teacher candidates and ourselves in a larger professional socialization where we can all learn to embody a professional identity, its lexicon, and its discourse structures—and also critique its hegemonic failings. This will be important to their and our professional

confidence and to bilingual students' academic achievement (94).

In moving forward, it is critical that multiple areas of teacher preparation continue to be developed. While *The National Dual Language Education Teacher Preparation Standards* (Guerrero & Lachance, 2018) presents a comprehensive guide to DL educator preparation, the present study highlights three aspects in particular that are relevant to PL development. First, attention to the Spanish language skills that bilingual teachers need to successfully foster their students' advanced bilingualism and biliteracy is essential, and, as has been recommended, should occur at all levels of the field. This work should be personalized to attend to the teacher candidates' individual needs. For example, some teachers (for example, high school DL Chemistry teachers) could benefit greatly from the opportunity to study their content in the PL. Many teachers who received their K-12 education in the United States could develop their PL skills through advanced grammar and composition courses. Teachers who are HSs may benefit from courses specifically designed for their needs that follow best practices in heritage language instruction, foster reading and writing skills, and allow for the development of areas such as spelling or mechanics that these teachers may feel insecure about (Beaudrie et al., 2014; Mikulski, 2006). Just as important as this linguistic preparation, however, is the need for this work to occur within the framework of an asset-based, sociolinguistically informed, heteroglossic outlook on bilingualism and translanguaging. This asset-based view is essential to ensuring that bilingual teacher educators and teacher candidates have both the knowledge and the belief in their own abilities necessary to keep building on their own bilingual strengths as well as those of their students. Course work that could help teachers to develop this perspective includes classes on bilingualism, Spanish of the United States, Latinx studies, SLA, and the history of bilingual education. Finally, teachers need to be provided with pedagogical knowledge

specifically related to integrating language and content instruction in the TWI setting. This should include specific techniques such as sheltered instruction strategies and counterbalanced instruction and may rely on a number of resources such as books and rubrics developed for this purpose (Beeman & Urow, 2013; Echevarría et al., 2013; Tedick & Lyster, 2020). Crucially, it should also include linguistically liberating instructional models such as translanguaging pedagogies and critical language awareness. This training will help teachers ensure that their classroom instruction honors and builds upon their students' existing linguistic systems and practices in an additive and affirming manner.

Implications for TWI Guiding Materials

One of the key findings from this study is that TWI teachers want and embrace receiving training, materials, and guidance on integrating language and content. At the same time, they show a tendency, even when they are well-intentioned, to form deficit views about their HSs, whether that be in relation to the latter's academic ability and varieties of Spanish or to their inherent strengths with the PL when compared to L2 learners and corresponding need for appropriately challenging instruction.

These findings have implications for materials and curricular frameworks that guide how language is taught in TWI settings (Beeman & Urow, 2013; Echevarría et al., 2013; Howard et al., 2018; Tedick & Lyster, 2020; Valdés, 2018). To look at a specific and highly relevant example, Tedick and Lyster (2020) recently published a highly comprehensive, research-based guide to fostering PL development in DL and immersion classrooms. They also produced corresponding materials available online that include lengthy (27-page) observation rubrics for preservice and inservice teachers, a self-evaluation rubric also available in the aforementioned text, and a complementary workbook (University of Minnesota, 2022). These materials were

published after the data collection portion of this study, so they unfortunately could not be used as resources during the PD and IC sessions, although the researcher did incorporate some of the components of the self-evaluation rubric into the checklist used for the analysis of observable practices in Chapter 5. In 2021, The University of Minnesota began offering multi-day summer workshops that incorporate the use of these materials (Center for Advanced Research on Language Acquisition, 2022b). In general, they represent a tremendous resource for teachers and, if incorporated into preservice teacher training and inservice teacher PD and coaching, have the potential to largely fill the gap the teachers in the current study described related to guidance on integrating language and content instruction in TWI.

Despite the tremendous potential of these materials and the thoroughness with which the authors incorporated prior research on PL development, the results of the current study suggest that some of these may not be sufficiently responsive to the particular needs of HSs in TWI. In the text of their guide, Tedick and Lyster (2020) do provide some examples of the application of their work, such as a sample counterbalanced unit on preterite and imperfect (117-120), that incorporate differentiation through heterogenous and homogenous grouping, although this is not described in detail. In addition, they provide a list of fourteen "Teacher strategies for equalizing the status of the minority language in ImDL [Immersion and Dual Language] programs" (59) that may help to promote equity for HSs. Notable examples include "expect students to show different strengths in both their languages and avoid seeing minority-language or other students from a 'deficit' perspective," "embrace students' non-standard language varieties as valuable and appropriate in some contexts and expand on these repertoires so that they come to include more standardized forms of the minority and majority languages," "in TWI programs, differentiate language objectives for L1 speakers and L2 learners of the minority language to ensure that L1

speakers are consistently being challenged to grow their proficiency," and "increase awareness of the subtle ways that the minority language can be devalued." While following these strategies is likely to help teachers improve the responsiveness of their instruction to HSs, the strategies could still potentially be refined in subsequent versions to promote greater equity and critical consciousness. First, the authors describe HSs' language varieties as "valuable and appropriate in some contexts." As described in the literature review, the appropriateness model has been questioned by a number of researchers who believe that it fails to sufficiently disrupt inequitable linguistic hierarchies that harm racialized speakers (Flores & Rosa, 2015; Leeman, 2018). In addition, the strategies here refer only to valuing HSs' "language varieties" and make no mention of the *practices* that they as bilingual speakers naturally engage in. The authors' perspectives on translanguaging will be further addressed below.

Even more important than the slight tweaks to these strategies that may make them more equitable is the fact that they were largely left out of the comprehensive rubrics that the authors created to guide preservice and inservice DL and immersion teachers in scaffolding students' PL development. For example, the Self-Assessment Rubric does address differentiation and equitable classroom dynamics, including the items "I differentiate objectives for a range of proficiency levels and learner characteristics" and "I employ inclusive pedagogical practices that position **all** students as knowledgeable and capable in the classroom and that promote equitable classroom discourse." However, the rubric makes no mention of avoiding deficit perspectives, embracing non-standard language varieties, or increasing understanding of the ways that the PL language (or bilingual practices) can be devalued. Considering the deficit perspectives that teachers of HSs, including TWI teachers, have been shown to easily fall into (Beaudrie et al, 2014; Flores & Rosa, 2015; Palmer & Henderson, 2016), the checklist that was provided to

teachers during the PD portion of the current study included points designed to meet these needs. In particular, it asked if the teacher "shows respect for language diversity and variation, including students' home language varieties, and encourages student agency in selecting desired forms" and if the "language objectives are differentiated to meet the needs of individual students & groups of students (Spanish home language, etc.)" (Appendix E). Chapter 6's findings that focusing instruction on language corresponded with an increased tendency for the teachers to lose sight of their HSs' linguistic strengths reaffirms the need for materials designed to guide TWI teachers to maintain equity for minoritized PL speakers at the forefront.

In addition to not specifically mentioning respect for linguistic variation or strategies for incorporating critical language awareness, the materials produced by Tedick and Lyster (2020) reflect their "concerns about the use of the majority language (English) during instructional time in the minority language in ImDL classrooms" (which they support in their text through ten well-researched and explained "counter-arguments to translanguaging pedagogies" [64]) in that they provide guidance for protecting the PL in DL and immersion classrooms but do not make room for the inclusion of translanguaging practices. The components of the self-evaluation rubric that seem aimed at protecting PL space state "I use the target language while teaching and communicate clear expectations for students to remain in the target language exclusively (or primarily)" and "I remain exclusively (or primarily) in the target language while making cross-lingual connections explicit." While the desire to fight against English hegemony and protect PL development is admirable and justified by prior research, the benefits of translanguaging pedagogies are now widely recognized in the bilingual education field even in mainstream publications (Howard et al, 2018). Tedick and Lyster (2020) themselves state that "We also find that ImDL educators are confused by the support for translanguaging that is so prevalent in the

literature, at conferences, and, increasingly, in professional development offerings" (64). In light of this, it seems a more prudent approach to translanguaging in materials designed for TWI teachers would be to encourage its strategic and critical incorporation (Ascenzi-Moreno, 2018; CUNY-NYS Initiative on Emergent Bilinguals, 2021; Hamman 2018; Palmer et al, 2014) rather than aim to simply reduce it. While a balanced approach to welcoming translanguaging and providing protected space for the PL was not included in the checklist used with the teachers in the PD sessions (Appendix E), it was subsequently added to the expanded checklist used for the analysis of observable practices in Chapter 5 (Appendix H).

Overall, for bilingual educators working in TWI who choose to build upon research and materials originally designed for the L2 immersion context, it is essential to incorporate criticality and for the needs of minoritized and racialized speakers of the PL to be centered (Cervantes-Soon et al., 2017; Flores, 2016). As mentioned in the literature review, some bilingual education scholars question the appropriateness of building upon work designed for L2 learners or consider theories and approaches developed within mainstream SLA, instructed second language acquisition, and instructed heritage language acquisition to be outdated or unsuitable for HSs in TWI programs. While the current study does not share that view and finds value in the decades of empirical research that have stemmed from these fields, the questions that these researchers pose are nonetheless important, as they can help others of us more closely examine assumptions and practices that may have originated within monoglossic, sociolinguistically inappropriate, or otherwise inequitable contexts and make adaptations and revisions as necessary so that greater equity can be achieved.

Limitations

The main limitation of the current study is the relative inexperience of the teachers and/or

the newness of the TWI program where they teach. While one of the teachers listed nine years of immersion experience (including developmental bilingual education and teaching English immersion abroad), the first year of the study was also the first year their school had received TWI students. The other two teachers were in their second year of teaching at the start of the study. This inexperience is likely a big part of why the teachers were still figuring out how to best serve their students. Nonetheless, the teachers' inexperience can also be seen as an advantage of this study in that it gives insight into the process through which teachers arrive at their understandings of how to integrate language and content in TWI settings and how they respond to small group and individualized PD. That is, while a survey of teachers with multiple years of experience in a TWI program would perhaps paint a different picture, it would also leave out the process of arriving at more permanent practice and fail to capture the educational experiences of students who are in a program as it is developing. Considering that the TWI model is continually growing in popularity, the practices that are common in early stages of implementation are important to understand. As noted, all three of these teachers had completed state certificate programs in bilingual education, so the results of the study give one snapshot of the level of preparedness and direction that these certificate programs provide. In addition, the relative inexperience of the teachers might mean that their existing beliefs and practices are less entrenched and thus amenable to evolution and growth through effective PD.

