## Title

"Vamos Juntos en Esto": Peer Interaction and Affordances for Language Development among Adolescent Newcomers in Language and Content Classrooms

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## UNIVERSITY OF CALIFORNIA <br> SANTA CRUZ

"Vamos Juntos en Esto": Peer Interaction and Affordances for Language Development among Adolescent Newcomers in Language and Content Classrooms

A dissertation submitted in partial satisfaction of the requirements for the degree of

DOCTOR OF PHILOSOPHY
in

EDUCATION
by

## Nora W. Lang

The Dissertation of Nora W. Lang is approved:

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2021

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#### Abstract

"Vamos Juntos en Esto": Peer Interaction and Affordances for Language Development among Adolescent Newcomers in Language and Content Classrooms


Nora W. Lang

Adolescent newcomer students bring a wealth of linguistic and cultural resources to their learning environments-resources that become even more dynamic when combined with those of their peers. While a significant body of research has explored students' deployment of multilingual resources through translanguaging, most of this work does not address other semiotic resources. Multimodality literature, meanwhile, has largely ignored multilingualism. Drawing on Leo van Lier's ecological notion of affordances, this dissertation contributes to this gap by examining the range of semiotic resources that acted as affordances for additional language development as students supported one another in negotiating classroom tasks.

This study was conducted in four classrooms for newcomer students within two school sites in California: Sycamore High School and Cedar International High School. At both schools, data were collected in one classroom focused primarily on English language and literacy development (ELD and reading), and one on content (ethnic studies and biology). Methodologically, the study included participant
observation, semi-structured interviews with four teachers and 12 focal students, collection of classroom artifacts, and videorecording of focal students' interactions.

Data analysis revealed a contrast in pedagogical approaches, which contributed to far more opportunities for peer interaction among students in the classrooms Cedar International than Sycamore High. Microanalysis of select peer interactions revealed that affordances for language development included oral and written features of English and Spanish, iconic and deictic gestures, and mutual engagement with material artifacts. Students skillfully pooled semiotic resources by combining their own linguistic, cultural, and content expertise with that of their classmates and material resources in the environment to negotiate the task at hand and ensure that their peers could participate meaningfully.

The study suggests the need for expanding translanguaging research to consider semiotic resources other than oral and written language that contribute to language development, challenging notions of fixed expertise in peer interaction, and examining peer interaction across a variety of participant structures. With regard to classroom practice, findings point to the value of affordances for illuminating what students are capable of doing, and to the importance of expanding opportunities for students to engage agentively through meaningful collaboration.

## Acknowledgements

The ecological approach that I adopted for this dissertation led me to reflect on the intricate ecology of which I have been a part in Santa Cruz over the past handful of years in while pursuing my Ph.D. This dissertation was only possible because of a network of relationships with mentors, colleagues, teachers, students, friends, family, the forest, and the ocean.

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Outside of the university, a powerful collective of women made this place my home. We went on wilderness adventures, shared meals, changed houses, lost and
gained partners, cried on kitchen floors, and hatched plans for our futures. I cannot begin to imagine what this experience would have been without them. Heather Schlaman took on simultaneous roles as my unfaltering friend, mentor, confidant, housemate, and baking partner. Her fierce commitment to social change and willingness to work for it-both within herself and at the systemic level—never ceased to amaze me.

My family members, while physically distant, buoyed me with their steadfast love and support. I am forever indebted to my mom for modeling the deepest commitment to human kindness that I have ever observed, and to my dad for encouraging me to take risks and to seek adventure. My sister continues to teach me what it means to be brave and to pursue opportunities to learn.

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## Chapter 1

## Peer Interaction and Translanguaging among Adolescent Newcomers

Feliciano arrived in California from Huehuetenango, Guatemala in October of 2018. At home he spoke Mam, an indigenous language of Guatemala, as well as Spanish. ${ }^{1}$ Prior to enrolling in ninth grade at a public high school for recent immigrant students that fall, Feliciano had relatively few experiences using English. He had been unable to attend school in Guatemala for the past four years, so he was also tasked with readjusting to classroom life. When I first met Feliciano in the fall of 2019 while observing his biology class, his energy and enthusiasm for learning was palpable. He had completed one year of school at Cedar International High, a small public school in California designed exclusively to serve recent immigrant multilingual students. Although Feliciano had only been in the United States for about one year, I observed countless instances in which his classmates sought out his council surrounding biology concepts, checked with him about translations from English to Spanish and vice versa, and requested support understanding what was expected of them in a class that was conducted entirely in English.

When I mentioned to Feliciano that I had noticed how often his peers asked him for help, he explained that he enjoyed this role:

Pues, no me siento incomfortable? Me siento bien, es más como me siento como un líder? Y me gusta mucho ayudar a varios de mis compañeros. Si
ellos me preguntan y estoy haciendo algo, pues, dejo lo que estoy haciendo y

[^1]les digo a ellos que es lo que tenemos que hacer, o que necesitan. \{Well, I don't feel uncomfortable? I feel good, it's more like I feel like a leader? And I really like to help several of my classmates. If they ask me and I'm doing something, well, I leave what I'm doing and I tell them what it is that we have to do, or what they need.\}

Feliciano's explanation illustrates a commitment to supporting the success of other young people navigating uncharted territory - learning new material in an unfamiliar language. Over the past several decades, and increasing number of scholars from fields including education, learning sciences, anthropology, bi/multilingualism, sociology, psychology, applied linguistics, and second language acquisition (SLA) have examined the relationships between peer interactions and opportunities for learning, as well as role of peer interaction in language and literacy development. For the purposes of this dissertation, I utilize a definition of peer interaction described by Philp and colleagues (2013), who suggest peer interaction includes "any communicative activity carried out between learners, where there is minimal or no participation from the teacher" (p.3).

Attention to the role of peer interaction has grown within second language development research, at least in part due to the centrality of interaction within sociocultural and ecological approaches to second language development (van Lier, 2000). Sociocultural theories applied to second language development assume that all meaning is constructed through social interaction embedded within particular a particular sociohistorical and sociocultural context (Firth \& Wagner, 1997; Lantolf,

2000; Lantolf \& Thorne, 2006; Swain \& Deters, 2007). From these perspectives, Valdés and colleagues (2011) point out, learning a second language involves becoming increasingly competent in communicating "in a variety of contexts for a range of purposes" (p. 29). While research has demonstrated that peer interaction provides opportunities for both language and content learning, questions remain about the level of collaboration, and how peers' degree of experience with the language influences the quality of the language learning (Sato \& Ballinger, 2016).

In addition to the significance of peer-interaction for learning in multilingual settings, Feliciano's comment above highlights a pattern of ingenuity, creativity, and resourcefulness with language displayed by multilingual youth. His use of the word 'incomfortable' reflects successful blending of features of the Spanish word 'incómodo' and the English word 'uncomfortable,' not with one language serving as "crutch", but rather, a creative extension beyond "named languages" (Makoni \& Pennycook, 2007; Otheguy et al., 2015, 2018). This example was one of countless instances in which students engaged in translanguaging, that is, the complex, dynamic, and discursive communicative practices in which bilinguals engage to make meaning (García, 2009a; García \& Li Wei, 2014). Scholars also use the term translanguaging, which I will discuss in greater detail in Chapter 2, to refer to a pedagogical orientation that invites all of students' communicative resources into the classroom and actively builds on multilingual language practices to facilitate learning (Cenoz, 2017; Cenoz \& Gorter, 2017, 2020; García \& Lin, 2016; Hornberger \& Link, 2012). Efforts to critically interrogate the role of language in patterns of inequality,
with the ultimate goal of transforming dominant power relations, are also central to the concept of translanguaging (Flores \& García, 2014; García et al., 2012; García \& Li Wei, 2014).

Over the past several years, a number of scholars have underscored how multilingual students draw from a semiotic repertoire, which includes multilingual language practices as well as embodied and multimodal practices such as gesture, posture, gaze, and engagement with material resources in the environment (Blackledge \& Creese, 2017; Hawkins, 2019; Hawkins \& Mori, 2018; Kusters et al., 2017; Li Wei, 2018; Pennycook, 2017). A related body of literature has examined the role of peer interaction in both language development and content learning in multilingual settings (see, for example Alvarez et al., 2020; Bigelow \& King, 2016; Carhill-Poza, 2018; Davila, 2020; Devos, 2016; King et al., 2017; Martin-Beltrán et al., 2017; Philp et al., 2013).

This dissertation builds on both of these bodies of literature. It examines how multilingual students enrolled in both content area classes and those focused primarily on English language and literacy development within two very different school settings interacted in with one another in ways that created opportunities for language development. Situating the study from an ecological perspective on language and language development and drawing on ethnographic methods and microanalysis of classroom interaction, I analyzed the participant structures that organized opportunities for peer interaction, the nature of interactions that involved peers supporting one another, and the affordances for language development that
emerged through those interactions. I argue that the ecological concept of affordances (van Lier, 2004) presents a powerful orientation for examining how students perceive and act upon semiotic resources to scaffold one another's participation in academic tasks. Such an approach, I contend, centers what multilingual youth can do when they have opportunities for meaningful engagement with new concepts in collaboration with peers. With regard to classroom practice, insight into the relationships that support meaning making has the potential to expand teachers' understanding of additional language development among multilingual students by shifting toward an emphasis on designing classroom environments that provide ample opportunities for meaningful interaction.

The following questions guided the study:

1. How do newcomer students interact with one another to navigate classroom tasks in language and content area classrooms in two different high school newcomer programs?
2. What are the affordances for language development that emerge through those interactions?

My primary goal in examining how students interacted with classmates in ways that created affordances for language development was ultimately to contribute to understanding pedagogical practices that can build on multilingual students' ingenuity and expand their opportunities for meaningful learning.

## Organization of the Dissertation

In the remainder of this chapter, I discuss some of the key tensions impacting the education of newcomer students in the United States. Chapter 2 includes a discussion of the theoretical perspectives and bodies of literature that shaped how I examined peer interaction and affordances for language development. In Chapter 3, I describe the methodological framework that guided decision making throughout the study, the methods I utilized, and the city and schools in which the study was conducted. Chapter 4 provides a more detailed look at each of the four selected classrooms, including the teachers and students who participated in the study. In Chapter 5, I describe the pedagogical approaches adopted by the teachers in each classroom and discuss how those approaches shaped opportunities for peer interaction. Chapter 6 consists of microanalysis of select instances of peer interaction in which a range of opportunities for additional language development emerged. In the final chapter, I discuss several pedagogical and research implications.

## Terminology and Tensions

Like most terminology in the field of education, the terms I have selected to describe students and the programs that serve them are inherently imperfect. In the sections that follow, I outline some of the challenges associated with several terms, including "emergent multilinguals," "newcomer," and "newcomer program," and "additional language development" and discuss my rationale for selecting them over alternatives. I discuss some of the tensions associated with focusing on additional
language development among newcomer students and then describe some of the approaches to integrating language and content learning for newcomers.

## Emergent Multilinguals

Terminology-and particularly terminology used to describe racially and linguistically minoritized groups-is at the center of political and ideological debates surrounding race, class, language, and academic performance. Undeniably, the use of particular terms by school officials and educational researchers has both ideological and material repercussions. For instance, the categorization of student subpopulations is important both for the allocation of resources and for shedding light on patterns of inequity. At the same time, there has been scholarly attention to how labels such as "English Learner" mask the complexity of students' bilingualism and impact students' access to educational opportunities in potentially harmful ways (García, 2009b; Martínez, 2018). A number of scholars have underscored that both the "English Learner" and "Long Term English Learner" (LTEL) labels continue to reflect an ideological orientation that devalues students' bilingualism (Garcia et al., 2008; García, 2009b; Garcia \& Kleifgen, 2010), and do not align with students’ own perceptions of themselves (Flores et al., 2015). Martínez (2018) for example, argues that the English Learner label has constrained the ability of educators to identify and draw on multilingual students' assets and experiences, including a wealth of complex and creative language practices.

In addition to a deficit perspective on students' bilingualism, several scholars have highlighted that the English Learner label obfuscates what is in reality a highly
diverse population in terms of language and educational background, length of time spent in US schools, socioeconomic status, immigration status, and English proficiency, among a host of other factors (García, 2009b; Martínez, 2018). Other researchers, equally committed to expanding educational opportunities for students who are developing bilingualism, have pointed out that, while imperfect, it is sometimes necessary to name the term students are bureaucratically categorized as in order to capture the impact of the label itself on students' opportunities for learning. For instance, Bunch and Walqui (2019) highlight that "English Learner" is the term used within the federal education policies that delineate how schools must serve this population of students. And, while advocating for the use of emergent bilingual, García and Kleifgen (2010) also point out the necessity of using the terms adopted by policy makers in order to impact policy.

In an effort to disrupt deficit orientations and to highlight students' developing bilingualism and potential, scholars have increasingly adopted the term emergent bilingual (Garcia et al., 2008; García, 2009b) as an alternative to English learner. These scholars have underscored that emergent bilingual students are already competent users of language and are in the process of becoming bi/multilingual. Admittedly, this term is also imperfect. As a proposed replacement term for English Learner, emergent bilingual also includes students with a range of bilingual experience, from those just beginning to use English for the first time to students who are bureaucratically designated as Long Term English Learners who are highly
experienced users of English. Thus, using the term emergent bilingual to describe recently arrived immigrant students who are new to English is potentially misleading.

Consistent with a number of scholars who examine language development, translanguaging, and interaction in highly linguistically diverse settings (Cenoz \& Gorter, 2020; King et al., 2017), I use, whenever possible, the term emergent multilingual to refer to students in the process of developing bi/multilingualism. In the classroom spaces where I was conducting this dissertation-in which some students were speakers of as many as three indigenous languages in addition to Spanish and English, and students who spoke languages such as Arabic, Amharic, or Farsi at home frequently utilized features of Spanish-"bilingualism" did not seem to capture the reality of students' complex semiotic repertoires. For instance, video data revealed that Semira, an Eritrean student who spoke Tigrinya at home, frequently engaged in Spanish language practices in her interactions with Spanish speaking classmates. Numerous other students who spoke languages other than Spanish at home participated in similar ways, either by indicating that they had understood interactions in Spanish among classmates, or by using Spanish words and phrases themselves. While I mostly refer to students as emergent multilinguals, in some instances, I refer to students’ official designation as English Learners and often describe students as newcomers. When referencing literature, I generally maintain the terminology adopted by the authors.

## Newcomer Students and Newcomer Programs

The "newcomer" label generally refers to a combination of a relatively short amount of time spent in the new country and to a student's beginning level language proficiency in the dominant societal language upon arrival. In the United States, like other labels involving multilingual students, the term newcomer obfuscates complexity within a population that is diverse with regard to race, socioeconomic status, educational background, language and literacy background, time spent in the US, and experience with English. Unlike designations linked to the allocation of federal funds such as English Learner, however, newcomer is not a federal designation, nor is there an official process through which students enter or exit newcomer status. Because there is no official designation, definitions of newcomer vary significantly across contexts. For instance, The Newcomer Tool Kit (2016), a publication created by the US Department of Education designed for teachers and administrators who serve immigrant students, describes newcomer as an "umbrella term" to refer to "any foreign born student and their families who have recently arrived in the United States" (p. 1). The document does not specify what qualifies as "recent." Definitions of "newcomer" also vary considerably within research literature and reports. For instance, some studies and reports simply describe newcomers as "recently arrived" immigrant students without specifying a time frame (MAEC, Inc., 2019), others refer to "newcomers" who have been in the US for as many as five years (Hersi \& Watkinson, 2012; Suárez-Orozco et al., 2009), while others refer to
students' enrollment in newcomer programs as a proxy for newcomer status (Feinberg, 2000; García \& Sylvan, 2011).

From the perspective of school districts seeking to best support a diverse population of students, collapsing students' status as recently arrived immigrants and students who are new to English is arguably helpful in identifying students who are likely to need access to similar services at school (such as access to housing services, counseling, or beginning level English language instruction) some of which are not necessary or appropriate for more experienced bilinguals. Yet, the label also increases the potential of homogenizing students' experiences in harmful ways. The differences among students who have been attending US schools for several months and those who have been attending US schools for three, four, or five years are enormous, and structures and approaches relevant to serving them differ considerably. It is also important to note that the concept of a "newcomer" is deeply rooted in broader political and ideological debates surrounding the intersections of race, class, language, and citizenship. Like overtly racist and xenophobic epithets for immigrants such as "fresh off the boat," the term "newcomer" has the potential to position immigrant students as perpetual outsiders, particularly if the label acts as a proxy for poor academic performance or to low levels of English language proficiency rather than to temporary status.

The definition of newcomer is further complicated by the concept of a "newcomer program," which is similarly variable. In the 1980s, as school districts in many parts of the US recognized that they were unprepared to meet the needs of
adolescent immigrant students, "newcomer programs" increased significantly in number (Friedlander, 1991; Short, 2002b). As one researcher put it, these programs were designed to serve as "cultural and educational shock absorbers," by providing temporary specialized services to recent immigrant students before they transitioned to English as a second language (ESL) or English language development (ELD) programs in comprehensive middle or high schools (Friedlander, 1991, p. 7). Newcomer programs vary significantly in terms of eligibility, length of enrollment, program design, and language instructional model. Some are housed within comprehensive secondary schools and, in many cases, emerge as extensions of traditional ESL programs; others are separate site "newcomer centers" that serve students for approximately six months to one year; while others exclusively serve immigrant students for the duration of their high school careers (Short, 2002b; Short \& Boyson, 2012). Notably, in many school districts, courses and additional services for recent immigrant students are not labeled "newcomer programs," nor are they officially distinguished from services for other students labeled English Learners (Short \& Boyson, 2012).

In spite of this host of issues, I opted to use "newcomer" because it is the term adopted by the school district where I conducted the study, and because it is my hope that this dissertation will contribute to an ongoing dialogue among educators seeking to better serve recently arrived immigrant students throughout the US, many of whom use the term newcomer. I use the school district's definition of a newcomer as a student who has spent three years or less in the United States and who speaks a
language other than English at home. The students whom I describe in this dissertation all met these criteria when data collection began in September of 2019. However, as I will discuss in detail in Chapter 3, they were far from a homogeneous population. Whenever possible, I attempt to be specific about the students I'm describing with regard to time spent in US schools as well as students' language and educational backgrounds. Both school sites were also considered "newcomer programs" by the school district, yet, as will become evident in Chapters 3 and 4, the two programs differed significantly with regard to design and pedagogical approaches, among other elements.

## Additional Language Development

As Larsen-Freeman (2015) has argued, the notion of second language acquisition denotes a linear process of acquiring a commodity, while second language development frames language as a nonlinear, "ever-developing resource" that emerges through use (p. 494). In addition to framing language as developing through use (Ellis \& Larsen-Freeman, 2006; Larsen-Freeman, 2015), the notion of "development" rather than "acquisition" highlights that language users, from their own perspectives, are making meaning through participation in language rather than acquiring particular linguistic forms-a process that, as numerous scholars have pointed out, also changes the language users themselves (Firth \& Wagner, 1997; Larsen-Freeman, 2015; van Lier, 1998, 2000).

In this dissertation, I utilize additional language development (a term used in many other countries) to describe the process of developing language, whether that be
a "second" or subsequent language. I argue that while second language development more accurately reflects the social nature of language development than does second language acquisition, the notion of "second" suggests a linearity and simplicity that does not reflect many multilingual language learning contexts-including those in which this dissertation was conducted. Admittedly, this term is imperfect for a number of reasons. For instance, some research in multilingualism and applied linguistics uses the term additional language learning or additional language development to refer specifically to individuals who are already bilingual and who are in the process of developing a third or subsequent language (e.g. Cenoz, 2015; Cenoz \& Gorter, 2011; May, 2013). The word "additional" also has the potential to indicate that language development consists of adding a neatly bounded new language to one's existing bounded languages, which does not align with the view of language development undergirding this study-that language development involves expanding one's semiotic repertoire through participation in new practices, a process that is both nonlinear and complex (Hawkins, 2019; C. Kramsch \& Steffensen, 2008; van Lier, 2000, 2004). In other words, the languages that a student uses for some form of meaning-making are not always easily "countable" (Franceschini, 2011; Makoni \& Pennycook, 2007). I discuss the theories of language and additional language development that informed my approach in greater detail in Chapter 2.

## Integrating Language and Content Learning for Newcomer Students

Researchers who examine the education of emergent multilingual students in US schools have underscored for several decades that, irrespective of policy
mandates, schools must develop structures and instructional approaches that facilitate access to curricular content while students are developing new language and literacy practices in English in order to provide students with equitable educational opportunities (Bunch et al., 2001; Samway et al., 2020; Valdés et al., 2011; Walqui, 2000, 2006; Walqui \& Bunch, 2019). Newcomer students, however, are tasked with engaging in content area learning in a language that is still very new, and most secondary content area teachers have received little preparation to support them (Lucas et al., 2008). A number of studies have examined the constraints and opportunities associated with newcomer programs, and the effectiveness of various program models (Boyson \& Short, 2003; Feinberg, 2000; Friedlander, 1991; Short, 2002b; Short \& Boyson, 2012). Far less research has explored pedagogical approaches to integrating language and content-area instruction for recent immigrant students who are new to English. The lack of research on pedagogy for recent immigrant students is troubling given that the structure of newcomer programs provides little insight into opportunities for learning without simultaneous attention to what occurs within classrooms. ${ }^{2}$

The benefits associated with providing students access to content-area instruction in students' home language while simultaneously developing new language and literacy practices in English have been well documented (Genesee \& Lindholm-Leary, 2013; Menken, 2013; Umansky \& Reardon, 2014), particularly at the elementary level, which has been the focus of much of the research on bilingual

[^2]education (Menken, 2013). Although less research has been conducted on bilingual instruction at the secondary level, when available, content-area instruction for recent immigrant students in their home language presents opportunities for immediate engagement in complex content. Two-way dual language programs or two-way immersion (TWI) programs, which (in the US) generally serve relatively equal sized populations of students learning English and those learning a language other than English, have gained some public support at the elementary level. TWI programs, however, are far less common at the secondary level. García and Bartlett (2007) suggest that the lack of dual language programs at the secondary level can be attributed at least in part to the challenges associated with learning specialized language practices associated with content area courses in just a few years, something that has been particularly challenging to English speakers learning an additional language given that these students tend to develop language proficiency more slowly than students learning the majority language. In spite of the potential benefits of this approach, Garcia and Bartlett conclude that "dual language high schools are rare and difficult to implement; they do not seem to provide a feasible model for educating newcomer immigrant youth" (2007, p. 4).

Unfortunately, the reality of political and practical constraints on bilingual education, including restrictive language policies, linguistically diverse populations of recent arrivals, and the availability of qualified bilingual educators, makes providing instruction in students' home languages unfeasible in many parts of the U.S., particularly at the secondary level (Short, 2002b; Short \& Boyson, 2012). Although
some comprehensive high schools and newcomer programs provide content instruction to newcomers in their home languages, the vast majority does not. Based on a 3-year national research study on programs serving adolescent newcomers, for instance, Short and Boyson (2012) reported that only $11 \%$ of the newcomer programs could be considered bilingual (programs in which at least one content course was offered in students' home language), and just under one third (32\%) offered language arts courses in students' home language. In other words, even within the context of programs especially designed to serve the needs of newcomer students, most adolescent immigrant students did not have access to content-area instruction in their home language or to structured language and literacy development in the home language at school.

Given the sociopolitical and practical constraints on providing content instruction in students' home languages, researchers and practitioners have also examined efforts to integrate content area learning with the development of new English language and literacy practices when more comprehensive bilingual programs are unavailable, often through "sheltered" approaches, in which contentarea courses are taught through the medium of English with particular attention to language and literacy demands (Short et al., 2012).

According to Genesee (1999), sheltered approaches are rooted in sociocultural perspectives on language development, which assume that language acquisition improves when language and academic content are integrated under the assumption that language is acquired through meaningful interaction. In theory, sheltered
approaches facilitate students' access to grade-level content through tools and techniques such as modeling, providing graphic organizers, adapted texts, and visual aids, while simultaneously supporting students' development of new English language and literacy practices (Genesee, 1999). Notably, sheltered approaches were originally designed for integrating language and content for students whose English proficiency is considered intermediate or above; they were not designed for students in the initial stages of developing an additional language (Valdés et al., 2005). Met with the challenge of providing recent arrivals with access to content when instruction in students' home language is not possible (and with little other guidance), sheltered approaches have been adopted widely among schools serving newcomer students (Short, 2002b; Short \& Boyson, 2012; Short \& Fitzsimmons, 2007). For example, Short (2002b) conducted a four-year (1996-2000) survey study examining the design and implementation of 115 newcomer programs for middle and high school students throughout the United States and found that $89 \%$ of the programs reported teaching content through sheltered instruction. A decade later, Short and Boyson (2012) reported that of the 63 newcomer programs that participated in their study, 67\% (42 programs) reported providing content instruction via sheltered instruction in English.

A number of researchers have argued that in spite of the fact that sheltered approaches were not originally designed for newcomers, they present the best option for engaging students in content area learning while concurrently facilitating English language and literacy development. Genesee (1999), for example, rationalized that although newcomers might not complete a year's worth of curriculum in sheltered
courses, "they can make progress toward meeting content standards and gain a foundation in academic domains as their English skills improve" (p. 11).

Numerous scholars, however, have not expressed the same level of confidence in sheltered approaches, at least as often implemented. A number of scholars have argued that sheltered courses often become "watered down," less academically rigorous versions of their mainstream counterparts (e.g. Walqui, 2000) and point out that separating students in the process of developing English from their peers denies them access to critical academic and linguistic resources (Bunch et al., 2001; Callahan, 2005). Others have argued that sheltered approaches were designed to support students at intermediate levels of English learning who have also developed grade-level literacy in their home language, and may not be appropriate for recently arrived immigrant students who are relatively new to English (Musetti et al., 2009; Valdés et al., 2005). Bunch and colleagues (2001) summarized the inherent predicament facing teachers of sheltered content courses: "The obvious need to simplify difficult academic language and content to make it accessible to ELLs comes with the concurrent danger of reducing opportunities for students to develop increasingly advanced language and content skills" (p. 28). Walqui (1992) argues that the solution is to amplify students' access to opportunities for language and learning rather than to simplify the language demands. As Walqui and van Lier (2010) explain, "amplifying students' access to the linguistic and extralinguistic contexts means providing students with more than a single opportunity to come to terms with the language and concepts involved" (p. 39-40). Such an approach does not involve
reducing the complexity of the task or the language necessary to engage in that task, but rather with providing the resources necessary for them to participate meaningfully.

Another concern with sheltered approaches is the level of attention to language development or content at the cost of the other. Some conceptions of sheltered instruction hold that the central focus is the disciplinary content and the instructor is necessarily a content specialist. This perspective stands in contrast to content-based ESL instruction, in which the primary concern is language development and instructors are generally language specialists (Short et al., 2012). This distinction, however, does not appear to be consistent within research on sheltered instruction, nor in practice. For instance, in case study of academic language instruction in a sheltered science course, Richardson Bruna and colleagues (2007) found that the participating teacher had neither been prepared to teach within the discipline of science nor had she been systematically prepared to work with emergent multilingual students.

In addition to the potential emphasis on the development of "English skills" at the cost of genuine engagement in content, some scholars have expressed the opposite concern: that focus on content could eclipse attention to English language development. For example, based on discourse analysis of interactions within sheltered social studies classes, Short (2002a) found that teachers devoted little attention to language development, defined as explicit instruction about language forms, functions, and register, a pattern that was confirmed upon analysis of the
teachers' lesson plans and instructional practices. Of the few instances in which teachers explicitly addressed language, they focused almost exclusively on vocabulary and pronunciation, which Short concluded was "disappointing" considering the potential to have included "utterances related to grammar, mechanics, usage, spelling, language learning strategies, metalinguistics, or targeted instructions of the four language skills" (Short, 2002a, p. 21). This concern for a lack of attention to explicit language instruction stands in stark contrast to critiques regarding lack of access to disciplinary language practices, or to opportunities for students to express their perspectives and ideas through meaningful interaction with their classmates.

Distinct conceptions of the nature of language are at the heart of critiques of efforts to integrate language and content described above. Valdés and colleagues (2014), for instance, highlight a range of definitions of language: "language is the knowledge in the mind of an individual; language is a set of building blocks that need to be assembled, language is a communicative practice that is apprenticed in social practice" (p. 21). Similarly, Cook (2010) identifies six distinct definitions of language, which include "an abstract external entity," "the possession of a community," and "a form of action," among others (p. 7).

These diverse theoretical perspectives on language itself are directly related to teachers' pedagogical practices-whether or not the teachers are conscious of the underlying theories of language that shape their decision making (Valdés et al., 2014). For instance, if teachers view language from the cognitive perspective that language consists of grammatical competence in the mind of the individual learner,
they are likely to emphasize students' acquisition of particular structures, rules, and words with the hope that "practice" through repetition will lead to automatization. If, in contrast, teachers view language from a sociocultural or ecological perspective as socially situated practice, they are likely to prioritize opportunities for learners to have meaningful interactions with one another.

This range of perspectives on language also encompass distinct views of the relationship between language and content learning and how teachers can best facilitate emergent multilingual students' meaningful participation in content area courses conducted in English. Bunch (2013) for instance, describes the pedagogical language knowledge (Galguera, 2011) necessary for supporting English Learners’ engagement in content area learning consists of intentionally creating opportunities for students to develop new language and literacy practices "in and through the teaching of core curricular content, understandings, and activities" (p. 298). This approach stands in stark contrast to the notion that teachers must first "teach English" and then begin to engage their students in topics at the heart of the discipline. Walqui and Bunch (2019) explain that, from a sociocultural perspective, integrating language and content requires attention from teachers because language mediates the development of concepts. At the same time, however, this attention to language "cannot be at the center of learning opportunities, since language is the vehicle for learning concepts and using those concepts through analytic tasks constitutes the central goal of these efforts" (Walqui \& Bunch, 2019, p. 37, emphasis in original).

## Commitments and Considerations

In spite of what young people like Feliciano (described at the beginning of this chapter) are capable of doing with language and content and their ability and willingness to collaborate in ways that extend understanding to their peers, a number of scholars have pointed out that much of the literature continues to frame emergent multilingual students in terms of what they cannot do in relation to White, middleclass, monolingual peers (Nelson Flores \& Rosa, 2015; García, 2009a; Martinez \& Martínez, 2017; Valdés, 2015). I situate this study within current efforts to critically examine peer interaction and affordances for language development that emerge in multilingual settings (Blackledge \& Creese, 2017; Hawkins \& Mori, 2018; Kusters et al., 2017; Martin-Beltrán, 2017; Pennycook, 2017). Consistent with this growing body of literature, I assume that microanalysis of classroom interaction must be examined in light of the asymmetrical relations of power both within and beyond the classroom. Indeed, as Kibler (2017) underscores: "Interactions among peers reflect not only the immediate interactional setting but also institutional and societal discourses, values, and beliefs: In short, sociolinguistic and sociopolitical contexts matter" (p. 201).

As Flores and Rosa (2015) point out, for several decades, many language education scholars have called for additive approaches that seek to maintain students' minoritized language practices while ensuring that students are also adding standardized language practices to their repertoires in order to navigate gatekeeping mechanisms such as high-stakes exams and admission to colleges and universities
(Bartlett \& García, 2011; Valenzuela, 1999). Yet, critical scholars who explore the intersections of language and race have underscored that additive approaches fall short of addressing the raciolinguistic ideologies that frame racialized students as linguistically deficient even when they engage in language practices that would be accepted from White peers (Flores \& Rosa, 2015)

While Flores and Rosa (2015) outline how raciolinguistic ideologies shape opportunities available to "Long Term English learners," "heritage language learners" and "Standard English learners," adolescent newcomer students present a somewhat unique situation. In the case of newcomer students, the urgency to provide students with English language practices that will support them in navigating life in the United States and in accessing content area courses that are still, by and large, conducted in English, is apparent. It is equally critical that opportunities for English language development are paired with actively challenging raciolinguistic ideologies that contribute to evaluations of newcomer students' language practices from a racialized perspective. Valdés (2015) points out that in spite of efforts to challenge dominant monoglossic language ideologies in schools and society, most Latinx students continue to have to navigate educational institutions mired in monolingual orientations, making the importance of English in their lives undeniable. At the same time, focusing primarily on newcomer students' development of English has the potential to legitimize the myth that accurate and appropriate deployment of "standard" or "academic" English will shield them from White supremacy and structural inequalities in opportunities for learning (Flores \& Rosa, 2015). While this
dissertation explores affordances for additional language development that emerge through peer interaction, I do not wish to suggest that that the development of English will protect students from racialized evaluations of their language use, nor guarantee access to more equitable educational opportunities. At the same time, I recognize that for the students who participated in this study, and other newcomer students with whom I have worked in the past, access to opportunities to develop English is both vitally important and urgent. In the following chapter, I describe the theoretical frameworks and relevant literature that shaped how I made sense of peer interactions and affordances for additional language development in four high school newcomer classrooms.

## Chapter 2

## Ecological and Sociocultural Approaches to Additional Language Development

"Knowledge of language for a human is like knowledge of the jungle for an animal" van Lier, 2000, p. 253.

This study draws on ecological approaches to additional language development (Kramsch \& Steffensen, 2008; van Lier, 2000, 2004) as well as sociocultural theory applied to SLA research influenced by the work of Vygotsky (Firth \& Wagner, 1997, 2007; Hawkins, 2004, 2019; Lantolf, 2000, 2001). In this chapter, I begin by describing ecological perspectives on language and additional language development and the relationship between the ecological tradition and sociocultural theory. Consistent with recent work on second language development and multilingual communication from sociocultural and ecological perspectives (Hawkins, 2019; Hawkins \& Mori, 2018; Kusters et al., 2017; Li Wei, 2018; Li Wei \& Lin, 2019), I explore students' deployment of communicative resources as part of a semiotic repertoire (Kusters et al., 2017), which encompasses multilingual resources, embodied resources such as gestures and facial expressions, and engagement with material artifacts. I then discuss the ecological notion affordances for additional language development, that is, the relationships among physical and social aspects of the environment learners perceive and act upon in ways that facilitate further interaction that comprises language learning (van Lier, 2000, 2004).

In order to make sense of the affordances for additional language development that emerge through peer interaction, I discuss the peer scaffolding and literature that has explored classroom-based translanguaging and multimodal meaning-making. I
close the chapter by arguing that, in addition to illuminating additional language development within applied linguistics research, an ecological orientation and the notion of affordances also provide a potentially transformative lens on language and language teaching for educators by expanding notions of what "counts" as language learning and more actively leveraging the range of resources that students bring to the classroom.

## Sociocultural and Ecological Approaches to SLA

Lev Vygotsky and his colleagues (Leontiev, 1981; Luria, 1976) introduced sociocultural theory as an overarching theory of development in which meaning is first negotiated socially and only later internalized by the individual. Vygotsky (1978) argued that learning is a social process mediated by language and material artifacts. Scholars have since extended Vygotskian sociocultural theory to the field of SLA, underscoring the importance of context and interaction with the social and material environment (Donato, 1994; Firth \& Wagner, 1997, 2007; Hawkins, 2004; Lantolf, 2000; Lantolf \& Thorne, 2006; van Lier, 1996). Sociocultural theory applied to SLA assumes that language and literacy development occur through participation in situated social practices, which are always embedded within broader social and historical relationships of power (Lantolf, 2000; Lantolf \& Thorne, 2006). From this perspective, individuals' appropriation of new linguistic resources occurs through engagement with semiotic systems including languages, text, and other cultural practices (Lantolf et al., 2015).

A sociocultural orientation toward language development reflected a major departure from traditional cognitive approaches within SLA that are concerned with the individual learner's acquisition of linguistic forms (Firth \& Wagner, 1997; van Lier, 1994). From the perspective that language meaning and knowledge reside in individuals' heads, language learning consists of a cognitive process of organizing and using components of the language being learned (Hawkins, 2004). The goal from a cognitive approach is often to identify generalizable rules about language and language learners regardless of the context in which learning occurs (Hawkins, 2004). In contrast, sociocultural theory is concerned with how meaning is co-constructed through situated interaction, with the understanding that social interaction mediates cognitive development (Larsen-Freeman, 2018). As van Lier (2000) underscores, both sociocultural and ecological approaches to language development center learners' relationships with one another and with the environment: "This does not deny cognitive processes, but it connects cognitive processes with social processes" (p. 258, emphasis added). From sociocultural and ecological perspectives, it is not fruitful to focus on the individual learner apart from the environment in which learning occurs. Language, van Lier (2004) contends, is like an onion; "You can't peel away the layers and hope to get to the 'real' onion underneath: it's layers all the way down. So it is with language: it's context all the way down (p. 24).

The origin of ecology as a metaphor for language is generally attributed to linguist Einar Haugen (1972), who underscored that language is inherently connected
to its environment. ${ }^{3}$ Ecological perspectives have since been utilized within the fields of applied linguistics and SLA, bilingualism and multilingualism, and language policy and planning to explore connections between language development and multilingualism on individual and societal scales (Cameron, 2015; Hult, 2012; C. J.

Kramsch, 2002; C. Kramsch \& Whiteside, 2008; Larsen-Freeman, 2015; LarsenFreeman, 2018; van Lier, 2000, 2004). Larsen-Freeman (2018) emphasizes that ecological theories represent a promising approach to second language development research because they embrace complexity by examining the dynamic and everchanging relationships among learners and their environment.

A number of scholars have explored the relationship between sociocultural theory and ecological approaches to the study of language (Hawkins, 2004; C.

Kramsch \& Steffensen, 2008; Thoms, 2014; van Lier, 2000, 2004). There is
widespread agreement that the two traditions share numerous underlying assumptions about the centrality of context and the socially situated nature of language learning, yet there are varied perspectives on which is the larger framework, and the degree to which they depart from one another. ${ }^{4}$ Van Lier (2000), for instance, points to

[^3]sociocultural theory as one example (along with the with the dialogical approach developed by Bakhtin) of an ecological approach to language and learning. Hawkins (2004), however, positions sociocultural theory as the broader frame. She uses an ecological metaphor to describe a sociocultural perspective on second language development as mediated and socially situated:

Classrooms are complex ecosystems, where all of the participants, the practices, the beliefs, the forms of language, the forms of literacies, the social, historical and Institutional context(s), the identity and positioning work, the politics and power relations, the mediational tools and resources, the activity and task designs, and the influences of the multiple local and global communities within which they are situated come together in fluid, dynamic, and ever-changing constellations of interactions, each one impacting the other. This is not a static process, but one that shifts with each new move/interaction, and as new organisms enter the environment, as ecological systems do (p. 21). Hawkins' description of the ecological metaphor underscores the role of power and status, positioning, and social interaction in second language development. The ecological concept of affordances builds on these assumptions, while also highlighting the importance of the relationships among learners and aspects of the environment, as well as learners' agentive role in learning through acting upon available affordances. Ecological theories of language, Kramsch and Steffensen (2008) explain, "view SLA as an emergent phenomenon, triggered by the availability of affordances in the environment, heavily dependent on an individual's perception of
these affordances and his/her [their] willingness to participate actively in their use" (p. 23). Drawing on ecological and sociocultural traditions, I view language as a dialogical, embodied activity through which language users create and sustain relationships and develop ways of relating more effectively with their surroundings (Hawkins, 2019; C. Kramsch \& Steffensen, 2008; van Lier, 2004).

Building on the work of van Lier (2004), I assume that an ecological approach to additional language development and the concept of affordances leverage understandings rooted in sociocultural theory, while also spotlighting engagement not only with social resources, but also with physical and symbolic resources in the environment. In doing so, an ecological approach also foregrounds agency.

## Semiotic Repertoires

Following a view of language as dialogical embodied activity, from an ecological perspective, language learning consists of engagement in semiotic activity, which is always shaped by cultural, historical, and institutionally informed contexts (van Lier, 2004). In communication, emergent multilinguals draw on linguistic resources that include features associated with numerous languages and language varieties, as well as gesture and material resources. Rymes (2010) has described this collection of communicative resources as a communicative repertoire. More recently, scholars have built on this notion, adding that the concept of a semiotic repertoire emphasizes the multilingual and multimodal nature of meaning making (Blackledge \& Creese, 2017; Kress, 2015; Kusters et al., 2017). Kusters et al. (2017), for instance, point out that the notion of a semiotic repertoire helps to bridge fields within language
research, including "research that focuses on gestures, signs and multimodality on the one hand, and research into linguistic diversity or multilingualism on the other hand" (p. 221). Blackledge and Creese (2017) suggest that that when people who share few linguistic resources come into contact, they draw on a variety of linguistic and embodied resources to communicate. They point out that it is this dynamic deployment of multiple semiotic resources that facilitates meaning making, noting that verbal and non-verbal interaction function in concert with one another, with gestures and indexing artifacts in the environment often occurring simultaneously or sequentially with verbal utterances.

In the context of a classroom, as students negotiate tasks in interaction with others, they draw on linguistic and embodied resources in conjunction with other semiotic resources available within the environment, such as texts, images, and the communicative resources introduced by their teachers and peers (Blackledge \& Creese, 2017; Creese \& Blackledge, 2010; Hawkins, 2004, 2019; Pennycook, 2017; van Lier, 2000, 2004). The process of drawing on a range of semiotic resources simultaneously in order to negotiate meaning is particularly relevant to this study, given that newcomer students were sometimes tasked with navigating classroom activities with classmates with whom they did not share a home language, wherein a range of semiotic resources are necessary to facilitate communication and thus language development.

From the ecological and sociocultural lenses that undergird this study, all learning-including language learning-occurs through social interaction. In the
process of interacting, Firth and Wagner (2007) explain, "interactants, conjointly, do interactional work to overcome potential or real communicative hurdles in order to establish intersubjectivity and meaning" (p. 808). Therefore, when instructional activities call for students to engage in unfamiliar language practices, students identify particular semiotic resources to communicate or to make sense of a text or task. In the traditional cognitive approach to SLA, the computational metaphor of language "input" frames language learning as a process of receiving, storing, and processing bits of language in one's brain (van Lier, 2000, 2004). An ecological perspective, however, reflects a fundamentally different view of language learning: Language emerges out of semiotic activity. The environment provides a 'semiotic budget' (analogous to the energy budget of an ecosystem) within which the active learner engages in meaning-making activities together with others, who may be more, equally, or less competent in linguistic terms. The semiotic budget does not refer to the amount of 'input' available, nor the amount of input that is enhanced for comprehension, but to the opportunities for meaningful action that the situation affords (van Lier, 2000, p. 252, emphasis added).

From this perspective, students need ample opportunities to negotiate meaning through interaction with an array of semiotic resources in the environment (such as images, gesture, speech, texts, etc.) (Firth \& Wagner, 2007; C. J. Kramsch, 2002; van Lier, 1994, 2000, 2004). These interactions, Firth and Wagner (2007) explain, "provide for the availability and utility of interactional and linguistic
resources that allow for learning to occur" (p. 808). In other words, classroom environments with rich semiotic budgets maximize students' opportunities to make sense of complex content, to participate in new language practices and, in doing so, to expand their semiotic repertoires.

## Affordances

Among the most notable contributions of ecological approaches is the notion of affordance which, when applied to language learning, refers to relationships among learners and physical and social aspects of the environment that learners perceive and act upon in ways that lead to further action (van Lier, 2000, 2004). The concept of affordance was a principal tenet of ecological psychology and has since been extended to a variety of disciplines (Scarantino, 2003). For James Gibson (1979/1986), the American psychologist who first coined the term, an affordance referred to a physical aspect of the environment that is relevant to an organism within that environment. Gibson (1979/1986) argued that there was no existing noun that encapsulated the relationship between an organism and the environment. Thus, he conceived of the noun affordances to refer to that relationship and provided the following definition: "The affordances of the environment are what it offers the animal, what it provides or furnishes, either for good or ill'" (Gibson, 1979, p. 128).

For Gibson, the construct of affordances helped explain the complex connection between perception and action (Scarantino, 2003). Gibson (1979/1986) often described affordances using the construction [verb phrase-able]. For instance, for an insect seeking shelter from a bird, a bed of moss is an affordance in that it is
hide-in-able. For a bird, a small branch might provide an affordance for resting because it is perch-on-able. Objects that have been constructed by humans can also serve as affordances. For instance, a bench could afford sitting or standing on for a range of purposes, such as reaching an upper shelf or hanging a picture frame. Gibson and researchers who have drawn on his work have emphasized that affordances can either enable or constrain (van Lier, 2004). From this perspective, affordances can also be understood as limiting actions. Given my focus on expanding students' opportunities for language development, however, I focus primarily on semiotic resources that students act upon in ways that enable the negotiation of meaning and further language use. With that said, as I describe in the following chapters, the classroom environment can facilitate or constrain the likelihood of the emergence of affordances.

As I outlined above, the relational aspect of affordances was essential to Gibson's definition (Kordt, 2018, Scarantino, 2003). An affordance, Kordt (2018) explains, "is neither a quality of the environment nor of the organism but emerges through their interaction" (p. 136, emphasis added). Because of their relational nature, a range of affordances can emerge for different individuals within the same environment or for the same individual at different times (Kordt, 2018). As Scarantino (2003) points out, affordances only exist in relation to a specific organism or set of organisms. In other words, while a bed of moss mentioned above might be hide-in-able for a variety of insects and perhaps a salamander or toad, it would certainly not afford hiding for a deer. In the context of teaching and learning, van Lier
(2004) describes affordances for student learning as opportunities for action or "action potential" that can lead to a range of outcomes depending on how a student perceives of the opportunity, the action she takes, and how the action serves her (p. 92). With regard to language development, a particular interaction might present include verbal utterances or materials that could serve as an affordance for language development; however, whether or not this opportunity is realized depends on the students' actions. ${ }^{5}$

From an affordances perspective, perception and action are fundamentally intertwined because people (and other organisms) perceive of the world around them as it relates to their own goals and desires (van Lier, 2004). van Lier (2004) distinguishes between immediate, or first-level affordances and mediated, or social affordances. He outlines how both immediate and mediated affordances often function collectively to create opportunities for action. To illustrate this process, he provides the example below of a person who does not speak any French who visits a woman's office while on holiday in France:
[S]he says 'asseyez-vous.' I have no idea what that means, but there is a chair there, and she is pointing to wit with an outstretched hand. So, the chair offers its usual affordance (it offers 'sitting in'), and she offers permission for me to carry out that action. So I sit and say 'thank you.' . . . the first moment, the

[^4]words 'asseyez-vous' have no meaning in themselves, but in the context they come to be seen as part of a sitting-down routine. The chair directly affords sitting for me . . . but the social context does not automatically afford sitting. It must, in this office, be afforded by a specific set of words and gestures. If the gestures are universal enough, then the words, incomprehensible though they may be, will become social affordances, the immediate chair-sitting affordance is supplemented by a socially mediated invitation, and I can sit down. So immediate and mediated affordances act in consort to link language to actions via perception. In language learning it seems to me that these connections are crucial for learning opportunities to emerge (van Lier, 2004, p. 94).

This example illustrates how affordances are inherently situated in social and physical space, as well as the integrated nature of affordances.

The notion of multiple affordances of various types functioning together is also central to the concept as it relates to classroom-based learning. Barab and Roth (2006) address the integrated nature of multiple forms of affordances, which they describe as affordance networks, that is: "the collection offacts, concepts, tools, methods, practices, agendas, commitments, and even people, taken with respect to an individual, that are distributed across time and space and are viewed as necessary for the satisfaction of particular goal sets" (p. 5). From this perspective, teachers' role is to enable meaningful engagement with the affordance network, in the context of a particular task. Similarly, van Lier (2007) suggests that a teacher's role, from an
ecological perspective, is to facilitate a learner's perception and action in relation to "arrays of affordances" that will allow the learner to pursue their goals (p. 53). From an ecological perspective, perception is multisensory, rather than divided into sight, touch, sound, etc. Thus, when an individual is making sense of an utterance, she is also perceiving information about the physical and social space, attending to gestures, facial expressions, and other information in the environment (van Lier, 2007). Linguistic affordances (things that are beings heard or read) are intertwined with other actions (such as how someone is moving their body) and objects (such as an item being pointed to) and these embodied forms of perception and action function as an integrated set of affordances (van Lier, 2007). With regard to language learning (and any learning, for that matter) it is therefore useful to consider affordances as sets, or as networks that allow for further action toward a goal rather than discrete elements of the environment. Like the example of the ensemble of affordances that allow for sitting in the chair, there were many instances in this study in which a particular affordance (such as a verbal utterance in English) would have meant little had other affordances not been perceived by a student simultaneously, or sequentially, such as deictic gestures and artifacts.

Several researchers within the field of SLA have underscored the potential theoretical value of affordances for illuminating aspects of the language learning process (Aronin, 2014; Aronin \& Singleton, 2012; Kordt, 2018). In spite of its celebrated potential, however, much of the literature on affordances for language learning is theoretical. The small body of empirical research on affordances for
"second" language development includes studies of affordances that emerge in response to a discursive move in the context of a single participant structure (Thoms, 2014); those that emerge as learners engage with a particular modality, such as telecollaborative (computer-mediated) communication (Darhower, 2008); and those that emerge as learners engage with classroom materials (e.g. textbooks) (Guerrettaz \& Johnston, 2014). ${ }^{6}$ Thoms (2014), for instance, examined the role of teacher reformulations during whole-class discussions and found that the kinds of reformulations that made one student's comment more accessible to the rest of the class acted as affordances for language learning.

Notably, the majority of literature on affordances for language development does not engage explicitly with literature on the role of translanguaging (or students' use of their first languages or "L1") in facilitating language development. For example, describing the potential of affordances to offer broader conceptualizations of meaning-making through interaction with the environment, van Lier (2000) points out, "gestures, pictures, and objects all blend with the communicative context" and adds, almost as an afterthought, "and even first language use can be seen as a semiotic system that supports emerging second language use (1976)" (van Lier, 2000, p. 256). Elsewhere, van Lier (2004) suggests that, from an affordances perspective,

[^5]students' L1 use "provide[s] access and promote[s] engagement," however, the role of the L1 is not framed as central (p. 137). As will I argue later this chapter, there is potential for greater synergy between translanguaging literature and the ecological notion of affordances.

## Affordances and Student Agency

As I described above, scholars who study affordances for language development from an ecological approach underscore that affordances are not particular curricular materials or instructional practices in isolation, but rather dynamic relationships between and among students and aspects of the environment. Given the centrality of perception and action, students' own agency is central to the study of affordances.

When viewed from the ecological perspective undergirding this study, language learning involves becoming aware of affordances, such as a peer's utterance in Spanish, an image to point to, or a piece of paper that can be folded to support an oral explanation of a concept, and using those resources to facilitate further action. As van Lier (2007) explains, students' agency in noticing and acting upon the affordances that are available is critical: "Every subject and every topic is an 'affordance network’ (Barab \& Ross, 2006) that is accessed through collaborative activity" (van Lier, 2007, p. 52). Thus, it is through interaction with one another and physical resources in the environment that students create and become aware of affordances in the classroom environment. Similarly, Thoms (2014) emphasizes the role of student agency in language learning viewed from an ecological perspective:
"A successful language learner wields a certain degree of agency over his/her [their] environment. It is out of a learner's social activity and awareness that affordances arise in language learning contexts" (p. 726).

Peer interaction is particularly fertile ground for the emergence of affordances for language learning. When peers jointly negotiate classroom tasks, not only are more semiotic resources available, they may also be more likely to perceive of affordances. Drawing on de Haan and colleagues (2011), who argued that an individual has their own unique 'field of affordance,' Kordt (2018) highlights how the field of affordances expands through interaction with others:

This effect is not just a matter of addition. It is also a question of the emergence of entirely new affordances because different sets of skills and prior knowledge are combined. Cooperation between different multicompetent people not only enlarges their field of affordances, but it also improves the accuracy of their perception of affordances and the appropriateness of their use (p. 140).

Put differently, when students interact with their peers, they have access to a greater range of semiotic resources, which might include multilingual linguistic resources as well as gestures and other forms of meaning-making. Because individuals also bring a unique set of experiences and expertise to the interaction, the possibilities for affordances to emerge become greater still.

## Peer Scaffolding

The concept of scaffolding is a central tenet of sociocultural learning theory and has been extended to ecological approaches to learning and to language learning specifically (van Lier, 2000, 2004; Walqui, 2006; Walqui \& van Lier, 2010). As Walqui and van Lier (2010) outline, scaffolding was first described by Bruner and Sherwood (1976) in reference to the combined structure and unpredictability that allowed for mothers to "control" their child's engagement in the game "peekaboo" at the moment of the unpredictable behavior, leading to increased agency and autonomy on the part of the child as the child takes over parts of the task. However, the list of essential elements of scaffolding included in a subsequent study of tutoring sessions by Woods, Bruner, and Ross (1976) a list that was then reproduced in a variety of educational settings as the key components of scaffolding-ignored the importance of learner agency (Walqui \& van Lier, 2010). Walqui and van Lier (2010) underscore that, in spite of frequent reductions of the concept, the combination of structure and process that allow for unpredictability is integral to scaffolding (see also Walqui 2006; van Lier, 2004, 2007). In the context of classroom-based learning, rather than referring merely to the structure of classroom activities, they argue, scaffolding "is a dynamic and contingent reaction to something new that the learner introduces into any classroom work" (Walqui \& van Lier, 2010, p. 24).
van Lier $(1996,2004)$ describes three layers of pedagogical scaffolding. The macro level refers to the design and progression of tasks and classroom rituals, the meso level refers to the organization and enactment of individual activities, and the
micro level refers to moment-to-moment interaction. In this study, my central focus was the micro, dialogical level given my interest in how students interacted with one another in ways that provided contingent assistance to scaffold each other's engagement in classroom tasks. At the same time, given the parallel goal of gaining insight into how teachers might organize classrooms to maximize this kind of meaningful interaction, I also discuss aspects of the curriculum and classroom structures in the four classrooms, as well as how individual instructional activities were arranged.

Moment-to-moment or interactional scaffolding has been examined by a number of scholars in the field of SLA. As van Lier $(1996,2004)$ highlights, much of this work builds on the notion of 'vertical scaffolding' described by Scollon (1976) to refer to a process in which "adult and child jointly construct their utterances across a series of turns;" the adult supports by making suggestions and filling in utterances for the child, resulting in a transcript that reads vertically (van Lier, 2004, p. 148, see also Walqui, 2006). Numerous scholars have shown that scaffolding is not constrained to expert-novice or teacher-student dynamics (Donato, 1994; Moll, 1990; Swain \& Lapkin, 2000). Donato (1994), for instance, demonstrated from a sociocultural perspective that peers who were all L2 learners created collective scaffolds for one another to achieve performance in their L2 that none of them could have achieved alone.

Donato (1994) demonstrated how collective scaffolding among peers led to second language development in the context of language majority students learning
an additional language (American speakers of English learning French at their university). More recently, however, a range of studies have expanded on this work, demonstrating how racially and linguistically minoritized students support one another's successful engagement in language and content area learning through their interactions. Like Donato's pivotal study, much of this work demonstrates how peers' fluid multilingual language practices play a central role in sense-making and joint negotiation of classroom tasks (Carhill-Poza, 2015, 2018; King et al., 2017; MartinBeltrán, 2014; Martin-Beltrán et al., 2016). For instance, Carhill-Poza (2018) found that adolescent immigrant students ("newcomers" who had spent three to five years in US schools) utilized Spanish and English to scaffold one another's participation in academic tasks, despite the fact that these multilingual peer interactions were rarely sanctioned during supervised portions of class time. In the context of an a "Language Ambassadors" program, Martin-Beltrán (2014) found that newcomer students from Spanish speaking countries enrolled in ESL classes, bilingual heritage Spanish speakers who were developing Spanish literacy, and students who spoke English at home and were studying Spanish at school engaged in translanguaging during peer interactions in ways that provided learning opportunities for all the students involved. Translanguaging among students as they negotiate classroom tasks-while often not framed in terms of affordances in the literature-often creates opportunities for action in ways that could be conceptualized as affordances for learning.

In the section that follows, I briefly discuss how the concept of translanguaging has been used to explore language and content learning in a variety
of multilingual settings. I argue that focusing exclusively on students'
translanguaging through talk and text falls short of capturing the range of semiotic resources relevant to language learning. Drawing on a growing body of literature that has called for a more expansive view of translanguaging that encompasses multilingual, embodied, and multimodal resources (Hawkins \& Mori, 2018; Kusters et al., 2017; Li Wei, 2018; Li Wei \& Lin, 2019; Lin, 2015, 2019; Pennycook, 2017), I argue that ecological approaches and the concept of affordances have the potential to build on translanguaging theory and research and expand how teachers conceptualize language learning in their classrooms.

## Translanguaging as an Embodied Multimodal Practice

Perspectives on the nature of bilingualism and methodological approaches to the study of bilingual language practices have shifted dramatically in the past several decades in response to increasing globalization. In light of growing linguistic hybridity and complexity, critical sociolinguists have challenged the concept of named languages (Makoni \& Pennycook, 2007) and the notion that bilingual individuals control two internally differentiated linguistic systems. Instead, a number of scholars have suggested that, from the emic perspective of bilingual language users, linguistic repertoires are not bounded by named languages (Makoni \& Pennycook, 2007; Otheguy et al., 2015, 2018; Otsuji \& Pennycook, 2010).

Together, these developments have contributed to what some scholars have called the 'multilingual turn' in applied linguistics (May, 2013), and others have referred to as the 'second turn,' (following the first turn from monolingualism to
linear bilingualism) (García \& Sylvan, 2011). Unlike previous approaches that viewed languages as discrete entities that are learned sequentially, "dynamic bilingualism suggests that the language practices of all bilinguals are complex and interrelated; they do not emerge in a linear way" (García \& Sylvan, 2011, p. 388). The shift towards dynamic bilingualism is not only theoretically significant; it also has implications for the education of bilingual and emergent multilingual students. García and Sylvan (2011) explain that, after the second turn, bilingual education programs in the US as well as content and language integrated learning (CLIL) programs in Europe increasingly viewed bilingualism as dynamic and nonlinear and acknowledged the reality that bilinguals would never become "two monolinguals in one" (Grosjean, 1982, 2001). ${ }^{7}$ Similarly, as Cenoz and Gorter (2017) highlight, this holistic perspective on bilingualism rejects the idealized "native speaker" as the benchmark to which emergent bilinguals should be compared.

Consistent with the multilingual turn, scholars have proposed a myriad of related terms as part of an effort to better capture the fluid language practices in which bilinguals engage. Some of these terms emphasize oral language practices, while others refer to bilinguals' dynamic language practices in writing. Such terms include hybrid language practices (Gutiérrez et al., 1999), language crossing (Rampton, 1995, 1998, 2001), polylanguaging (Jørgensen et al., 2011),

[^6]metrolingualism (Otsuji \& Pennycook, 2010), codemeshing (S. Canagarajah, 2011;
Pacheco \& Smith, 2015), linguistic dexterity (Paris, 2009), translingual practice (A. S. Canagarajah, 2013), and translanguaging (Baker, 2011; Creese \& Blackledge, 2010; García, 2009a). Of these concepts, translanguaging has gained the most traction among scholars of bilingualism and bilingual education (García et al., 2017; García \& Li Wei, 2014; Lewis et al., 2012b, 2012a; Li Wei, 2018).

While several the concepts mentioned above were first developed to describe the nature of bilingual language practices, translanguaging has origins in the classroom. Translanguaging, or trawsieithu, was first used by Welsh scholar Cen Williams $(1994,1996)$ in reference to a particular pedagogical practice that involved alternating languages for "input" (reading or listening) and "output" (speaking or writing) within the same lesson (Lewis et al., 2012a). Notably, Williams' use of the terms input and output, as I mentioned above, reflect a cognitive view of language that is inconsistent with sociocultural and ecological perspectives. In one of the first texts to popularize the concept of translanguaging in the US, García (2009a) described translanguaging as the "multiple discursive practices in which bilinguals engage" (p. 45, emphasis in original). García (2009a) suggested that translanguaging practices include code-switching, but also encompass language practices such as translating, and the use of language across multiple modalities. ${ }^{8}$ She argued that

[^7]centering "multiple discursive language practices" presents new opportunities for the study of what was previously referred to as "bilingual language use" or "language contact" from the perspective of the speakers themselves, for whom languages are not neatly bound (García, 2009a). Although García (2009a) highlighted the fluidity among languages and echoed the notion that bilinguals are not "two monolinguals in one" (Grosjean, 1992, 2001), she did not at this point position translanguaging as a theory of language. Instead, she proposed the concept of "dynamic bilingualism" to describe "the dynamic cycle where language practices are multiple and ever adjusting to the multilingual multimodal terrain of the communicative act" (2009a, p. 53).

As use of the term translanguaging has expanded in the past several years, however, the concept has taken on new meanings. García (2009a) had originally described translanguaging as an everyday communicative practice, yet more recent definitions reflect a distinct perspective. Otheguy and colleagues (2015), for example, provide the following definition of translanguaging: "The deployment of a speaker's full linguistic repertoire without regard for watchful adherence to the socially and politically defined boundaries of named (and usually national and state) languages" (p. 283, emphasis original). This definition of translanguaging underscores one of the central differences between translanguaging and code-switching: bilingualism is considered from an emic perspective. Indeed, García and Lin (2016) make this addition explicit: "We...insist that translanguaging is not solely a social practice, but,
theoretical underpinnings of translanguaging in which bilinguals draw from a single, fluid repertoire (see, for example, García \& Lin, 2016; Kleyn \& García, 2019).
also a linguistic theory that poses a mental grammar shaped, of course, through social interaction and negotiation" (p. 7, emphasis added).

In their review of literature on translanguaging, García and Lin (2016) attempt to address the variation among definitions of translanguaging by outlining the differences among "strong" and "weak" versions of translanguaging as a theory. They explain that that the central difference between these two interpretations of translanguaging is the degree to which the authors believe that languages can be clearly identified and delineated. Representing the "strong" end of the continuum, García and Lin (2016) point to Otheguy and colleagues (2015), who position translanguaging as encompassing the goal to "overturn" the notion that bilinguals or multilinguals use two separate linguistic systems and, in doing so, to replace the concept of code-switching (p. 282). Otheguy and colleagues (2015) contend that, from the point of view of the speaker, what is often called "code-switching" instead consists of selecting among organized lexical and structural features within the individual's "idiolect," or the unique mental grammar that is acquired through social interaction. Monolinguals, they explain, also draw on the range of linguistic features within their idiolect, making sociocultural judgments about appropriate selections based on setting and audience. Bilinguals simply draw from a larger repertoire and face greater constraints with regards to which features will be recognized (Otheguy et al., 2015). In contrast, "weak" version of translanguaging, they contend, assumes boundaries among languages exist, but seeks to "soften" them. They provide the example of scholars who have called for more flexible instructional approaches to
bilingual education. While the "strong" and "weak" distinction acknowledges that some interpretations of translanguaging theory reject any internal differentiation among languages while others do not, scholarship that adopts the term translanguaging often does not explicitly acknowledge the particular interpretation of the concept, nor does this distinction aid educators in identifying how these two perspectives on translanguaging might influence their instructional decisions.

In addition to exploring the theoretical questions associated with language and bilingualism, scholars have also extended the concept of translanguaging as it relates to teaching and learning both language and content within a range of instructional settings. Flores and Schissel (2014) point out that translanguaging can be considered from both sociolinguistic and pedagogical perspectives:

From a sociolinguistic perspective it describes the fluid language practices of bilingual communities. From a pedagogical perspective it describes a pedagogical approach whereby teachers build bridges from these language practices and the language practices desired in formal school settings (p. 461). While Flores and Schissel (2014) emphasize the role of translanguaging pedagogical practices as they relate to language development, a translanguaging approach is also relevant to the teaching and learning of content. For instance, in their recent publication for practitioners, García and colleagues (2017) argue that translanguaging pedagogy seeks to illustrate how educators can leverage their students' bilingual language practices in ways that facilitate students' engagement in core content in addition to meeting standards for language development.

A significant body of empirical work has demonstrated that efforts to leverage students' multilingualism through classroom-based translanguaging contributed to a range of notable outcomes. Studies found, for instance, that various approaches to incorporating translanguaging into classrooms increased students' access to content learning (Flores \& García, 2014; Worthy et al., 2013); expanded students’ communicative repertoires, (Martin-Beltrán, 2014; Velasco \& García, 2014), including "academic" varieties of English (Sayer, 2013); contributed to greater academic achievement (Bartlett \& García, 2011; Flores \& García, 2014; Hornberger \& Link, 2012); led to greater metalinguistic awareness (Cenoz \& Gorter, 2017; Palmer et al., 2014); and supported bilingual identity negotiation and performance (Creese \& Blackledge, 2010). Although originally developed as a pedagogical strategy to extend bilingualism among experienced bilinguals (Lewis et al., 2012), some scholars have suggested that translanguaging is particularly relevant to recently arrived immigrant students as a way of both drawing on their rich knowledge and expertise and of actively challenging dominant language ideologies (García et al., 2012; García \& Sylvan, 2011).

In sum, much of the literature on translanguaging documents the value of leveraging students' multilingualism to support language and content learning, and to contest monolingual and monoglossic ideologies. Significantly less research, however, has explored the complexity of meaning-making among multilingual learners and other social, symbolic, and material resources within the classroom ecology. Scholars of translanguaging have often highlighted the importance of
multimodality as part of a holistic view of translanguaging and underscored the value of considering meaning-making resources while still focusing primarily on the role of oral and written multilingual language practices. García and Li Wei, for instance describe an individual's semiotic repertoire as a "trans-semiotic system with many meaning-making signs, primarily linguistic ones" (García \& Li Wei, 2014, p. 42 emphasis added).

## Developments in Translanguaging, Semiotics, and Multimodality

In the past several years, numerous scholars have sought to expand notions of translanguaging as a multilingual and multimodal practice and to frame linguistic resources as fundamentally integrated with other semiotic resources, including embodied actions and engagement with artifacts in the environment (Canagarajah, 2017; Hawkins \& Mori, 2018; Kusters et al., 2017; Lin, 2015, 2019; Li Wei, 2018; Li Wei \& Lin, 2019; Pennycook, 2017). As I discussed above, many of these scholars have proposed that the concept of a semiotic repertoire allows for examination of the deployment of all forms of meaning-making resources in communication. Drawing on semiotic theories, scholars have developed a range of constructs to make sense of these integrated resources. Concepts that have emerged out of this work include semiotic assemblages (Pennycook, 2017), semiotic ensembles and spatial repertoires (Canagarajah, 2018), trans-semiotizing (Lin, 2015, 2019), the corporeal dimension of translanguaging (Blackledge \& Creese, 2017), embodied interaction (Wagner, 2018), and trans-perspectives (Hawkins \& Mori, 2018). While I do not wish to suggest that these terms are synonymous, they share a call to conceptualize multilingual linguistic
practices as fundamentally intertwined with other forms of semiosis and as situated within physical, social and (in some instances) temporal space. Like much of the earlier theorizing of translanguaging as transformative in nature, they also share a critical stance and a commitment to challenging historically embedded relationships of power.

Notably, more than two decades ago, while outlining ecological approaches and the notion of affordances, van Lier (2000) described an approach similar to those above: "taking a semiotic perspective, we might amplify, and place language inside a more general scheme of sign-making systems" (p.255). More recently, Pennycook (2017) called for a very similar shift in examining interaction: "The linguistic resources matter, but it is the way in which they are interwoven with the rest of the action, the dynamic relations between semiotic resources, activities, artefacts and space, that are of interest" (p.273).

## Considering the Classroom Ecology

In order to leverage insights from ecological and sociocultural theoretical traditions and to build on the growing body of literature that conceptualizes translanguaging as an embodied and multimodal practice, this dissertation examines how newcomer students interact with one another in ways that create affordances for language development. A "classroom ecology" framework (Guerrettaz \& Johnston, 2013; Tudor, 2001; van Lier, 1996)—one ecological approach to research on classroom-based interaction and additional language development-explores the dynamic relationships among participants, processes, structures, and artifacts
(Guerrettaz \& Johnston, 2013). This approach illuminates relationships among features of the environment and other aspects of classroom experience, particularly classroom discourse. By exploring these relationships, this dissertation seeks to reveal the kinds of classroom environments that maximize student agency through perception that results in action and interaction with semiotic resources leading to deeper and richer uses of language. From an ecological orientation (van Lier, 2011) explains, rather than viewing the context as the "arena," context refers to "those complexes of actions and emergent facts, rituals and meanings that arise in and through the activities that unfold, in relation to the physical, social, and symbolic resources that are invoked (p. 386, emphasis added). Viewed as an ecology, in other words, the classroom does not merely refer to the physical space in which learning occurs. Rather, the classroom ecology indexes the dynamic network of relationships among aspects of the classroom environment (van Lier, 2004).