Another limitation of the current study is the number of participants. Although small participant groups are typical of qualitative case studies, a larger number of participants would provide greater insight into the themes that emerged from this study and perhaps allow additional patterns to surface as well. The three participants included in this study were also all bilingual beginning sometime in early childhood. The perspectives of teachers who grew up

monolingually in either Spanish or English might yield different beliefs and perspectives about how bilingualism develops based on teachers' own experiences. Similarly, the current study relied on an online survey and interviews with the teachers for data during the first year of the study. Triangulation from another source such as stimulated recall of classroom practices or focus group feedback would allow for a more nuanced understanding of the results.

Finally, an important limitation of the current study is the relatively short-term nature of the PD, which was compounded by the need to end data collection suddenly in the third year. Previous work has shown that multiple years may be necessary for teachers to begin to truly absorb the learning gained through PD (Garcia & Lang, 2018). In addition, the timing of the sudden end to the project made it impossible to include important work involving critical language awareness. It would be informative for future research exploring PD and IC on integrating language and content instruction to incorporate this work.

Conclusion

The results of this study add to previous research findings on immersion teachers' beliefs and practices surrounding language and content instruction. They suggest that TWI teachers are resourceful and thoughtful professionals who, if empowered with necessary resources and guidance, can be instrumental in advancing PL development, one of the principal areas in which these otherwise highly successful programs have room to more completely meet their students' needs. Nonetheless, the results also show that teachers' beliefs about their HSs' PL abilities and academic preparedness may not always be sociolinguistically appropriate or accurate and that teachers' incorporation of intentional language instruction may exacerbate existing inequities. In addition, teachers' own linguistic and educational backgrounds play a strong role in how they experience PD on language and content integration, which brings up the need for these to be

explored and developed in preservice teacher preparation and inservice PD contexts. Overall, the study confirmed the importance for teachers of receiving explicit training and resources related not only to PL instructional strategies but also to developing asset-based, sociolinguistically appropriate instruction that can serve their L2 learners and HSs equitably.

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APPENDIX A: BILINGUAL PROGRAM TEACHER QUESTIONNAIRE

(Starred items were taken or modified from Lindholm-Leary, 2001)

*What is the total number of years of general teaching experience that you have? ____ years

*How many years have you taught in a bilingual classroom? _____ years

*How many years have you taught in the bilingual program at your current school? ____years

*What is your role in the bilingual program?
___ Teach in Spanish only
___ Teach in English only
___ Teach in English and Spanish

*What do you believe are the bilingual program's greatest strengths and weaknesses in your school?

Which of the following best describes your language background?
- Spanish-speaking during childhood
- English-speaking during childhood
- Bilingual during childhood
- Other

Please elaborate if you chose "other" for the previous question.

What is your overall proficiency in Spanish?
- Excellent/native
- Very advanced
- High intermediate or advanced
- Intermediate
- Basic

What is your overall proficiency in English?
- Excellent/native
- Very advanced
- High intermediate or advanced
- Intermediate
- Basic

What grade do you currently teach?

***Please indicate the extent to which you agree or disagree with the following statements. *Please answer as carefully and truthfully as you can, as there is not a particular right or wrong answer; many responses may vary a lot by grade level.**

1. In the immersion classrooms at my school, students learn language at the same time they learn content.
2. Speaking and using both languages is valued at my school.
3. Most students who complete the immersion program at my school will graduate speaking excellent (nativelike or near-nativelike) English.
4. Most students who complete the immersion program at my school will graduate speaking excellent (nativelike or near-nativelike) Spanish.
5. I focus primarily on content and academic skills in my classroom.
6. *I rarely or never explain points of grammar to my students.
7. *I fairly often, but not always, correct students' grammatical errors.
8. *I accept all students' attempts at communication even if they are expressed incorrectly.
9. We have developed content and academic objectives by grade level for the bilingual program.
10. *We have developed language objectives by grade level for the bilingual program.
11. *I have developed specific language objectives that I incorporate into content.
12. *I develop activities to address consistent language errors that students make.
13. When I teach my classes, I speak naturally in Spanish.
14. The immersion program at my school benefits students from English-speaking homes and Spanish speakers equally.
15. *I correct students' pronunciation errors.

Answer the following questions in your own words. Any supporting details you can provide will be very helpful.

1. What types of problems with Spanish grammar do your students from English-speaking homes typically have? Please consider both their speaking and writing.
2. What types of problems with Spanish grammar do your students from Spanish-speaking or bilingual homes typically have? Please consider both their speaking and writing.
3. Do you believe that explicit attention to grammar is necessary in a bilingual classroom? Why or why not?
4. What activities (if any) do you include in your class in order to improve students' language or address their errors?
5. Do you have any additional comments, questions, or observations you believe may be useful?

Thank you for your participation!

APPENDIX B: FFI COLLABORATIVE QUESTIONNAIRE

(Adapted from Ellis, 2001)

Activity	Frequency	C/D*	Target Forms
Type 1 – Primary focus on form and intensive treatment on preselected forms			
Explicit instruction (deductive)			
Inductive rule learning			
Memorization of models			
Structured input/processing instruction			
Pattern practice			
Functional language practice			
Type 2 – Focus is on meaning but there is still an intensive focus on preselected forms			
Input flood			
Input enhancement			
Focused communicative tasks			
Type 3 – Attention to a wide range of forms that have not been preselected			
Pre-emptive focus-on-form—brief timeout during teaching when you think there will be a problem			
Implicit negative feedback (recasts)			
Prompts/Elicitation			
Explicit negative feedback			
Metalinguistic feedback			

*C/D = Contextualized/decontextualized
Frequency = 4 regularly, 3 occasionally, 2 a few times, 1 once, 0 never

Figure 4: FFI collaborative questionnaire

APPENDIX C: SAMPLE ITEMS FROM WRITTEN SPANISH TEST

(Starred items taken or adapted from Potowski, 2007)

Parte 1

Completa las siguientes oraciones en español. ***[Complete the sentences in Spanish.]***

1. *En la escuela no me gusta que los maestros... *[In school, I don't like teachers to...]*
2. *Si los maestros no dieran nada de tarea, nosotros... *[If teachers didn't give any homework, we...]*
3. *Mi mamá siempre me pide que... *[My mom always asks me to...]*
4. *Voy a estar feliz cuando... *[I will be happy when...]*

Escoge la palabra correcta y dibuja un círculo alrededor de ella como en el ejemplo.
[Choose the correct word and draw a circle around it like in the example.]

"El patito bobo" (from *High Five Bilingüe*)

Había una (vez / tiempo) un patito al que le (*encantó / encantaba*) nadar en el lago.
Se (*pasó / pasaba*) todo el día salpicando, chapoteando y buceando.
Pero un día, (*aparecieron / aparecían*) unas nubes oscuras y (*empezó / empezaba*) a llover.
--*¡Cuac!* – (*gritó / gritaba*) el patito mientras (*nadó / nadaba*) hacia la orilla tan rápido como (*pudo / podía*).
--¿Qué pasa? –(*preguntaron / preguntaban*) sus amigos.
--¡Está lloviendo! –dijo el patito bobo--. ¡No me quiero mojar!

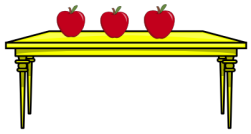
"The Silly Duck"

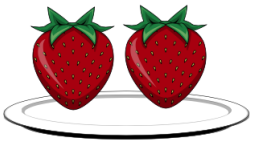
Once upon a time, there was a duck who loved to swim in the lake. He spent all day splashing and swimming underwater. But one day, some dark clouds appeared and it began to rain. "Quack," screamed the duck as he swam to shore as quickly as he could. "What's going on?" asked his friends. "It's raining," said the silly duck. "I don't want to get wet!"

Instrucciones: Escribe una oración completa para describir cada imagen. Asegúrate de mencionar el color *principal* de todos los objetos en tu descripción. ***[Instructions**: Write a complete sentence to describe each image. Be sure to mention the main color of all the objects in your description.]*

Ejemplo: **El oso café está en la silla café.**

[Example: ***The brown bear is in the brown chair.]***

1.  _____

2.  _____

¿Escribiste una oración completa para cada dibujo? ¿Mencionaste el color *principal* de cada objeto en tu oración? ¡Muchas gracias! *[Did you write a complete sentence for each drawing? Did you mention the* main *color of each object in your sentence? Thank you!]*

Parte 2 (Given to 6th graders only)

Traduce las siguientes oraciones al español. *[Translate the following sentences to Spanish.]*

1. *Penelope likes Tom.

   _____

2. *Eighth graders like good teachers.

   _____

APPENDIX D: PD STANDARDS, TOPICS, AND AGENDA

Standards from The National Dual Language Education Teacher Preparation Standards (Guerrero & Lachance, 2018)

- 3.1.b The candidate is able to develop integrated (and ideally thematic) lessons that are based on a combination of academic and language/literacy standards as well as guiding principles for sociocultural development.
- 3.3.d The candidate demonstrates pedagogical practices that support students' use of grammatical, pragmatic, discourse, and metalinguistic competencies, with ample opportunities for structured and unstructured language production in both the partner language and English.