The ecological approach adopted here is concerned with the nature of the complex and dynamic relationships among learners and the classroom environment and how learners act upon available semiotic resources. Of the myriad of relationships in the classroom ecology, the set of relationships between a young person and the environment that the person perceives and engages with can be characterized as affordances for language development (van Lier, 2000, 2004). In each of the focal classrooms, I examined peer interaction in order to gain insight into affordances for language development. If a learner is engaged, van Lier (2000) explains, "she will perceive of linguistic affordances" (in the form of things to talk
about and other social and material resources that are available) "and use them for linguistic action," thereby constituting language learning (p. 252). Following van Lier (2000, 2004), I assume that classroom ecology must both encourage students to draw on their own semiotic repertoires and provide ample social and material resources for meaning making in order to maximize the possibility that students will perceive of affordances for action. This approach, van Lier (2010) writes, provides insight into the process of learning by focusing on the types of actions students and teachers take with attention to "the multilayered nature of interaction and language use, in all their complexity and as a network of interdependencies along all the elements in the setting, not only at the social level, but also at the physical and symbolic level (p. 3, emphasis added). The goal of this study, however, was not simply to make sense of students' interactions, but to gain insight into the nature of those interactions in order to inform efforts to improve recent immigrant students' educational experiences.

Central to ecological approaches to the study of language is an understanding that the researcher, like other participants, is situated within the environment and thus forms part of the system under study (Kramsch \& Steffensen, 2008). Bang and Trampe (2014) point out that otherwise disparate ecological approaches share an explicit ethical commitment to seek to improve circumstances for participants. Similarly, van Lier (2004) underscores that an ecological approach is inherently critical: "The critical perspective requires constant evaluation of what is happening (what we are doing, in other words) with what we think (in line with our principles, more values, and so on) should be happening" (p. 6).

In addition to this critical stance, one of the strengths of ecological approaches is their ability to guide the researcher toward a deep and nuanced understanding of the phenomena under study before suggesting changes or altering the environment. All ecological approaches, van Lier (2004) explains, "invest a great deal of effort in understanding the context, describing and modeling that context, and only then propose specific interventions, usually in tentative ways at first, and only gradually in more fundamental and committed ways" (p.218). In other words, rather than offering sweeping recommendations for change, a strength of an ecological approach is in its commitment to in depth understanding of the phenomena and potential points of leverage within a particular environment.

A vision of the classroom as a complex ecology and of language learning as emerging through interaction with semiotic resources in the environment is also relevant to teachers, both in terms of their conceptualization of additional language development and the ways in which they organize classroom activity (Guerretaz \& Johnston, 2013; Hawkins, 2019; Kordt, 2018; van Lier, 2000, 2004). Hawkins (2019) suggests that an ecological view of language could result in a fundamental shift in teaching and learning: Rather than possessors of language knowledge, teachers' role becomes 'designer-of-environment' and emphasis shifts toward providing ample opportunities for interaction in which students can work together to negotiate meaning (Walqui \& Bunch, 2019). From this orientation toward language, teachers' efforts involve ensuring that students have access to a range of multimodal resources, "that students can leverage all of the resources at their command (in their repertoires)
to creatively make meaning together, and that performances that evidence learning enable students to demonstrate what they know and can do through all of their semiotic resources" (Hawkins, 2019, p. 20). Similarly, referring specifically to the relevance of the notion of affordances for language development for teachers, Kordt (2018), contends that such an orientation shifts teachers' focus away from an emphasis on mastering discrete linguistic forms, and instead underscores the importance of creating a learning environment for their students that maximizes opportunities for interaction. In other words, because affordances are relationships (and not objects or individuals themselves), teachers cannot "engineer" them; yet they can create environments rich with semiotic resources and support students in noticing and acting upon those resources. In the following chapter, I describe the methodological framework and particular methods that guided this study before turning to the city, school district, and schools where I gathered data.

## Chapter 3

## Study Design and Methodology

Following recommendations from van Lier (1997) regarding ecological approaches to research on additional language development, in this study I used ethnographic methods, which allowed me to explore the complex nature of interaction over an extended period of time by acting as a participant observer. Ethnographic microanalysis of social interaction (Erickson, 2004) and multimodal interactional analysis (Norris, 2004) also provided useful lenses. Together, these approaches allowed for the integration of data sources gathered using ethnographic methods, such as fieldnotes gathered during observations and interviews with teachers and focal students, with detailed analysis of a smaller set of interactions. As Martinez and Martínez (2017 highlight, "ethnographic methods help make clear the continuities and discontinuities existing for children, youth, and their families from "nonmainstream" linguistic backgrounds, while simultaneously calling into question the validity of deficit approaches to learning" (p. 507).

My methodological choices were guided by my interest in how peers worked together to make sense of classroom tasks and the affordances for language development that emerged as they supported one another. Consistent with descriptions of ecological approaches as inherently axiological (Bang \& Trampe, 2014; Kramsch \& Steffensen, 2008), my social and political commitments shaped every stage of the study, including my approach to data collection and analysis. Like critical approaches to applied linguistics, as Kramsch and Steffensen (2008) describe,
various strands of "ecolinguistics" share an orientation toward change: "Since the researcher interferes with the object understudy, he/she is committed-as meticulously, conscientiously and explicitly as possible-to a praxis that furthers a development which is beneficial" (p. 19). Ultimately, my goal was to not only to document and make sense of how students interacted in the classroom in ways that supported one another and provided opportunities for language development, but also to gain insight that could contribute to informing curricular and instructional decisions in order to improve the educational opportunities of racially and linguistically minoritized immigrant students.

In an effort to explore different schooling environments that serve newcomer students, I selected two schools for this research. I was interested in how students' interactions with one another and the kinds of semiotic resources available to them might differ across environments designated for English language and literacy development and those that prioritized content area learning, thus I selected two classrooms at each school that were designed to reflect those priorities. It was clear that attempting to observe peer interaction among all students in each classroom would result in relatively diffuse and shallow understanding of patterns of interaction and would not reflect an ecological orientation which seeks ecological validity rather than generalization. Therefore, I selected three focal students in each classroom in order to narrow my observations and to consider individual patterns of interaction. My goal in selecting focal students with varying degrees of experience using English was rooted in part in the possibility that there would be patterns in the frequency or
types of affordances that different students perceived and acted upon. I also gathered a range of classroom artifacts in order to better understand the material resources available to students, and how the materials informed their interactions with peers. In the section that follows, I describe the setting for my study, the city and schools in which the study took place, and the methods that I utilized for data collection and analysis. I reserve a more detailed description of the classrooms, participating teachers, and focal students for the following chapter.

## Situating the Study

The study was conducted in a large metropolitan city in California. This part of California has been home to immigrant communities for many generations. I selected this city in part because of its rich history of activism, engagement, and advocacy surrounding racial justice and immigration, and in part because of the range of programs designed to serve recently arrived immigrant students. Nearly a quarter of the students in the school district designated as English Learners were identified as "newcomers" (which the school defined as having spent three years or less in US schools). At the secondary level, the school district offered seven middle school newcomer programs, one ninth grade only program, and five high school newcomer programs. According to demographic data provided by the district office that supports emergent multilingual students, as of 2018, the school district was serving approximately 3,000 newcomer students across all grades, a number that had more than doubled in five years. Youth from Central America comprised the majority of newcomer students in the school district, with the largest number of students from

Guatemala. There were also significant portions of the newcomer population from Mexico, Yemen, and China. The most commonly spoken home languages among newcomer students included Spanish, Mam (an indigenous language of Guatemala), Arabic, Cantonese, and Vietnamese.

In 2014, this city, like many parts of the Western United States, experienced a significant increase in arrivals of high school-aged immigrant students, the vast majority of whom had undergone the harrowing journey from Central America to the southern border of the US over land alone or without an adult caregiver. Many of these youth, who officially referred to as "unaccompanied minors," had been apprehended by US homeland security at the US-Mexico border, held in detention centers for weeks or months, and were eventually released under the care of an adult family member or family friend who became the youth's "sponsor," who is responsible for ensuring that the young person is enrolled in school and that they attend court appointments. As of 2018, there were 572 unaccompanied immigrant youth enrolled in schools within the school district, nearly all of whom were high school students. Of the students who participated in this study, some were living with a parent or another close family member, and many cases they had been reunited after not having seen that family member for many years.

Many of the newcomer students in the school district had also experienced some form of interrupted education. The school district uses the following definition of students with interrupted formal education (SIFE):

Immigrant students who come from a home in which a language other than English is spoken and 1) Enter a United States school after the second grade; 2) Have had at least two years less schooling than their peers; 3) Function at least two years below expected grade level in reading and mathematics; and 4) May be pre-literate in their first language.

In the 2018-2019 school year, there were more than 600 newcomers considered SIFE enrolled in the school district. However, as I will discuss in greater detail, the school district's definition of SIFE did not always match how teachers assessed students' educational backgrounds, nor did SIFE status always suggest that the student would struggle academically when compared to peers who had not experienced interruptions in their educations.

A number of efforts on the part of the school district to expand services available to newcomer students and to better prepare the teachers who serve them had been developed over the several years leading up to 2019-2020 when data were collected. For instance, in 2017 the school district received a large grant to hire social workers dedicated to supporting health, well-being, and access to services among high school newcomer students. The school district had also developed a "Toolkit" for newcomer education that included curricular materials as well as information for teachers, administrators, and staff about the population of newcomer students in the school district, entry and exit criteria from newcomer programs, and resources for supporting speakers of Mam and speakers of Arabic. The school district also explicitly positioned itself as having adopted an asset-based approach to the education
of newcomer students, highlighting the rich linguistic and cultural diversity, resiliency, and dedication to pursuing education that newcomer students bring to their schools. For instance, the school district published "Asset-Based Cards: Strategies for leveraging the strengths of English Language Learners and Academic Language Learners" designed to "Identify and counter deficit traps." These cards include guidelines for approaches such as activating prior knowledge, heterogeneous grouping, same language grouping to encourage students to interact in their home language and then produce oral language or texts in English, identifying both language and content demands associated with classroom asks, and the recommendation to "celebrate approximation and progress towards mastery as opposed to expecting immediate mastery." The guidelines and specific strategies included in the cards were based on approaches to scaffolding developed by Gibbons $(2002,2009)$ and Zwiers and colleagues (2014).

## Sycamore High School and Cedar International High School

In selecting school sites for the study, I sought two distinct program models for newcomer education and varying levels of linguistic diversity among the school's population of recent immigrant students. As I will describe in greater detail below, the two research sites I selected for this study are both public schools located within the same school district, yet they reflect distinct models of newcomer education at the secondary level. While both schools' newcomer populations were primarily comprised of speakers of Spanish, one school served a far more linguistically diverse population.

Most newcomers in California and throughout the US attend comprehensive high schools, and newcomer programs housed within comprehensive high schools represent the most common newcomer program model (Short \& Boyson, 2012), yet little research has been conducted on language development among newcomer students learning within this model. In contrast, smaller, separate site newcomer schools that cater exclusively to recent immigrant students serve a far smaller percentage of the total number of newcomers in the US. However, this latter model has been identified within scholarly and popular literature as having been particularly successful in integrating language and content instruction for recent immigrant students and for utilizing translanguaging pedagogical strategies (García \& Sylvan, 2011; Kessler et al., 2018; Kirp, 2017; Stavely, 2019; Sugarman, 2017).

With regard to linguistic diversity, the majority of newcomer students in California speak Spanish, as do students classified as English Learners nationwide (Sugarman \& Geary, 2018). While many newcomer programs in the US predominantly serve Latinx students who are speakers of Spanish (in some cases in addition to indigenous languages), the majority of the small schools designed specifically for recent immigrant students serve far more linguistically diverse populations including, in many cases, speakers of several dozen different languages (see, for example, Kessler et al., 2018). Sycamore High School is a comprehensive public high school with a population of roughly 800 students. As of the 2019-2020 academic year when data were collected, approximately 250 students were enrolled in Sycamore's Newcomer Academy, the vast majority of whom were Spanish speakers.

Cedar International High School, in contrast, is a small public high school that exclusively serves approximately 400 students that the school describes as "newly arrived immigrants," including speakers of more than 30 languages.

In selecting Sycamore High School and Cedar International High School, I hoped to explore affordances for additional language development that emerged through peer interaction in the context of a newcomer program that resembled the majority of newcomer programs throughout the United States in that it served predominantly Spanish speakers and was housed within a comprehensive high school. I selected Cedar International High School because I was interested in exploring these interactions within more linguistically diverse classroom settings within the context of an entire school designed to serve recent immigrant students. In this way, I was able to examine two school settings with distinct classroom environments and those in which students would potentially act upon different affordances for language development. ${ }^{9}$

## Sycamore High School

Sycamore High is located on the East side of the city in a working-class neighborhood. Sycamore's student population reflects the community it serves, which is comprised primarily of Latinx and Black residents, in addition to smaller

[^8]populations of Asian Americans and Pacific Islanders. According to Sycamore's 2018-2019 School Accountability Report Card (SARC), $67 \%$ of the students were identified as Hispanic or Latino, 20\% as Black or African American, 5\% as Asian, 4 \% as Native Hawaiian or Pacific Islander, and $2 \%$ were identified as White. Ninetyfive percent of students at Sycamore were considered socioeconomically disadvantaged (SARC, 2018-2019).

## Table 1

Sycamore High School and Cedar International High School at a Glance

| Student Population | Sycamore High <br> School | Cedar <br> International <br> High School |
| :--- | :---: | :---: |
| Total Student Population | 780 | 380 |
| Newcomer Program Population | 250 | 380 |
| Students designated as English | $56 \%$ | $99 \%$ |
| Learners |  |  |
| Socioeconomically Disadvantaged | $95 \%$ | $98 \%$ |
| Hispanic or Latino | $67 \%$ | $71 \%$ |
| Black or African American | $20 \%$ | $5 \%$ |
| Asian | $5 \%$ | $17 \%$ |
| Native Hawaiian or Pacific Islander | $4 \%$ | NA |
| White | $2 \%$ | $4 \%$ |

With just under 800 students, Sycamore High School is relatively small for a comprehensive high school in an urban area. In part, its size can be attributed to its history as a comprehensive high school that was converted into separate small schools, and then once again transformed into a comprehensive high school. During the 2019-2020 school year when data collection took place, the Sycamore High campus was undergoing major construction and redesign of facilities. Ultimately, the restructuring of the campus would expand the services that Sycamore could provide
to students and staff, including larger and updated classroom spaces. Both of the classrooms where I observed had been newly constructed. However, fumes and noise from the construction outside were constant, outdoor spaces formerly available to students were roped off, and some teachers were required to share classrooms.

The majority of ninth grade newcomer students at Sycamore enroll in two periods of English, two periods of math, ethnic studies, biology, and physical education. Sycamore High is structured such that all students, including newcomers, apply in ninth grade to participate in one of two Career and Technical Education program pathways: The Architecture Academy or the Media Academy. Students then participate in one of the two academies during grades $10-12$, which aim to provide students with opportunities to develop both technical and social skills necessary to attain and be successful in a variety of careers. Many students participate in a paid internship as part of their program of study, and ultimately complete a Capstone course which calls on them to write and present a paper on their learning experience within the program. The teachers of the two focal classes, Ms. Cardoso and Ms. Lambert (who I will introduce in greater detail below) frequently mentioned their goals of preparing newcomer students for the capstone project and described much of what they were doing in ELD 1 and ethnic studies as preparation for the project, both in conversations with me and with their students.

The Newcomer Academy at Sycamore High School has been in place for nearly a decade and has continued to grow over the past several years. At the time of data collection, the Sycamore Newcomer Academy was serving approximately 250
students, comprising about $30 \%$ of the school's student population. The vast majority of the students enrolled in the program were from Central America, with the greatest number of students hailing from Guatemala, El Salvador, and Honduras. Nearly all of the students in the newcomer academy spoke Spanish, although a significant portion of those students spoke indigenous languages of the Americas at home. Sycamore's Newcomer Academy is organized as a cohort model based on students' level of English proficiency, with a separate cohort for students designated SIFE. The year data were collected, there were three cohorts of ELD 1, one of which was designed for SIFE. The majority of the students in ELD 1 were ninth graders, although there were several tenth-grade students in the class who were repeating ELD 1 . Of all three ELD 1 cohorts, the only two students who did not speak Spanish at home (one student who spoke Vietnamese and another who spoke Arabic) were enrolled in the class I observed.

Participating teachers reported that Sycamore Newcomer Program faculty met regularly in an effort to align the curricula for newcomer students and to identify students in need of additional support. The year that data were collected, the entire school had designated all of their professional development sessions to supporting students designated as English Learners. According to one of the participating teachers, this decision was a result of a lawsuit that was brought against Sycamore High because the school did not offer designated ELD for students bureaucratically designated Long-Term English Learners. In other words, once students exited the Newcomer Academy at Sycamore High, they no longer had access to ELD classes.

As I will discuss in greater detail below, however, in spite of the schoolwide attention to supporting students designated as English Learners, participating teachers were skeptical at best regarding whether the approach to professional development was effective.

## Cedar International High School

Cedar International High School is situated within a residential neighborhood in the northern part of the city, just a few blocks away from a thoroughfare with numerous popular restaurants. Cedar International is part of a consortium of small public schools throughout the United States designed to cater to the unique resources and needs of recent immigrant students. The consortium of schools has received significant attention for their impressive rate of student graduation and for their instructional approach (García \& Sylvan, 2011; Kessler et al., 2018; Sugarman, 2017) which, as described by the consortium's website, is guided by a commitment to "heterogeneity and collaboration, experiential learning, language and content integration, localized autonomy and responsibility, and one learning model for all."

Like the majority of the schools within the consortium, Cedar's student population is highly ethnically and linguistically diverse. At the start of data collection, Cedar International High School had a population of just under 400 students from 35 different countries, which included speakers of 32 languages. The majority of the students at Cedar were Spanish speakers, a significant portion of whom were also speakers of Mam and other indigenous languages of Guatemala. While teachers reported that the school's demographics had shifted in the past several
years toward more Spanish speakers and fewer speakers of other languages, other commonly spoken languages included Arabic, Amharic, Vietnamese, and Tigrinya. Like Sycamore High, the majority of students at Cedar High were identified by the school's SARC as Hispanic or Latino (71\%), the vast majority of whom were from Central America. When compared to Sycamore, however, a significantly larger portion of Cedar High's students were identified as Asian (17\%), the percentage of students identified as White was twice as large at Cedar (4\%), and that of students identified as African American students was far smaller (5\%). Like Sycamore, virtually the entire student body at Cedar International (98\%) were considered socioeconomically disadvantaged (SARC, 2018-2019).

Cedar International had been identified by the school district as a particularly effective model for supporting newcomer students. Specifically, when the school district developed a work plan for newcomer education in 2015 and identified the goal of providing resources and professional development for newcomer teachers and school leaders, one strategy involved utilizing Cedar International as a newcomer lab school. Because of its small size and funding from the Bill and Melinda Gates Foundation, Cedar was able to cap class sizes at 25 students. Students at Cedar work with the same team of five teachers during ninth and tenth grade, and in eleventh and twelfth grade students engage in community service and participate in internships. All students at Cedar International enroll in the same pathway for newcomers, the Multimedia Academy, which focuses on developing students' skills and experience with video and sound editing, web design, and navigating web-based programs.

Notably, Sycamore High School and the Cedar International High School operate within fundamentally different conditions that extend beyond the newcomer program model and the linguistic diversity of their students. Significant influences include, but are not limited to external funding, class sizes, and teachers’ opportunities for professional development. For instance, while class sizes at Cedar High are capped at 25 , some classes had fewer than 20 students, and many had an instructional aid present at all times. At Sycamore, in contrast, I observed classes within the newcomer program with as many as 32 students and a single teacher. Additionally, while three full days and 39 partial days per year were dedicated to professional development at Sycamore High, approximately double that amount (ten full days and 78 partial days) were allocated for this purpose at Cedar. While I acknowledge that these types of differences fundamentally impacted the focal classrooms, examining classrooms within distinct school settings can help to illuminate aspects of the classroom environments that are malleable.

## Classrooms

This study examined student interaction in the context of two types of classes: those in which English language and literacy development was the central goal and those that were primarily concerned with other subject-matter content. Initially, I had planned to select one beginning level ELD class and one content area class at each school. I hoped to document dynamic environments that provided a range of opportunities for students to engage in new English language practices and meaningful content-area learning in the context of two significantly different school
settings. I also recognized that I would only be able to gather rich interactional data if the participating teachers were confident enough about their own craft to welcome an outside researcher into their classrooms. In the case of Cedar International High School, I met with site administrators who then sent an invitation to all faculty, explaining that I was seeking one English language and one content area teacher to participate in the study. Ms. Aviva, a teacher of English and reading classes and Ms. Lilly, a biology teacher, both volunteered to participate. The administrators I had met with identified both teachers as highly skilled educators. At Sycamore High School, the district office responsible for services for emergent multilingual students contacted faculty on my behalf to invite them to participate in the study. Ms. Lambert, an English teacher, and Ms. Cardoso, a social studies teacher, volunteered to be a part of the study. Both teachers had taken on leadership roles within the newcomer program and communicated both to the district office and to me that they were eager to learn from the study's findings.

## Focal Students

Before selecting focal students, I conducted weekly observations in each classroom over the course of several months focusing on students' patterns of interactions with one another. In collaboration with participating teachers, in each of the four classrooms I then selected three focal students who were at various points along the bilingual continua (Hornberger, 1989, 2002) and who were performing academically in the focal classrooms at diverse levels. I limited eligibility to students who had been enrolled in US schools for no more than two full academic years as of

September 2019. As I discussed in Chapter 1, labeling students who have spent two years in US schools as "newcomers" presents a range of potential ideological and material repercussions. However, the school district definition of newcomers includes those students who are designated as English Learners and have been in the US for three years or less. While I recognize the potential impact of the label, I also wanted to include in my study students who have spent as many as two years in US schools (for whom the label is particularly inaccurate) precisely to demonstrate the type of complex and rigorous work those students are capable of engaging in, when provided the opportunity.

Given that Spanish is the most commonly spoken language among recent immigrant students in the US and given my own Spanish-English bilingualism, I only considered speakers of Spanish, including students who are speakers of Spanish in addition to indigenous languages. Among students who had indicated interest, I selected several potential focal students in each class whom, from my observations, appeared to have varying degrees of experience using English. I then asked participating teachers whether they would consider the potential focal students' English proficiency to fall within the top, middle, or lower third of the class. Other factors for consideration included students' level of educational continuity prior to enrolling in US schools, whether they had additional learning needs, as well as their age, country of origin, gender identity, and attendance patterns.

Selecting focal students presented a significant challenge. However, the process also illuminated how identifiers such as students' ELPAC scores, SIFE
designation, and indigenous language background often had a stigmatizing impact on students' experiences with English and academic performance. I had intentionally not provided teachers with more specific guidelines surrounding the notion of "English proficiency" because I was interested in how they would make sense of the concept, and how their evaluations would compare with my own informal assessments of students' English use in relation to that of their classmates. Unsurprisingly, the four teachers interpreted the concept of English proficiency in several ways. Ms. Cardoso, the ethnic studies teacher at Sycamore High separated her ranking of the students in terms of writing and speaking and did not position any of the students in the same third across both categories. Ms. Lambert, the ELD teacher at Sycamore High, notified me that all of the students I had identified as potential focal students had ELPAC scores of 1 or "Emerging." However, she explained that she would rank those students across the spectrum of the class (top, middle, and bottom third) suggesting recognition of the range in levels of bilingual experience that are not reflected in students' ELPAC scores. ${ }^{10}$ The biology and reading teachers at Cedar International, Ms. Lilly and Ms. Aviva, opted out of characterizing students in this way altogether, and simply sent me the potential focal students' ELPAC scores.

It also became apparent that identifying certain characteristics, such as SIFE status or "first language" speakers of indigenous languages, was not entirely straightforward. For example, Ms. Lambert and Ms. Cardoso, the two teachers at

[^9]Sycamore High, both separately explained that placement in the "regular" ELD 1 cohort versus the SIFE ELD 1 cohort was often more complex than whether or not the student was officially designated SIFE. They noted that, in some cases, students did not reveal during their initial placement interview that they had been unenrolled in school for several years, and other students only later shared that they had only able to attend school part-time in their home country. In other words, many of the students who were not technically designated SIFE had experienced interruptions in their schooling. In other instances, according to Ms. Lambert and Ms. Cardoso, decisions about whether students should be enrolled in the SIFE ELD class were made based on constraints of the master schedule and efforts to balance the size of SIFE and "regular" ELD1 classes.

Further complicating the use of SIFE as an indicator of students' educational background, participating teachers from both schools pointed out that there was not a direct correlation between students' SIFE designation and students' need for support services-once again highlighting the issues with these labels. Ms. Cardoso, the ethnic studies teacher, described how the label was used in a variety of ways, and still often failed to identify the students who would need additional support:

Some of them are SIFE by the definition. Because the definition of SIFE just means two years of interruption in education. Many of them by the-so they're like the literal or technical definition of SIFE? Which I'm pretty sure like ninety percent of them meet? Then there's our [Sycamore] High School definition of SIFE which is basically that you have less than a fifth or sixth
grade education? THEN or even if like, Brandon for example, he according to his dad, I met his dad last week he went to school up until like the DAY before he came to this country until he was in like eighth or ninth grade or something and we're moving him to the SIFE cohort this semester?

Ms. Cardoso went on to describe that the reverse was also true: there were students who were labeled SIFE and placed in the SIFE cohort who excelled academically and were recommended for "mid or high-level content classes the following year."

Similarly, the biology teacher at Cedar International, Ms. Lilly, noted that several of her students who were designated as SIFE were among the most successful academically and among those with the highest English language proficiency. She provided the example of Feliciano, one of the focal students, who was classified as SIFE and his first language was Mam, an indigenous language of Guatemala. Contrary to the notions that an interrupted educational background and a home language that Ms. Lilly did not speak would create additional challenges for him, she described how Feliciano communicated complex ideas in English with confidence, and shared that he had told her when he first enrolled in her class that he was a smart student who was very much prepared to learn. As I will discuss in detail below, my own observations also indicated that Feliciano was among the most high-performing students in the class and that his peers consistently sought him out for help, both with navigating course content and with the language and literacy demands of the class. Ms. Lilly also gave the example of Julia, another focal student classified as a SIFE who was also excelling in Biology class. Notably, Ms. Lilly considered that Feliciano
and Julia's success could also be attributed to the fact that they were slightly older than some of their peers in the class and thus, perhaps more mature. She pointed out that other students in her class who were not classified as SIFE had a much harder time managing the course materials and expectations. In sum, the process of selecting focal students highlighted the diversity of experience masked by some of the labels used to describe students and underscored the impact of making assumptions about students' English proficiency or academic performance based on their ELPAC scores, SIFE designation, or languages spoken at home.

Ultimately, I selected twelve focal students with varying degrees of experience with English and with a range of educational backgrounds, and who were performing academically at various levels in the focal class. Half of the focal students identified as female and half identified as male. The youngest focal students were fourteen and the oldest were eighteen at the time of the first interview. Eight of the twelve focal students were from Guatemala, two were from El Salvador, one was from Mexico, and one was from Honduras. In the following chapter, I provide more detailed description of these students.

I selected students with a range of experiences with English based on the understanding that students' experiences with English might be linked to different patterns of engagement in peer interaction and to perceiving different types of affordances for language development. However, I recognize that the tendency to generalize is antithetical to ecological approaches, and especially to the notion of affordances. As Larsen-Freeman (2017) underscores, in spite of researchers' efforts to
generalize, "when it comes to perceiving affordances, every individual is unique, something to which all teachers can attest" (p. 14). In an effort to avoid this tendency, I try to ground my observations in the particularity of each student and to honor the complexity to the best of my ability.

## Data Collection

Data collection for the study consisted of a range of qualitative methods that allowed me to examine peer interaction and affordances for language development in each classroom. In order to address my first research question regarding how students interact with one another to navigate classroom tasks, I relied primarily on fieldnotes from observations, teacher interviews, and video recorded student interaction. As a means of exploring my second research question on the affordances for language development that students acted upon these classrooms, I draw primarily on video data. I describe each of these methods in greater detail below.

## Classroom Observations

In September 2019, I began weekly classroom observations in each of the four classrooms. Prior to beginning data collection, I had discussed my role in the classroom with each teacher. We agreed that I would sometimes circulate and provide students with assistance, while on other visits I would spend more time quietly observing students' interactions. In practice, I found that I was almost always actively engaged with students. In all four classes, students consistently asked me for help as they navigated assignments, and I spent the much of my time in the classroom moving from one student to the next to provide support as they negotiated
instructional tasks. I took extensive fieldnotes during and immediately following observations, highlighting the ways in which students communicated with one another and provided each other with support with classroom tasks (see Appendix A). Given my focus on opportunities for interaction and affordances for language development, I was also interested the participant structures that shaped classroom discourse, the organization of instructional activities, and the instructional materials that each teacher provided. I documented this information in my fieldnotes, and separately documented emergent areas of interest that that would later become analytic memos. For instance, I noticed during one observation of Ms. Lilly's biology class that students were engaging in extended interactions with one another about the content during activities that had been designed to be individual tasks. In other words, students appeared to be noticing and acting on affordances through interaction with one another that Ms. Lilly had not intended. After noticing this pattern over the course of several observations, I was more attentive of the kinds of interaction that took place during individual work on laptops and later reviewed my fieldnotes to identify instances in which I had observed this pattern and to consider the conditions that may have allowed these interactions to occur.

As I described above, identifying focal students was more challenging and time consuming than I had anticipated, and I spent the first several months observing patterns of interaction in each class and developing relationships with the students and teachers before I eventually identified focal participants. Once I had selected three focal students in the four classrooms, I focused each observation on one of the
focal students. Whenever possible, I positioned myself close enough to the student to hear their oral interactions and, as I describe below, sometimes video recoded them as they participated in class activities.

As anyone who has ever observed a newcomer classroom will know, the presence of an additional educator in the classroom is not a resource to be wasted. I recognize that by merely being in the classroom I impacted the classroom ecology, and that by interacting with students directly, I likely changed the ecology more substantively. Consistent with an ecological approach, however, I was committed to responding to students' and teachers' requests for support any time that I was in a position to provide it. ${ }^{11}$ It was important to me that the teachers and students feel comfortable with my presence in the classroom and that they benefit in some way, given my own positionality as a White researcher who did not live in their community, and who was benefitting from observing, recording, and interviewing them. Several students asked if I would give them my phone number so that they could text me questions on their homework-a request I accepted happily-and some asked for help with other tasks, such as navigating a missed immigration court date and seeking out part time job opportunities. Undeniably, I gained more from these

[^10]relationships than the students or teachers. However, I hoped to contribute in some small, but positive way to the learning environment. ${ }^{12}$

## Classroom Video Recording

I video recorded between four and six instructional periods in each classroom in an effort to capture students' engagement in a range of instructional activities and across a variety of participant structures. ${ }^{13}$ Video recording is particularly well-suited to multimodal analysis of classroom interaction given the focus on multiple semiotic resources utilized simultaneously in interaction. As Dufon (2002) points out, video recording has become increasingly popular within research on second language development precisely because videos can capture a range of semiotic resources and provide "denser linguistic information" (p. 44). In the context of this study, audio recording would not have captured many of the multimodal or embodied practices in which students engaged.

Drawing on recommendations for video recording in ethnographic research on SLA (Dufon, 2002), I alternated between occasional wide-angle views that would capture a broad frame of movement and discourse in the classroom and a smaller frame trained on a particular focal student. ${ }^{14}$ After reviewing the first several video

[^11]recordings, I asked focal students to wear lapel mics so that I could capture a more detailed record of their oral interactions with group members, as well as instances of private speech.

The majority of the video recordings consist of full instructional periods in which the camera follows a single focal student for the duration of the class periodeven if the class was divided into stations in which different groups of students rotated through a series of simultaneous instructional activities. Although video data and video logs document the focal student's actions, they also provide an accurate record of time spent engaging in a particular participant structure during the entire class period. ${ }^{15}$ On several occasions, however, I recorded two different focal students within a single class period, either because the focal student being recorded was called out of the class, or because I wanted to record several focal students engaging in a particularly dynamic activity.

## Teacher and Student Interviews

I conducted two semi-structured interviews with the teachers of each class, the first after about two months of observations, and the second after at least six months of observations. I asked teachers to describe their professional preparation and development, instructional goals and decision-making, as well as their observations surrounding students' patterns of interacting with one another and their perspectives

[^12]on the kinds of knowledge and practices important for success in that particular class (see Appendices B and C).

I conducted semi-structured individual interviews with 11 if the 12 focal students, in which I inquired about students' perceptions of the opportunities for learning that emerge in their classroom, how they respond to challenges in the classroom, and their own perspectives on language learning (see Appendix D). As Kordt (2018) points out, students' insight on language learning provides valuable information for both teachers and researchers. When researchers ask students about the elements of the learning environment that students find helpful, "students can comment, give advice and make the teacher aware of the extent to which the affordances intended by the teacher overlapped with the affordances actually perceived by the students" (p. 145). Student perspectives, in other words, could potentially provide guidance for how teachers might adjust the classroom environment to provide additional semiotic resources or to support students in noticing those that are available.

## Classroom Artifacts

I gathered a range of classroom artifacts during classroom observations, including instructional materials such as narrative texts students engaged with, worksheets, homework assignments, focal student work, virtual artifacts like video clips and google docs, pictures and realia, and resources in the classroom and on the walls, such as models and posters. In some instances, I gathered originals, but more often I photographed the artifacts and stored digital copies.

## Data Analysis

The process of data analysis was inarguably shaped by the sociocultural and ecological theoretical perspectives that I have described in previous chapters. Data analysis consisted of an iterative process of coding, recoding, identifying salient themes, and returning to the data. Given the range of data sources gathered and various approaches to data reduction and analysis, I describe each briefly below.

Fieldnotes served as an important source of data for developing analytic memos to document initial themes and areas of further inquiry. Once I had completed observations, I annotated the entire set of fieldnotes from each classroom. I then reread the annotated fieldnotes from each classroom, taking note of emergent themes, differences in the kinds of activities students engaged in within each classroom, the kinds of materials available, and patterns of interaction. I then revisited and expanded on analytic memos from each class. I later returned to my annotated fieldnotes and sets of analytic memos in order to create detailed profiles of each classroom.

Like my fieldnotes, I began analysis of interview data by reading and annotating select sets of transcripts. For instance, I began by annotating a set consisting of one transcript form each of the participating teachers, and focal students from each classroom. I then reviewed my annotations across the set of transcripts, and created a working set of codes, the majority of which were Structural Codes (MacQueen et al., 2008) consisting of conceptual phrases that would provide contextual information about the participants' backgrounds, experiences, and perspectives and the schools and classrooms in which I collected data. Codes
included, for instance "Students' educational background," "Teachers' view on language/language development," and "Teachers' background / preparation" (see Appendix E). After creating a working codebook, I utilized qualitative data analysis software (Dedoose) to code one set of each type of transcript (e.g. the first interview transcript with each teacher and focal student transcripts), adding and eliminating codes as necessary, and then coded a second round of transcripts. I then examined applications of single codes across transcripts (such as "Teachers' view of language/language development") as well as co-occurrence of pairs of codes both within and across transcripts (such as "Teachers' view of language/language development" and "Forms-focused worksheets."

Analysis of classroom artifacts was also important to making sense of each classroom ecology. Laurillard et al. (2000) and Guerrettaz and Johnston (2013) underscore that instructional materials designed to facilitate learning may be perceived by learners in ways that differ significantly from the expectations of the designers of the material (whether that be the teacher or the authors of textbooks). Therefore, I chose to limit analysis to artifacts used during selected video episodes based on the understanding that affordances for language development presented by materials could only be understood in action.

## Analysis of Video Data

I recorded a total of just over 21 hours of video in the four classrooms in order to explore peer interaction and the affordances that emerged through those interactions in detail. Unlike real time observation, Erickson (1995) points out,
replaying recorded episodes allow for contemplation of the data over time, which helps to avoid premature interpretations. For each class session that I recorded, I created video logs of two-minute intervals in which I recorded information about the activity in which students were engaged, and actions taken by students and teachers with particular attention to instances in which students reached out to peers for support, or peers volunteered to support their classmates (see Appendix F). I then reviewed all of the video logs, taking notes in a separate column on patterns surrounding the interactions that occurred, the kinds of resources that students used during those interactions, and the participant structure.

Based on this preliminary analysis of the video logs, I wrote numerous analytic memos exploring emergent patterns and interrelationships. For instance, I noted that students in all four classes regularly leveraged their home language resources in order to make sense of instructional tasks and to support the understanding of their peers. Regarding Ms. Aviva and Ms. Lilly's class, I reflected that students engaged in more frequent and more extended interactions surrounding course content than students in Ms. Lambert or Ms. Cardoso's classes.

## Coding Video Logs

Drawing on these first rounds of analysis and my research questions, I developed a codebook for the video logs primarily comprised of Descriptive Codes (Saldaña, 2014) and Process Codes (Charmaz, 2002). Descriptive codes included parent codes such as "Materials" with child codes such as "Images/Infographics," "Video," and "Narratives." Given my interest in what students were actually doing as
they interacted with one another, process codes, which use gerunds to reflect action, were particularly important. I created process codes such as "Giving instructions," "Modeling," "Encouraging peer support," to document actions taken by the teacher and to provide an overview of the sequence of each recorded class, and codes such as "Questioning / Doubting," and "Revising explanation" in order to analyze students' interactions with one another (see Appendix E).

As I will discuss in Chapter 5, drawing on the notion of participant structures (Philips, 1972 / 2012) that organize classroom discourse, I coded all video logs in order to examine instances of Pair work, Small group work, Individual work, Teacher-fronted station work, Teacher-fronted whole class work, and Whole class discussion (I describe each structure in greater detail in Chapter 5). I then selected a smaller portion of the video logs (two full class sessions from each classroom) and calculated the percentage of time spent on each participant structure during the selected class sessions in order to explore opportunities for peer interaction in each of the four classrooms relative to one another.

After observing that students frequently supported one another in the context of activities that had not been designed for collaboration, I returned to instances of peer interaction in the video logs for further analysis and identified intervals in which students interacted in order to provide one another with support, regardless of the participant structure. As I will describe in greater detail in Chapter 5, I identified the following categories of "Peer Support": Providing meanings, translations, and spellings of a word or phrase; Checking or correcting answers; Offering explanations
of instructions; Providing explanations of content; and Collectively negotiating content and explored the frequency and substance of each category of peer support within and across classrooms.

## Microanalysis of Select Interactions

During the next phase of analysis, I selected specific interactions that I had coded "Collective negotiation of content." I selected this category because these interactions involved richer negotiation than did many of the other categories, included numerous students, and because the interactions themselves were not focused exclusively around language, but rather involved students engaging in meaningful sense-making surrounding new concepts. Within this category, I selected examples for microanalysis that highlighted students' creativity and ingenuity, and the kind of meaningful engagement that is possible when the curricula, pedagogical approach, educators, and fellow students assume that recently arrived immigrant students are highly capable individuals with rich and varied experiences and ideas.

As Ochs (1979) famously pointed out, transcriptions of audio or visual data are inherently (and necessarily) selective. She underscored that clarity regarding the filtering mechanism is critical given that what is included in a transcript is directly connected with the kinds of conclusions drawn by the researcher. Of particular relevance to this study, Ochs (1979) noted that research on child language development overwhelmingly favored oral language over other forms of communication, adding that when there was attention to "nonverbal" communication, "such behavior tends to be treated as a set of variables that co-occur with language
but do not necessarily constitute part of the idea conveyed" (p. 172). Ochs acknowledged that the tendency to foreground verbal behavior could be attributed in part to the reality that it is quite difficult to include all of the nonverbal actions within a transcript such that the reader can still follow the thread of the interaction. Similarly, Erickson (2006) underscored that regardless of how fine-grained a transcription of video footage is, it is always incomplete. This is particularly true of multimodal analysis of video-recorded interaction. Because multimodal analysis is grounded in mediational discourse theory primarily concerned with 'mediated action' (Scollon, 2001) rather than language (which is generally foregrounded from a discourse analysis perspective), multimodal transcripts must capture social actionwhat participants are doing-in addition to what they are saying (Norris, 2002). I was interested in capturing not only students' speech, but also the ways in which they used their bodies and engaged with materials in the environment to communicate and to provide one another with assistance, thus, I needed to document actions such as gesture and mediating materials (such as images and texts). It is important to note that I did not always have full access to the mediational means students engaged with, nor is the particular frame of video clips or segment of an assignment always clear within the video recordings. Wherever possible, however, I describe and include still images of materials that mediated interactions.

In organizing my transcriptions for microanalysis, I drew on Blackledge and Creese (2017) who examined the corporeal aspects of translanguaging in communication, that is, the role of the body. Like Blackledge and Creese, in my effort
to document multimodal interaction in transcripts, I created columns for the actor, verbal action, other forms of action, and images to capture the physical positioning of the body and use of gestures. While I acknowledge that the attention from listeners contributes in important ways to interaction (Erickson, 2004; Goodwin, 2013), I omitted many instances of listeners' use of modes such as gaze or shifts in posture, which were not always visible in the video-recording. After completing transcriptions of select episodes, I then expanded my codebook to allow for more detailed analysis of students' actions, adding codes such as "Deictic gestures," "Iconic gestures," "Metaphoric gestures" and "Requesting support." I examined code applications of individual codes across interactions, such as "Utterances with features of Spanish," well as co-occurrences of select codes within interactions, such as "Deictic gestures" and "Materials."

In sum, by drawing on tools from ethnographic microanalysis of social interaction (Erickson, 2004) and multimodal interactional analysis (Norris, 2004) I explored broad patterns of interaction common within and across classrooms as well as the affordances that emerged within individual peer interactions. In the chapter that follows, I provide a more detailed description of the participating teachers, focal students, classroom practices, and the classroom ecologies of which they were a part.

## Chapter 4

## Classroom Life

In this chapter, I describe what classroom life looked like in ELD 1 at Sycamore High with Ms. Lambert, in ethnic studies at Sycamore High with Ms. Cardoso, in reading at Cedar International with Ms. Aviva, and in biology at Cedar International with Ms. Lilly. For each class, I begin by providing some basic information about the class itself, followed by a brief description of student demographics. I then discuss the participating teachers' backgrounds and professional preparation. Finally, drawing on fieldnotes and interviews with teachers and students, I describe the focal students in each class.

## Table 2

## Four Classrooms

| School | Sycamore High School |  | Cedar International High School |  |
| :---: | :---: | :---: | :---: | :---: |
| Subject area | ELD (1-2) | Ethnic <br> Studies | Reading | Biology |
| Teacher Course type | Ms. Lambert Core | Ms. Cardoso Core | Ms. Aviva Elective | Ms. Lilly Core |
| Grade(s) | $\begin{aligned} & 9 \text { (and a few } \\ & 10) \end{aligned}$ | $\begin{gathered} 9 \text { (and a few } \\ 10) \end{gathered}$ | 11 | 9 / 10 |
| Length of instructional period | 100 minutes | 50 minutes | 105 minutes | 105 minutes |
| Number of students in focal classroom ${ }^{16}$ | 29 | 32 | 22 | 25 |

[^13]

## ELD 1 at Sycamore High with Ms. Lambert

Ms. Lambert's ninth grade ELD 1 class served students who had very recently arrived in the United States and enrolled in high school for the first time as well as a few students who had studied for a year or less in US middle schools. Ms. Lambert's classroom is located in a newly constructed section of the campus, where most classes within the newcomer program are held. The classroom itself is bright and airy with big windows, desks grouped together in clusters of four or five, and a few posters on the walls, the English alphabet, and several bookcases filled with children's books and young adult novels. During our first interview, Ms. Lambert explained that the double period class that I was observing was technically comprised of one period of English and one period of ELD, adding "but as you've seen we don't really distinguish between the two periods." My observations confirmed that while students had a fiveminute break between periods, there was no designated "ELD time" and "English
time," and Ms. Lambert and Ms. Cardoso (the other focal teacher at Sycamore) consistently referred to this class as "ELD 1. ."

Although it was officially a ninth grade course, several tenth grade students were also enrolled in ELD 1, either because they had enrolled at Sycamore part way through the previous year or because they completed the entire school year but the faculty had determined that they would be better served by repeating ELD 1. Students' ages ranged from 14 to 18 . All but two of the 29 students enrolled in September spoke Spanish as a home language, although numerous students also spoke indigenous languages of Guatemala such as Mam at home. The majority of students in the class were from Guatemala, along with several students from El Salvador and Honduras, and one from Mexico. The remaining two students were from Vietnam and Yemen and spoke Vietnamese and Arabic, respectively. Although the Newcomer Academy at Sycamore High had created a different section of ELD for students with interrupted formal education (SIFE), several students in the focal class had also experienced interruptions in their education but had been enrolled in Ms. Lambert's class due to scheduling constraints.

Ms. Lambert is a White woman in her late thirties who had grown up in the city where she was now teaching. Her demeaner during class was somewhat stern, something she pointed out herself on several occasions. During one interview, for instance, she described how one of her colleagues had texted a silly picture she had taken of herself with one of the newcomer students and contrasted this kind of practice with her own orientation toward teaching: "So that was cute. Yeah. That's
more of her personality. I'm like more business with them [Laughs]." While Ms. Lambert's affect was relatively serious, her commitment to making herself available to support students was evident from observations as well as students' comments about their experiences in her classroom.

Ms. Lambert had two instructional aides, Ms. Elena or Ms. Paloma, both of whom are Latina and bilingual speakers of Spanish and English. One of the two women led a third of the class in the station focused on phonics instruction (SIPPS) on occasions when class was organized in stations. The majority of the time, however, they were available to circulate and provide individual support to students. Throughout the time I spent in Ms. Lambert's classroom, shouts of "Miss Lambert!" "Miss Elena!" "Miss Paloma!" were nearly a constant refrain. In addition to the instructional aides, during the fall a local college student named Rahim volunteered in the class twice a week. Because he was a bilingual speaker of English and Arabic, during the first semester he often provided individual support to Samir, a Yemeni student in the class who spoke Arabic.

## Ms. Lambert's Professional Background and Preparation

Exceedingly unusual for a high school teacher, Ms. Lambert had previously earned a PhD in linguistics and had taught linguistics at the university level for a number of years before deciding to pursue a career in teaching at the high school level. She explained that she had volunteered as an ESL teacher for adults and teenagers at a local church serving the Guatemalan community, discovered that she really enjoyed it, and decided that she wanted to pursue teaching ESL to newcomers.

She had learned Spanish through study and travel, and regularly used Spanish flexibly with English during classroom instruction and individual interactions with students. She explained to me that this was her only ELD class in which there were speakers of languages other than Spanish, which encouraged her to think through how to provide grammatical explanations exclusively in English.

At the time data were collected, Ms. Lambert had been teaching at Sycamore High for three years and was in the process of earning her credential in English. Her two-year credential program exclusively served teacher candidates who were already full-time teachers in grades K-12. When I asked Ms. Lambert about coursework within the program surrounding emergent multilingual students, she explained that in one of her classes there was some discussion of how to support emergent multilinguals, but that none of it was specific to newcomers. Because none of her coursework was focused specifically on teaching newcomer students, she described how one of the few other candidates within the program who worked in newcomer classrooms became her "permanent peer feedback partner."

Regarding other sources of professional development, as I mentioned previously, all professional development sessions for staff at Sycamore High were focused on serving students designated as English Learners the year that data were collected. Yet, Ms. Lambert explained that the structure of the sessions worked poorly because they were so spread out:

So we have these learning teams and you're supposed to do a lesson plan and then get feedback on it. And then people on your learning team come and
observe you and then you debrief. But the problem is with our PD schedule, it'll be like a month and a half between the first time like they present the lesson and when you debrief and that's if you're lucky! Sometimes it's two months later and it's like, 'I don't remember! What did you talk about?' And then it's pretty useless.

She went on to explain that the ELD department at Sycamore had also decided to focus on using "juicy sentences," (Wong Fillmore \& Wong Fillmore, 2014) a strategy developed for supporting English Learners' engagement with complex text through a guided process of deconstructing select sentences. Ms. Lambert noted that while she had only tried the approach a few times and felt that the students found the structure of the lesson difficult, that students would likely adjust with time and find it helpful. Not surprising given the taxing schedule of teachers and the additional demands presented by her credential program, Ms. Lambert noted that more than any kind of professional development she wished for more time. She concluded our conversation about professional development by acknowledging the reality of the time constraints she faced: "I'm sure there's lots of good things, but it's just hard to keep on top of what I need to do."

## Focal Students in ELD 1

In this section, I draw on fieldnotes, informal conversations as well as interviews with participating teachers, and interviews with the focal students to provide brief profiles of the focal students in Ms. Lambert's ELD class. As I mentioned previously, because of the structure of the Newcomer Academy at

Sycamore High, the majority of the students enrolled in Ms. Lambert's ELD 1 class were also enrolled in Ms. Cardoso's ethnic studies class, including all three focal students in both classes. Therefore, some of my descriptions below are also based on fieldnotes gathered in Ms. Cardoso's class.

Table 3

Focal Students at Sycamore High School

| Name | Grade | Age ${ }^{17}$ | Gender <br> Identity | Country of <br> Origin | Time <br> spent in <br> the US | Grade <br> complete <br> d in <br> home <br> country | Languages <br> spoken at <br> home | SIFE |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

[^14]
## Gisela

Gisela, an 18-year-old female-identifying student from Quiché, Guatemala, was short in stature with russet, reddish-brown skin. While physically petite, Gisela moved confidently about the room. She usually wore fitted jeans, pink and white Adidas sneakers, a sweatshirt or denim jacket, and her shoulder length black hair in a partial French-braid or ponytail. She told me that although she was often responsible for looking after her nephews, when she had time, she liked to play soccer. During one observation, when the class was working on an activity that required them to ask one another questions about their family, I learned that Gisela was one of eight children in her family and the only girl. She had arrived in the US about a month before classes began in 2019 and joined one of her brothers, his wife, and their children, while the majority of her family members remained in Guatemala. Because her brother was so much older than her and they had not grown up together, Gisela commented that her relationship with him was different than those with rest of the members of her family. Gisela had completed cuarto diversificado, the equivalent of eleventh grade in Guatemala and significantly more schooling than the majority of her classmates had completed in their home countries. When I asked Gisela about the languages she spoke at home, she explained that while she speaks Spanish at home with her brother and occasionally English with her nephews, at home in Guatemala her mother spoke to her Mam and her father spoke to her in Q'anjob'al. She went on to note that she also understood Akateko because when she had moved away for three
years to attend secondary school in Guatemala, she lived with a family who spoke only Akateko.

Like many of her classmates, Gisela had to navigate challenges related to documentation status alone. The one instance in which I observed Gisela noticeably upset, she arrived late and soaking wet to class and put her head down on the table. When I checked in with her, she explained to me that she had missed an appointment with her lawyer in the city center because she could not find the office, and that her brother would be furious. She then quickly brushed away tears and got started on the assignment.

Gisela was a diligent worker. She tended to be relatively quiet, although she frequently provided support to her classmates in the form of translations and explanations of grammatical constructions and clearly had good rapport with a number of students in the classroom. She was always eager to get the answers correct and sometimes preferred to seek out support form adults in the classroom, rather than ask her classmates. Ms. Lambert described Gisela as a student who would "go the extra mile" and ask for additional work when she finished early.

Based on observations of Gisela in both Ms. Lambert's class and Ms. Cardoso's class, my sense was that the tendency to ask a teacher rather than a classmate related to a perception of at least some of her peers as less knowledgeable of the English language than Gisela, and concern that the answers her classmates offered might be incorrect. She explained that if she did ask a classmate, she was careful to ask someone who she believed would be most likely to know the correct
answer: "A mi me cuesta preguntar, a la que más pregunto es a Gabriela, es la que más pregunto porque sé que sí me va a responder @ @ @ o sí sabe! \{It's hard for me to ask. The one I ask the most is Gabriela, she's the one I ask the most because I know that she will answer me @ @ @ or that she knows! \} ${ }^{18}$

Gisela's assessment that the majority of her peers would likely not be familiar with information with which she was unfamiliar herself was warranted. I frequently observed her moving ahead of much of the class. On several instances I documented in my fieldnotes that while Ms. Lambert was still explaining instructions, Gisela would have already completed half of the worksheet. Ms. Lambert positioned Gisela in the top third of the class with regard to her English language performance. Like most of her classmates, Gisela had scored one, or "Novice" on the Initial ELPAC exam. ${ }^{19}$

## Pedro

Pedro, a fourteen-year-old male-identifying student from Guatemala was an extroverted, near-incessant performer. A heavy-set boy with deep terra-cotta skin and a big smile, Pedro continually sought out the attention of both his classmates and teachers, often by singing or creating close physical proximity. On some occasions his classmates encouraged and laughed along with his performances. Frequently, however, he was teased and ostracized by his classmates, at least in part because of

[^15]their assessments about his sexuality. Pedro had arrived toward the end of the previous academic year and attended a local middle school for two months.

Pedro was quick to offer support to his classmates, however he seemed to prefer to ask adults in the classroom for help and did so more frequently than most of his peers. At times, Pedro would grow impatient when he was trying to get the attention of an adult and would get up and walk across the classroom so that he could not be ignored. Ms. Lambert also described Pedro's tendency to seek out adult support. She explained that every year, as part of an effort to encourage students to seek out support from one another rather than always asking a teacher, she selects a challenging assignment and tells students that they can only ask questions that come from a representative for the entire group. For the students who prefer to ask an adult for help, she added, this activity was particularly difficult:

Like for Pedro it was like [PAUSE] he didn't DO this but you can IMAGINE him cause you know- you've seen him in class, like ALMOST lay down on the floor and cry-difficult @ @ @ you know? Like he didn't DO that, BUT you could see that he was SUUUPER frustrated by that.

Like Giesla, Pedro had scored "Novice" on the initial ELPAC exam. However, he was more comfortable using English orally than most of his classmates, which Ms. Lambert suggested was because he was one of few students in the class who had access to a highly experienced English-speakers at home. She described Pedro's use of English as reflecting a different pattern than that of most of his classmates:

I think Pedro is remarkable, because for the most part, our kids' written spoken language either, it's usually the case that either their written and their spoken are pretty on par? OR that their written is better than their spoken. And he has that flipped on its head. Like his spoken English is much better than what he writes and his willingness to speak and make mistakes in English is, um, exceptional. Like he's one of the top students in terms of his willingness to take risks in speaking English.

My observations confirmed that Pedro consistently sought out opportunities to use new English language practices, even when he received little response from his peers. Pedro often blended risk-taking with English with some sort of dramatic performance. On one occasion, for instance, as students were transitioning activities and chatting with one another, Pedro began to sing several verses from a popular song from the hip-hop artist Lizzo: "I like big girls, inner city girls, itty bitty girls," riffing off of the actual song lyrics:

I like big boys, itty bitty boys
Mississippi boys, inner city boys
I like the pretty boys, with the bow tie
Get your nails did, let it blow dry
This particular performance resulted in an outburst of laughter from his classmates, who inquired about what the lyrics meant. To which Pedro answered with a laugh and sly smile "ask Miss Nora!" [referring to me]. It is unclear in this instance whether he was unsure of the meaning of the lyrics, or if by asking them to ask me he was
indicating and understanding that the message of the lyrics was sexual. On several occasions Ms. Lambert commented that she worried about students bullying Pedro. However, I also found that Pedro was also confident in asserting himself and demanding an explanation when something did not make sense to him, an approach that I rarely observed in most of his classmates.

## Julián

Julián, a tall and lanky 16-year-old male-identifying student with cool-tone brown skin from Quiché, Guatemala had a much quieter demeanor than Pedro. He often joked with his classmates while continuing to work on his in-class assignments. Julián was an avid soccer player, and often reported to me about wins, losses, and goals he had scored. He had arrived in California with his mother, little sister, and cousin the previous school year and enrolled for one month at another local high school. He explained to me that he was unable to gather all of the requirements to remain enrolled, so he stopped attending school that year and found work washing dishes at a sushi restaurant. Julián added that after a week, his bosses noticed his work ethic and offered him a job doing food preparation. At the sushi restaurant, Julián eagerly learned as many new skills as possible because he hoped his future would be in cooking. Although his bosses told him that he could become a waiter, Julián told me that he preferred cooking, something he had enjoyed since he was young. He had also heard that there were opportunities to earn a better wage as a cook and he reported to me: "no pienso hacer otra cosa más que cocinar." [I don't plan to do anything but cook]. The following fall he enrolled in Sycamore High School and
began working at Kentucky Fried Chicken as a cook three days a week in addition to several days a week helping a contractor remodel houses. Julián explained that he was tired at school because some nights he did not make it home after work until midnight and occasionally as late as three in the morning.

Although Julián's exhaustion was often apparent during class, his desire both to learn and to form relationships with his classmates was equally evident. Because I conducted my interview with Julián during lunch, I brought him a personal pizza. After the interview, he brought the pizza to class and promptly handed out all but one piece to his peers. Although he did not frequently position himself as an expert in the way that Gisela often did, he was quick to reach out when his classmates expressed confusion or frustration about in-class activities. My fieldnotes describe Julián as quiet, attentive, and hard-working. He too had scored "Novice" on the Initial ELPAC exams, but Ms. Lambert described him as positioned within the lower third of the class in terms of his English proficiency. When I spoke with her about Julián's performance in class shortly after the school had shifted over to remote instruction because of the COVID-19 pandemic, she expressed concern:

Julián, I'm worried about. . . He seemed to have been falling behind like, there was stuff that I thought he should know that I thought most students in the class would know that he would sometimes be asking. And I don't know, I think there was something like emotionally going on there? Like he was depressed or disengaged for some reason. Because I THINK that if he had put in more effort, he could have that's successful. On the other hand, maybe the
reason he became disengaged is because it became too hard for him. I'm not really sure.

Ms. Lambert's confusion about whether Julián's disengagement was a result of emotional struggles or difficulty with the content reflects the reality that he, like many other recent immigrant students, was navigating a host of challenges outside of the classroom.

## Ethnic studies at Sycamore High with Ms. Cardoso

During the fall semester of 2019, with the exception of three students, the same group of students that was enrolled in Ms. Lambert's ELD 1 class was also enrolled in Ms. Cardoso's ethnic studies class. Like Ms. Lambert's class, Mai and Samir (speakers of Vietnamese and Arabic) were the only two students who did not speak Spanish. Ms. Cardoso's fifth period ethnic studies class took place directly after lunch, which she surmised was part of the reason that this group tended to be rambunctious and talkative. There were 32 students on the roster for the class, although most days several students were absent. Unlike Ms. Lambert's class, Ms. Cardoso had no instructional aide, nor did she have consistent volunteers. With only one teacher and so many students asking for help, I often found myself circulating the classroom and responding to students' questions.

Ms. Cardoso, a Latina woman in her mid-thirties whose parents were from Brazil, had grown up speaking Portuguese at home but completed all of her schooling in the US. She described herself as having studied a number of languages and, in doing so, having gained considerable insight into the process of second language
development. Ms. Cardoso was outgoing and talkative. She frequently utilized Spanish for both whole-class instruction and interactions with individual students. She often joked with the students, but also let them know when she was frustrated. She described wanting to embody the identity of the "warm demander," a concept she learned about during in her credential program. She elaborated on this concept during our second interview: "The warm demander is somebody who is loving, but still holds you to high expectations and holds you accountable, somebody who shows you that they care, but doesn't put up with any crap." Ms. Cardoso's assessment of herself as a provider of warmth paired with tough love largely aligned with what I observed in her classroom. In my fieldnotes, I documented numerous instances in which she lectured the class on their behavior, explaining that she expected more of them and was confident that they could do better. ${ }^{20}$ Several students voiced appreciation for Ms. Cardoso's approach. For instance, when I asked Saraí, one of the focal students, what she enjoyed about her ethnic studies class, she described how Ms. Cardoso demonstrated an understanding of the challenges facing students:

Digamos, como cuando Miss Cardoso nos da, aparte de darnos las clases, también nos da su tiempo para nosotros. Digamos como se pone a hablar con nosotros. Una vez fuimos en lunch, fuimos a hablar con ella, como decir lo difícil que es para nosotros estar en casa en Estados Unidos y así? Y ella

[^16]también se pone de nuestro lado, no sólo para su clase, sino también tiene tiempo para nosotros. \{Let's say, like when Ms. Cardoso gives us, apart from teaching class, she also gives us her time. Like she starts talking to us. One time during lunch, we went to talk with her, like to say how difficult it is for us to be at home in the United States and so on. And she also takes our side, not only for class, but she also has time for us.\}

A number of students voiced similar perspectives, underscoring that although sometimes Ms. Cardoso appeared frustrated with them, they knew that she would be available if they needed support.

## Ms. Cardoso's Professional Background and Preparation

When data were collected, Ms. Cardoso was in her fifth year of teaching social studies to newcomers at Sycamore High and had just taken on a new role as the co-director of the school's Newcomer Academy. She described coming to work with newcomers as somewhat serendipitous. She was in the process of earning her masters and credential in History through a large university in southern California, and needed to find her second practicum placement, when a friend who worked at Sycamore High facilitated the connection. Prior to seeking pursuing her degree, however, she had worked as an English teacher in South Korea for three years. Her experience teaching in Asia was dramatically different because she was working with elementary and middle school-aged students and had approximately one fifth of the number of students compared to her classes at Sycamore High. She also underscored that the students' socioeconomic backgrounds contrasted with those of the students
she worked with at Sycamore: "It was also like very highly skilled, highly motivated, privileged kids from affluent families? Um in a private setting. . . This is-this COULDN'T be more different."

Ms. Cardoso described her masters and credential program as "equity oriented," explaining that it was "designed to prepare teachers to teach in an urban, low resource, low income, high need setting." The program included one course designed to prepare teachers to support students designated as English Learners. She commented that the course focused primarily on working with speakers of Spanish, "and it was mostly around being culturally responsive" and "scaffolding strategies." While there was no specific attention within this course to newcomers, she appreciated what she felt was a deep commitment to culturally responsive teaching woven throughout the program, as well as the emphasis on developing practical skills and practices.

Ms. Cardoso had also participated in a range of professional development programs while she was teaching at Sycamore High. For instance, several years prior to data collection, the distract office that coordinates services for emergent multilingual students had provided a three-day professional development session focused on supporting academic language and literacy development for newcomer students across the disciplines. Ms. Cardoso was particularly impressed by how the presenters modeled the strategies as they presented:

We were seeing it happen and I was like "LITERALLY how they just did it to me is how I should do it with my kids!" Like I'm seeing it. It was amazing. . .

I feel like it was meant to sort of be transformative because it was for me! . . . Like "now that I have these tools, I'm going to apply them to everything that I do to make it a little bit better, a little bit more accessible, help the kids get there a little bit faster, a little bit easier."

She contrasted those experiences with more recent professional development opportunities that had been available as a result of the school-wide effort to expand students' literacy development that were far less supportive and seemed to discount the expertise of the teachers who worked with newcomers at Sycamore High.

## Focal Students in Ethnic Studies

As I mentioned above, like most of the students in Ms. Cardoso's class, the following three focal students were also enrolled in Ms. Lambert's ELD class. Thus, while I focus primarily on these students in the context of ethnic studies class, some of what I gathered about each student came from conversations that took place in ELD, as well as during lunch, between classes, and after school.

## Delmara

Delmara, a sixteen-year old female-identifying student from Honduras, was tall for her age and had long wavy hair. She generally wore carefully selected outfits with matching jewelry. Her warm and self-deprecating demeanor earned her both close friends in the class and a lot of admirers. During unstructured times in class, I often observed male-identifying classmates buzzing around her and vying for her attention. Virtually every class I observed, Delmara brought a bag of spicy Taki chips to share with her friends. Delmara had arrived in the US shortly before enrolling at

Sycamore High that fall. She was classified as SIFE because she had completed sixth grade in Honduras and not been enrolled in school for several years before enrolling as a ninth grader at Sycamore High. In Honduras, Delmara explained that she had begun taking classes to learn how to be a beauty consultant and that she now planned to pursue a career in cosmetology. At home, according to Delmara, she only spoke Spanish with her mother and brothers. While her mother spoke some English, her brothers had also recently arrived in the US and were several years older than Delmara, therefore she was the only one of her siblings who was enrolled in school.

Delmara tended to work diligently in class, although she was also highly social. She often circulated the classroom or whispered across the room to check in with Saraí or Silvia, her two closes friends in the class. Delmara was clearly committed to earning high grades in both Ms. Cardoso and Ms. Lambert's classes. In my fieldnotes, I commented on Delmara's disappointment at receiving a B on an exam in ethnic studies class.

Delmara and Gisela, who were sitting next to each other, looked at their final grade for the semester in ethnic studies. From the look on her face, Delmara appeared disappointed about the B she had received. Ms. C said congratulations to Gisela, who had received a $92 \%$. Gisela and Delmara poured over their exams carefully, comparing the two of them to see where they had gone wrong. Delmara mouthed across the room to Saraí to ask about the grade Saraí had received, and Saraí mouthed back that she had gotten a B as well.

Ms. Cardoso described Delmara as falling within the top third of the class in terms of writing and the bottom third in terms of speaking. However, from my observations, Delmara was a frequent first responder to Ms. Cardoso's questions to the class. In addition to raising her hand or calling out, video data in which Delmara was wearing a lapel microphone revealed that she often responded to Ms. Cardoso's questions quietly under her breath. In spite of the fact that she could respond correctly the majority of Ms. Cardoso's questions, Delmara's own confidence in her ability to make sense of and produce English orally was rather low. She described how using English presented the greatest challenge, rather than the content of the course itself: Me cuesta entender MUCHO las cosas. Como que Sí sé, pero algo que yo lo entienda y yo lo sé y lo hago a ligero, pero algo que yo no entiendo, me queeeedo pensando, 'cómo lo voy a hacer?' Y lo hago, y pues y a veces me sale y a veces no! Pero si TODO etuviera es español fuera mucho mejor. Porque uno ya 'o esto!' Pues son cosas que uno conoce en su idioma, son cosas que uno ya está acostumbrado a ver y a escuchar. \{It's REALLY hard for me to understand things. It's like YES I know it, but something that I understand and I know and I do it no problem, but something that I don't understand, I staaaaay thinking 'how am I going to do it?' And I do it, and sometimes it turns out right and sometimes it doesn't! But if EVERYTHING were in Spanish it would be much better. Because you're like 'Oh, this!' Well they're things that you know in your language, they're things that you're used to seeing and hearing. $\}$

Delmara's comments highlight the pattern among some recent immigrant students of relatively low self-confidence about their performance in school, paired with the recognition that they would have far less difficulty navigating the same tasks in their home language.

## Saraí

Saraí, a petite fourteen-year-old female-identifying student from Guatemala with pale, taupe skin, usually wore her long black hair down. Her style of dress was meticulous but simple. Most days I observed, Saraí was sporting small stud earrings, jeans, and a brightly colored polo shirt. Saraí shared that, in Guatemala, she had been on a path to pursue a career in medicine and still hoped to do so. At her home in California, she reported speaking some English with her little brother and cousin, but primarily interacting with her family in Spanish.

Saraí had arrived in the US at the very end of the previous school year, so she had waited until the fall to enroll at Sycamore. At school, Saraí and Delmara were virtually glued to one another. When I arrived at Sycamore High during the lunch period, the two young women would often be chatting and waiting in line in the courtyard just inside the campus gate purchasing a bag of spicy Taki chips or a CocaCola, and they always chose to work together in class when given the option. In fact, they asked me if they could do their interview together, so theirs was the only student interview that was not conducted individually.

Saraí was consistently positioned as both highly skilled and as a hard worker by her peers and by Ms. Cardoso. When I interviewed Ms. Cardoso shortly after the
students had begun remote learning due to the COVID-19 pandemic, she reported that Saraí was one of only a few students who showed up to every single remote class session, adding "no surprise really!" She explained that while other students would send her text messages seeking out support with assignments, "Saraí doesn't message me much about the homework, because she's just so good at it!"