Topics

- PL Development in DL/TWI
- Counterbalanced instruction
- Reacting to errors
- Challenging forms
- Heritage language learners and heritage language instruction
- Sociolinguistically informed approaches to correction
- Differentiation

Agenda

- Presentation/discussion of key topics
- Analysis of sample counterbalanced lesson plans (Lyster, 2016) and teacher-led discussion of how these are designed
- Analysis of checklist of partner language development strategies (Selected and modified from Fortune, 2014)
- Discussion of how teachers would like to continue with PD sessions
- Online survey

APPENDIX E: IMMERSION AND HERITAGE GRAMMATICAL DEVELOPMENT TEACHING STRATEGIES CHECKLIST

(Selected and adapted from Fortune, 2014)

Well Represented: A key component of the lesson design or occurs spontaneously on multiple occasions (3+) during the lesson.
Evident: Occurs 1-2 times during the lesson.
Not evident: Not observed during the lesson or counter-evidence

Teacher _____ Date _____ Period _____ Grade _____ Class _____

The two-way immersion teacher:	Well Represented	Evident	Not Evident	N/A
1. Specifies content-obligatory and content-compatible **language** objectives for each lesson/unit				
2. Language objectives are differentiated to meet the needs of individual students & groups of students (Spanish home language, etc.)				
3. Evaluates language for each lesson/unit				
4. Attends to errors in both oral and written language				
5. Shows respect for language diversity and variation, including students' home language varieties, and encourages student agency in selecting desired forms.				
6. Uses a variety of effective feedback techniques including elicitation, metalinguistic clues, clarification requests, repetition, recasts, explicit correction, and non-verbal cues				
7. Differentiates between feedback on form versus meaning, e.g., "I like that idea. How might you say it more precisely?"				
8. Creates opportunities and activities to assist students in noticing and producing accurate language in oral and written from				
9. Models accurate use of oral language				
10. Models accurate use of written language				
11. Plans for and employs questioning techniques that encourage extended discourse and foster higher-order thinking.				
12. Uses output-oriented activities such as role plays, simulations, drama, debates, presentations, etc.				
13. Provides learners with opportunities to interact and communicate spontaneously in the minority language.				
14. Makes use of a variety of interactive groupings such as dyads, think-pair-share, small groups, etc.				
15. Promotes learning from and with peers, e.g., peer editing, peer tutoring				

Comments:

Figure 5: Immersion and heritage grammatical development teaching strategies checklist

APPENDIX F: ONLINE PD SURVEY

Which of the following topics did you find most useful? (Check all that apply.)
Check all that apply.

- Counterbalanced instruction
- Ways to react to errors
- Sociolinguistically informed approaches to instruction
- Immersion teacher strategies checklist for language development
- Seeing example lesson plans of counterbalanced instruction
- Learning about what language forms students struggle with

Are there any topics you did NOT find useful? (Check all that apply.)
Check all that apply.

- Counterbalanced instruction
- Ways to react to errors
- Sociolinguistically informed approaches to instruction
- Immersion teacher strategies checklist for language development
- Seeing example lesson plans of counterbalanced instruction
- Learning about what language forms students struggle with

Which of the topics would you like to learn more about? (Check all that apply.)
Check all that apply.

- Counterbalanced instruction
- Ways to react to errors
- Sociolinguistically informed approaches to instruction
- Immersion teacher strategies checklist for language development
- Seeing example lesson plans of counterbalanced instruction
- Learning about what language forms students struggle with

Which of these additional activities would you find useful? (Check all that apply.)
Check all that apply.

- Help planning a counterbalanced lesson (language lesson) in one of your classes
- Coaching on the language feedback you provide students
- Coaching on providing more opportunities for students to produce the partner language
- Coaching on differentiation for different groups of students (heritage speakers)
- Coaching on creating learning objectives that correspond with a content lesson
- Coaching on sociolinguistically appropriate feedback
- OTHER

Do you have any other comments on the PD? For example, are there concepts you find hard to apply to your own classes? Things that didn't make sense for you? Things you found particularly helpful? Are there any other topics you would like to discuss?

Thank you for your time!

APPENDIX G: TIMELINE FOR PD AND COACHING SESSIONS

Table 6. Timeline for PD and coaching sessions

Date	Participants	Description
4-3-19	Teachers 2 and 3	● PD Session 1: Introduction to Balancing Language and Content in Dual Language
8-1-19	Teacher 2	● Discussing context, form, and potential data
8-28-19	Teacher 2	● Continued discussion of context and form
9-3-19	Teachers 2 and 3	● PD 2 Session 2: Writing Language Objectives and the CAPA sequence
9-13-19	Teacher 3	● Initial coaching meeting
9-20-19	Teacher 2	● Counterbalanced worksheet ● Continued discussion of context, form, and data
9-26-19	Teachers 2 and 3	● Discussion of pretest, differentiation, contextualization, and awareness with Teacher 2 ● Discussion of contextualization and differentiation with Teacher 3
10-1-19	Teachers 2 and 3	● Refinement of Teacher 3's lesson based on researcher feedback and teacher observation ● Planning of CAPA sequence for Teacher 2
10-8-19	Teacher 2	● Continued planning of CAPA sequence ● Planning of additional lessons (transition words, etc.)
10-15-19	Teacher 3	● Planning of implementation of Teacher 3 lesson ● Connection to future learning objectives
10-18-19	Teachers 2 and 3	● Review of student data from science class lesson ● Review of CAPA plan
10-25-19	Teachers 2 and 3	● Look at more science data
11-12-19	Teacher 3	● Debriefing of science CAPA lesson ● Discussion of next steps
12-3-19	Teachers 2 and 3	● Continued debriefing of science CAPA lesson ● Discussion of final assessments
12-10-19	Teacher 2	● Debriefing of social studies CAPA lesson ● Discussion of next steps
1-7-20	Teachers 2 and 3	● Continued debriefing of social studies and next steps ● Setting date for next PD

APPENDIX H: DUAL LANGUAGE PARTNER LANGUAGE DEVELOPMENT STRATEGIES CHECKLIST

(Selected and heavily adapted from Fortune, 2014)

Well Represented: A key component of the lesson design or evident to a significant degree
Evident: At least partially evident or occurring sporadically
Not evident: Not observed during the lesson or counter-evidence

The two-way immersion teacher:	Well Represented	Evident	Not Evident	N/A
1. Provides plentiful opportunities for students to listen to and comprehend auditory input in the partner language				
2. Provides plentiful opportunities for students to read and understand text in the partner language				
3. Ensures auditory and written input is accurate, varied, and appropriately compelling and complex				
4. Provides scaffolds to aid comprehension of auditory and written input when necessary				
5. Incorporates opportunities for students to produce oral output through varied activities such as role plays, drama, debates, presentations, etc.				
6. Incorporates opportunities for students to produce written output through varied activities such as journaling, expository and persuasive writing, dictation, creative writing, etc.				
7. Creates opportunities for students to interact and communicate spontaneously in the partner language				
8. Provides scaffolds to aid production of oral and written language and increase accuracy and complexity				
9. Specifies content-obligatory and content-compatible language objectives for each lesson/unit				
10. Differentiates language objectives to meet the needs of individual students & groups of students (Spanish home language, etc.)				
11. Creates opportunities to assist students in noticing accurate, complex language in oral and written form				
12. Evaluates language for each lesson/unit				
13. Provides feedback on development and accuracy of both oral and written language				
14. Shows respect for language diversity and variation, including students' home language varieties, and, when appropriate, encourages student agency in selecting desired forms				
15. Uses a variety of effective feedback techniques such as elicitation, metalinguistic clues, clarification requests, repetition, recasts, explicit correction, and non-verbal cues				
16. Differentiates between feedback on form versus meaning, e.g., "I like that idea. How might you say it more precisely?"				
17. Incorporates activities that help students build metalinguistic and cross-linguistic awareness				
18. Includes activities that build students' sociolinguistic and critical language awareness				
19. Judiciously balances providing protected space for the partner language with welcoming and leveraging translanguaging practices				
20. Plans for and employs questioning techniques that encourage extended discourse and foster higher-order thinking				
21. Makes use of a variety of interactive groupings such as dyads, think-pair-share, small groups, etc.				
22. Promotes learning from and with peers, e.g., peer editing, peer tutoring				