During both ethnic studies and ELD, Saraí and Delmara often sought support from one another on in-class assignments. Saraí explained that she and Delmara had also formed a group-chat with Gisela and Silvia (two other female-identifying students, both of whom were also enrolled in Ms. Lambert's class) on the messaging application WhatsApp. She described this support as crucial for completing homework assignments: "Así como, 'ya hicieron esta tarea?' o, 'explíquenos esta parte?' 'Hay alguien que sepa?' Y así como si Delmara sabe, me explica y yo digo ‘o, así se hace!' y ya lo hago. O si no sabemos, le preguntamos a Gisela.’ \{It’s like, 'did you already do this homework?' or, 'explain this part?' 'Is there anyone that knows?' And so if Delmara knows, she explains and I say 'oh, that's how you do it!' and I do it. Or if we don't know, we ask Gisela.\} Delmara underscored that they provide each other with explanations, but do not simply share their work: "Hacemos llamadas y lo explicamos. Sí-yo no te voy a dar copia, hazlo tú! [@ @]." \{We call and explain it to each other. Yeah-I'm not going to give you a copy, do it yourself! [@@].\} The young women's description of how they support one another contests the notion that by collaborating they were somehow evading work, a framing that was echoed by a number of other students. Delmara's comment was perhaps a response to
frequent reminders from both Ms. Cardoso and Ms. Lambert not to copy each other's work.

## Patricio

Patricio, a fourteen-year-old male-identifying student from Guatemala, has light brown, olive tone skin and was the smallest in stature of any of the students in Ms. Cardoso's class. He was also quick witted and often cracked clever jokes. Because of the COVID-19 pandemic, I was forced to end data collection early, and Patricio was the only focal student with whom I did not conduct an individual interview.

Patricio, like Delmara and Saraí had scored "Novice" on the Initial ELPAC exam. Ms. Cardoso described Patricio as one of the most hard-working students in the class and among the top third with regard to his English proficiency. Along with Delmara, she noted that Patricio diligently sought out her support and continued to attend class and complete assignments when they shifted to remote instruction: "Patricio will be like-will send me a screenshot and be like, 'Is this correct?' He even noticed he even noticed I had a typo in one of my questions cause there was a word missing! It's not usual for a ninth-grade newcomer to notice a typo and to point out your error!" She also described Patricio as seeking out opportunities to use English earlier and more frequently than the majority of his peers:

They KNOW I understand Spanish, but there's always a few kids earlier, sooner than anybody else that WILL start asking me questions in English or just making casual comments in English, just because they're like, 'I know
how to say that, so let me use it.' You know, that doesn't come naturally to everybody. Cause they're shy, they're scared, they're going to get made fun of, or it doesn't even occur to them, or they're a little lazy or something, you know? Oh, 'she understands Spanish. I'll just speak to her in Spanish.' No, there's always like a Pedro or a Patricio who, who will be like, 'okay, well I know how to say these words. Let me see if I can practice using them.' . . . those are the ones-that's always the sign in ninth grade that they're going to excel above and beyond the rest of their classmates and already by the end of tenth grade to be practically fluent.

She also included Patricio among a few other students who she believed were ready to engage with more rigorous content. Patricio also positioned himself as someone capable of supporting his peers. On numerous occasions, I observed Patricio leaning over to write on his classmates' papers while explaining that they had completed some aspect of the assignment incorrectly.

## Reading at Cedar International High with Ms. Aviva

Ms. Aviva's eleventh grade reading class at Cedar International was comprised of students from Guatemala, Honduras, Mexico, Colombia, Pakistan, Burma, China, Vietnam, and Eritrea, and Afghanistan whose home languages included Spanish, Mam, Urdu, Burmese, Mandarin, Vietnamese, Amharic, and Farsi. Several new students enrolled over the course of the school year shortly after arriving in the US and others had enrolled the previous year as tenth graders. The majority of the students in reading class, however, had been attending Cedar since ninth grade
and thus had considerably more experience with English than most of the students in Ms. Lambert and Ms. Cardoso's classes.

Reading class was located in a "portable" building near the school's turf soccer field. The room was brightly colored and welcoming, with a couch with pillows and a rug in one corner of the room, a cushioned bench and a rug at the other, and six tables with four or five chairs around them. Student work covered much of the walls with more strung up on a clothesline across the classroom.

Ms. Aviva, a White woman in her mid-thirties, was a self-proclaimed perfectionist who was constantly seeking out ways to improve her teaching. She understood a considerable amount of Spanish, having studied the language and learned from her students; however, she was less comfortable speaking Spanish than the other three teachers. During classroom observations, she used Spanish words and phrases occasionally in her communication with individual students but almost never did when interacting with the entire class. Ms. Aviva had a friendly rapport with the students in reading class and described this particular class as was one of the most high-performing cohorts of eleventh graders she had ever worked with. She explained that there was considerable diversity in terms of students' experience with English and academic background, but that even the students with the least experience with English had been making remarkable progress. She also commented that there appeared to be a sort of "friendly competition" among the students in the class, which contributed to greater effort than students might have put in otherwise.

## Ms. Aviva's Professional Background and Preparation

Ms. Aviva had earned her masters and credential in TESOL and went on to teach at another international school (part of the same consortium as Cedar International) for two years in New York City before she began teaching at Cedar International, where she had been for five years when data collection began. Prior to earning her masters, Ms. Aviva had worked for a non-profit afterschool organization where she participated in health education and garden education programs. She explained that her pathway to working with immigrant students had been mostly serendipitous. The masters and credential program she selected in New York only offered degrees in impacted areas, including STEM, special education, and ESL. Although she was interested in teaching history, she decided to pursue ESL with the hopes that she would be able to "teach history to English language learners." As part of her teacher preparation program, she remembered taking a "linguistics class" and a "translanguaging class," neither of which were explicitly focused on newcomers, but both of which included some attention to students with relatively little experience with English. However, because a significant number of the teacher candidates in her cohort were also working at international schools with newcomer students, she described how these teacher candidates often worked together during class discussions and on assignments.

Ms. Aviva explained that when she was hired at a relatively new international school in New York City, she discovered that she wanted to continue to work with recent immigrant students. After two years at the international school in NYC, she
was hired to teach at Cedar International as part of the school's efforts to build a Reading Department. In New York, Ms. Aviva reported that the consortium of international schools had provided a range of professional development opportunities, including a summer institute, and the option of visiting other international schools in the city, all of which she described as having fundamentally shaped how she teaches. When I asked her if there were other kinds of professional development opportunities that she would wish for, she responded humbly and through laughter: "I still want to know how high school English language learners learn how to read in English [@@@] I mean like, I now LEAD PDs on that? And I [@@] wish I could go to a PD where someone shed light on like, what is the answer?" She went on to explain that in spite of her leadership position, she wanted to learn more about supporting students in becoming successful readers:

This year I led a PD cycle on, uh, teaching complex texts? And I feel like I still, I have so much to learn in how to be an effective teacher of reading of English to students who have such varying ranges of English acquisition and formal education? . . .Should they be doing SIPPS? Is SIPPS effective? And what are other kind of programs or routines that will support their acquisition, not just of English, but reading and being strong readers.

She also suggested that while she found many of the professional development opportunities in which she had participated as a newer teacher to be helpful (both those available through the international schools and those provided by her current
school district) she wished for more opportunities that would also support experienced teachers in developing their practice.

## Focal students in Reading

## Table 4

Focal Students at Cedar International High School

| Name | Grade | Age | Gender <br> Identity | Country of Origin | Time spent in the US | Grade completed in home country | Language <br> (s) spoken at home | SIFE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reading |  |  |  |  |  |  |  |  |
| Jéssica | 11 | 15 | F | México | 2 years, 4 months in school | $8^{\text {th }}$ grade | Spanish | No |
| Fernando | 11 | 18 | M | Guatemala | 2 years, 4 months in school | $10^{\text {th }}$ grade | Spanish | No |
| Benjamín | 11 | 16 | M | El Salvador | 2 years in school | $7{ }^{\text {th }}$ grade | Spanish | Yes |
| Biology |  |  |  |  |  |  |  |  |
| Paulina | 9 | 14 | F | Guatemala | 6 months in school (plus 4 months in US) | 6th grade | Spanish | Yes |
| Julia | 10 | 18 | F | El Salvador | 1 year, 6 months in school (plus 3 months in US) | Unknown | Spanish | Yes |
| Feliciano | 10 | 18 | M | Guatemala | 1 year, 5 months in school | $7^{\text {th }}$ grade | Spanish, <br> Mam | Yes |

Jéssica
Jéssica, a fifteen-year-old female-identifying student from Mexico, was an eager participant in Ms. Aviva's class. Jéssica has light beige skin, blue-green eyes.

During data collection, Jéssica had braces and waist-length light brown hair. She had arrived in the US from Mexico just before beginning ninth grade at Cedar International. At the time of data collection, Jéssica lived with her father, stepmother, and her ten-year-old half-sister who had been born in the US. Jéssica reported speaking in Spanish with her father, who does not speak any English, but often interacting in "Spanglish" with her little sister. She explained that while her school in Mexico had provided English classes, the class was conducted in Spanish. She described how she only knew a few phrases in English when she first arrived in California. Her first few months, she felt utterly overwhelmed until she connected with classmates who were fellow Spanish speakers:

No tenía amigos y no sabía hablar inglés y yo no hablaba. Entonces me quedaba haciendo mi trabajo, como lo podía hacer, porque yo no entendía nada! Y hasta que una compañera me preguntó si hablaba español y le dije que sí, y nos estuvimos ayudando, pero ella también era del nueve. Entonces nos ayudábamos como podíamos, porque ni una de las dos entendíamos. \{I didn't have Friends and I didn't know how to speak English and I didn't talk. So I would do my work, what I was able to do, because I didn't understand anything! And then a classmate asked me if I spoke Spanish and I told her yes, and we helped each other, but she was also in ninth. So we helped each other as well as we could, because neither of us understood.\}

Shortly after connecting with this classmate, Jéssica made friends with tenth grade students in her classes who were able to translate for her. Through her classmates'
translations she began to understand more of what her teachers were saying and was able to participate more actively in her classes. The following year, according to Jéssica, she began to make friends with classmates who did not speak Spanish. She commented that currently (during her eleventh-grade year) none of her closest friends were Spanish speakers, so they always interacted with one another in English: "con las que me junto, es de Cambodia, de Brasil, de China creo, y de África." \{with those I get together with, one's from Cambodia, from Brazil, from China I think, and from Africa. \} In fact, just before our interview, she had called her friends to tell them that she would not be joining them during lunch. She shared with me that they asked if they could come listen, but she explained to them that they would not understand because the interview would be in Spanish.

In reading class, Jéssica told me that she often sought out her Spanish speaking classmates to provide explanations when she was stuck, and that when she was in the role of helping her peers, she used both English and Spanish. She went on to explain that because Ms. Aviva taught in English, it was generally faster to explain concepts to her classmates in English than in Spanish: "Porque si es poquito tiempo, me tarda más en traducirlo que en explicarlo. Entonces si es poquito tiempo, solamente in inglés." \{If it’s just a little time, it takes me longer to translate it than to explain it. So if it's just a little time, just in English.\} Ms. Aviva reported that Jéssica was an especially successful student in reading class, adding that she displayed "noticing and curiosity" about language by frequently asking about the meaning of
something Ms. Aviva had said or trying to figure out how she might say something in multiple ways.

## Fernando

Fernando was an eighteen-year-old male-identifying student with warm-tone sepia brown skin who, unlike virtually all of his classmates at Cedar, had been born in the US. Fernando returned to Guatemala when he was one and a half due to his father's health, where he attended school until he was 16 . Fernando described how he told his father that he wanted to return to the US to learn English and to experience life in the US. Fernando eventually convinced him to allow Fernando to move to California to live with his aunt, uncle, and cousins. In Ms. Aviva's reading class, he generally sported matching athletic pant and shirt sets, his hair neatly slicked back, and a silver cross around his neck. Fernando had a big smile and confident demeanor-so much so that he often challenged Ms. Aviva about assignments he did not enjoy. Ms. Aviva described him as "an exceptional student," who like, Jéssica was "curious" and among the top students in the class in terms of academic performance and English language proficiency. She also noted, however, that he was often sensitive about receiving feedback regarding his language use and frequently rejected her offers of explanations.

Like Jéssica, Fernando's closest friends were speakers of languages other than Spanish. Ms. Aviva explained that Fernando was "attached at the hip" to his best friend Haji, who is from Eritrea. In fact, she shared that because Haji was planning to transfer to the technical high school in the same district the following year, Fernando
had also been considering transferring. Fernando told me that his objective was to become an engineer, and that he had made a promise to his father that he would achieve this goal, underscoring, "De todo, lo que menos me gusta es fallarle a mi familia" $\{$ Of everything, what I like least is to fail my family. $\}$

Like most of the focal students, Fernando portrayed his interactions classmates as critical to his success at Cedar International. He explained how when he had first enrolled and could not understand anything in English, his classmates made him feel accepted and offered support:

Me ayudaron bastante. Pensé que iba a hacerlo todo por mi cuenta? Pero no. Estaba con mis compañeros. Ahorita hablo con ellos, jugamos, nos divertimos. Entonces es lo que más me gusta, que hay gente aquí que sabe apoyar y yo también tengo que apoyarlos a ellos porque vamos juntos en esto. $Y$ estamos aprendiendo poco a poquito y-esto es lo que me gusta, que nos estamos ayudando. \{They helped me a lot. I thought that I was going to do everything on my own? But no. I was with my classmates. Now I talk to them, we play, we have fun. So that's what I like the most, that there are people here who know how to provide support and I have to support them too because we're in this together. And we're learning little by little and-that's what I like, that we're helping each other.\}

## Benjamín

Benjamín was a sixteen-year-old male-identifying student from El Salvador with deep reddish-brown skin and a sly smile. Benjamín was relatively quiet in Ms.

Aly's class, but also gently teased his classmates and sought out ways to make them laugh. When Benjamín first arrived in the US from El Salvador, he spent about five months as an eighth-grade student at a middle school in Los Angeles. He explained that when arrived at Cedar International, he technically should have enrolled in ninth grade, but he was placed in tenth grade because he had more experience using English than some of his classmates. He described having had a really difficult tine at the school in Los Angeles, both because it was so large and because he had few classmates with whom he could communicate in Spanish. In contrast to his previous school, he described feeling supported and cared for by his teachers at Cedar. In spite of all the support, however, he explained that it was difficult to keep up in his classes because he worked after school an did not have a computer at home, so he often found himself behind on his homework.

Benjamín, while relatively quiet, was highly social in Ms. Aviva's class and during my observations he was virtually always chatting with classmates. He described how he frequently both sought out support from his classmates and provided explanations for them, drawing on both English and Spanish depending on the classmate. When I asked Benjamín what advice he might give a new student who had recently enrolled in US schools for the first time, he recommended that the student not be afraid to use English, particularly at Cedar International, where all students were familiar with the challenge of learning a new language:

El error que uno tiene cuando viene a este país es que. . . uno tiene miedo al hablarlo-al hablar en inglés? Porque yo tengo amigos que no pueden y yo les
digo que no tengan pena a hablarlo . . . más en esta escuela que la mayoría vienen aquí sin poder inglés, solo que ellos, pues ya pasaron por lo mismo que él está pasando y que pues, no se sienta mal porque no le van a hacer burla? Lo podemos ayudar con la pronunciación o apoyarlo para que, puespero que no tenga pena hablarlo. \{The mistake that one makes when one comes to this country is that . . . one is scared to speak-to speak English? Because I have friends who can't and I tell them not to be ashamed to speak it ... more in this school because the majority [of students] come here without being able to speak English, it's just that they already went through the same thing that he is going through and that well, not to feel bad because they aren't going to tease him? We can help with pronunciation or support him so that, well-but not to be ashamed of speaking it.\}

Ms. Aviva described Benjamín as a diligent student who frequently checked in with his teachers to make sure that he understood assignments and was staying on top of his work. However, she also commented that because he seemed to "try hard to fit in" and to "receive validation from his peers," she worried that he might lose focus on school. She added that, unlike Jéssica and Fernando, Brandon's caregivers were his cousins, who were just a few years his senior.

## Biology at Cedar International High with Ms. Lilly

Ms. Lilly's combined ninth and tenth grade biology class included students from Guatemala, El Salvador, Honduras, Yemen, and Eritrea whose home languages included Spanish, Mam, Arabic, and Tigrinya. Approximately half of the students
were ninth graders and half were tenth graders. The majority of the tenth-grade students had also attended Cedar International during ninth grade and small number had attended US schools for part of eighth grade. Ms. Lilly's biology classroom featured a Smartboard, lab tables that seated four or five students, various two- and three-dimensional models on the walls and hanging from the ceiling, plants, and a terrarium where she kept various live organisms such as "rollie pollies" during an ecology unit.

Ms. Lilly, a White woman in her early thirties, was relatively soft-spoken with a calm demeanor. She rarely raised her voice and spent extended periods of time waiting for this particularly rowdy and playful class to quiet down. She described this group as particularly challenging behaviorally, which she attributed to the fact that a large number of the students in the class had experienced some form of trauma associated with migration, and many had been out of school for a number of years prior to enrolling at Cedar International. Ms. Lilly had studied several languages, including Spanish. She understood the majority of students' comments in Spanish when they were directed at her, and regularly used Spanish to provide instructions or clarification to individual students and for the purpose of classroom management. Ms. Lilly had support from an instructional aide, Ms. Saba, a Black woman who was in the process of earning her teaching credential.

## Ms. Lilly's Professional Background and Preparation

Ms. Lilly had earned a single subject credential in biology at a local university, during which she was also teaching full time. Like Ms. Aviva, Ms. Lilly
had worked at another school serving newcomer students for several years before she was hired at Cedar International, where she had taught for three years when data collection began. She described her credential program as having included a summer and fall course in which there was some attention to working with emergent multilinguals, as well as a brief Guided Language Acquisition Design (GLAD) training program. However, she found the professional development opportunities provided by the school district in which Cedar International is situated to be much more relevant to her work teaching science to newcomers than her coursework during the credential program:

I feel like I [PAUSE] the ones that were from my program just felt a little bit disconnected from the reality of working with students that have emerging literacy in some and some of them, you know, so it was more about students seemingly that have like a very like firm foundation and like academics and literacy and just sort of like mapping onto that? And that wasn't really my experience in my classroom.

She explained that because she had participated in so many professional development opportunities, what stood out the most as a science teacher who works with newcomer students is that those that were designed to "map onto highly rigorous, very academic" settings were less helpful, particularly when there was no attention to the reality of serving a group of students that is highly diverse with regard to academic background.

Ms. Lilly had also worked with a coach for the previous year as part of a fellowship for educators on "maker-centered learning experiences" with an explicit focus on fostering student agency. She explained that she learned a lot from the one-on-one coaching, but that she would like to learn more about how to use the makercentered approach with emergent multilinguals, and how to draw on trauma informed pedagogy in her teaching. Additionally, Ms. Lilly participated in a two-year long fellowship though a nearby university, which she described as "focused on equity in education." She explained that she had applied for the fellowship as part of a team of three teachers and had access to a two-week intensive program during the summer and additional one-on-ne coaching during the school year. She reported that while the one-one-one coaching had been helpful, she and her other team members were all somewhat overwhelmed with other responsibilities, including, in the case of Ms. Lilly, serving as leader for the tenth-grade team of teachers at Cedar. Near the end of the 2019-2020 school year, Ms. Lilly informed me that it would be her last year of teaching. She was not sure yet what was next, but hoped to work in the education sector, possibly in relation to supporting students with technology. Although she described feeling torn about leaving, she explained that the amount of work paired with the emotional labor required to effectively support her students felt unsustainable.

## Focal students in Biology

## Julia

Julia, a petite, 18-year-old female identifying student from El Salvador, often took on the role of corralling her classmates and keeping them on task. Julia had cooltone beige skin, wore her wavy, medium-brown hair in a high ponytail, and frequently sported a blue and white athletic jacket with "El Salvador" stitched across the back. Each day that I observed biology class (which met first thing in the morning) Julia arrived with a coffee and a breakfast sandwich from McDonalds, and often brought additional snacks to share with her classmates. As a tenth-grade student, she was well versed in classroom practices and frequently scolded the boys in the class for wasting time. Julia shared with me that her favorite subject was math, adding that she also enjoyed science and hoped to one day become a nurse. Julia lived with her father, whom she had not seen for many years prior to migrating to the United States and she described the transition to living with him as incredibly challenging.

Julia had been unable to attend school for several years in El Salvador. Ms. Lilly explained that Julia was absent relatively often because she was navigating some challenges with her family and worked quite a lot. When Julia was present, however, Ms. Lilly described her as especially likely to collaborate with classmates: I always felt like she was quick to work with others? Like it was easy for her, she would often be the one to be like, "okay, I'm going to look, I'm going to understand this and then I can explain it to you" or like, "let me get help from
the teacher and then I'll-" like she would take on that role just naturally a lot of the time?

Consistent with Ms. Lilly's depiction of Julia's readiness to support her peers, I often observed Julia asking questions of Ms. Lilly and Ms. Saba (the instructional aide) and then reporting back to her classmates. Julia also shared that while she found it easier to ask fellow Spanish speakers in the class for help, she sometimes intentionally asked speakers of other languages as an opportunity to challenge herself to use English. She added that, regardless of the language they speak, she always seeks out help from the classmates whom she deemed to be the brightest and most likely to be in a position to provide relevant guidance.

## Paulina

Paulina was a fourteen-year old female identifying student from Guatemala who enrolled in US schools for the first time the during the fall when data collection began. Paulina has warm tone, light brown skin, long wavy brown hair, and dimples. She generally wore jeans, sneakers, and a fitted t-shirt. Several of students in Ms. Lilly's class consistently vied for Paulina's attention. Paulina, however, expressed frustration about how often her classmates wasted time and distracted others. She confessed to me that she did not enjoy biology class (both because of the content of the class and her classmates' behavior) but that she hoped to one day go to college to study psychology. She explained that because she felt that she had gone through a lot, she wanted to be able to help others. She framed her development of English as the most important factor in her ability to achieve this goal.

Because Paulina had just enrolled for the first time at Cedar that fall and at the time of our interview had spent one semester in school, she explained that she relied heavily on Spanish-speaking classmates-"los que saben mucho español e inglés" \{those who know a lot of Spanish and English \} - to help her make sense of classroom tasks. At the same time, however, she expressed pride in her own ability to support her classmates, which she attributed to her maturity relative to many of her classmates and to the joy she felt in serving others. In her English class, she told me that was the designated facilitator for her group, which involved translating for those at her table and helping them when they encountered difficulties with assignments. In biology, Paulina reported that she often sought out support from Feliciano, who I introduce below, because he would grasp the nuances of her questions or clarifications in Spanish.

Paulina, like Julia and Feliciano, was also considered SIFE. Ms. Lilly explained that Paulina had completed sixth grade in Guatemala and had been unenrolled in school for some time, however she was also several years younger than many of her classmates. Ms. Lilly had shadowed Paulina during a full school day as part of her fellowship program and echoed Paulina's own description of herself as taking on leadership roles. She noticed that while Paulina was relatively quiet in biology, in other classes she actively asserted her position as group leader.

## Feliciano

Feliciano, the eighteen-year-old male identifying student from Guatemala who I described in Chapter 1, had a big broad smile, and dark ochre color skin. Feliciano
laughed often and appeared to be well-liked by virtually all of his classmates. Like a number of his peers, he frequently gently teased his classmates during biology, but he was generally careful to stop before Ms. Lilly scolded him. Feliciano had been unable to attend school for a number of years in Guatemala. As I described previously, Ms. Lilly described Feliciano as among the most successful students in this biology class, citing his maturity, willingness to both ask for help and provide support to his classmates, and the pace at which he had become comfortable with articulating complex ideas orally in English. I also observed how Ms. Lilly frequently called on Feliciano to provide answers to particularly challenging questions and to take on leadership roles.

Feliciano explained that he was grateful to be able to provide his classmates who had less experience with English by translating to Spanish. However, he pointed out that because his first language is Mam, sometimes he would be providing a translation form English to Spanish and realize that he did not know the words that he was looking for in Spanish:

Porque no todo podemos saber-en español también no todas las palabras lo sé? No todo el cien por ciento lo sé, hay unas palabras que me complican también. Que TAMBIÉN no es mi primer lenguaje, mi primer lenguaje es el Mam. \{Because we can't know everything-I don't know all the words in Spanish too? I don't know all one hundred percent, there are some words that confuse me too. That [Spanish] ALSO isn't my first language, my first language is Mam.\}

Feliciano acknowledged the racialized stigma associated with indigenous languages and noted that some of his classmates avoided communicating in Mam, particularly at school. However, he wholeheartedly rejected the notion that he should not use Mam to interact with his peers, highlighting that he was not ashamed to do so: "Sí, pues, no me da vergüenza de hablar. Hay unos que dicen 'no, pues ¿cómo vamos a estar hablando así si otras personas no hablan eso.' Pero no importa que esté alguien más, yo hablo, no pasa nada." \{Yes, well, I'm not ashamed to speak. There are some people who say 'no, well, how are we going to be speaking like this if other people don't speak that. But it doesn't matter if someone else is there, I speak [Mam] and it's no big deal.\} He explained that there were several students in biology with whom he interacted in Mam, often by translating key concepts. In addition to Spanish and Mam, Feliciano also appeared to be quite comfortable interacting in English with speakers of other languages. I often observed him providing explanations to Maalik (who speaks Arabic) and seeking out support from Semira (who speaks Tigrinya).

Feliciano frequently both volunteered to help his classmates and was sought out for support. As I described in Chapter 1, he expressed pride in being positioned as a leader among his classmates. Notably, however, he was also cognizant about how this dynamic had the potential to limit his peers' opportunities to learn:

A veces si yo solo voy a preguntar-a preguntar, o sea ellos, como que no van a aprender nada? O ellos no están aprendiendo algo? Entonces a veces les dejo la oportunidad a ellos que ellos lo hagan. Si no entendemos alguna palabra, les digo que "no entendemos nada, pregunten ustedes pues, para que
ustedes también pues colaboren o aprendan algo también . . . Porque si solo yo, él que va a aprender más soy yo. Y ustedes pues, no van a aprender nada." Entonces es lo que hago yo a veces, [le digo] a otro compañero que pregunte o que ellos primero lo hagan y pues yo después lo explico. \{Sometimes if I'm the only one to ask-to ask, like they, like they aren't going to learn anything? Or they aren't learning anything? So sometimes I give them the opportunity so that they do it. If we don't understand a word, I say that "we don't understand anything, you all ask, so that you all collaborate or learn something too. Because if it's just me, the one who will learn the most is me. And you all well, you aren't going to learn anything. So that's what I do sometimes, [I say] to another classmate that they ask or that they do it first and then I explain it.\}

Ms. Lilly confirmed that Feliciano was among the most likely in the class to volunteer to help his peers, to collaborate in groups, and to do so kindly. At the same time, she also expressed concern about students like Feliciano who often have to take on the role of supporting their classmates. She told me that this year she was particularly attentive to this dynamic: "Cause in the past I've had kids burn out from that really quickly where it's like, 'Oh, you're the, you know, you're our translator and facilitator!' It's a LOT to hold all the time."

## Comparing Settings and Participants

The four participating teachers described above share a number of characteristics. They were all female identifying individuals in their thirties who had
been teaching at the focal school between three and five years and working as educators between four and ten years, with varying degrees of Spanish-English bilingualism. All four women's dedication and commitment to their work with newcomer students was undeniable. They had each taken on some sort of leadership role and were seeking out ways of improving students' opportunities for learning within their programs. Although they had entered the profession through various pathways, they all expressed reverence for their students' wit, humor, and intelligence. At the same time, they voiced a shared understanding of the difficulties associated with providing a rigorous learning environment while simultaneously recognizing the range of challenges students faced. Like many teachers, they expressed a desire for more resources and, above all, more time to be able to support their students effectively.

In spite of these similarities, however, there are also a number of notable differences among the participating teachers. For instance, in contrast with their counterparts at Sycamore, both Cedar International teachers had experience teaching in another newcomer program prior to beginning their work at Cedar. Additionally, as I described above, Cedar International was structured such that teachers had more opportunities for professional development as well as collaborative curriculum development than did the teachers at Sycamore High. Because the entire school was designed to serve recently arrived immigrant students, teachers at Cedar International were not tasked with vying for more of the school's resources to be designated to
newcomer students, as were teachers within the Newcomer Academy at Sycamore High.

As the descriptions above illustrate, the twelve focal students were diverse with regard to languages spoken at home, educational background, experiences inside and outside of school, and goals for the future, among a host of other factors. Yet they also shared some similarities. Most of the focal students at both schools worked at least part time, several were responsible for providing childcare for family members, and many were tasked with navigating pending asylum cases. Virtually the entire student body at both schools was characterized as socioeconomically disadvantaged by the school district (see Table 1). However, it was apparent that some students had access to greater financial resources than others. To my knowledge, for instance, Fernando (one of the focal students in Ms. Aviva's reading class at Cedar International) was the only focal student who drove himself to school in a car. Similarly, Jéssica (another focal student in Ms. Aviva's class) and Saraí (a focal student in Ms. Cardoso's ethnic studies class at Sycamore High) were among the few students who did not have part time jobs.

As I described above, the focal students also positioned themselves differently and were positioned differently by their peers in terms of their ability to contribute linguistic and content area expertise. Consistent with Malsbary (2014), the young people described in this study demonstrated an awareness of language ideologies as linked to race and interacted with one another in ways that both reinforced and
resisted the practice of comparing their language practices to those of their White counterparts.

## Note of Caution Regarding Comparison across Classes

It is important to note that the nature of these four classes differed in numerous ways, including students' grade levels, time spent in the US, instructional time, disciplinary content, teachers' years of experience teaching, etc. (see Table 2). For instance, the ELD and ethnic studies classes were comprised primarily of ninth graders, with a few tenth graders, and a few students who had enrolled in eighth grade in US schools. The majority of the students in both classes had just enrolled in US schools for the first time in September of 2019, when data collection began. Because Cedar International places all students in biology for two years, the biology class included relatively equal proportions of ninth and tenth grade students. The majority of the ninth-grade students had enrolled in US schools for the first time that year, and several new students enrolled over the course of data collection. However, most of the tenth-grade students had already studied for part or all of an academic year at Cedar International as ninth graders, and in some cases some portion of eighth grade in a US middle school. The reading class served eleventh grade students, the majority of whom had completed both ninth and tenth grade at Cedar International High School and had just begun their third year at the school. Although there were a number of students who had arrived more recently and just enrolled for the first time, students in the reading class, generally speaking, had much greater familiarity with US school structures and practices and were familiar with a much broader range of

English language and literacy practices than the majority of students in the other three classrooms. Because of the linguistic diversity with regard to home language(s) at Cedar International that created an authentic need to communicate with classmates who did not share a home language, ninth grade students at Cedar had, on average, more experience using English than the ninth-grade students at Sycamore High.

Instructional time also varied across focal classes. While ELD 1, biology, and reading classes were all blocked periods lasting for 100 or 105 minutes, ethnic studies was a single period class, which lasted for 50 minutes. Because of this difference in the length of instructional periods, although I conducted a similar number of observations in each classroom (between 18 and 22), I observed a total of 15 hours in Ms. Cardoso's ethnic studies class, compared to 31.5 hours in Ms. Lambert's ELD class, 38.5 hours in Ms. Lilly's biology, and 36.75 hours in Ms. Aviva's reading class.

While the study did not focus explicitly on disciplinary language that is used in the content classroom, teachers' perceptions of the relationship between learning content and learning language are certainly relevant and potentially vary by discipline. Additionally, the practices central to the disciplines of social studies and biology were likely linked to different patterns of interaction and potentially to distinct types of communicative hurdles that emerged in the two content classrooms.

## Chapter 5

## Distinct Pedagogical Approaches and Opportunities for Peer Interaction

Fieldnotes, interviews with the four teachers, video-recordings, and classroom artifacts all suggest that the ELD and ethnic studies class at Sycamore High School adopted fundamentally different pedagogical approaches compared with the reading and biology classes at Cedar International High School. Students in the reading and biology classes at Cedar International spent far more instructional time working in pairs and small groups than those enrolled in ELD and ethnic studies at Sycamore High. As I will argue in this chapter, varying patterns of participant structures emerging from different pedagogical approaches contributed to, but do not fully account for, distinct opportunities for meaningful peer interaction across classes. In addition to structured opportunities for interaction with peers, the extent to which students had opportunities to make sense of complex ideas and engage creatively also shaped classroom discourse. In other words, while students found ways to make even highly constrained activities meaningful, the richest discourse occurred when students were tasked with challenging intellectual tasks that required genuine collaboration.

I begin this chapter by describing how these four classroom environments shaped opportunities for peer interaction. I then describe the concept of participant structures, which I used to examine how structured opportunities for peer interaction differed across the four classrooms. In second half of the chapter, I describe various ways in which peers supported one another's participation in classroom activities,
even those not designed for student-to-student interaction, and how opportunities for the various forms of peer interaction differed across classrooms.

## Varied Opportunities for Meaningful Peer Interaction

As I described in Chapter 3, in order to examine opportunities for peer interaction, I analyzed fieldnotes that I created during weekly observations in each classroom and video-recorded classroom interaction with particular attention to how the class was organized, the frequency with which activities were intended for peer interaction, and the types of activities in which students commonly engaged. I also analyzed transcripts from interviews with participating teachers, focusing specifically on their stated goals for the course, instructional approaches, and their perspectives on language and additional language development. I describe patterns of interaction in each of the four classes and typical instructional activities below based on fieldnotes, teacher interviews, and video data, before turning to an analysis of participant structures captured in a subset of the video data.

## Perspectives on Language and Literacy Development

As I noted in Chapter 1 and as the descriptions below illustrate, theories of language, literacy, and second language development underlie pedagogical practices, regardless of whether teachers are conscious of them (Valdés et al., 2011; Valdés et al., 2014). Valdés and colleagues explain how language teaching has been involves the curricularized, a process through which language is taught as "a curricular subject or skill," that can be detached from real life context and taught, practiced, and learned like other academic subjects (Valdés et al., 2015, p. 262). Curricula for ESL, for
instance, are often built on the assumption that language development and thus language teaching follow a linear trajectory "moving from simpler or more useful to more complex" (Valdés et al., 2014, p. 42). In the context of literacy instruction, while not referring specifically to multilingual settings, Ivanič (2004) points out that when teachers operate form a "skills discourse" view, they prioritize explicit instruction of linguistic patterns in writing, rather than how writing is used in real life for particular purposes (see also Lea \& Street, 1998).

The "skills discourse" view of language and literacy described by Ivanič (2004) differs fundamentally from the sociocultural and ecological perspectives that assume language and literacy development occurs through meaningful participation in social practices and that language teaching, therefore, should provide students with ample opportunities to interact with one another, with their teachers, and with different types of texts. As will become evident below, the participating teachers' underlying views of language and literacy development differed substantially from one another-as did the pedagogical approaches they adopted.

## A "Basic Foundation of English"

Ms. Lambert's ELD class at Sycamore High was organized around a grammar-based syllabus. Although during the latter half of the academic year, units explored themes such as "visiting the doctor," instructional activities even within those thematic units were designed primarily to provide students with "practice" with particular forms, with the goal that students would progress from writing complete sentences to writing paragraphs. The majority of the ELD classes I observed at

Sycamore High consisted of a combination of independent work on grammar-based worksheets, teacher-fronted lecture, phonics instruction, and pair activities focused on oral production of target forms. Somewhat regularly, class was organized by rotating stations. In these instances, Ms. Lambert provided direct instruction to one group as they took notes and then worked individually or in pairs; another station consisted of direct instruction using Systematic Instruction in Phonological Awareness, Phonics, and Sight Words (SIPPS) curriculum, led by one of the instructional aides; while at a third station students completed worksheets individually. Ms. Lambert explained to me that several years prior to data collection, the school district had received funding to implement the SIPPS curriculum designed for "new and struggling readers." The curriculum includes explicit, skills-based instruction "focused on phonological awareness, spelling-sounds, and sight words, with immediate application to reading connected text and to spelling" (https://www.collaborativeclassroom.org/programs/sipps). Ms. Lambert described how the district office in charge of services for emergent multilinguals had tied the provision of instructional aides to the implementation of SIPPS curriculum:

If we wanted those TAs, we had to, like, it was specifically for ELD 1 and ELD 1 teachers had to REQUEST it. And it was only, you could own only have that person in your room if you ran SIPPS. And you were supposed to run SIPPS, each kid was supposed to get 90 minutes of SIPPS a week. She went on to explain that she and her colleague who teaches the SIFE cohort had written a proposal outlining how they would incorporate SIPPS into their curriculum
and were granted two instructional aids. Although Ms. Lambert expressed some ambiguity about the effectiveness of SIPPS, she also identified that the support of two instructional aides was invaluable.

Students spent a significant portion of most instructional periods that I observed (whether or not class was divided into stations) working individually on highly repetitive worksheets that targeted discrete linguistic forms. The titles of these worksheets reflect this focus on discrete forms, such as "Noun and Pronoun Practice," "Past Tense Verbs," "Sometimes, Always, Never," and "Paragraphs about Like and Don't Like." The "More Noun and Pronoun Practice" worksheet, for example, called on students to circle the nouns in a series of unrelated statements (e.g. "Do you have a pencil?" "John likes chocolate."); to write the pronouns that correspond to a list of nouns (e.g. "your father $\qquad$ ""the erasers $\qquad$ "); and to rewrite a list of sentences by replacing an underlined noun with a pronoun (e.g. "Susana likes the library." "Fatima always runs in the morning.").

Students also engaged regularly in highly structured pair activities. For instance, students were often assigned to partners to "check answers" on grammarbased worksheets with questions to which there was a single correct answer; thus, the interactions that emerged were relatively brief and focused narrowly on grammatical accuracy. "Interview-style" activities were another common format for pair work in Ms. Lambert's class. Yet these partner interviews consisted of highly constrained questions with an emphasis on accurate production of specific forms and the use of complete sentences over the expression of ideas. During one observation, for
example, I documented in my fieldnotes how I had been circulating around the room as students were asking one another questions about their preferred activities and likes and dislikes (e.g. Can you sing very well? Do you like to talk in class? Can you cook very well? Do you know how to cook your favorite meal?). As I walked around the room and responded to students' questions, a student named Sanson approached me and asked "Miss Nora, can you play soccer very well?" to which I responded, "Well, I play soccer okay!" Ms. Lambert overhead this interaction and jumped in: "So then it's 'No, I cannot play soccer very well.'" Her response made clear that the focus of the activity was less about communication of abilities or interests than accurate production of 'can' and 'cannot.' Although this particular instance involved an oral interaction, it is reflective of the "skills discourse" of literacy (Ivanič, 2004) described earlier. Such an orientation, Ivanič explains, is evident in references to "spelling, punctuation and grammar, in expressions such as 'correct', 'accurate', 'proper', 'learners must/should', in the explicit prescriptive teaching of rules, and in an emphasis on accuracy in assessment"" (2004, p. 228).

## Content Classes as ELD "A Little Ethnic Studies Flavor"

Ethnic studies courses and programs, which arose out of efforts to counteract Eurocentric perspectives that dominate mainstream curricula, are typically designed to center the experiences and knowledge of minoritized racial or ethnic group(s), to draw on scholarship rooted in those groups' lived experiences, to seek to affirm students' social identities, and to facilitate critical and meaningful engagement in social and political issues (Cuauhtin et al., 2019; Dee \& Penner, 2016; Sleeter, 2011;

Sleeter \& Zavala, 2020; Tintiangco-Cubales et al., 2015). The Ethnic Studies Model Curriculum of California (April, 2021), for instance, describes the field as follows: "the interdisciplinary study of race, ethnicity, and Indigeneity, with an emphasis on the experiences of people of color in the United States" (p. 5).

Ms. Cardoso described how she hoped her ethnic studies course would contribute to expanding her students' cultural awareness and draw links between racialized oppression in their home countries in Latin America and the United States: "Ideally what I would hope is for them to have increased awareness around different cultures. . . So increased awareness and TOLERANCE for different cultures? As well as sort of an awakening around systems of oppression." She went on to explain how, given the that the newcomer program served so many students from indigenous communities, she also wanted to work toward facilitating students' awareness of racialized oppression in relation to Indigeneity:

I would love it of some of the indigenous kids in the ELD 1 classes had an awakening where they're like 'wait a second - I AM from a marginalized oppressed group in my country.' And I would love it if the non-indigenous kids would be like 'oh, my people have oppressed your people historically in the country that we come from.'

Although these comments reflect a desire to facilitate students' engagement with core ethnic studies content, the majority of the instruction I observed prioritized repetition of preformed statements (often in the form of fill in the blank exercises) and accurate production of target linguistic forms. Similar to Ms. Lambert's ELD 1
class, Ms. Cardoso's ethnic studies classes at Sycamore High generally consisted of a combination of brief lectures, independent work, and pair activities. Likely because her class period was half the time of Ms. Lambert's ELD class and she had no instructional aides, Ms. Cardoso often provided whole-class instruction or circulated around the class and responded to questions as students worked individually. She explained that she viewed establishing a foundation in English to be the primary focus in ninth grade for newcomer students (and presumably, a greater priority than engagement with ethnic studies concepts), an approach that she reported reflected the Newcomer Academy as a whole. She described efforts to "reinforce what they do in ELD" as a central goal of her ethnic studies class. Ms. Cardoso explained that that she generally checked to find out what Ms. Lambert was teaching in ELD and then created "similar assignments with a little ethnic studies flavor."

Reflective of the prioritization of mastering target forms over engaging with ethnic studies content, the majority of the instructional activities I observed within a unit on ethnicity and nationality called on students to complete repetitive, formsfocused worksheets, and provided very few opportunities for students to engage in sense-making surrounding these topics-whether individually or collaboratively. For instance, the review packet for the first several marking periods asked students to answer a long list of versions of the same questions titled "Questions with 'To Be,"" which included questions such as the following: "Are you Mexican?" "Is Ms. Cardoso Mexican?" "Are you Salvadoran?" "Is Ms. Cardoso Salvadoran?" "Are you

Yemeni?" "Is Ms. Cardoso Yemeni?" For each pair of questions, spaces were provided for students to respond.

Yes, ___ . (Yes, I am Mexican.)
No, _____ (No, I am not Mexican.)
Yes, ___ . (Yes, Ms. Cardoso is Mexican.)
No, $\qquad$ . (No, Ms. Cardoso is not Mexican).

Not only was this activity highly repetitive, students were instructed to fill in both yes and no responses to all of these questions, making the questions entirely devoid of meaning. In other words, regardless of whether a student is Salvadoran, Mexican, or Yemeni, in response to the question "Are you Salvadoran?" they were all instructed to write "Yes, I am Salvadoran" and "No, I am not Salvadoran." This emphasis on repetition over meaning-making was true of the majority of the instructional activities I observed in in ethnic studies.

Like Ms. Lambert's ELD class, pair activities in Ms. Cardoso's ethnic studies class at Sycamore High often consisted of interview-style questions. While the types of questions students were instructed to ask one another were usually highly constrained (similar to the written questions from the review packet above), occasionally activities provided opportunities for somewhat greater student agency. During one activity within a unit on stereotypes, for instance, Ms. Cardoso provided a graphic organizer that instructed students to ask three different classmates the following questions and to write a written summary of their responses: "1) What is a stereotype? 2) What is one stereotype that people believe about your ethnic group? 3)

Why are stereotypes bad?" Notably, engaging around these questions could have led to generative interactions surrounding students' experiences and perspectives on the ways in which they and others have been racialized and otherwise marginalized. Yet, because the classroom environment was such that students were not used to the prioritization of their points of view and sense-making (regardless of the linguistic resources they used to express those perspectives) their interactions with one another mirrored the emphasis on reproducing what had been presented as the "correct" responses and avoiding "errors." As Valdés et al. (2011) underscore, SLA literature has offered few concrete answers to guide content educators who serve linguistically minoritized students. Valdés and colleagues (2011) go on to point out that in spite of inconclusive evidence regarding whether explicit grammar instruction is effective (Ellis, 2005), this approach continues to guide many ESL and sheltered content courses and programs.

Notably given that this was an ethnic studies course, over the course of my time in this classroom, I did not observe a single instance in which students were encouraged to engage in discussion in pairs, small groups, or as an entire class in ways that positioned them as agents with meaningful experiences and insight regarding race, class, Indigeneity, or immigration. This approach is particularly noteworthy given the newcomer students' overlapping and diverse experiences with migration and racialization as well as Ms. Cardoso's own description of her goals for the course. Although Ms. Cardoso had likely assessed that these students did not have enough experience using English to participate meaningfully in extended discussions
surrounding complex social and political issues exclusively in English, she did not encourage students to use their wealth of Spanish linguistic resources (nor other semiotic resources) to engage in meaningful dialogue about the issues at the heart of ethnic studies.

In contrast to the approaches described above, both the reading and biology classes at Cedar International High had adopted pedagogical approaches. Both classes were arranged such that students spent a considerable amount of class time working with partners or small groups. And while there was often purposeful attention to language (including an explicit focus on vocabulary and pronunciation) the majority of the activities in both classes called upon students to make sense of new concepts, to hypothesize, and to consider various perspectives, often by explicitly encouraging students to utilize their home languages as well as other semiotic resources such as images and videos in order to participate meaningfully.

## "Becoming Better Readers"

Ms. Aviva's reading class was organized by thematic units addressing social issues. Units I observed included Religion, Disabilities, Community, and Gender and Sexuality. Class was often divided into three rotating stations, with students working with Ms. Aviva at one station, where she provided some direct instruction related to the theme and students often worked in pairs or small groups. The other two stations consisted of phonics based SIPPS lessons led by the instructional assistant, Ms. Emma, and individual work on laptops. Like Ms. Lambert, the ELD teacher at Sycamore High, Ms. Aviva expressed apprehension about the SIPPS curriculum, but
explained that using SIPPS was tied to funding for instructional support staff. Ms. Aviva had a lot of flexibility with regard to the curriculum and described having made many changes over the past five years. When I asked about her primary goals for the course, she responded as follows:

So, the overarching goal is to become better readers? So, for me that looks like a lot of different things. Let's see if I can name them. Like definitely improve pronunciation, just general fluency, comprehension, being able to do critical thinking, um and just like overall confidence with reading? And being able to engage in different texts? Like so, a lot of the work that you see me do in my group is kind of how to engage with the text, how to make meaning of a text, and how to build foundational skills that I hear are important once they graduate? Like summarizing, finding main idea, really honing those skills? She went on to explain that while these were her goals related to literacy development, she had organized the course to "be social justice oriented" and sought to facilitate students' critical engagement with issues of power and access to opportunities through the design of units on topics such as disabilities and gender and sexuality. She had also arranged an ongoing project that included visits to a local elementary school where students partnered with a first grader and read aloud a children's book that addressed the themes students were currently exploring in reading class. This project involved extensive preparation on the part of the eleventh graders, for the majority of whom (according to Ms. Aviva) reading a book aloud in English was both challenging and anxiety-provoking. This preparation process
included reading the book with a partner several times, inventorying unfamiliar words, writing open ended questions for the first graders that increased in complexity as the story progressed, and practicing reading aloud with expression. Ms. Aviva described how this process contributed to her goal of increasing students' sense of agency: "So my hope is . . . through having to be teachers and mentors to the elementary school students that they kind of have to step up and be leaders about these topics and have some ownership over what they're teaching them."

In addition to the children's book project, daily activities in Ms. Aviva's class provided opportunities for students to talk about their points of view and experiences and to compare those with their classmates. For instance, during one class I observed during the unit on gender and sexuality, Ms. Aviva had provided each student with a different image depicting people engaging in a variety of activities. One image included a group of people who appeared to be female-identifying wearing lab coats and goggles, another depicted young boys dancing ballet, and another showed what appeared to be a male-identifying person wearing elaborate makeup. Students received a graphic organizer, which instructed them to begin by writing or drawing a description of their photo, and then to walk around the classroom and ask five peers whether they thought the image reinforced or challenged gender norms and to explain why they thought so. The graphic organizer provided the question and a sentence frame for the response: "I think this photo $\qquad$ (reinforces or challenges) gender norms because . . ." along with space for students to document their classmates' names, whether they had responded reinforce or challenge, and a
description of their rationale. As students were circulating and sharing their questions with classmates, Ms. Aviva again positioned students as agents with valuable perspectives and experiences by highlighting that students' responses might differ based on where they are from, offering the example that women soldiers might be viewed as normal in one culture but challenge gender norms in another.

## Becoming "a Student and a Scholar"

Like Ms. Aviva's reading class, Ms. Lilly's biology at Cedar International also provided a range of opportunities for students to interact with one another. Units observed in Ms. Lilly's biology class included Ecology, Endangered Species, Sexual Education, and Climate Change, with each unit lasting between three weeks and two months long. Most of the instructional periods that I observed included very little direct instruction. Students spent much of the class period working in small groups, pairs, or individually on ongoing projects.

Ms. Lilly emphasized the value of students' observations, hypotheses, and emergent understanding of biology concepts. Notably, while Ms. Aviva's reading class at Cedar International served eleventh grade students who had already spent several years in US schools and on average had a considerable amount of experience using English, both Ms. Lilly's biology class and both classes at Sycamore High included students who had just enrolled in US schools for the first time. In all three classes, several additional students enrolled over the seven months in which I was conducting observations. However, because content courses at Cedar International combined ninth and tenth graders, Ms. Lilly reported that the tenth graders often
served as important guides for their ninth-grade counterparts. Still, like the ELD and ethnic studies teachers at Sycamore High, Ms. Lilly also described an understanding that more recently arrived students needed foundational skills. Rather than focus on students' acquisition of discrete forms, however, she emphasized the importance of developing the ability to navigate moments when they found themselves stuck and of becoming "a student and a scholar." In other words, Ms. Lilly viewed supporting her students in developing the kinds of skills and practices that would facilitate their long-term academic success as a higher priority than students' declarative knowledge about biological processes. She acknowledged the tension surrounding the typical rigor of a biology class and pointed out that, while her students tackled less content than a typical ninth/tenth grade biology class, the class was "rigorous in different ways for them" because so much of what students were asked to do was new.

In part because biology class was first thing in the morning and students often streamed in over the course of the class period and in part because it was a rambunctious group, Ms. Lilly described attempting even less teacher-fronted instruction with this class than the small amount that she generally provided. Daily "Do Now" activities often asked students to look at an image or watch a video clip and respond to a set of prompts that emphasized observation and hypotheses, such as "I saw $\qquad$ ," "I heard ___," "I feel $\qquad$ ," "I think this place is $\qquad$ ," and "I am curious about $\qquad$ ." Students were almost always asked to share their responses with a partner. In collaboration with the other biology teacher at Cedar International, Ms. Lilly had designed a range of pair or small group projects that
stretched over the course of several weeks. For instance, one project called on pairs of students to create their own screencast (a video recording of data on a computer screen paired with an audio recorded explanation) describing human impact on a specific endangered species. On several occasions, assessments consisted of "group quizzes." At the end of their ecology unit, for instance, Ms. Lilly provided each group of three to five students with images of different producers, consumers, and decomposers, along with a word bank to scaffold their interactions. She instructed students to use the images to quiz one another by identifying whether the organism pictured was a producer, consumer, or decomposer, and to explain why they thought so. Students alternated quizzing one another and making statements such as "I think the rollie pollie is a decomposer because it gets energy from dead plants" or "I think the algae is a producer because it depends on the sun for energy." Activities like this one were typical of Ms. Lilly's biology class in that correct and incorrect responses were possible, yet students could express their understanding in a variety of ways. In general, Ms. Lilly's pedagogical approach prioritized students' ability to meaningfully communicate emergent understanding of biology concepts, rather than their use of particular forms.

As I described above, structured opportunities for peer interaction varied across the four classes, and particularly between the two schools. I the following section, I discuss the concept of participant structures, which I used to examine in greater detail how much class time was designed to facilitate peer interaction in each of the four classes.

## Participant Structures

A number of language scholars have identified participant structures, which play a significant role in shaping classroom discourse, as a tool for exploring opportunities for learning (Cazden, 1988; Cazden \& Beck, 2003; Philips, 1972 / 2012), including among emergent multilinguals (Galguera, 2011; King et al., 2017). Yet, participant structures have been conceptualized in a variety of ways that often do not align with those proposed by Philips (1972 / 2012), who first used the term.

In her study of language use among Indian children from the Warm Springs Reservation, Philips (1972 / 2012) describes participant structures as teachers' approach to "arranging verbal interaction with students, for communicating different types of educational material, and for providing variation in the presentation of the same material to hold children's interest" (2012, p. 383). Philips' interest in participant structures was motivated by efforts to understand how cultural practices shaped Indian and non-Indian children's forms of communication in classrooms. Philips identified four types of participant structures: the first refers to structures in which the teacher interacts with the entire class at once, either directing talk to all students or to one student in the presence of their classmates. She points out that verbal participation is sometimes voluntary in this structure (in the case when the teacher asks the entire class for a response) and sometimes obligatory (such as when a teacher calls on an individual student whether or not they have volunteered). Philips underscores that the teacher always controls the flow of talk in this structure by determining whether to address an individual student or the entire class, whether
responses are choral or individual, and whether participation is voluntary or required (p. 400). She distinguishes between this teacher directed structure and another participant structure, teacher interacts with a group of students, (such as reading groups in Philips' study) where fewer students are involved and participation is generally required. In the students working independently structure, students work individually at their desks with the understanding that the teacher is available to provide individual support. The fourth participant structure, students working together in small groups that run themselves, involves less intervention from the teacher. In Philips' study, however, this "group work" structure always included an assigned student "chairman" who took on the role of the teacher in facilitating who could speak when-which was rarely the case in the instances of group work I observed in this study.

Galguera (2011) provides a somewhat distinct definition of participant structures as "explicit, planned interactions" arranged by teachers and designed to scaffold students' comprehension and oral language production. For Galguera, examples of participant structures include "pair-share, Round-Robin, and jigsaws," all of which involve peer interaction (p. 93). My own conceptualization of participant structures aligns more closely with the definition outlined by Philips $(1972,2009)$ in that I was (at least initially) less concerned with the specific rules that governed the sequence of participation (such a Round-Robin, which dictates that each group member responds before any single group member shares again) than with whether or not the structure imposed by the teacher was designed to facilitate peer interaction
(e.g. teacher fronted or individual activity versus pair or small group work). I was interested in examining how the ways in which different classrooms were organized shaped students' opportunities for interactions with their classmates based on the understanding that dialogue is at the heart of learning (van Lier, 2004). As will become clear below, however, I found that attention to the pedagogical structure alone provided limited insight into the interactions themselves.

Similar to King and colleagues (2017), who drew Philips' (1972) notion of participant structure but modified the categories based on the most common forms of structuring interaction in their focal classroom, I identified six participant structures based on observations of the four classrooms under study. These participant structures, while not necessarily described as such by teachers or students, can be organized into the following categories: Pair work, Small group work, Individual work, Teacher-fronted station work, Teacher-fronted whole class work, and Whole class discussion. In the pair work structure, students worked with a partner sitting next to them, selected or were assigned a partner elsewhere in the classroom, or circulated having brief "interview-style" interactions with one student at a time. Common pair activities included "checking answers," reading a text together, practicing vocabulary with flashcards, summarizing a text, and creating a poster. Small group work generally consisted of three to five students seated around a table. Small group work activities included reading responses to prompts aloud to one another, writing fictitious dialogues, reaching a consensus (e.g. write a definition for a concept), and using images and sentence starters to form statements. In some
instances, group members had designated roles, while in others they were simply instructed to "work together." The individual work structure most often consisted of completing worksheets or working on laptops as teachers circulated and provided individual support. Within the Teacher-fronted station work participant structure, students often rotated through three stations, with the classroom teacher leading one station, an instructional aide leading another, and students working individually at another. The teacher-fronted whole class work structure included times in which the teacher was at the front of the classroom providing instruction at the whiteboard or Smart Board, while students were at their seats taking notes and responding to questions posed to the entire class either individually or chorally. This structure aligns closely with the first type of teacher-controlled participant structure described by Philips (1972, 2012) and outlined above, in which a teacher addresses the whole class collectively or addresses one student in the presence of the whole class. Whole classdiscussions (which were used seldom in any of the four classes) usually involved rearranging the tables or desks so that students could face one another and engage in dialogue facilitated by the teacher.

## Participant Structures in Each Classroom

In order to examine patterns in participant structures within and across classrooms, I selected recordings of two full instructional periods in each classroom and identified the total number of two-minute intervals of video data that $I$ had coded for the participant structures listed above. As I described in Chapter 3, I selected recordings in which I had followed a single student for the duration of the class
period, such that the participant structures in which that student engaged would mirror those of the entire class. Because class length varied, I calculated the percentage of time spent on each of the six participant structures outlined above in relation to the total number of intervals coded for participant structure in the two selected recordings of each class.

Analysis of these video recordings revealed that students in ethnic studies at Sycamore High spent the vast majority of the selected recorded classes listening and taking notes as their teacher led the class ( $80 \%$ ), and less than a tenth ( $9 \%$ ) of class working in pairs or small groups (see Table 5). Instructional time in the selected recordings of ELD class at Sycamore High was also spent primarily on individual work (52\%) or teacher fronted whole-class work (40\%), with only $7 \%$ of the time spent working with peers. In stark contrast, the selected recordings of reading and biology classes at Cedar International included a markedly higher percentage of time spent in pair and small groups: Together, pair work and small group work comprised nearly half (48\%) of the instructional time in the selected recordings of reading class, and more than half (53\%) of those in biology. In other words, students enrolled in reading and biology at Cedar spent more than five times the proportion of the selected class sessions interacting with peers than did their counterparts in ELD and ethnic studies Sycamore High.

## Table 5

Participant Structures in Each Classroom in Two Videorecorded Class Sessions

| Participant | Sycamore High |  | Cedar International High |  |
| :---: | :---: | :---: | :---: | :---: |
| Structure | Ethnic <br> studies with <br> Ms. Cardoso | ELD with Ms. <br> Lambert | Reading <br> with Ms. <br> Aviva | Biology with <br> Ms. Lilly |
| Pair \& Small | $9 \%$ | $7 \%$ | $48 \%$ | $53 \%$ |
| group work |  |  |  |  |
| Individual work | $11 \%$ | $52 \%$ | $26 \%$ | $20 \%$ |
| Teacher-fronted <br>  <br> station work | $80 \%$ | $40 \%$ | $26 \%$ | $47 \%$ |

I do not wish to claim that these percentages match the exact balance of participant structures utilized within these four classrooms over the course of the academic year. However, the pattern of far more time spent working in pairs and small groups in the two classes at Cedar International when compared to the two classes at Sycamore High is consistent with my observations of these classrooms over the course of seven months.

It is important to note that the frequency of particular participant structures, while indicating structured opportunities for peer interaction in different classroom, reveals little about the extent to which students were actually interacting with one another, or about the quality of those interactions and the likelihood that they would provide ample affordances for language development. In other words, students might
have had few meaningful interactions in the context of poorly designed group activities. Students also might have engaged in dynamic, productive interactions with one another when, according to the design of the lesson, they were supposed to be working alone.

## Beyond Classroom Structure

As discussed above, the analysis of participant structures revealed that students in the reading and biology classes at Cedar International spent more planned instructional time interacting with their classmates than students in the ELD and ethnic studies classes at Sycamore High did. In my classroom observations, however, I had noticed that students in all four classrooms also frequently interacted and supported one another's participation in classroom activities during instructional activities that had not been designed for peer interaction. A number of scholars have highlighted that participant structures are not always reflective of meaningful opportunities for peer interaction. For instance, King and colleagues (2017) examined peer interaction among newcomer students from Somalia, all of whom were new to print. They found that students often did not take up opportunities to engage in extended interactions with their peers in the context of activities that had been designed for peer interaction, while students did engage with one another, provide recasts, feedback, and other forms of support during activities that had been designed for individual performance. Similarly, when I reviewed the video data from each classroom, I found that many instances of students reaching out to support one another and engaging in dialogue occurred while students were (according to the
participant structure) working individually, or while the teacher was addressing the whole class. These observations led me to more systematically examine instances of peer interaction in all four classrooms. To do so, I coded all intervals within the video logs in which peers provided some form of support for one another or collectively constructed meaning with the code Peer Support, regardless of the participant structure. I discuss these findings below.

## Different Forms of Peer Support

Upon analyzing intervals coded Peer Support in all four classes, I found that the ways in which students supported one another and the extent to which those interactions involved extended and meaningful dialogue varied significantly. It also appeared that the type of peer support students engaged in most frequently differed across the four classrooms. Drawing on this observation, I re-examined excerpts coded Peer Support across all four classrooms and conducted an additional round of coding. I found that instances of peer support could be divided into the following categories: 1) providing meanings, translations, or spellings of a word or phrase, 2) checking or correcting answers, 3) offering explanations of instructions, 4) providing explanations of content, 5) collectively negotiating content. ${ }^{21}$ All of these forms of interaction provided affordances for language development in that they included instances of a student perceiving semiotic resources and acting upon them in ways

[^17]that led to further action. Some of these interactions, however, were very brief and did not involve the joint construction of meaning. Additionally, while interactions in the first two categories of peer support involved providing peers with assistance, they did not involve scaffolding because they did not always foster autonomy-a core component of scaffolding from a sociocultural perspective (van Lier, 2004, Walqui \& van Lier, 2010). The latter three categories (offering explanations of instructions, providing explanations of content, and collectively negotiating content), however, often involved interactional scaffolding and joint construction of meaning. Based on video data from the four classrooms, I provide examples of each type of peer support, describe the frequency with which they occurred in each classroom, and discuss the extent to which they provided affordances for additional language development.

## Providing Meanings, Translations, and Spellings

Providing peers with the meaning or translation of a word or phrase and responding to requests to spell individual words comprised a significant portion of the instances coded peer support in the video data from each classroom. Not surprisingly, these interactions were often relatively brief and involved less back and forth or building on ideas presented than other types of peer support. For instance, in the following excerpt, students in Ms. Cardoso's ethnic studies class at Sycamore High had recently returned from school after winter break. Because she was beginning to introduce past tense verb conjugations, the "Do Now" prompt on the whiteboard stated: "Write 3 sentences about what you did during the vacation."

Dario: [looks up at classmates sitting at his table] Cómo se dice fútbol in English? \{How do you say 'soccer’ in English?\}

Gisela: Soccer. S-o-c-c-e-r [using Spanish alphabet]. Play soccer.
Dario: [Nods, turns head back down and continues to write on his "Do Now."] Similar brief interactions of this type occurred frequently in all four classrooms. In the following interaction from Ms. Lilly's biology class at Cedar International, for instance, students were working individually on an "Activity Guide" on climate change. Paulina, one of the focal students in Ms. Lilly's class turned to Semira and asked:

Paulina: Cómo-how do you say more? Increase?
Semira: Increase. [Both students continued to work.]
As I described in Chapter 4, Paulina shared with me that she often sought out help from "los que saben mucho español e inglés" \{ those who know a lot of Spanish and English\}-however it was also apparent that she sought out both linguistic and content area expertise from students who did not speak Spanish at home. In the example above and others like it, a request was generally followed by a single utterance in response, at which point the interaction concluded. In some cases, however, requests for meaning, spelling, or translation of a word or phrase involved more than two interlocutors. In the following interaction, for example, students in Ms. Aviva's reading class at Cedar International were working individually at stations to revise their written informational summaries about an athlete who was born with one partial-leg, Ms. Aviva was providing individual support to Yesenia, a female
identifying student from Guatemala who spoke Spanish at home. Sitting on the floor next to Yesenia, Ms. Aviva prompted:

Ms. Aviva: Ok! Because he was born with one leg [writing on Yesenia's paper] and they thought he was, what is that word in English, it's one of our vocab words.

Yesenia: [turned to her two classmates, Marlena and Jaira] Cómo se dice 'maldición' en inglés?" \{How do you say 'curse’ in English?\}

Jaira: Cursed.
Yesenia: [Writes the word 'cursed' and continues working with Ms. Aviva.] Each of these interactions, while relatively brief, provided affordances for additional language development in that they allowed the students who made the request to continue to use English, in these cases in their written work, and to navigate their assignments. It is also worth noting that in both the first and third example above, students' responses extended beyond their classmates' requests. When Dario asked how to say soccer, Gisela responded by spelling the word for him in Spanish and offering the verb 'play' that he could use. Similarly, in the interaction in Ms. Aviva's class, Yesenia asked her classmates how to say 'maldición' [curse] in English. However, Jaira's response, 'cursed' suggests that she was paying attention to the ongoing interaction between Ms. Aviva and Yesenia and had identified that the adjective 'cursed' [embrujado] was a better fit than the translation of the noun 'curse' [maldición] that Yesenia had requested. Even in the context of these relatively brief and constrained interactions, peers provided critical assistance to one another.

## Checking or Correcting Answers

Instances of peers checking or correcting one another's answers to class assignments was also common across all four classrooms. In general, this was the most constrained and least dynamic type of peer support. While in some instances students' requests to have a classmate look over their responses led to more extended negotiation, more often these interactions were relatively brief, and sometimes consisted primarily of deictic gestures. For instance, students often pointed to a response on a worksheet while making eye contact with a classmate at the table, indicating that the classmate should check the answer. Replies to this type of implied request often consisted of a nod or a suggestion for a different response. Consistent with the emphasis on grammatical accuracy that characterized both classes at Sycamore High, many of this type of peer interaction in the ELD and ethnic studies classes involved correcting one another's use of grammatical, lexical, or morphological structures. In all four classrooms, however, these interactions were often framed as yes/no or otherwise closed questions, which limited the likelihood that the request would result in further negotiation.

## Offering Explanations of Instructions

A significant number of instances of peer support involved explanations of oral or written instructions. These instances often consisted of more extended back and forth interactions than the previous two categories, almost always involved deictic gestures with material resources (e.g. worksheets, images on the laptop screen, etc.), and frequently combined features of Spanish and English. In all four
classrooms, students often provided their classmates with explanations of instructions in their home languages. Unsurprisingly (given that all but two students in the ethnic studies and ELD classes at Sycamore spoke Spanish) there were more instances in which explanations were provided primarily in Spanish in those classes; while greater linguistic diversity among students in the biology and reading classes at Cedar International contributed to more frequent explanations provided primarily in English.

In many of these interactions in both classrooms at Sycamore High, one student translated oral or written instructions to Spanish for a classmate, often while pointing to the instructions on a worksheet or on the board, or to where the student would need to write a response. The few instances in which explanations included more extensive use of English at Sycamore High were those that involved Mai, the student in the class who spoke Vietnamese and who was often positioned by her peers as possessing English language expertise.

In all four classrooms, when explanations of instructions were provided primarily in English, gestures and material resources functioned together with the oral explanation to act as affordances. For instance, when the following interaction occurred in Ms. Lilly's biology class at Cedar International, students were working in pairs to create a poster describing a particular natural disaster caused by climate change. Julia, a focal student in Ms. Lilly's class from El Salvador who speaks Spanish at home, was working in pairs with Nero, who also speaks Spanish at home. As I described in the previous chapter, Julia described how she sometimes intentionally sought out support from students who did not speak Spanish in order to
create an opportunity for herself communicate in English. In the example below, she asked Hakeem, a Yemeni student and speaker of Arabic and one of the more experienced users of English in the class. Hakeem responded with a verbal explanation in English paired with deictic gestures:

1 Hakeem: The title. See, go back over here [points to another tab on Julia's browser]

2 Julia: [clicks tab with slides]
3 Hakeem: Oh yeah, right here. That's the title, right here. [Points to the slide on forest fires]

4 Julia: Ok.

6 Julia: This is the title? [points to text on her screen]
7 Hakeem: You see the title? [points to slide at the front of the room]

9 Hakeem: So write it like that one [points to Julia's screen] then write that one, from the first, all the way-

10 Julia: In Australia?
11 Hakeem: Not that, all the way through here [pointing to the title 'Wildfires in Australia' on Julia's screen]

12 Julia: Wildfires in Australia?
13 Hakeem: Yeah
14 Julia: Ok, thank you

In this case, the oral explanation was provided entirely in English; however, the words would have meant very little without the accompanying deictic gestures and the material resources that were being indexed by both Hakeem and Julia.