Adapted from: http://carla.umn.edu/immersion/checklist.pdf **Comments:**

Figure 6: Dual language partner language development strategies checklist

APPENDIX I: ELEMENTARY TEXTBOOK SERIES READING

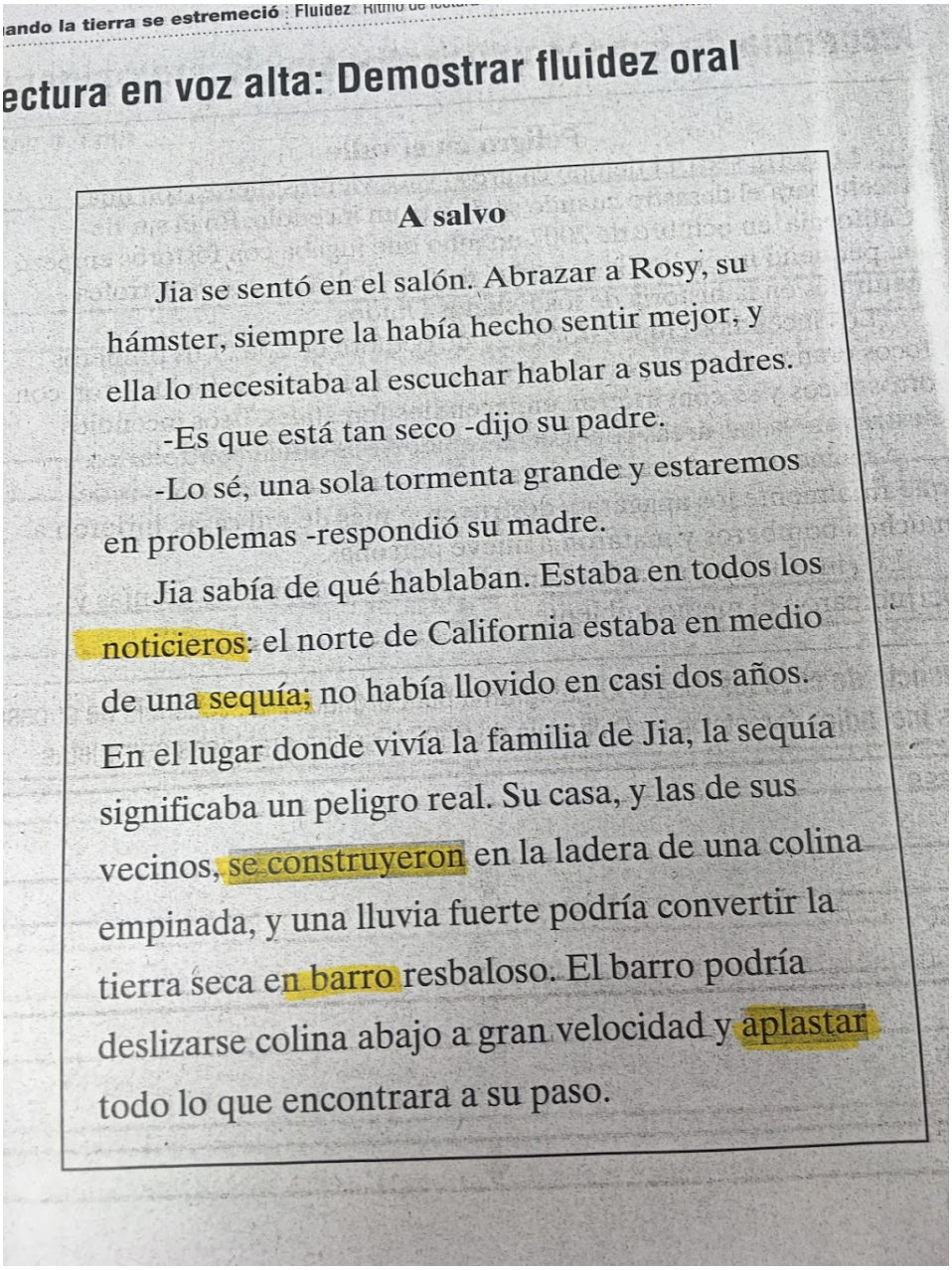


Figure 7: Elementary textbook series reading

APPENDIX J: SOCIAL STUDIES READINGS

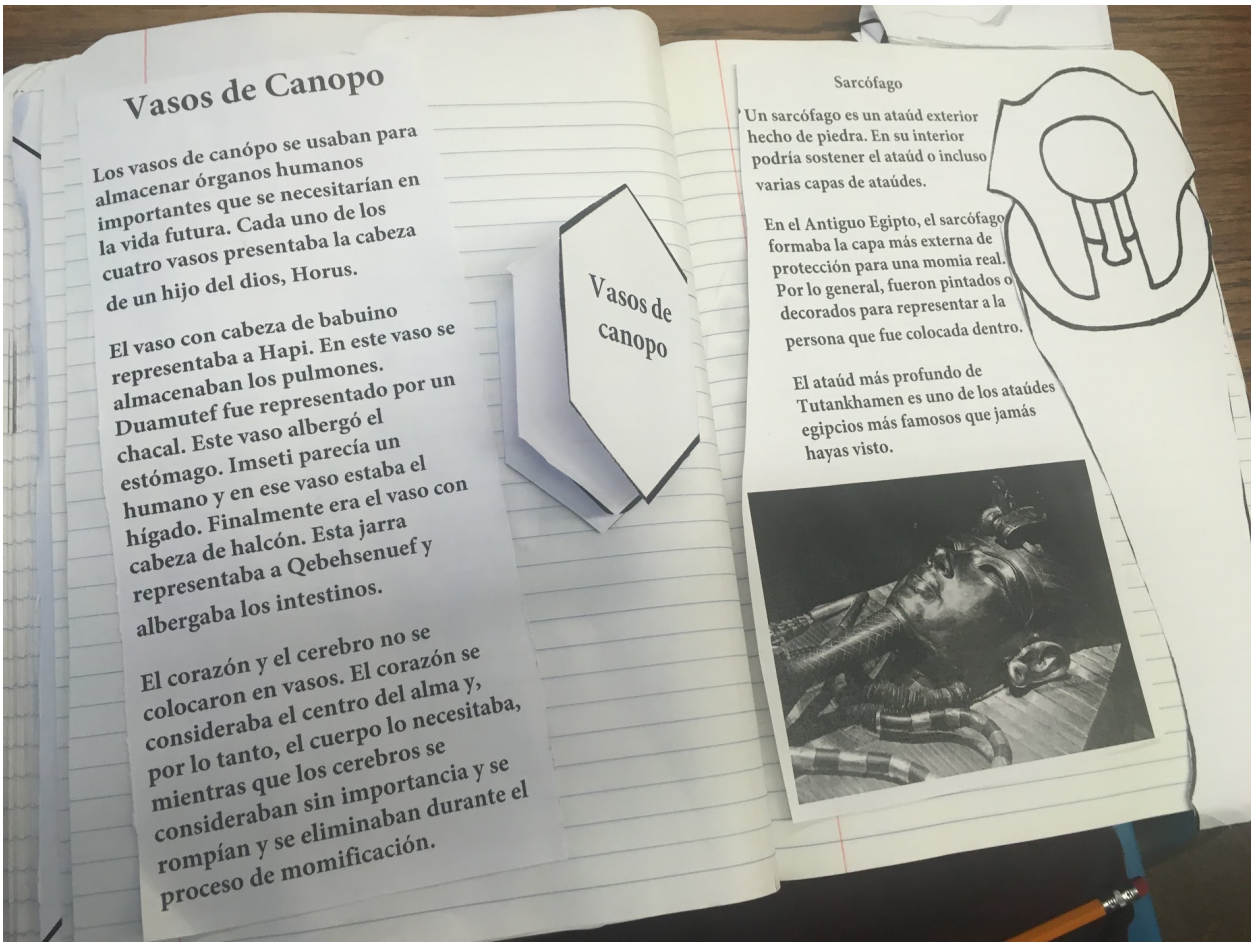


Figure 8: Social studies reading 1

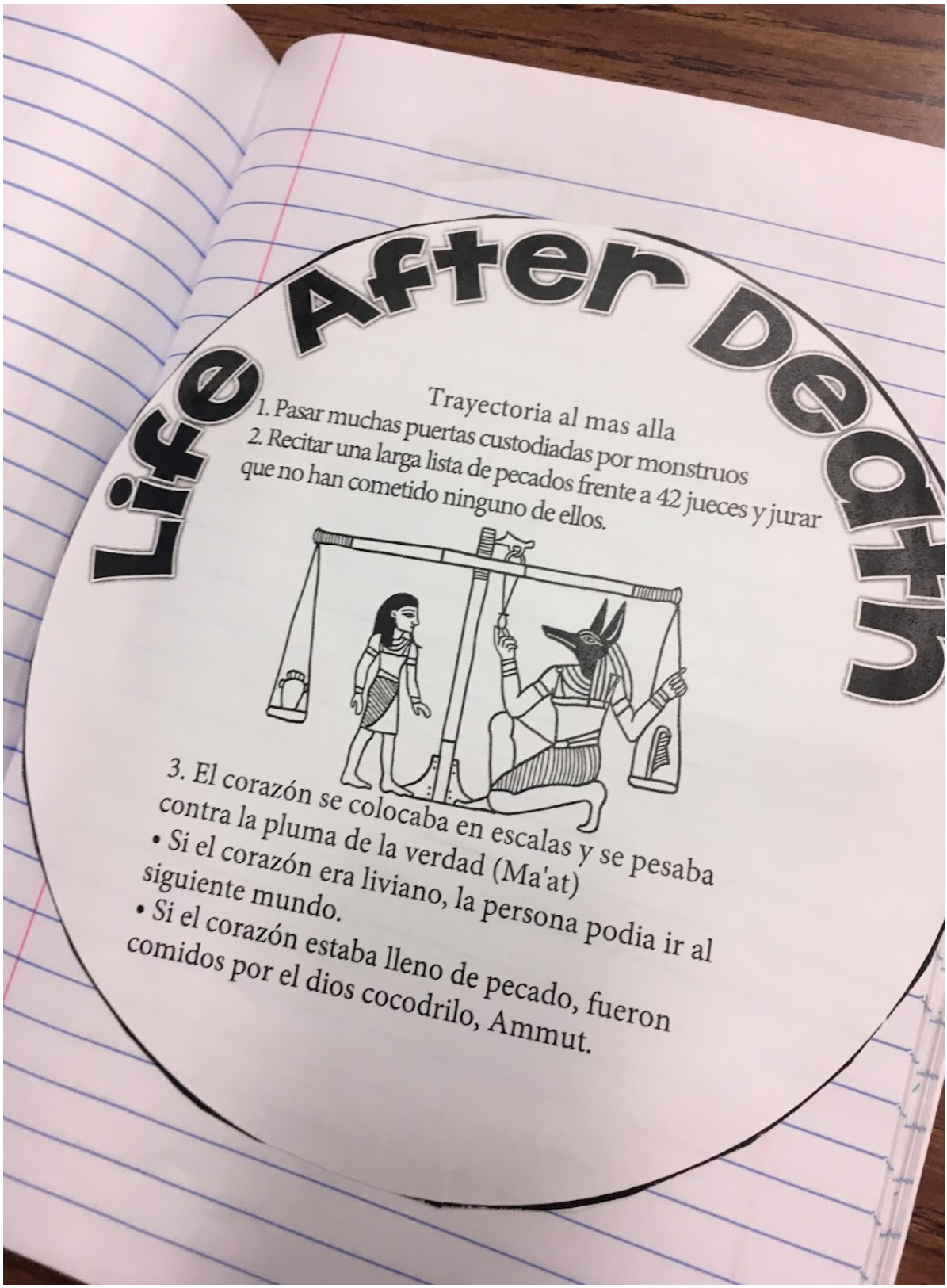


Figure 9: Social studies reading 2

APPENDIX K: PARTNER LANGUAGE BOOKS FOR FREE READING

Figure 10: Partner language books for free reading

APPENDIX L: ANCHOR CHART IN CLASSROOM

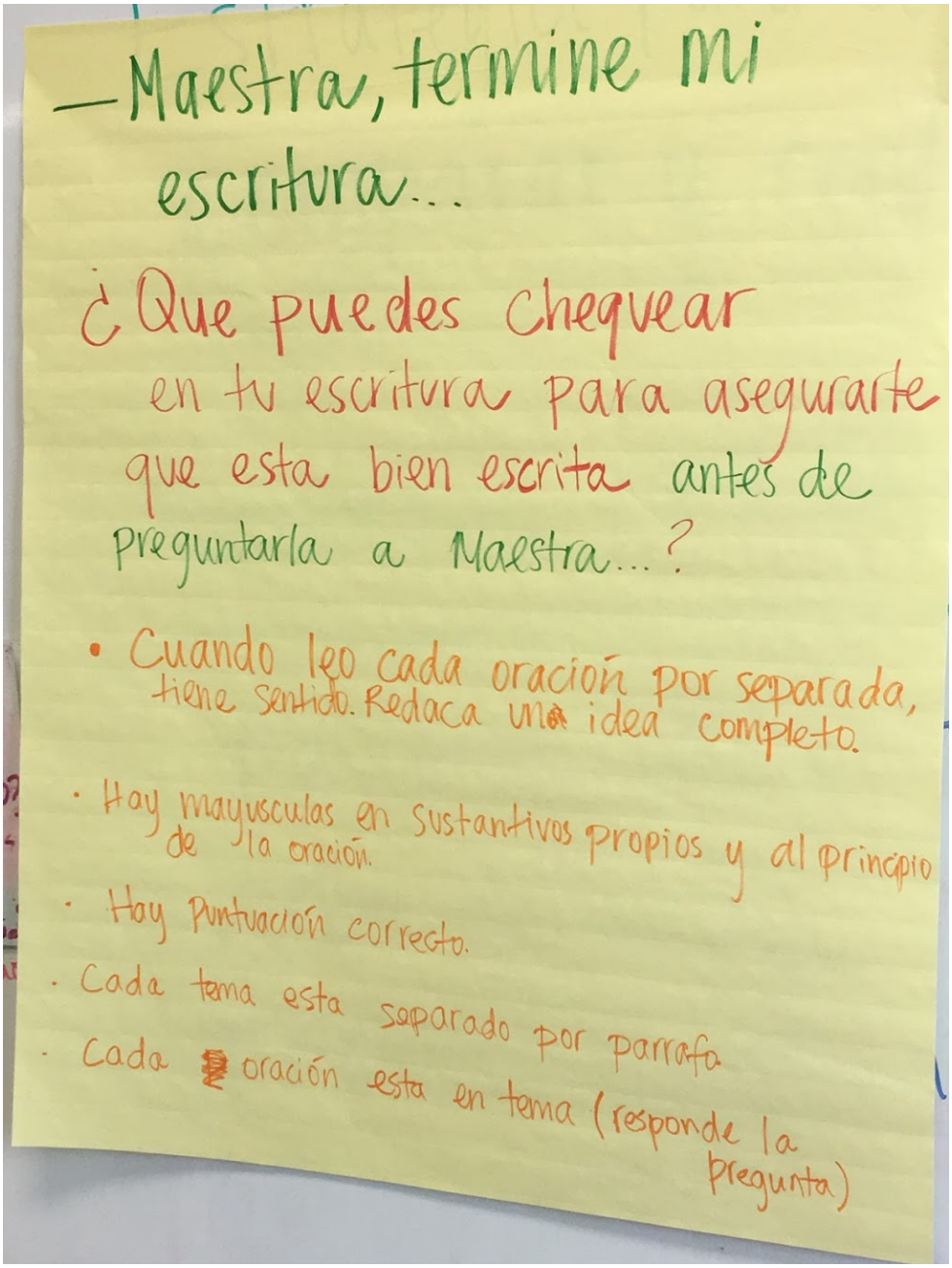


Figure 11: Anchor chart in classroom

APPENDIX M: DAY'S INSTRUCTIONS ON PROJECTOR SCREEN

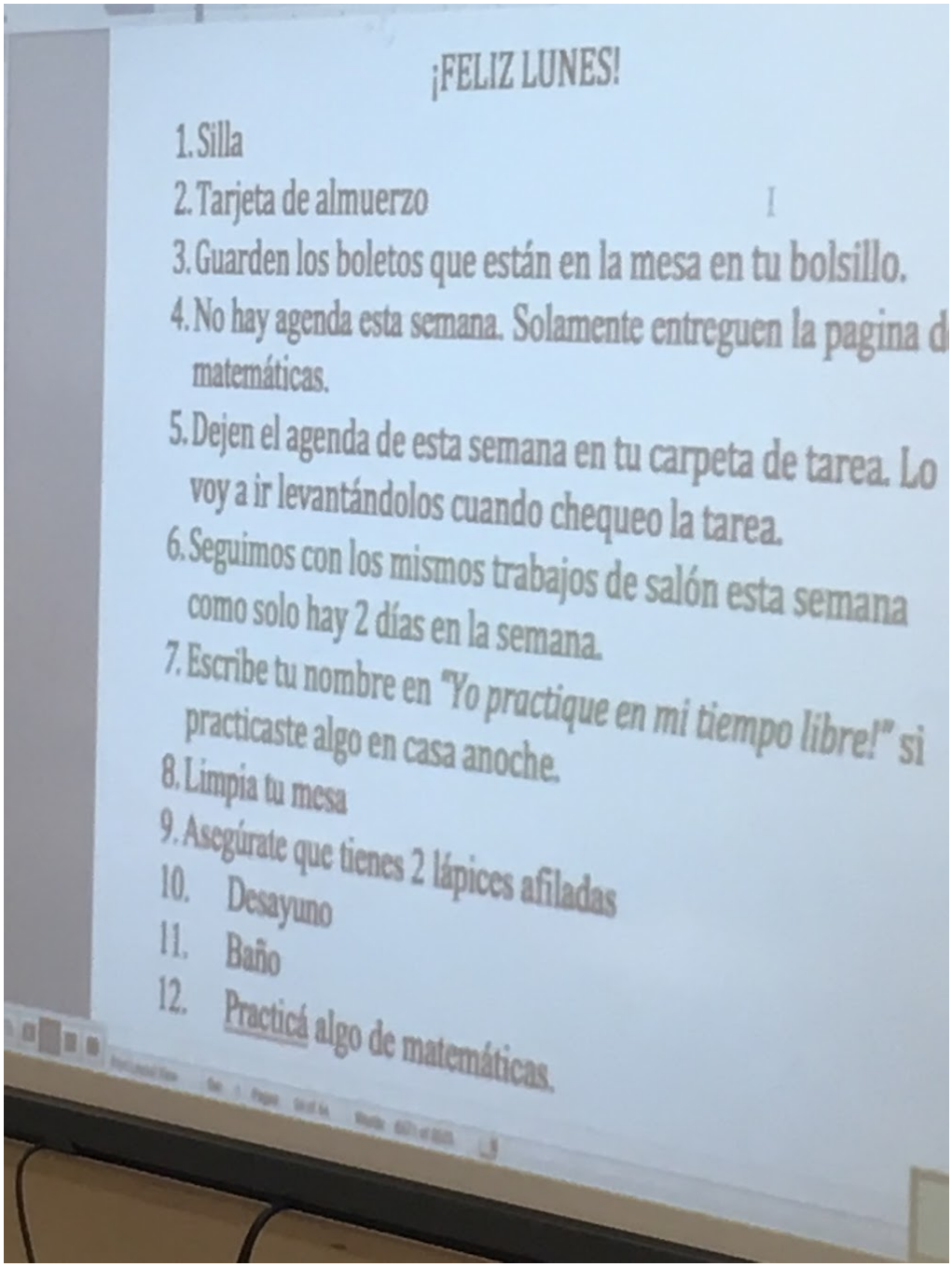


Figure 12: Day's instructions on projector screen

APPENDIX N: SAMPLE SOCIAL STUDIES COUNTERBALANCED LESSON

Translated from the following source:

https://mcgill.ca/etsb/

Joint project with ETSB-McGill: Counterbalanced approach in social studies and FSL

Counterbalanced Lesson Plan in Social Studies and French as a Second Language

Name of Lesson Plan: The Evolution of Streetcars in Montreal

Target grade level: 6th grade

Teacher name: Louise Boudreau

Email address: boudreaul@edu.etsb.qc.ca

School name: St. Francis Elementary School

Content Objectives

- familiarize students with the first streetcars in Montreal and their evolution from horse-drawn to electric streetcars
- highlight the events that made it possible for students to compare past and present modes of transportation in urban centers

Language Objectives

- encourage students to notice the descriptive function of the imperfect
- provide students with opportunities to use the imperfect to describe what the first streetcars were like

Noticing Activity: From the Oldest to the Newest Streetcars
Using eight images of streetcars, students work in teams to classify them in order from oldest to most recent while explaining their choice. Then, as a large group, they read a text on tramways (below), identify the main points, and discuss them.

In the 1860s in Montreal, the first streetcars **were** horse-drawn cars—that is, cars pulled by horses along rails installed on public roads.

This means of transportations **was** fairly expensive. The driver himself went around collecting the passage fares.

However, streetcars pulled by horses **caused** many problems:

-The wagons full of passengers **were** getting heavier and heavier for the horses to pull, especially for their ribs.

-In winter, the horses **suffered** from sores on their hooves caused by the salt spread on the

streets.
-The number of passengers **was** constantly growing.
-Street cleaning **was** also a problem because they **had** to pick up the horse excrement.

The first electric streetcars made their appearance in Europe at the beginning of the 1880s. In Montreal, people **were** reluctant to install electric streetcars because this **required** many horses to be returned to pasture.

The first electric streetcar in Montreal, the Rocket, was put in service in 1892. The network was fully electrified two years later as Montreal and its territory **grew**.
Adapted by Louise Boudreau from the website:

http://ville.montreal.qc.ca/portal/page?_pageid=2497,3090490&_dad=portal&_schema=PORTAL http://www.stm.info/fr/a- propos/decouvrez-la-STM-et-son-histoire/histoire/histoire-des-tramways

Awareness Activity: Singular or plural imperfect?
In a large group, students are asked to identify the words in bold and then discuss the form and meaning of the imperfect. Finally, in small groups students classify the verbs according to their number (singular or plural).

Guided Practice: Streetcar Descriptions
In groups of three, students write a short text describing one of the 8 streetcars and using three different imperfect verbs (for example, "This streetcar operated in Montreal. It ran on iron rails and had around 40 to 46 seats.") The students present their descriptions to the class, which allows the teacher to give them corrective feedback on their use of the imperfect.

Independent Practice: Creating Posters
Students work in groups to complete a research project about one of the streetcars. Using an annotated and illustrated poster, each group will present its streetcar to the class. As there is no presentation on the same streetcar, together they will show the evolution of streetcars in Montreal from the end of the 19th century to the beginning of the 20th century. Students must describe the streetcar just as it was when it was in service, so they need to use the imperfect to complete this task.

APPENDIX O: SAMPLE SCIENCE COUNTERBALANCED LESSON

What would a space colony be like? 7th grade

Translated from the following source:

Lyster, R. (2016). *Vers une approche intégrée en immersion*. Ed. CEC.

In a quasi-experimental study, Day and Shapson (1991) performed an intervention focused on the conditional with 7th grade students. The lessons in this intervention were prepared by Collins and Rioux (1989) and adapted in the following plan. While they were implemented in the context of a French class, they could also be integrated in natural and human sciences.

Learning Objectives:

- Lead students to reflect on the conditions that are necessary for human life
- Guide them to find solutions to scientific problems

Language Objectives:

- Notice the grammatical and sociolinguistic functions of the conditional
- Guide the students to correctly use the conditional in a variety of contexts

Noticing: Overpopulation is getting worse!
The thematic context of this lesson is the imaginary planning of a first space colony. This context is presented to the students through the title of an article similar to one from a future newspaper:

Overpopulation is getting worse!
A courageous few will leave to found space colony

The students then read the following instructions, which require them to plan and make a station either in orbit or on a planet to welcome the space colony. This step establishes a meaningful context through which the students can be asked to notice the grammatical function of the conditional: to indicate possible but uncertain facts in the future. Please note that this is a large-scale project and it could be carried out over a long time period.