Interestingly, however, in some instances at Cedar, students utilized features of Spanish during explanations of instructions, even when one of the students did not speak Spanish at home. For instance, in the following example from Ms. Lilly's biology class, students were working individually on an "Activity Guide" packet titled "Solutions to Climate Change." The activity guide called on students to watch a series of video clips on a laptop and complete the worksheet by drawing images and providing written responses to questions about the video clips. Paulina, a ninth grader from Guatemala who speaks Spanish at home and one of the focal student's in Ms. Lilly's class, was sitting next to Semira, a tenth grader from Eritrea who speaks Tigrinya at home. In the interaction below, Semira turned toward Paulina, unsolicited, and asked:

1 Semira: Do you understand?
2 Paulina: [removes headphones and looks at Semira]
3 Semira: Do you understand? First draw image Ok? [points to Paulina's screen] Good.

4 Paulina: So, hay two videos?
5 Semira: Yeah, this is one, two [flips pages of activity guide, shakes the packet when she arrives at the correct page]

6 Paulina: So, dónde está el otro video?

7 Semira: Here [points to the images on her page in the activity guide] This is three. Video three. You have two.

8 Paulina: Two image? [points to her activity guide, then to the screen] So are you writing about THIS VIDEO? [taps one of the video clips on the screen with her pencil eraser]

9 Semira: Yeah! You write about-you write 'I see', 'I think', 'I'm curious about' about-of this video [points to Paulina's screen] and THEN you draw the image once you see here [points to screen]

10 Paulina: What about this? [points to the following prompt on her page]
11 Semira: Yeah, this here! [points to where Paulina should write her response]

12 Paulina: I'm drawing ahh [puts hand over her eyes and shakes head, acknowledging her mistake] I write two different things?

13 Semira: Yeah, two
14 Paulina: About this video? [pointing to screen]
Semira: Yeah, look here [shows Paulina where she has drawn images on her activity guide, flipping to the correct page]

16 Paulina: Ok [puts headphones back on and returns to face her laptop and continue work on the activity guide.]

In this interaction, like the previous example, the two students engaged in an extended oral interaction conducted primarily in English, paired with near constant gesturing with artifacts in which one student clearly positioned themselves as the
"helper." Interestingly, in this interaction, Paulina also incorporated features of Spanish, even though Semira does not speak Spanish at home. In the first instance, she asks: "So, hay two videos?" Here it is possible that she knew it was not necessary for Semira know the meaning of word 'hay' $\{$ there are $\}$ in order to understand the question. However, she follows up with the question "So, dónde está el otro video?" \{So, where is the other video?\}, to which Semira responds, "Here, [pointing to the images on her page in the activity guide] This is three. Video three. You have two." Semira's response clearly indicates that she understood Paulina's question. Paulina had, on other occasions documented within video logs and fieldnotes, expressed surprise and delight by how much Spanish Semira was able to understand.

In the interaction above, it is unclear whether Paulina was intentionally using Spanish as a way to signal that she knew and appreciated that Semira would understand her, or if she simply found this to be a clearer way of expressing her questions. It is also possible that Paulina, who was a less experienced user of English than Semira, was utilizing features of Spanish as a way of asserting her own linguistic expertise. Regardless of Paulina's intentions, her use of Spanish served as an affordance for additional language development (of both Spanish and English) given that Semira acted upon the description and was able to continue the interaction.

This observation is consistent with a recent study of peer interaction among adolescent recently arrived immigrant students from the Democratic Republic of Congo in high school ESL classrooms that were primarily comprised of Spanish speakers. Davila (2020), found that Congolese students engaged in translanguaging in
a "non-target" language (Spanish) in ways that allowed them to convey meaning and shape the environment, and that also served as a tool for learning English: "The students enjoyed tapping into their knowledge of French to learn Spanish, and they appreciated Spanish in its own right" (Davila, 2020, p. 48). Similarly, speakers of languages other than Spanish in all four of the classrooms in my study sometimes leveraged features of Spanish, including in order to support Spanish-speaking classmates. I observed this phenomenon more often in both classes at Cedar International, given that there were far more speakers of languages other than Spanish in those classrooms. However, on several occasions Mai, a Vietnamese speaker who was enrolled in both Ms. Lambert's ELD class and Ms. Cardoso's ethnic studies class, demonstrated that she understood explanations of instructions that had been provided entirely or partially in Spanish.

## Providing Explanations of Content

Explanations of content extended beyond students supporting one another with making sense of what was being asked of them, to making sense of the material itself. Unlike instances that I coded collectively negotiating content, however, I coded providing explanations of content when support was unidirectional (one student was clearly occupying the role of "helper"). I recorded far more instances of peers providing explanations of content to their classmates at Cedar International than at Sycamore High. Notably, I did not find a single instance of the video data from ethnic studies class in which a student was supporting a peer in with conceptual understanding of ethnic studies content, likely because the primary focus of most
instructional activities I observed was students' development of English forms. In ELD at Sycamore High, the instances of explanations of content were often focused on accurate production of target forms. For instance, in the following example, students in Ms. Lambert's ELD class were working on an activity that asked them to write a paragraph comparing their behaviors in 2010, 2017, and "now." Ms. Lambert had been explaining to Marcela where the period and commas should be placed in the paragraph, when Julián, a 16-year-old male identifying student from Guatemala and one of the focal students in Ms. Lambert's class, realized that Marcela was confused. Julián provided the following explanation:

1 Ms. L: Dónde termina la oración? \{Where does the sentence end?\}
2 Marcela: [points to her page and looks up at Ms. L tentatively]
3 Ms. L: No adivines. Léelo con cuidado. \{Don’t guess. Read it carefully.\}

4 Marcela: [reading aloud] 'I am different than from for example'
5 Ms. L: Uh uh. [shakes head] Mira al ejemplo en la otra página [walks away] \{Uh uh. [shakes head] Look at the example on the other page [walks away]\}

6 Julián: En el dos mil diez va la primera, el punto [pointing to the number 2010 on Marcela's page] 'I am different now from the year two thousand @@@ two thousand ten' @@ luego va 'for example' luego va la coma y (inaudible) Sí entendés? \{The first period goes after two thousand ten [pointing to 2010 on Marcela’s page] 'I am different now from the year two thousand @@@ two thousand
ten’ @@ then goes 'for example’ then goes the comma and (inaudible) You understand?\}

7 Marcela: No [shakes head]
8 Eh-qué te voy a decir [leans over toward Marcela, showing her his paper and pointing to his text] aquí va el punto, luego 'for example' y le pone la coma \{Eh, how can I tell you [leans over toward Marcela, showing her his paper and pointing to his text] here you put the period, then 'for example' and then you put the comma\}

9 Ah, ok [nods]
This example is similar to many other instances in Ms. Lambert's class in which students worked to support their peers to accurately produce a particular form. Julian's assistance, which is narrowly focused on where Marcela should place punctuation, is geared more toward completing the activity correctly than conceptual understanding. This orientation is not surprising given that the goal of the activity itself was not for students to reflect on changes over time, but rather for students to produce "a complete paragraph," and Ms. Lambert often emphasized accuracy over emergent sense-making.

Interactions of this type in the biology and reading classes at Cedar International were more likely to be focused on conceptual understanding. In the following example from Ms. Lilly's biology class, Feliciano, a focal student in Ms. Lilly's class who is from Guatemala and speaks Spanish and Mam at home, sought out support form Semira, a student from Eritrea who speaks Tigrinya at home:

1 Feliciano: Soooo, I don't understand this sentence. So 'climate change is caused by humans using fossil fuels' [reading and pointing to the statement on the board]

2 Semira: What is fossil fuels, do you know that?
3 Feliciano: Fossil fuels. Yeah

4 Semira: What is that? @ @ @
5 Feliciano: I don't know!
6 Semira: You don't know that? Feliciano! What's wrong? @ @
7 Feliciano: I don't know! I don't remember that!
8 Semira: What is fossil fuels?

9 Feliciano: It's what people use for-
10 Semira: -it's oil, gasoline, for cars @ @
11 Feliciano: Fossil fuels, fossil fuels, fossil fuels, fossil fuels. Fo-ssil
fuels. I don't know. It's gasoline, it's oil, it's coal-
12 Semira: -gasoline is for driving cars
13 Feliciano: Gasoline
Although Semira teased Feliciano a bit, she also scaffolded his sense making about what fossil fuels are and how they are connected to human activity. Similar interactions occurred in Ms. Aviva's reading class as students explained concepts such as the differences between a group and community, or what it means to make assumptions about gender based on appearance.

## Collectively Negotiating Content

In all four classrooms, the most dynamic interactions occurred when students engaged in collective negotiation of content-that is, when three or more students jointly constructed meaning, and when the activity in which students were engaged included some of conceptual or disciplinary goal. I found the notion of "productive peer interactions," which Alvarez and colleagues (2020) developed based on their analysis of classroom discourse and opportunities for language and science learning in linguistically diverse fifth grade science classrooms in California, particularly helpful in making sense of the distinctions between the instances of collective negotiation at the two schools. Their notion of productive peer interactions consists of the following three criteria: "back-and-forth interaction" involving collaborative construction of meaning; student agency (acting on available affordances); and developing deeper understanding of disciplinary practices through the interaction (Alvarez et al., 2020, p. 83). While I identified a few peer interactions in the videodata from the two classrooms at Sycamore High that involved joint sense-making and back and forth interaction, none of the interactions recorded in either classroom at Sycamore High involved participation in disciplinary practices. At Cedar International, however, there were numerous instances in which students engaged collaboratively to scaffold one another's participation in disciplinary practices central to science and English language arts. Below I provide several examples to illustrate these differences.

The following example was one of relatively few instances at Sycamore in which students engaged in collectively to make sense of a task that was not focused explicitly on accurate production of particular forms. Ms. Lambert had recently begun a new unit on "Doctor's office talk." For the "Do Now" students were asked to work with the other members at their table to write what a patient might say to a doctor based on an image of an injured man with crutches, a cast on his foot, and a scrape on his leg. Saraí, Gisela, and Pedro were sitting together, and Gisela was writing for the group as they discussed what the patient might say to his doctor:

1 Saraí: I am hurt? No. I hurt? No! @ @ @

2 Pedro: Yo dolor [laughs] \{I to hurt?\}
3 Saraí: @ @ @ yo dolor. Ok, me duele? \{I to hurt. Ok, hurts?\}
4 Pedro: The part-

5 Saraí: The part of my body hurts-
6 Pedro: IS-

7 Saraí: -is my arms [grabs arm] is my legs! [points to legs]
8 Pedro: [points to image on the overhead of a person with many injuries] y la otra pierna la tiene rascada y el pie lo tiene hinchado \{and his other leg is scratched and his foot is swollen\}

9 Gisela: este-este todo mi cuerpo? [motioning whole body, looks up at Saraí] ¿cómo se dice? \{this-this my whole body [motioning whole body, looks up at Saraí] how do you say?\} Pedro: all my body hurts

11 Giesla: [erases]
12 Saraí: [quietly to self] all my body. [looks at Pedro] No. Ol?
13 Pedro: ALL [draws letter 'A' in the air with fingers, looking at Saraí]
A-L-L [using Spanish alphabet]
14 Saraí: A-L-L [looks over at Gisela, repeats the spelling using Spanish alphabet]

15 Gisela: [writing] all - my -
16 Saraí: body
17 Gisela: [continues writing]
18 Pedro: hurts
19 Gisela: [continues writing]
Pedro: que buen equipo! \{what a good team!\}
Saraí: [nods and shrugs]
In this example, all three students built on each other's contributions to collaboratively construct meaning. They act upon available affordances, including features of Spanish, English, gestures, and the image of the injured man. This example of interactional scaffolding reflects the process of 'vertical construction' described by Scollon (1976) that I discussed in Chapter 2. In lines 4 through 6, Pedro and Saraí jointly construct the statement in English "the part of my body hurts is my arms, is my legs." Yet the triad also draws on features of Spanish to work toward a more detailed statement. For instance, in line 8, Pedro draws the group's attention to the image of the injured man and adds " $y$ la otra pierna la tiene rascada y el pie lo
tiene hinchado" \{and his other leg is scratched and his foot is swollen\}. Gisela then revises this contribution, asking in Spanish how to say "todo mi cuerpo" \{my whole body $\}$ which Pedro takes up in his response in English "all my body hurts." Although Gisela is responsible for writing the dialogue, Saraí responds under her breath "all my body" and seemingly unsure of the first word, looks up at Pedro and asks "No. Ol?" to which Pedro responds by both spelling out the word A-L-L using the Spanish alphabet, and drawing the letter ' A ' in the air with his fingers.

This interaction is similar to the instances of collective scaffolding described by Donato (1994) in that the three students incorporated pieces of speech from prior discourse in order to achieve linguistically what they would not have been able to do alone. Yet in the example above, in addition to home language resources, other semiotic resources (gestures and the image of the injured man) also acted as affordances for language development. The notion that multiple semiotic resources functioned simultaneously as affordances is consistent with the literature on affordances for language development that I discussed in Chapter 2, which highlights in order to support language development, affordances must be available in "sets" (Aronin \& Singleton, 2012), "sequences" (Gaver, 1991), or "networks" (Barab \& Roth, 2006). Very rarely were there instances of peer support of any type that did not include multiple forms of affordances functioning simultaneously or sequentiallyand collective negotiation of content generally involved the broadest range of affordances, which I will address in greater detail in Chapter 6.

While the previous example of collective negotiation of content occurred in the ELD class at Sycamore, this form of peer interaction was significantly more common in the two classrooms at Cedar International. In the following example from Ms. Lilly's biology class, students were working in pairs on an activity that asked that they write their responses to the statements 'I see . . . I think ...I am curious about . . .$\quad$ regarding images of natural disasters impacted by climate change on post-its, that would later be placed on the board to discuss in groups. Julia and Nero, both of whom speak Spanish at home, were working together with an image of a forest fire. After asking Julia in Spanish to explain the meaning of the question 'I am curious about. . .' Nero began to write his response, but turned to pose his question to Gervin, another Spanish speaker seated behind him. Semira, who speaks Tigrinya at home, was seated next to Gervin, also engaged.

1 Nero: I am curious [quietly, to self]
2 Nero: [turns around toward Gervin] Como por qué- yo me pregunto por qué la montaña está quemando? \{Like why- I wonder why the mountain is burning?\}

3 Gervin: Why the-the mountain is burning?
4 Nero: Espérate. \{Wait\} 'I am curious why' [Turns back forward to write on post-it, reading aloud as he writes]

5 Semira: The mountain is burning because it's a volcano
6 Nero: Ey! The mountain-the mountain- [turns around toward Gervin]
7 Gervin: Is, uh huh [PAUSE] Burning

8 Nero: Burning?
9 Semira: It's smoking, not burning!
10 Nero: It's burning!
11 Semira: How a mountain can burn?
12 Julia: [Turns around to look at Semira]
13 Gervin: With fire!
In line 1, Nero enlisted the support of Gervin. It is not entirely clear whether Nero was requesting a translation of his statement or asking whether his statement was appropriate given the prompt, but Gervin responded with a partial translation in line 2. In line 5, however, Semira offered a response to Nero's question, suggesting that what Nero was calling a mountain was actually a volcano. Nero ignores her suggestion, urging Gervin to provide the translation of his original statement. In lines 9-11, Semira interjects "It's smoking, not burning!", Nero reasserts his position that the mountain is burning, and Semira again challenges his solution with the question: "How a mountain can burn?" Consistent with Alvarez and colleagues' (2020) description of productive interactions for language and science learning, Nero, Gervin, and Semira posed questions to one another and both built on and challenged one another's ideas. The students also had opportunities to engage agentively. The prompt itself was focused on what students noticed and found compelling about an image of a natural disaster that each pair had selected. The students also asserted agency in determining what elements of their peers' contributions to act on. Nero reached out for support and then took up Gervin's translation of his original statement
"I wonder why the mountain is burning," however, he held his ground when Semira challenged the logic of the question. Although Nero's final written statement was consistent with his original request for a translation, by pointing out "It's smoking, not burning" Semira drew attention to nuances in phenomenon depicted in the photograph. She also introduced questions about substances that are capable of burning ("How a mountain can burn?"), suggesting that something else must be going on in Nero's image. Julia, who had been working on writing her own responses, was clearly attending to this interaction as well, because she turned around in response to Semira's question. Donato (1994) found that "peripheral" participants in instances of collective scaffolding (a student who did not ask for assistance but was present during the interaction) also demonstrated having benefitted from the interaction based on their use of the scaffolded form independently later in the interaction. Unfortunately, this interaction ended almost immediately after line 13 above because Ms. Lilly called students' attention to the front of the room, yet it is possible that Semira's contributions triggered new questions or ideas for Nero, Gervin, and Julia. In Chapter 6, I describe several instances of collective negotiation of content in greater detail with particular attention to the broad range of semiotic resources that acted as affordances for language development during peer interactions.

## Perspectives on Language and Additional Language Development

In this chapter, I described the pedagogical approaches adopted by the four teachers, which contributed to distinct instructional arrangements. Both the ELD and ethnic studies classes at Sycamore High reflected the teachers' (and the program's)
prioritization of students' ability to accurately produce target forms and eventually automatize grammatical rules. There was also some evidence of a focus on accuracy in the reading and biology classes at Cedar International (such as the use of SIPPS curriculum and separate language and content objectives). However, both Ms. Aviva and Ms. Lilly described an understanding that students needed opportunities to actively make sense of new ideas through interactions with peers and texts in order to both develop language and content knowledge. Ms. Aviva and Ms. Lilly also frequently de-emphasized linguistic accuracy, encouraging students to grapple with the concepts and to express their ideas to the best of their ability. These distinct pedagogical orientations contributed to more frequent and more dynamic peer interaction among students than the approaches adopted in the ELD and Ethnic studies classes at Sycamore High.

Given that both classes at Sycamore High were primarily serving students in their first year of school in the US, it is possible that Ms. Cardoso and Ms. Lambert's classes would have moved toward incorporating more instructional activities designed for collective sense-making once they felt that their students had become more familiar with the structures and expectations of high school and had developed a "foundation" of English language skills. Ms. Cardoso reported during an interview that the second half of the school year was when she "really started to get into content," and perhaps this shift in focus would also involve more peer interaction. Even if that were to be the case, however, the notion that students must develop "basic skills" in English before they can interact with one another in ways that
support additional language development and content learning reflects an understanding that language development can be detached from the meaningful social environments in which it occurs.

The participant structures adopted within the four classrooms also provide some indication of the teachers' views of language development in relation to peer interaction. Ms. Lambert's comments during interviews and video-recorded classroom interaction suggest a view of peer interaction as a stopgap for navigating tasks designed for individual work. She explained that because so many students needed support, seeking help from peers was necessary, but that it also obfuscated what individual students were and were not capable of doing: "[I]t's like an individual assignment but it's always ok to ask their group, in fact I encourage it? So it's really hard to know what an individual student can produce . . . Because it's like, EVERY assignment is a group assignment in our whole program." The notion that accurate assessment of a student's language development requires isolating what that student "can produce" individually suggests that Ms. Lambert endorsed a cognitive view of language as existing in the mind of the individual learner. As Valdés and colleagues (2014) point out, cognitive theories of language have contributed to a lasting emphasis within language teaching on rule learning with the understanding that this will lead to eventual competence, that is "tacit knowledge of the rules" (p.41).

Fieldnotes and video data both reinforce Ms. Lambert's statement that she frequently encouraged students to reach out to their classmates for support with navigating classroom activities. Generally, however, she framed peer support in terms
of providing explanations of instructions and building students' capacity to sort through confusion without the help of a teacher. She did not appear to view those interactions themselves as a venue for learning. In the following video-recorded exchange, for example, Ms. Lambert provided the following instructions to the class: "It's a paragraph? You write one sentence, period. Second sentence on the same line. Can you talk to people in your group, and if you're sitting in seat B, can you explain to your group what we're going to do? Los en el asiento B, pueden explicar al grupo? \{Those in seat B, can you explain to the group?\} If you DON'T understand, if you don't understand and you're in seat B, you're gonna ask for help." Here again Ms. Lambert framed peers as a resource for explaining instructions rather than immediately seeking out the support of a teacher. Additionally, this description of writing mirrors a "skills discourse," in which "what counts as good writing is determined by the correctness of the letter, word, sentence, and text formation" (Ivanič, 2004, p. 227).

Ms. Cardoso also encouraged students in her ethnic studies class to utilize their peers for support navigating classroom activities, but she emphasized the act of asking peers for support as an opportunity for students to "practice" using English. In the following example, she explained to the class that they should use English to ask one another questions. However, she emphasized the structural accuracy of students' requests over the process of joint sense-making:

1 Ms. C: SO, how can we ask them IN ENGLISH, how can we ask them in English to help you translate

2 Patricio: [softly] qué es - what means?
3 Delmara: [softly] Do you know?
4 Ms. C: How do you say 'significa' in English?
5 Students: Means
6 Ms. C: Ok-
7 Patricio: What means?
8 Ms. C: No, not what means.
9 Pedro: What do means?
10 Ms. C: [writing on board as she speaks] What does $\qquad$ and then the word mean. So for example, 'what does island mean?'

In rejecting suggestions from Patricio and Pedro, Ms. Cardoso reinforced the notion that the act of asking for peer support was valuable primarily because it served as language "output."

Both teachers at Cedar International described different views of language and additional language development compared with their counterparts at Sycamore described above. While her class included an explicit focus on spelling, pronunciation, and oral fluency, Ms. Aviva described the desire for students to develop "as readers" by becoming familiar with the kinds of practices readers engage with as they make sense of texts through interactions with others and with the texts themselves. When I asked her about a lesson or unit that she was particularly proud of, she referenced the ongoing project that I described in the beginning of this chapter
in which her students paired with elementary school children to read and facilitate discussions surrounding children's books:

It's very intentionally developed so that it hits on pronunciation, making meaning, its thematic to these larger conversations we're having in class and things we're reading about. And they really have to step up and be a leader and be their best selves. And if they're not their best selves it's an opportunity to talk through what came up for them. . . there's so many other pieces that I feel like are beneficial to them as readers?

She added that while she wished that all students would leave her class being able to write questions in "correct format," she was most concerned that they learned how to engage meaningfully with texts.

When I asked Ms. Lilly about students who had been particularly successful in terms of their development of English over the course of the year, she described students who "took a lot of ownership over their learning," who were able to navigate moments in which they found themselves stuck, and who were collaborative and willing to both ask for help and explain their understanding of concepts to their classmates. Ms. Lilly underscored that her priority was that students make sense of the science content with the linguistic resources at their disposal. She explained, "I would much rather you write in whatever language you're comfortable with, instead of copy something that you don't understand. So just get some ideas about, and then we'll begin to think about how to translate and work in English from there." Consistent with this description of her position, during class, I often observed
instances in which Ms. Lilly explicitly highlighted for students that the primary goal was to make sense of biology concepts, even if the language they used to do so was "imperfect." For instance, in video recorded data from a lesson within the climate change unit, before she went over the answers to an activity, she reminded the class: "I saw a lot of you had really interesting answers. Some of them weren't the EXACT answers that I had in mind, but some of them really made sense, which makes me know that you are understanding the CONCEPTS, which is really good!"

This statement and others like it reflect a fundamentally different understanding of language development and learning than the emphasis on accuracy expressed by the teachers at Sycamore High. Rather than drawing distinctions between students' use of "basic interpersonal communication" (BICS) and "cognitively demanding" academic language proficiency (CALP) (Cummins, 1984, 2000), Bunch (2014) proposes that teachers consider the differences between the language of ideas and the language of display:

Language of ideas consists of the use of any and all linguistic resources students bring to bear on the engagement in and completion of an academic task, no matter how far from 'literate' language it is. Language of display refers to the evolving oral and written texts students develop, either individually or as a group, to present to particular academic audiences (p. 74). Bunch (2014) warns that when teachers focus exclusively on whether or not the language that linguistically minoritized students utilize as they grapple with new concepts aligns with "standard" or "academic" English, they may neglect to notice
students' meaningful contributions to the academic task at hand. In contrast, attention to the language of ideas highlights the assets that linguistically minoritized students bring to academic tasks, without denying that the language of display is important for particular settings and purposes.

Following Valdés and colleagues (2011), the focus on grammatical accuracy that characterized both Ms. Lambert's ELD class and Ms. Cardoso's ethnic studies class mirrors the approach adopted within many programs serving linguistically minoritized students. If this focus on accuracy continues, Valdés and colleagues (2011) warn, "and as long as teachers continue to believe that the direct teaching of grammatical rules can increase accuracy, grammatical syllabi and grammatical approaches will continue to dominate the practice of language teaching" (p.31). The notion of affordances has the potential to contribute to shifting this orientation by drawing teachers' attention-in real time-to how students are relating to their environment, the kinds of resources students are noticing and acting upon, and how students jointly contribute to one another's sense-making when given the opportunity to interact. Over time, this type of careful attention to interactions in the classroom environment might also lead to deeper awareness on the part of teachers of the complex tasks students are capable of navigating using the broad range of linguistic and other semiotic resources available to them-even if the language they produce is "imperfect."

In Chapter 6, I provide a detailed analysis of three interactions that occurred at Cedar International and discuss the broad range of semiotic resources that acted as affordances for additional language development.

## Chapter 6

## Students Pooling Semiotic Resources

While a growing body of literature has adopted a conceptualization of translanguaging as involving multilingual, multimodal, and embodied actions (Blackledge \& Creese, 2017; Blair et al., 2018; Kusters et al., 2017; Li Wei \& Lin, 2019; Pennycook, 2017), the vast majority of research on translanguaging in classrooms has focused on spoken and written language (e.g. Creese \& Blackledge, 2010; Daniel \& Pacheco, 2016; de los Ríos \& Seltzer, 2017; Duarte, 2018; García et al., 2012; Garza, 2018; Martin-Beltrán, 2014; Martínez et al., 2017; Poza, 2018; Sayer, 2013). Building on efforts to expand translanguaging research to attend to students' dynamic semiotic repertoires, my approach to exploring the affordances for additional language development that emerged during peer interaction was informed by an understanding that meaning making encompasses not only fluid multilingual oral and written practices, but also other semiotic resources.

Central to my perspective is also the understanding that peer interactions have the potential to provide different opportunities for learning than do student-teacher interactions. Unlike the scripted structure consisting of Initiation-Response-Feedback (IRF) or Initiation-Response-Evaluation (IRE) frequent among teacher-student interactions (Mehan, 1979; Sinclair \& Coulthard, 1975), when students interact with their classmates in the context of challenging and engaging tasks, they often ask one another genuine and open-ended questions building on one another's contributions (Devos, 2016; Walqui, 2006). And while the "expert" role tends to be more fixed
during teacher-student interactions, peers continuously reposition themselves and one another depending on their semiotic repertoires and knowledge of particular topics (Kibler, 2017). Put differently, "[t]he constructors of scaffolds among collaborative peers change because of fluctuating knowledge resources" (Devos, 2016, p. 147).

As I discussed in the previous chapter, all four participating teachers encouraged students in the classrooms I observed to "help each other" as they navigated classroom activities. However, the ways in which class time was structured, the available curricular materials, and kinds of questions students engaged with contributed to varying opportunities for meaningful interaction among peers. In Chapter 5, I explained how, in order to examine peer interactions in detail, I coded instances of Peer support within the video logs, and then conducted an additional round of coding of those interactions, dividing them into the following categories: 1) providing meanings, translations, or spellings of a word or phrase, 2) checking or correcting answers, 3 ) offering explanations of instructions, 4) providing explanations of content, 5) collectively negotiating content. In this chapter, I examine several interactions in which students collectively negotiated content in greater detail, describe the kinds of semiotic resources that acted as affordances, and discuss the conditions that allowed these productive interactions to unfold. I selected this category because the interactions involving collective negotiation of content presented particularly rich opportunities for learning given their dynamic and back and forth nature; and because they were comprised of students supporting each other to make sense of new ideas, concepts, and to participate in disciplinary practices. As I
described in Chapter 3, I selected the examples below because they highlight the range of semiotic resources that acted as affordances and shed light on the creative and skillful ways in which students supported one another to negotiate complex tasks. All three interactions occurred at Cedar International. Although the examples below are particularly dynamic, this type of interaction was common in the reading and biology classes at Cedar.

The first two interactions took place in Ms. Aviva's eleventh grade reading class during small group activities that had been designed for collaboration, while the third example comes from Ms. Lilly's ninth/tenth grade biology class while students were working on an individual assignment on laptops. As will be apparent in the examples below, all of these interactions involved engagement with a broad range of semiotic resources including verbal utterances with features of English and Spanish, student writing, artifacts such as images and digital media, iconic gestures (physically creating an image matching what a speaker is conveying verbally), metaphoric gestures (depicting more abstract ideas), and deictic gestures (pointing to physical objects, events in time, or ideas as though they had a physical location) (Norris, 2004).

Microanalysis also revealed that students not only positioned themselves and their classmates differently over the course of an interaction, but at times they also engaged in what I call pooling semiotic resources. I define pooling semiotic resources as a process through which students assess their own linguistic, cultural, and content expertise as well as that of their classmates and creatively combine a wide variety of
semiotic resources in order to both negotiate the task at hand and ensure that their peers can participate meaningfully. Notably, pooling semiotic resources differs from the collective scaffolding described by Donato (1994) in which students built off of one another's verbal contributions to the ongoing dialogue using features of English and French. Storch (2002) described this process of collective scaffolding as pooling resources, and a number of scholars have taken up the notion of pooling linguistic resources to make sense of how peers collaboratively construct meaning and negotiate classroom-based tasks (e.g. Malsbary, 2013; Storch \& Aldosari, 2013; Wigglesworth \& Storch, 2009). Malsbary (2013), for instance, examined how a group of multilingual and multiethnic students (both recently arrived immigrant youth and students bureaucratically designated Long-Term English Learners) frequently and spontaneously pooled linguistic resources to negotiate classroom tasks and to support their peers: "A student would notice another student sitting quietly and ask whether he or she understood the current activity or conversation. When the answer was no, several students would issue rapid directives and explanations in English and Spanish" (p. 10). In Malsbary's (2013) study, pooling linguistic resources involved students drawing from features of a variety of languages (including Spanish, Portuguese, and English, among others) in order provide one another with assistance. I argue that the notion of pooling semiotic resources more accurately reflects the complexity and ingenuity involved in collective scaffolding in which students build on multilingual resources in conjunction with a variety of other semiotic resource in
order to facilitate their peers' meaningful participation and to jointly negotiate academic tasks.

The process of pooling semiotic resources, which included students assessing one another's linguistic and content expertise, often resulted in greater affordances for both language and content learning for the students involved. At the same time, however, students' more enduring positioning of one another as more or less capable of contributing linguistic or content area expertise sometimes led to missed opportunities for meaningful interaction. As I will argue at the end of this chapter, the richness of the interactions described below can be attributed in part to the linguistic diversity and varying levels of experience with English that required authentic communication among students who did not share a home language. Yet, as I discussed in Chapter 5, other aspects of the classroom ecology, such as the curriculum and organization of instructional activities, also shaped how students interacted with one another and the emergence of affordances for additional language development.

## A Note on Transcriptions

As I mentioned in Chapter 3, my approach to transcribing video data draws on Blackledge and Creese (2017), who studied the role of the body in translanguaging. Like Blackledge and Creese (2017), I organized transcriptions for microanalysis by creating columns for the actor, verbal actions, other actions, and still images. However, unlike their data, the majority of the interactions I transcribed for microanalysis involved more than two participants. Given that collective negotiation
of content involved at least three students, there were always multiple actions occurring simultaneously. For example (as in the case of one of the interactions included below) one student would be writing, while another student was providing an oral explanation, and two other students were attending to the explanation in different ways. As I mentioned in Chapter 3, although I recognize that actions taken by listeners (such as shifts in gaze or posture) contribute in meaningful ways to the ongoing interaction (Erickson, 2004; Goodwin, 2013) these actions were not always visible in the video-recording, and thus were often not included in the transcriptions.

## "Do You Understand?": Mutual Responsibility for Peers

Ms. Aviva's eleventh grade reading class at Cedar International was unique in that she designed the course around thematic units that would allow students to explore social issues such as notions of community, disability, and gender, and sexuality. The following interaction occurred on the first day of a unit on gender and sexuality. Students were sitting in table groups of four or five when Ms. Aviva presented them with the following riddle on the screen projected at the front of the classroom:

A father and his son are in a car accident. The father dies instantly, and the son is taken to the nearest hospital. The doctor comes in and exclaims:
"I can't operate on this boy."
"Why not?" the nurse asks.
"Because he's my son." the doctor responds.
How is this possible?

Groups had already come up with the first and most common answer to this popular riddle, which is often used to highlight assumptions about gender identity: that the doctor was a woman. Ms. Aviva pointed out that most students had assumed that the doctor was a man even though nothing about the riddle indicated that this was the case. After a brief discussion with the class about this assumption, she instructed students to work with their group members to come up with another possible solution to the riddle, and to write their solution on a small whiteboard at each table, which groups would later use to report out to the rest of the class.

Jéssica, Labibah, Nicanor, and Esmat were sitting around a table at the front of the room. Jéssica, one of the focal students in Ms. Aviva's class, is a Spanish speaker from Mexico who frequently volunteered responses to questions posed to the class and often provided explanations in Spanish to classmates with less experience using English. She was seated across from Labibah, a feisty and playful Urdu speaker from Pakistan and one of the more experienced users of English in the class. Nicanor, who is from Guatemala and spoke Spanish and Mam at home, was seated next to Labibah and opposite Esmat (See Figure 1). Nicanor was relatively quiet and less likely to volunteer to participate orally in front of the entire class than Labibah or Jéssica were, but he frequently sought out and provided support in Spanish. While the other three students had attended Cedar International since ninth grade and were at the time of this video in the second half of their third year in US schools, Esmat had arrived from Afghanistan more recently. Esmat, who spoke Farsi at home, had also transferred into Ms. Aviva's class in the middle of the year because of a scheduling
shift linked to students' math classes, so he was relatively new in the class when this interaction occurred (see Table 6).

## Figure 1

Students' Physical Position


## Table 6

Student Demographics: Riddle and Prediction Activity

| Name | Jéssica | Labibah | Nicanor | Esmat |
| :---: | :---: | :---: | :---: | :---: |
| Home country | Mexico | Pakistan | Guatemala | Afghanistan |
| Home language | Spanish | Urdu | Spanish, Mam | Farsi |

In the segment below, Ms. Aviva had just finished giving instructions when
Labibah turned to Jéssica to offer a possible solution to the riddle:

Actor Verbal action
1 Labibah: What if they are gay?