Create a space colony!

Suppose that you are scientists, managers, or engineers. The agency CANADESPACE hired you to plan a space station that **would recreate** a natural environment and where 100 pioneers **could** settle.

For this project, you should plan then create a space colony that **would have**:
-a viable environment for humans
-a well-defined social and technological framework
-pioneers chosen for their personal qualities and professions

In order to begin the project, you should reflect on the following questions.

1. What sources of energy, light, heat, oxygen and food **would** you **choose**?
2. What climate **would** you **want**?
3. What **would** the environment **resemble** (urban or rural, flora and fauna)?
4. What type of candidates **would** you **select**?
5. **Would** you **settle** a large or small colony?
6. What modes of internal transportation and communication **would** there **be**?

(Adapted from Collins and Rioux, 1989)

Awareness: Predictions and Politeness

The awareness phase can begin with some preliminary explanations about the grammatical and sociolinguistic functions of the conditional. This awareness is then immediately put to application through games or linguistic exercises. For example, in the following hypotheses game, students must choose the results of diverse experiments that they can try out at home, and then explain their response. This exercise helps to understand the conditional while integrating it into a science course.

1. If you stuck an inflated balloon in the refrigerator overnight, what would happen?
a) The balloon would expand.
b) The balloon would deflate.
c) The balloon would pop.

2. If you put a jar over a plant for 24 hours, what would happen?
a) The leaves would fall off.
b) The leaves would turn yellow.
c) Water droplets would form in the jar.

3. If you placed a large slice of bread in an oven on low heat for a few hours, what would happen?
a) The weight of the bread would decrease.
b) The weight of the bread would stay the same.
c) The weight of the bread would increase.

(Adapted from Collins and Rioux, 1989)

Another game aims to practice the sociolinguistic function of the conditional and its use as a politeness marker. The game is introduced by this saying:

Politeness is like an inflatable mattress: There's nothing in it, but it lessens the shocks.

Since the students will have worked in groups throughout the project, the game aims to get them used to communicating in a cordial manner. They must create replies in which the requests are formulated in an "bossy" manner (example: *I want that form; give it to me*!), then a "polite" manner (example: *I would like that form; could you give it to me?*).

Guided Practice: If...then
The guided practice phase consists of another language game, but one that is better integrated into the context of the space station. In order to be recruited in the space colony project, each team must propose some consequences or solutions to different problems that begin with the word *if*. Here are some examples:

-*If you didn't have a watch...*
-*If oxygen got mixed with hydrogen...*
-*If the climate were too cold...*
-*If the sun were constantly shining...*
-*If the colony wanted a new chef...*

The teams are given 10 minutes to imagine as many outcomes as possible in order to complete the statements. For example, *If the climate were too cold...* could be followed with *then the residents would use heat all the time* or even *then they would make good coats.* Then, the teacher randomly chooses one of the conditions and asks the team to propose as many outcomes as possible in 30 seconds.

Independent Practice: Creating a Space Station
The independent practice consists of carrying out the instructions given in the noticing activity. In teams of four, the students must design a space station, either in orbit or on a planet, that serves to shelter the colony. Each student on the team is given a role:

-manager (ensures participation from everyone)
-engineer (takes care of materials)
-secretary (takes notes about decisions)
-the person in charge of French (who notes each use of the conditional for evaluation purposes)

This activity is begun with scaffolding that will help the students to express needs and necessities in the hypothetical situations. Here are some useful sentence starters (Collins & Rioux, 1989:22).

-*It would be absolutely necessary...*
-*They would definitely need to...*
-*They could not live without...*
-*It would be important to have...*
-*They would die if they didn't have...*

In teams, the students would debate the possible answers to the questions asked during the noticing activity. After having consulted relevant resources (for example, documents regarding the International Space Station and about current projects to set up a base on the moon), the teams would create a plan for their station. They could make a model or a collage with an explanatory key to illustrate their project. In addition to this approach, the teams must perform the following tasks:

a) Write a scientific report that identifies and justifies 10 essential elements for the space colony:

Example: *The bushes would be an important element since they would provide greenery and ensure good functioning of the oxygen cycle* (Collins et Rioux, 1989).
b) Present an oral report to the class describing their space station and explaining their choices (see the following example)
c) Write a journal article describing the operation of the space station and the life of its inhabitants.

Here is an example of an oral report presented to the class (adapted from Collins & Rioux, 1989: 33).

Dear citizens,

Welcome to our space station, which we propose founding on the planet Mars. If our ideas were accepted, we would have an amazing way of life. Our space station would be in the form of four small domes made of transparent plastic. We would have an abundance of oxygen, but we would still need to be careful. It would be necessary to always keep the plastic pipes clean. These pipes would be suspended in all the domes from the ceiling.

There would not be any large animals because these take up too much space. We would no longer need a lot of food because we would have pills. Therefore, it would be sufficient to have a small garden and some small animals.

As a means of local transportation, we would use flying carpets and, to go from one dome to another, we would use supersonic underground elevators.

APPENDIX P: INTEGRATING LANGUAGE OBJECTIVES INTO CONTENT

Instructions for Teachers

1) Identify the content objectives for your unit/lesson. What do the students have to be able to do? How are you going to evaluate them?

Differentiation:

2) Considering your students' needs, choose a content-obligatory or content-compatible language objective.

Differentiation:

3) Write your objective:

The students will use _____ *in order to*
[target form]

_____
[do something related to the content]

**Note: You can also add what vocabulary they will do this with.*

Differentiation:

4) Plan the contextualization/noticing stage. What text are you going to use? How can you make the target form standout? How will the students engage with the text?

Differentiation:

5) Plan the awareness stage. What do the students have to learn? How can you guide them to

understand the rules related to the target form in the text? What tools will you use to scaffold and support learning (graphic organizer, video, etc.)?

Differentiation:

6) Plan the guided practice. How will the students practice the target forms? Will they play a game, manipulate sentences, etc.? Can you incorporate both written and oral language?

Differentiation:

7) Plan the autonomous practice. How will the students use the target form autonomously within the context of the content (for example, in a summative assessment such as a report or presentation)?

Differentiation:

8) How will you include language evaluation within the content evaluation (rubric, etc.)? How will you provide feedback to students?

Differentiation:

9) How can you follow up on this lesson in future learning?

APPENDIX Q: PRETERITE/IMPERFECT PRE-TEST

Superhombre

Cuando Kal-El _____ joven él _____ en el planeta Krypton.
(ser) (vivir)

Pero un día sus padres se _____ de él y lo _____ en una nave
(despedir) (poner)

espacial para salvarlo de la explosión de Krypton. Después de un viaje largo, él

_____ a un pueblo en Kansas donde Johnathan y Martha Kent lo
(llegar)

_____. Ellos le _____ el nombre nuevo de Clark Kent. Clark
(encontrar) (dar)

_____ mucho a sus padres adoptivos y siempre _____
(querer) (hacer)

muchos quehaceres para ayudarlos en casa. Clark _____ un perro que se
(tener)

_____ Krypto y se _____ juntos cada día. Un día Clark
(llamar) (divertir)

_____ la verdad sobre su doble identidad cuando sus padres le
(saber)

_____ que _____ Superhombre! Clark _____ 10
(decir) (ser) (pasar)

años con su familia adoptiva en Kansas y entonces _____ a trabajar como
(empezar)

reportero para el Daily Planet.

Los dos amigos nuevos de Clark Kent, Lois Lane y Jimmy Olsen, _____ (estar) preocupados con frecuencia porque generalmente ellos no _____ (ver) a Clark Kent en la escena de un crimen o accidente importante. Un día por ejemplo, mientras Clark _____ (escribir) un artículo para el Daily Planet, él también _____ (escuchar) la radio. De repente él _____ (oír) algo terrible. ¡Una crisis en el aeropuerto! ¡Su enemigo, Lex Luther, _____ (ir) a usar un avión con una bomba llena de ántrax y cólera para matar a millones de personas! Al oír esto, Clark Kent inmediatamente _____ (salir) de su oficina, _____ (entrar) en una cabina telefónica, y se _____ (poner) una capa roja. Entonces Superhombre se _____ (ir) rápidamente por el cielo y _____ (destruir) la bomba con su visión X--- ¡pero Lex Luther se _____ (escapar) otra vez.

APPENDIX R: COUNTERBALANCED SOCIAL STUDIES LESSON

Gramática – El pasado en español

Paso 1: ¿Cómo describimos el pasado en español? En el pasaje que acabas de leer, algunos verbos en el pasado están subrayados y otros verbos están resaltados. Encuentra 4 ejemplos de cada tipo. Comienza a reflexionar sobre cómo son diferentes en términos de cómo describen el pasado:

Verbos subrayados (En el imperfecto)	Verbos resaltados (En el pretérito)
- - - -	- - - -

Paso 2:

Como habrás notado, en español, hay dos tiempos verbales que nos permiten describir el pasado. Estos tiempos verbales se llaman el _____ y el _____. En esta lección, vamos a explorar las diferencias entre el imperfecto y el pretérito.

Mira estos ejemplos de algunos verbos en el imperfecto y en el pretérito.

caminaba/caminé	era/fue	tenía/tuvo
había/hubo	recolectaban/recolectaron	usaba/usó

Es curioso que haya dos maneras de describir el pasado en español. En inglés solo hay _____ manera. Por ejemplo, para decir “caminaba” o decir “caminé” decimos _____.

Reflexiona un poco más. En tu opinión, ¿cómo son diferentes el imperfecto y el pretérito?

Lo que yo pienso:	Otras ideas de mis compañeros de clase:
_____ _____ _____ _____	_____ _____ _____ _____

Paso 3: Ahora vamos a ver un video que nos explica más sobre el imperfecto y el pretérito. Toma notas durante el video. https://www.youtube.com/watch?v=ROEp-weRomk

1. "Fui al gimnasio cada sábado."
   I went to the gym every Saturday.
   "Iba al gimnasio cada sábado."

   Ambas frases son _____. Ambas están en _____.

2. Hay _____ tipos de pasado en español.

3. La conjugación de caminar en el pretérito: caminé, _____, caminó, caminamos, _____

4. La conjugación de caminar en el imperfecto: caminaba, _____, caminaba, caminábamos, _____

5. El imperfecto describe "¿Qué _____ pasando?"

6. El pretérito describe "¿Qué _____?"

7. Algunos verbos que frecuentemente están en el imperfecto son: ser, _____, poder, querer, _____. Es decir: era, _____, podía, _____, sabía.

8. "Todos los días" va con el _____.

9. "Un día" va con el _____.

10. Lo que determina realmente qué conjugación utilizar es el _____.

11. Cody nos cuenta sobre su vida cuándo _____ niño.

12. ¿Qué _____ Cody cuando era niño? Cody _____ en el bosque.

13. ¿Qué _____ Cody ayer? Ayer Cody _____ a las 5 de la mañana e _____ ejercicio.

Paso 4: ¿Puedes completar la historia con los verbos correctos? Pon los verbos en paréntesis en la forma correcta.

Cuando yo era una niña, (1)_____ (vivir) en una casa muy grande y antigua cerca al centro de la ciudad. En la casa a veces escuchábamos ruidos extraños en la noche, pero no (2)_____ (pensar) mucho en eso.

Una noche, me levanté a usar el baño. De repente, escuché un ruido detrás de mí. Me (3)_____ (dar) la vuelta y (4)_____ (ver) una sombra que cruzó el pasillo rápidamente. Me asusté y (5)_____ (empezar) a gritar. Mis papás despertaron y (6)_____ (venir) a ver qué pasó.

Prendimos las luces y empezamos a buscar señales de lo que yo había visto. Cuando bajamos al sótano, vimos una familia de gatos. Ellos habían entrado al sótano por una puerta pequeña que (7)_____ (dar) a la calle. Era una gata negra con blanco y cuatro gatitos negros y grises. (8)_____ (ser) todavía muy pequeños.

Mis papás y yo (9)_____ (adoptar) a la mamá gata y a un gatito negro. Mis papás (10)_____ (regalar) a los otros tres gatitos a amigos y vecinos que (11)_____ (ser) muy responsables y se (12)_____ (encargar) de cuidarlos.

Paso 5: Vamos a aplicar las reglas que aprendimos a los estudios sociales.

Lee las siguientes oraciones sobre los primeros humanos. Decide si cada oración describe qué pasaba (el imperfecto) o qué pasó (el pretérito).

Los primeros humanos….

1. vivían en cuevas.
   a. qué pasaba (imperfecto) b. qué pasó (pretérito)

2. aprendieron a domesticar animales.
   a. qué pasaba (imperfecto) b. qué pasó (pretérito)

3. hacían ropa.
   a. qué pasaba (imperfecto) b. qué pasó (pretérito)

4. utilizaban herramientas.
   a. qué pasaba (imperfecto) b. qué pasó (pretérito)

5. aprendieron a criar animales.
   a. qué pasaba (imperfecto) b. qué pasó (pretérito)

Paso 6: Ahora vamos a describir a los cazadores, recolectores y agricultores.

Nota que algunos verbos son usados comúnmente (pero no siempre) en el imperfecto:

eran, usaban, querían, trabajaban, creían, necesitaban, fabricaban, recolectaban, construían

Otros verbos se usan más en el pretérito:

hicieron, aprendieron, comenzaron, se transformó/convirtió, descubrieron

Describe a los cazadores y recolectores usando por lo menos 1 verbo en imperfecto y 1 verbo en pretérito:

1. _____
2. _____

Ahora describe a los agricultores usando por lo menos 1 verbo en imperfecto y 1 verbo en pretérito:

3. _____
4. _____

PÁGINA DE REFERENCIA – CÓMO FORMAR EL IMPERFECTO Y EL PRETÉRITO

El imperfecto

Los verbos que terminan en -AR (hablar, caminar, recolectar, etc.)
hablaba, hablabas, hablaba, hablábamos, hablaban

Los verbos que terminan en -ER o -IR (comer, vivir, aprender, etc.)
comía, comías, comía, comíamos, comían

Formas irregulares:
VER: veía, veías, veía, veíamos, veían
IR: iba, ibas, iba, íbamos, iban
SER: era, eras, era, éramos, eran

El pretérito

Los verbos que terminan en -AR (hablar, caminar, recolectar, etc.)
hablé, hablaste, habló, hablamos, hablaron

Los verbos que terminan en -ER o -IR (comer, vivir, aprender, etc.)
comí, comiste, comió, comimos, comieron

Algunas formas irregulares:
ANDAR: anduve, anduviste, anduvo, anduvimos, anduvieron
DAR : di, diste, dio, dimos, dieron DECIR: dije, dijiste, dijo, dijimos, dijeron
ESTAR: estuve, estuviste, estuvo, estuvimos, estuvieron
HACER : hice, hiciste, hizo, hicimos, hicieron
PODER : pude, pudiste, pudo, pudimos, pudieron PONER : puse, pusiste, puso, pusimos, pusieron
QUERER : quise, quisiste, quiso, quisimos, quisieron
SABER : supe, supiste, supo, supimos, supieron SER / IR : fui, fuiste, fue, fuimos, fueron
TENER : tuve, tuviste, tuvo, tuvimos, tuvieron TRAER : traje, trajiste, trajo, trajimos, trajeron
VENIR : vine, viniste, vino, vinimos, vinieron VER: vi, viste, vio, vimos, vieron

+ los verbos que terminan en -DUCIR:
TRADUCIR : traduje, tradujiste, tradujo, tradujimos, tradujeron

+ los verbos que terminan en -UIR, -OIR, -AER, -EER, -OER
i → y en 3ª persona (CONCLUIR: concluyó, concluyeron; LEER: leyó, leyeron)

+ los verbos que terminan en -CAR, -GAR, -ZAR
la forma de yo se escribe empaqué, jugué, empecé, etc.

+los verbos como DORMIR, DIVERTIR, PEDIR, SERVIR, etc.
DORMIR: dormí, dormiste, d**u**rmió, dormimos, d**u**rmieron
PEDIR: pedí, pediste, p**i**dió, pedimos, p**i**dieron

APPENDIX S: SCIENCE CLASS ANCHOR CHARTS

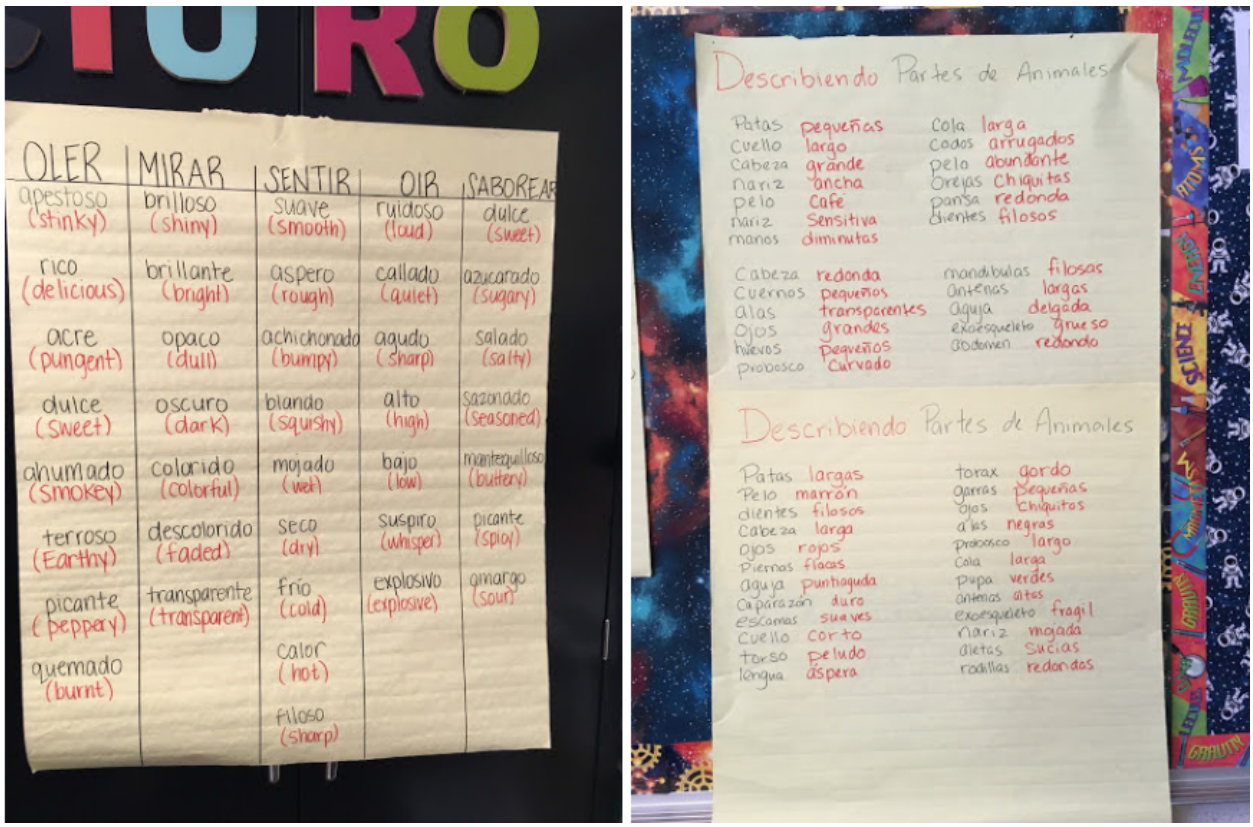


Figure 13: Science class anchor charts

APPENDIX T: SCIENCE CLASS ADJECTIVE CLOUD FROM STUDENT NOTEBOOK

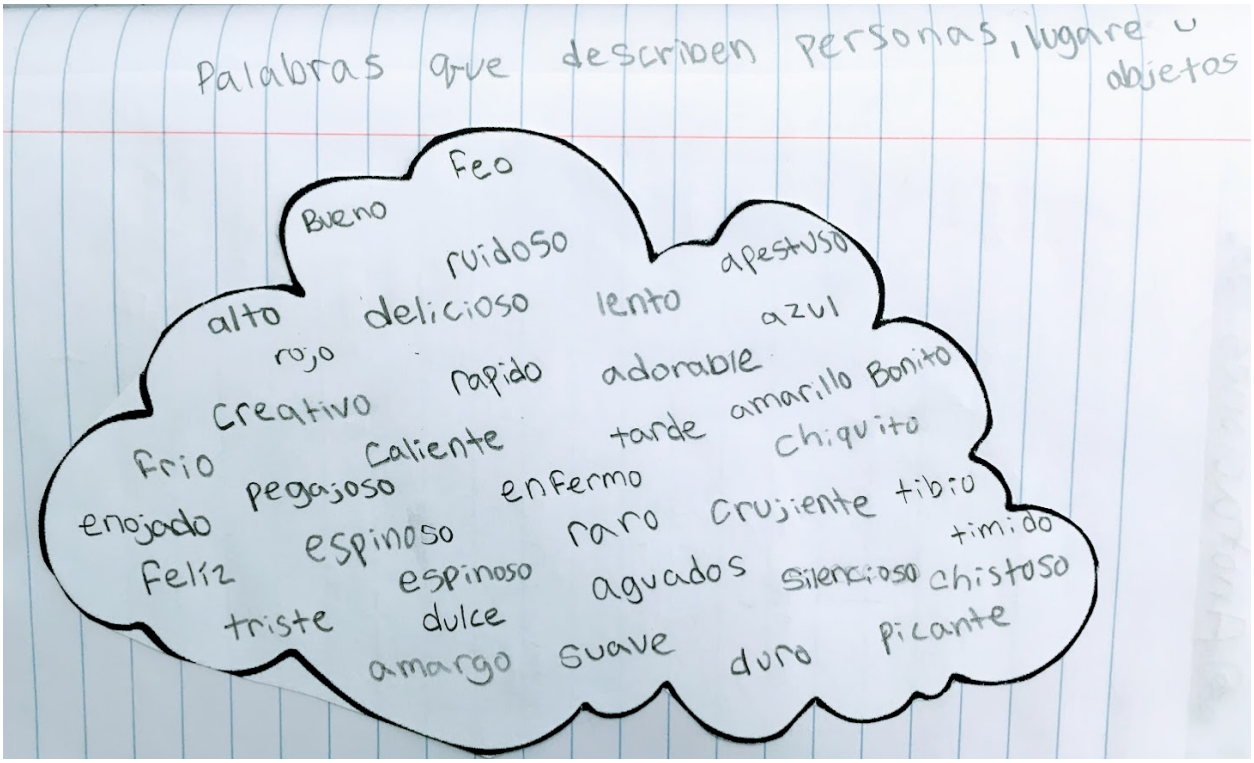


Figure 14: Science class adjective cloud from student notebook

APPENDIX U: COUNTERBALANCED SCIENCE LESSON

NOMBRE: _____ FECHA: _____ PERIODO: ____

UN ANIMAL MISTERIOSO ES DESCUBIERTO, Y NOMBRADO: "DEMENTOR"

Todos los años, muchos biólogos viajan a distintos lugares del mundo y descubren y nombran nuevos animales que existen en esos hábitats. La ciencia de descubrir y nombrar el mundo viviente se llama taxonomía. ¡Recientemente, se descubrió un animal misterioso, pues logra convertir a su presa en zombi! La localización de esta especie, es en el río Mekong en Tailandia. Dr. Michael Ohl, fue el entomólogo científico que observó y describió en detalle este animal. Leamos la descripción de las observaciones científicas y aprendamos más sobre él.

DESCRIPCIÓN DEL ANIMAL:

El animal es pequeño, midiendo de 9.5 a 11 milímetros. Su apariencia es amenazante, con un cuerpo de color anaranjado-rojizo y negro. El animal tiene el cuerpo separado en 3 partes: cabeza, tórax y abdomen. Mientras que la cabeza y el abdomen son negros, el tórax es anaranjado, y del tórax salen dos alas pequeñas, transparentes y amarillas. El animal tiene 6 patas largas y flaquitas que salen de su tórax y abdomen. De su cabeza, salen dos antenas curvadas. También 2 mandíbulas filosas. La criatura mueve sus alas ágiles para moverse rápidamente por el aire, a una velocidad de 25 millas por hora. Este animal vive una vida corta, pues solo dura 1 año de vida. Lo que hace este animal muy interesante, es su dieta horrorosa. La comida favorita de este animal son: ¡LAS CUCARACHAS! El animal no solo tiene una dieta asquerosa, la manera en que se come la cucaracha es usando un veneno peligroso, que sale de un aguijón filoso. Primero, el animal inyecta veneno en la cabeza de la cucaracha, y luego en el abdomen de la cucaracha. El veneno no mata la cucaracha, sino que afecta su movimiento, de forma que su cerebro no controla sus patas ni sus movimientos. La cucaracha pierde el control completo de su cuerpo, pero permanece viva. El animal arrastra a la cucaracha, halando sus antenas largas. La cucaracha caminará como zombi hasta la cueva oscura del animal. El animal comienza a comerse por dentro las pequeñas partes de la cucaracha, usando sus mandíbulas poderosas, pero aun dejándola viva. Después de la comida deliciosa, el animal hace algo completamente curioso, deposita 1 pequeño huevo con sus crías adentro. La larva pequeña al nacer, se comerá el resto de la cucaracha deliciosa hasta matarla, y comienza el ciclo nuevamente.

Usando tu lápiz, circula palabras descriptivas en la lectura. Usando esas palabras descriptivas del animal, haz un dibujo de cómo crees que se ve. Marca tu dibujo usando las partes del cuerpo del animal y las palabras descriptivas (ej: patas largas, etc.). Cuidado con el orden de las palabras. (¿Se dice 'negra cabeza' o 'cabeza negra'?)

¿Qué animal crees que es? Explica porqué piensas esto y usa evidencia del texto.

_____

_____

Encuentra 5 observaciones <u>CUALITATIVAS</u> del animal misterioso:

1._____
2._____
3._____
4. _____
5. _____

Encuentra 5 observaciones <u>CUANTITATIVAS</u> del animal misterioso:

1._____
2._____
3._____
4._____
5._____

Lee las siguientes observaciones. Escribe O en la línea si la observación es objetiva y S si la observación es subjetiva.

_____ El animal tiene el cuerpo separado en 3 partes.
_____ El animal tiene una apariencia amenazante.
_____ El animal tiene una dieta asquerosa.
_____ El animal tiene 2 mandíbulas filosas.
_____ El animal mide de 9.5 a 11 milímetros.
_____ El animal es curioso.
_____ El animal vuela a 25 mph.

Práctica de Gramática

Nota que las palabras descriptivas pueden tener diferentes terminaciones. Por ejemplo, podemos decir *largo*, *larga*, *largas* o *largos*. Algunas palabras descriptivas solo tienen dos formas --como *verde* y *verdes*. Vamos a ver algunos ejemplos:

el tórax anaranjad**<u>o</u>** la cucaracha delicios**<u>a</u>** las antenas curvad**<u>as</u>** los ojos negr**<u>os</u>**

¿Por qué cambian las terminaciones? ¿De qué depende?

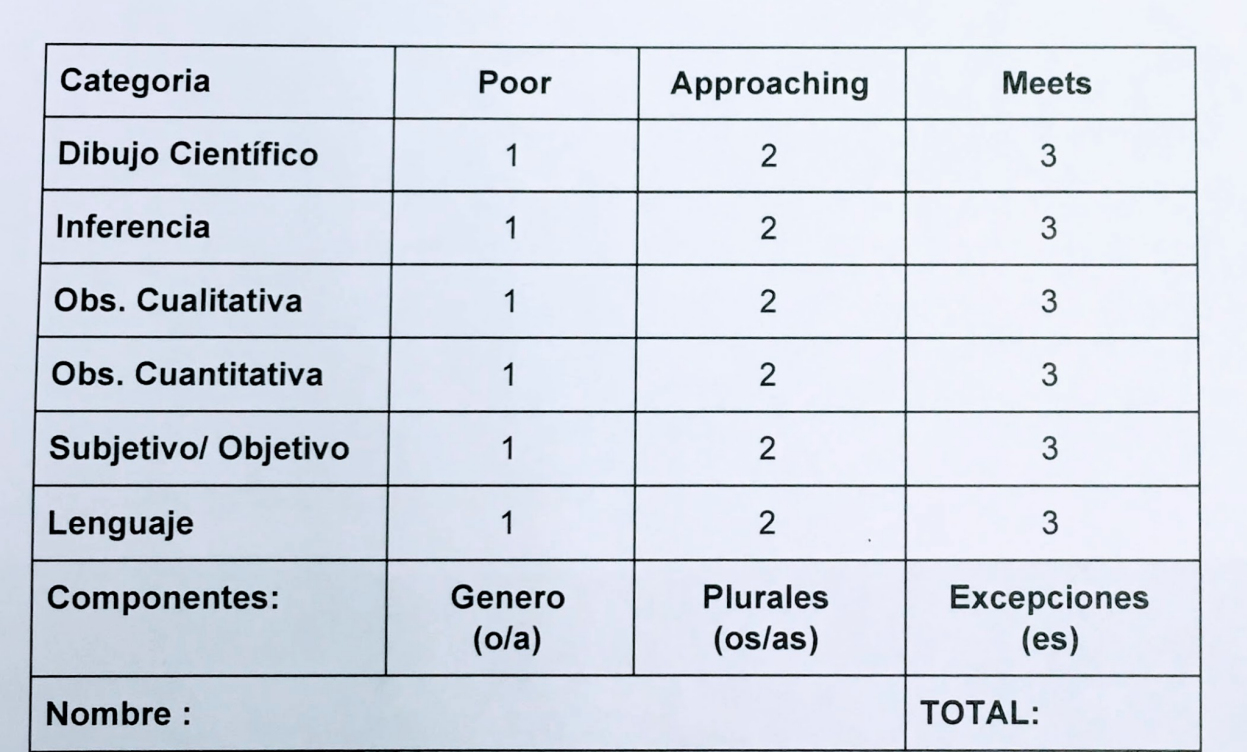
Lo que yo pienso:	Explicación de [lx] maestr[x]:
_____	_____
_____	_____
_____	_____
_____	_____

Completa cada palabra con la terminación correcta. OJO: algunas palabras descriptivas no terminan ni en *o* ni en *a*.

1. el abdomen negr_____
2. las alas pequeñ_____, amarill_____ y transparent_____
3. el aguijón filos_____
4. las mandíbulas poderos_____
5. el veneno peligros_____

6. la dieta horroros_____
7. las alas ágil_____
8. las antenas curvad_____

APPENDIX V: SCIENCE CLASS COUNTERBALANCED LESSON RUBRIC



Categoria	Poor	Approaching	Meets
Dibujo Científico	1	2	3
Inferencia	1	2	3
Obs. Cualitativa	1	2	3
Obs. Cuantitativa	1	2	3
Subjetivo/ Objetivo	1	2	3
Lenguaje	1	2	3
Componentes:	Genero (o/a)	Plurales (os/as)	Excepciones (es)
Nombre :			TOTAL:

Figure 15: Science class counterbalanced lesson rubric