Like the boy has married the boy

The one father died and-

Other Images actions looks at Jéssica brings two palms together


2 Jéssica: -OOOOHHHH!
3 Labibah: And the other father is here
4 Jéssica: Yeah yeah yeah! smiles


In the beginning of this interaction, Labibah proposed her solution directly to Jéssica, providing an oral explanation entirely in English and joining her two hands together with a metaphoric gesture to illustrate the notion that two men had gotten married and had child (with the surviving of the two men being the doctor in the riddle). She looked directly at Jéssica this entire time, yet both Nicanor and Esmat watched and listened carefully to her description. In lines 2 and 4, Jéssica indicated that she had understood, both verbally expressing an emphatic "OOOOHHHH!" "Yeah yeah yeah!" smiling, and promptly beginning to formulate a written response for the group on the whiteboard. At this point, Labibah sought confirmation from Ms. Aviva by calling her over to share the proposed solution. Labibah made a point to have Ms. Aviva lean in close so that the table behind them could not overhear, and whispered "Ok, what if the boys they are gay?" Once Ms. Aviva confirmed with several "Mmhmms" and a smile, Jéssica continued to write the beginning of a response on the whiteboard: "The boy have. . ." In line 12, below, Jéssica posed, "Do you understand?" to Nicanor, who was seated diagonally from her, as she continued to
write on the whiteboard. Labibah immediately followed with the same question for
Esmat, who was seated diagonally across from her.



In response to the inquiries about whether or not they had understood the solution, Nicanor slowly read aloud what Jéssica was writing on the whiteboard, "The boy have two-" at which point Esmat finished his statement "-two fathers." Both Nicanor and Esmat were reading what Jéssica had written, and perhaps also expressing an accurate understanding of the proposed solution-that prior to the accident, the boy had two fathers. However, Labibah's response of "Wait, no!" indicates that she felt they had misinterpreted the solution, possibly because they used the present tense of the verb "to have," she assumed they had not understood that one of the fathers had died. Jéssica began to provide an explanation in Spanish to Nicanor, who was looking at her and listening attentively. Labibah, however, interrupted the description in Spanish to provide an explanation to Esmat in English, perhaps recognizing that Nicanor could follow the English narrative, while Esmat could not understand Jéssica's account in Spanish. Looking directly at Esmat, Labibah explained "In the

United States, here, boys and boys can marry" and "girls and girls can marry" using a metaphoric gesture, joining her index and middle fingers together as she spoke to indicate two people marrying. Esmat responded with nods and several "yeah." Nicanor was also clearly tracking this explanation, which is evident from his eye contact in lines 23-26 and his reaction in line 27, in which he looked momentarily wide-eyed, then put his head down and banged his pencil against the table in apparent discomfort at the idea of two gay men having a child.


| Labibah: | In the United | draws |
| :--- | :--- | :--- |
| States, here, | index and |  |
| boys and boys |  |  |
| can marry- |  |  |$\quad$| middle |
| :--- |
| fingers |
| together |



24 Esmat: Yeah

Labibah: g

| girls and girls | draws |
| :--- | :--- |
| can marry | index and |
|  | middle |
|  | fingers |
|  | together |



26 Esmat: Yeah
Labibah: So if he had-the boys and boys had married together
twists
and they have a kid,
hands toward each other
and


28 Nicanor:
downward

29 Labibah: But the kid, one father died, but the other father is alive.
You understand?
holds up
one hand to
indicate
each father


30 Esmat: | Yeah yeah, now |
| :--- |
| I understand. |

It is unsurprising that Jéssica offered Nicanor a verbal explanation in Spanish, given that the two shared a home language. Labibah and Esmat, however, did not share a home language, thus she provided her explanation entirely in English accompanied by metaphoric gestures to illustrate key actions such as "married" and "have a kid." Labibah's decision to direct her explanation at Esmat and her mention "In the United States, here. . ." before going to describe same-sex marriage perhaps indicate a shared cultural understanding that that same-sex marriage is not a common practice in either Pakistan or Afghanistan. When Labibah checked whether or not Esmat understood her explanation, he confirmed orally "Yeah yeah, now I understand." Esmat's use of 'now' suggests that he had not previously understood, and that Labibah's explanation was effective. It is certainly possible, however, that he had already grasped the proposed solution to the riddle when he read "two fathers" from the whiteboard in front of Jéssica, but that he chose not to point this out. As I mentioned above, Nicanor's embodied response and apparent discomfort suggest that he was making sense of the solution for the first time as Labibah provided an explanation.

In this interaction, these four students skillfully pooled semiotic resources including metaphoric and iconic gestures, written text in English, verbal utterances in English and Spanish, and shared cultural understandings. Jéssica and Labibah displayed a sense of mutual responsibility for their peers by checking in with Nicanor and Esmat about the solution to the riddle. In fact, Labibah asked Esmat, who had joined the class recently, three separate times if he had understood the proposed solution. It is also apparent that both Jéssica and Labibah made evaluations of their classmates' linguistic and cultural practices in determining how to provide support. Jéssica had begun to provide an explanation in Spanish to Nicanor, who often used Spanish to check in with Jéssica or other Spanish speakers in the class in order to clarify his understanding of concepts. Jéssica could have (and often did) resist interruptions from Labibah, yet in this instance, Jéssica allowed Labibah to interrupt and provide an explanation in English, again suggesting careful attention to the semiotic resources that would facilitate participation for all group members.

What made this sort of collaborative negotiation possible? In addition to students' own creativity, resourcefulness, and commitment to supporting one another, part of the richness of the interaction can be attributed to the content and structure of this activity. Ms. Aviva underscored students' own agency in answering the riddle, highlighting that there were many possible interpretations. Other groups, for instance, suggested that perhaps the boy in the riddle was adopted, or that the doctor was a sperm donor. As she wrapped up the activity, Ms. Aviva reinforced that the goal of the activity was not to reach a particular solution, but rather to draw attention to
students' own thought processes. She reminded the class: "There are many different ways that we can think, and the important thing is that we are not ASSUMING things but instead we are CHALLENGING our ideas."

In terms of structure, Ms. Aviva thoughtfully scaffolded the activity by giving students several opportunities to make sense of the riddle, both in their groups and as a whole class, providing semiotic resources in the form of classmates' language use and gesturing in interaction with another as they made sense of the riddle. Asking that groups write their response on a whiteboard provided additional semiotic resources. In this group, both Nicanor and Esmat perceived and acted upon the written text on the whiteboard as affordances.

In the following interaction that I discuss, which took place later during the same class period, in addition to their verbal utterances and use of gestures, students' embodied participation with mediating artifacts (images and text) also acted as key affordances for facilitating engagement as students collaborated to make a prediction about the content of a complex text.

## "This is the Mistake He Made, This is the Boy that He Burned": Mediating Artifacts and Embodied Participation

Later during the same introductory lesson to gender and sexuality described above, Ms. Aviva provided table groups of four or five students with a set of images and texts, explaining that they were all connected to the next article students would be reading in class. The set included photographs of a lighter, a city bus, a group of students protesting, a correctional facility, a high school campus, a skirt, and two
short quotations. Ms. Aviva explained that students had six minutes to work as a group to make a prediction about what the text would be about based on the images and quotations provided. She instructed students to write their prediction on the whiteboard at their table, adding that the prediction should begin with the phrase "We predict the article will be about . . ." Because the purpose of the activity was for students to utilize the images and quotations to formulate a prediction, Ms. Aviva did not provide any information about the content of the article. The article itself (which students would read later that class period) described an act of violence against a queer student on a bus in the same city that Cedar International is located in 2015, and the racialized way in which the young Black male who had committed the act was framed by the media (see Appendix H).

As the groups began working, Labibah, Jéssica, Nicanor, and Esmat each pulled one of the images toward themselves in order to examine them. Jéssica read the quotation she had picked up aloud: "'I wouldn't say that I hate gay people, but I'm very homophobic.'" Examining an image of a bus, Nicanor commented to Jéssica in Spanish that he recognized the bus. Leaning in, Labibah shared, "Yeah, you know in Cypress High, in the bus, a boy burned another gay person because he was a gay." Jéssica gasped, but their interaction was interrupted by a student from another group scolding Labibah for speaking too loudly. When all four group members turned back to the task, Jéssica held up an image of a lighter, looked across at Labibah and Nicanor and asked what role the lighter might play. In line 6, Nicanor responded in Spanish, suggesting that the lighter was connected in some way to the other quotation
in the set, which read: "'I am not a tough gangster hoodlum or monster. I am young African American male who's made a terrible mistake.'" As Jéssica began to read the quotation, she stumbled on the word 'hoodlum.' Labibah pronounced the word for her, adding "or something like that." Nicanor, who was not often positioned by his peers as someone with linguistic expertise in English, made the connection to the word 'Homeless,' but neither Labibah nor Jéssica acknowledged the contribution.


8 Labibah: Hoodlum
9 Jéssica: Hudlum?
10 Labibah: Hoodlum or something

11 Nicanor: Como es?
Homeless?
\{What is it?\}
12 Jéssica: [continues
reading] 'or
monster. I'm a young African American male
reaches out to move one of the images as that's made a Labibah reaches terrible for another mistake. image
 [Gasps]

Up until this point in the interaction, Labibah had positioned herself as having access to key content knowledge-perhaps in part because she had some background information about the story. Jéssica also positioned Labibah to provide English language expertise when she got stuck on the word 'hoodlum' by looking directly at Labibah for support. Over the course of my observations, Jéssica occasionally requested Spanish language expertise from Nicanor and other Spanish speakers in the class. However, she appeared to assume that Nicanor was not in a position to provide English language expertise. During the interaction above, both Jéssica and Labibah, ignored Nicanor's contribution of the word 'homeless.' The connection that Nicanor was drawing between 'hoodlum' and 'homeless' is unclear. It is conceivable that he wished to highlight that these two English words sounded similar, a comparison he made about other pairs of words on numerous occasions. Other possibilities include
that he had heard the two terms used in relation to each another but was unsure of the meaning of one or both words. The reasons for which Jéssica and Labibah do not notice or choose not to act on Nicanor's contribution can only be surmised. However, based on observations of Nicanor in this class, it is possible that because he opted to communicate in Spanish with classmates more often than other Spanish speakers, such as Jéssica, did, that his group members dismissed his offering of English language expertise. Regardless of his intentions or the other group members' rationale for ignoring the suggestion, this instance might be considered a potential affordance that was unrealized because no one acted upon his contribution. The interaction might have led to other affordances, for instance, had one of the group members chosen to express their understanding of 'homeless' or 'hoodlum' and what the two words might mean in the context of this particular quotation.

As their interaction continues, the ways in which students' collective sensemaking is mediated by mutual engagement with the images and texts is apparent. There are numerous instances in which one of the students slides one of the images into the developing sequence representing their prediction for the story. Moving images and texts acted as affordances that facilitated further interaction, much in the way that that an oral suggestion would. In some instances, actions with the artifacts functioned alone, and in others physical action with artifacts functioned in concert with verbal utterances, as in the case of Labibah and Jessica's actions in lines 13-16 below.

13 Labibah: This is the mistake he made, this is the boy that he burned, and this is how he burned, this is where he burned the boy, and this is why he burned the boy, and this is where-

14 Jéssica: In the bus-
moves images into order as she makes each statement Jéssica and Nicanor simultaneously move images


15 Labibah: In the bus @ @ And that's the country
reaches across table toward Esmat, pointing to another image

16 Jéssica: This is- he burned the boy because he was wearing a skirt [PAUSE] on the bus and-

| Labibah: | -In the United |
| :--- | :--- |
|  | States [PAUSE] | it comes up because-

points to the top of the sequence of images
aps images, pauses looking at last image

18 Jéssica: $\left.\begin{array}{ll}\text {-And then he go } \\ \text { to the center- } \\ \text { young } \\ \text { correctional } \\ \text { center }\end{array} \quad \begin{array}{l}\text { ignores } \\ \text { Labibah's } \\ \text { suggestion, } \\ \text { places image at } \\ \text { the bottom of } \\ \text { sequence }\end{array}\right]$


Notably, Ms. Aviva had not instructed students to put the images and text in order; she had simply explained that all of the images and quotations were connected to one another. It was the students' own decision to arrange the images and quotations in a line and to try to make sense of the relationships chronologically.

In sum, this interaction illustrates how mutual engagement with artifacts (in conjunction gestures and utterances in English and Spanish) acted as affordances. In line 12, Labibah pairs deictic gestures with specific demonstratives "THIS" as she moves the images-which is only meaningful because of students' mutual engagement with the particular image. As Norris (2002) explains, the use of demonstratives assumes that the listener understands what the speaker is referring to. Indeed, making sense of Labibah's verbal description: "This is the mistake he made, this is the boy that he burned, and this is how he burned, this is where he burned the boy, and this is why he burned the boy, and this is where-" required that the students were all looking at the images and text as she referenced them.

Similar to the riddle activity, Ms. Aviva had planned a number of thoughtful scaffolds that helped to facilitate this dynamic interaction and allow students to engage agentively. For instance, by providing a set of images and brief quotations and asking students to formulate a prediction in groups, Nicanor and Esmat (who had less experience using English than did Jéssica and Labibah) were also able to participate meaningfully in the group's joint sense making by listening and physically moving the images and text. The curriculum itself was also central to making this kind of interaction possible. Making sense of the article required that students engage with complex social issues including gender, sexuality, race, and the carceral system, as they engaged in new literacy practices (see Appendix H). Following this activity, and before students read the article, Ms. Aviva highlighted that the purposes of reading the article were for students to challenge their assumptions about gender and society's gender norms, to identify the difference between gender and sexual orientation, and to work on activating the "conversational voice" while reading.

While the previous two interactions occurred during activities that had been explicitly designed for peer interaction, the interaction described below highlights how students extended the practice of thoughtfully pooling semiotic resources to activities that had not been designed for collaboration.

## "You Give Him and He Give Me": Directed Pooling of Semiotic Resources

The last example of collaborative negotiation of content occurred in Ms. Lilly's ninth / tenth grade biology class, also at Cedar International, while students were working on a unit on climate change. Like the interactions described above,
students pooled a range of semiotic resources in order to negotiate the task at hand and to ensure that their peers could engage meaningfully, in this case during an "individual" activity. Also unique to the interaction below, however, is that one student explicitly directs her classmate as to how she should provide support, leveraging multiple students' expertise to negotiate the task.

Like she did each class period, Ms. Lilly began by asking a student to read the language and biology objectives for the day from the whiteboard: "Language objective: I will practice pronunciation and spelling of new vocabulary. Biology Objective: I will make models of carbon dioxide, atmosphere, and fossil fuels to begin to understand the causes of climate change." The class was organized in three simultaneous stations that each group of students rotated through over the course of the class period. With Ms. Lilly, a subset of students would create models of carbon dioxide molecules that would contribute to a larger model of the atmosphere. With Ms. Saba, the instructional aide, a different group of students worked on spelling and pronunciation of new vocabulary. When the interaction below took place, the remaining students were working in the "individual work" station, where they were asked to watch several video clips and respond to a set of questions about the causes of climate change in an "Activity Guide" on a Google doc. Two of the focal students in Ms. Lilly's class, Paulina and Feliciano, along with Semira, Maalik, Joaquin, and Daniel, were assigned to this station first. The students were sitting side by side at two long, narrow tables facing the widows. Daniel, a Spanish speaker who does not appear in the interaction below, was sitting at one end of the table. Next to him sat

Paulina who, as I described in Chapter 4, is a ninth-grade student from Guatemala and speaks Spanish at home. Next to Paulina sat Semira, a tenth-grade student from Eritrea who speaks Tigrinya at home. On Semira's right sat Feliciano, also a tenthgrade student from Guatemala who speaks Spanish and Mam at home and not been enrolled in school for four years prior to enrolling at Cedar International. Maalik, who speaks Arabic at home was seated on the other side of Feliciano. At the end of the table sat Joaquin, who is also a Spanish speaker.

## Table 7

Student Demographics and Position: Carbon Dioxide Activity


In the interaction below, Feliciano had asked Semira for help, explaining that he did not understand the description of climate change provided in the video clip. Overhearing this request, Paulina turned toward Semira and Feliciano and told Semira with a smile: "you give him and he give me" indicating that Semira should provide an explanation to Feliciano (in English) who would then translate the explanation in Spanish for Paulina. Semira, unsure of how to proceed, responded "How I can tell you, oh my god!" She then proceeded to open the tab on her screen with the video clip, pressed play, and provided the following explanation as the video progressed:


Feliciano and Paulina both leaned in, looking at back and forth between Semira and her laptop screen as she spoke. Semira's utterances in lines 40-42 are all paired with deictic gestures, pointing and motioning to the image on the screen. In line 41 , she uses the specific demonstrative "THIS" as she points to the arrow on the image coming from the sun toward the earth on the video, and then points to the other arrow facing away from the earth as she explains "into the space" (see Figure 2 below). Like students' statements during the picture prediction activity from Ms. Aviva's class, this interaction is only meaningful for the students because they are mutually engaged with the same images and text on the screen. Following the frames of the video, in line 42 , Semira pauses the video and points to the words 'absorbs heat' on the screen, as she states: "but the carbon dioxide absorbs heat" (see Figure 3 below). She then pairs her verbal explanation "beneath the sun to heat the earth, to go the earth" with another deictic gesture, drawing a line with her finger from the image of the sun toward the earth on the screen, emphasizing by drawing the line several times back and forth. In line 43, Semira gets stuck, asking herself aloud "How to explain" and visibly displaying her frustration by wringing her hands. Up until this point, deictic gestures mediated by the video (such as pointing to images in the video, drawing lines across the screen linking one image to another) have been paired with most verbal utterances. However, iconic gestures also play a central role in this interaction. In lines 44-49, Semira shifts from referring to the image on the screen to creating a makeshift 3D model, using a folder on the table to represent carbon dioxide and a series of deictic and iconic gestures to represent the sun, heat, and the earth.

Figure 2
Still Frame of Video Clip: "Normally, that heat radiates into space"


Figure 3
Still Frame of Video Clip: "Carbon dioxide absorbs heat."


As she models with the folder, her body is oriented towards Feliciano, although
Paulina is also watching and listening carefully. Semira holds the folder upright to represent the carbon dioxide and uses the specific demonstrative "THIS" in conjunction with her hands referring to the earth and sun on either side of the carbon dioxide (the folder). In line 49, Semira explains that the sun "can't go in." In line 50,

Feliciano responds "OHHH yeah yeah!" and then immediately translates his understanding of Semira's explanation to Spanish, looking across Semira at Paulina.



As Feliciano begins to explain to Paulina in Spanish that the carbon dioxide is between the earth and the sun, in line 53, Semira interjects in English "So it's can't go the" and a deictic gesture, adding to the explanation intended for Paulina and building in a logical way on Feliciano's statement. Semira then defers to Feliciano, who continues the explanation for Paulina in lines 54 and 55 by pairing a verbal description in Spanish with deictic gestures on Semira's screen. In line 56, Semira again builds on Feliciano's description with an utterance in English and an iconic gesture, making a sphere with her hands, to illustrate a layer around the earth.

52 Feliciano: El dióxido de looks carbono está across en medio del Semira at sol y la tierra- Paulina \{The carbon dioxide is between the sun and the earth-\}


53 Semira: -So it can't go [PAUSE] the-
makes a downward motion with hands, points to sun on the screen, gazes at Paulina
 then shifts gaze back
to
Feliciano
54 Feliciano: El sol no puede entrar mucho a la tierra, nomás que nomás ilumbre (inaudible) \{The sun can't enter the earth much, it just it just illuminates points with pencil to Semira's screen, making downward motion from the sun to the earth
 (inaudible) \}

55 Feliciano: el dióxido de carbono está protegiendo la tierra\{the carbon dioxide is protecting the earth $\}$
draws an arc over the image of the earth on Semira's screen while gazing at Paulina


56 Semira: -so it can- |  | waves |
| :--- | :--- |
| cupped |  |
|  | hands back |
|  | and forth, |
|  | making a |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |



Having listened to and observed the joint explanation provided by Semira and Feliciano, Paulina attempts to interject in line 57, below, in order to check her understanding. However, at this moment Feliciano turned to Semira to clarify his own understanding, asking her "Like the sun is protecting?" and forming a sphere with his hands. Semira confirms, making the same iconic gesture with her hands. Clearly indicating that she understood this exchange, in line 60, Paulina points to the words 'carbon dioxide' and then the image of the earth on Semira's screen as she asks: " $O$ sea que el dióxido de carbono protege el mundo, no?" \{So the carbon dioxide protects the planet, no?\} Both Semira and Feliciano offer confirmation and all three students turn to face forward toward their laptops.

57 Paulina: | [Overlapping | points to |  |
| :--- | :--- | :--- |
|  | ] O sea que - | Semira's |
|  | \{In other | screen |
|  | words- $\}$ |  |



\{Can I write that?\}
64 Feliciano: Sí \{Yes\}

This interaction also illustrates how students utilized iconic gestures introduced by their peers to support ongoing sense-making, much in the way that Donato (1994) illustrated that peers built on the verbal utterances of their peers by reusing the same word or phrase and adding something new. In lines 52-56 Semira and Feliciano build on each other's utterances, however Semira's contributions are in English while Feliciano's are in Spanish, and gestures play a crucial role in the interaction. Semira makes a sphere shape with her hands in line 56 , which stands in for a verbal description of how carbon dioxide becomes trapped in the earth's atmosphere. In line 58, Feliciano uses the same gesture, adding the oral description that the carbon dioxide is "protecting," and Semira mirrors the gesture again. As Goodwin highlights, "actors can build new action by selectively reusing resources provided by a prior action" (2013, p. 9). This interaction demonstrates how students expanded their own opportunities for sense-making by pooling semiotic resources. And in doing so, the emergence of one resource that served as an affordance (such as the iconic gesture of making a sphere) led to the emergence of additional affordances (such as Feliciano's suggestion that the carbon dioxide was "protecting" the earth).

It is clear that the students' initial conclusion that carbon dioxide "protects the earth" reflects an incomplete understanding. While their understanding of role of carbon dioxide in climate change was still emergent, however, all three students were
actively involved in the joint construction of meaning. In fact, shortly after the interaction described above, Paulina checked in again with Semira. As she drew a circle with her finger around the earth on Semira's screen, Paulina asked: "Eh the dióxido-the dioxide carbon, it protects the world?" to which Semira responded: "It doesn't protect [PAUSE] it's absorb- it absorbs" The camera frame shifts away from these two students to a separate interaction, so the nuances of how this interaction continues are not visible. However, following Semira's revised explanation, Paulina quietly whispers "absorbs" to herself.

From the sociocultural and ecological perspectives undergirding this study, meaning is constructed dialogically (Bakhtin, 1981) as learners interact with the environment (Lantolf, 2012; van Lier, 2004). Through dialogic sense-making among peers, students generate meaningful opportunities for language and content learning, even when their understanding of new concepts is still emergent (Alvarez et al., 2020). In the example above, students perceived of a broad range of affordanceswhich included verbal utterances that incorporated features of English and Spanish, deictic and iconic gestures, infographics (in the video), text, and ambient resources such as a folder-and acted upon them in ways that facilitated both learning of language and emergent understanding of scientific concepts.

## Affordances for Language Development

In the sections that follow, I discuss some of the semiotic resources that acted as affordances for language development in the interactions described above, from the perspective that language development and content learning are inherently integrated.

Notably, it is impossible to list generalizable affordances for language development given that affordances are inherently relational. In other words, as I discussed in Chapter 2, affordances cannot be framed in the abstract because they refer to a particular relationship between an individual or individuals and an aspect of the social, symbolic, or physical environment, and require perception and action on the part of that individual (van Lier, 2004). Nonetheless, in highlighting the semiotic resources that acted as affordances in the interactions above, I hope to shed light on possibilities for creating classroom environments that provide an ample "semiotic budget" and expand students' opportunities for the kind of meaningful action from which language development emerges.

## Multilingual Language Use

In all of three of the examples above (and many of those included in Chapter 5) students' flexible multilingual language use served as affordances for language development by expanding opportunities for meaningful participation and facilitating further action. While generally not conceptualized in terms of affordances, this finding is consistent with a wealth of research on translanguaging among peers in classrooms, which has highlighted how peers utilize fluid multilingual language practices to negotiate classroom tasks and to expand their linguistic repertoires (see for example, Martin-Beltrán, 2014; Martínez et al., 2017; Sayer, 2013; Tigert et al., 2019). Notably, multilingual resources also served as affordances in some instances in which peers did not share a home language, as in the interaction surrounding
carbon dioxide in which Semira, who speaks Tigrinya at home, effectively built on her classmates' contributions in Spanish.

## Gestures

All three interactions above reveal that in addition to multilingual language use, iconic gestures and deictic gestures were often utilized with verbal utterances, simultaneously or sequentially. Both gestures alone and the skillful combination of gestures and other semiotic resources acted as affordances by allowing for further action. In the interaction surrounding carbon dioxide, for example, deictic gestures were paired with verbal utterances fifteen times. This finding is echoes those of Blackledge and Creese (2017) who found that participants whose linguistic backgrounds overlapped very little utilized semiotic resources including gesture, gaze, and facial expressions in conjunction with verbal utterances to communicate in a meat-market. As Norris (2004) points out, within an interaction, gesture may sometimes play a subordinate role to verbal language, while in other instances gesture plays a superior role, and in others multiple modes or "channels" are all equally important.

## Mutual Engagement with Artifacts

Like gestures, when interacting with peers who did not share a home language, mutual engagement with artifacts such as images, texts, and videos often served as affordances. For instance, in the first example from Ms. Aviva's reading class, Nicanor and Esmat both perceived and act on Jéssica's written response to the riddle on the whiteboard, which then led Labibah to provide a more extended
explanation of the solution. Students' mutual engagement with artifacts as affordances for language development is even more evident in the second two examples. For instance, as students from Ms. Aviva's reading class worked to make a prediction about the text they would be reading based on a set of images and quotations, the act of moving an image acted as an affordance for language development, functioning much in the same way that a verbal suggestion would have by contributing to the ongoing interaction and collective sense-making. At the same time, many of the verbal utterances during this interaction were only meaningful because students were all looking at the images. Similarly, as students in Ms. Lilly's class as students mutually engaged with the video clip on climate change, the interaction is mediated not only by what their peers say and do, but also by the images on the screen. Notably, while the images and video resource had been curated by Ms. Aviva and Ms. Lilly, Semira's creative use of the folder to facilitate her explanation of the role of carbon dioxide demonstrates that ambient materials in the classroom environment can also serve as affordances for language development.

## Pooling Semiotic Resources

The peer interactions described in this chapter illustrate how students' collective negotiation of content involved pooling a range of semiotic resources, often including a combination of multilingual verbal utterances, deictic gestures, iconic gestures, and mutual engagement with artifacts. As I discussed in Chapter 2, a number of studies have illustrated that groups of students with similar levels of knowledge can effectively scaffold one another's engagement (Donato, 1994; Moll,

1990; van Lier, 1996, 2004). Donato (1994) describes how through the process of collective scaffolding, "the speakers are at the same time individually novices and collectively experts, sources of new orientations for each other, and guides through complex linguistic problem solving" (p. 46). The examples above illustrate the ways in which students' collaborative engagement was not limited to building on one another's linguistic contributions, rather, students skillfully deployed a broad range of semiotic resources in order to both expand opportunities for participation and collectively navigate complex tasks. The finding that students utilized a variety semiotic resources simultaneously in order to achieve mutual understanding is consistent with literature on affordances for learning, which has highlighted that affordances generally function in "sets" (Aronin and Singleton, 2012), "sequences" (Gaver, 1991), or "networks" (Barab \& Roth, 2006; see also van Lier, 2007).

Students' process of pooling semiotic resources also highlights tensions associated with notions of "expert-novice" interaction or support from a "more knowledgeable other." A number of scholars have pointed out that students constantly reposition themselves and others in interaction based on each individual's semiotic repertoire and unique linguistic and content area expertise (Devos, 2016; Kibler, 2017). For instance, Devos (2016), who examined peer interaction in the context of Content and Language Integrated Learning (CLIL) secondary-level physical education classes in Germany, underscored that the "expert" position was constantly in flux depending on the skills and experiences of the individual and the knowledge demanded in a specific moment. He noted that although "expert" and
"novice" positions were identifiable at particular moments, these roles often fluctuated. The interactions I have described above demonstrate students' interactive negotiation of fluid expertise and moment-to-moment repositioning of themselves and one another. At the same time, the more static ways in which students positioned some of their classmates as less capable of contributing linguistic and content area expertise led to missed opportunities.

## Considering the Conditions for Affordances to Emerge

Lastly, all three of these interactions, and others like them, involved tasks that asked students to engage in engage with challenging topics for which the outcome was not purely linguistic and incorporated a range of artifacts such as images, videos, and models that expanded opportunities for meaningful participation. Although these features may seem typical of quality instruction in a range of classroom contexts, they are often absent from learning environments designed for newcomer students, for whom the assumption may be that "basic" language instruction focused on English language forms must precede both more interactive structures and genuine engagement in content. The richness of these interactions-both with regard to the multitude of semiotic resources students marshalled and the complex ideas that they were able to negotiate collectively-has a number of important implications for both research and practice, which I consider in the subsequent, concluding chapter.

## Chapter 7

## Conclusions and Implications

"Pensé que iba a hacerlo todo por mi cuenta? Pero no. Estaba con mis compañeros." $\{\mathrm{I}$ thought I was going to do everything on my own? But no. I was with my classmates. $\}$-Fernando

In this dissertation, I set out to explore how newcomer students interacted with their peers to navigate classroom tasks and to examine the affordances for language development that emerged through those interactions. In Chapter 4, I described the participating teachers' professional backgrounds and opportunities for professional development, and I provided a snapshot of the twelve focal students. All twelve focal students are Latinx youth of color who share a home language of Spanish and who had spent two years or less in US schools when data collection began. Yet, as the descriptions illustrate, these students are highly diverse with regard to other languages spoken at home, educational background, experiences in school since they arrived in the US, obligations outside of school, and goals and desires for the future.

In Chapter 5, I discussed the different pedagogical approaches adopted by each teacher, which contributed to distinct instructional arrangements across classrooms and to varying opportunities for meaningful peer interaction. I analyzed participant structures to examine opportunities for peer interaction in each classroom and found that students enrolled in reading and biology classes at Cedar International had far more structured opportunities to interact with their peers than students in ELD and ethnic studies at Sycamore High School. In order to better understand how
students supported one another, I reexamined video data and identified six categories of peer support. Students across classrooms consistently sought out ways of making activities more meaningful through their interactions with one another, including in the context of highly repetitive tasks focused on discrete linguistic forms. However, students engaged in more in more dynamic interactions surrounding content in the classrooms at Cedar International-where they had more opportunities to interact with peers who did not share a home language and where the curriculum and instructional practices facilitated meaningful collaboration-than in the classrooms at Sycamore High.

In Chapter 6 I provided a detailed analysis of select interactions in which students at Cedar International collectively negotiated content. I found that students perceived and acted upon multilingual language practices, gestures, and artifacts as affordances for language and content learning. I argued that, when given opportunities to collaborate on complex and engaging tasks, students skillfully pooled a range of semiotic resources in order to negotiate academic tasks and to support their peers' meaningful participation. I found that students' dynamic linguistic and content area expertise contributed to fluctuating roles over the course of a single interaction. At the same time, however, students' more enduring views of which among their classmates were capable of contributing meaningfully sometimes led to missed opportunities. In the sections that follow, I discuss the implications for these findings with regard to research and practice.

## Conceptualizations of Translanguaging and the Value of Affordances

As I described above, multilingual resources acted as affordances for language development in all four classrooms as students interacted with peers to make sense of classroom tasks and to provide one another with support. However, other semiotic resources, such as gestures and mutual engagement with artifacts, also served as affordances as students navigated classroom activities with one another. Drawing on a broad range of semiotic resources was particularly common in the two classrooms at Cedar International, where students had more opportunities to interact with peers who did not share a home language.

While some of the existing research on classroom-based translanguaging acknowledges the importance of attending to forms of meaning-making that extend beyond oral and written language, many of these analyses focused primarily (or exclusively) on oral and written modalities. Findings from this study contribute to a growing body of literature that has adopted a more expansive notion of translanguaging by drawing on semiotics and bridging research that has primarily focused on multilingual oral language practices in interaction with research focused on gesture and multimodality (see, for example Canagarajah, 2017; Hawkins \& Mori, 2018; Kusters et al., 2017; Lemke, 2016; Lin, 2015, 2019; Li Wei, 2018; Li Wei \& Lin, 2019; Pennycook, 2017). As Kusters and colleagues (2017) highlight, when individuals interact with one another, they utilize the range of semiotic resources at their disposal "rather than languages understood as coherent packages" (p. 221).

On a larger scale, the transformative potential of translanguaging is compelling-both theoretically and pedagogically. Martin-Beltrán (2014) suggests that translanguaging can "shift students' and teachers' dominant monolingual ideologies toward more pluralist understandings of the wider linguistic repertoire students bring to literacy practices and beyond" (p. 226). Building on earlier research documenting code-switching in classrooms and communities (Arthur \& Martin, 2006; Auer, 1998; Blom \& Gumperz, 1972; Martínez, 2010; Poplack, 1980; Sayer, 2008; Valdés-Fallís, 1978; Zentella, 1997), the wealth of research that has taken up the concept of translanguaging over the past decade (albeit in a variety of ways) has further illuminated aspects of emergent multilingual and multilingual students' agency and ingenuity with language. The concept of translanguaging has also shed light onto students' engagement in multilingual language practices while writing (Canagarajah, 2011; Velasco \& García, 2014) and highlighted innovation with language supported by digital technologies (Li Wei, 2020; Pacheco \& Smith, 2015; Walker, 2018). Scholars have also expanded on how teachers can actively leverage their students' multilingualism to facilitate critical reflection and expand opportunities for language and content learning-both through teachers' stance toward bilingualism and through curricular and pedagogical design (Conteh, 2018; Duarte, 2018; Flores \& García, 2014; García et al., 2017; García \& Kleyn, 2016; Makalela, 2015; Seltzer \& García, 2020).

While the concept of translanguaging has contributed to a variety of theoretical and pedagogical developments, findings form this dissertation highlight
that a focus on multilingual discourse alone may fall short of capturing the ingenuity and complexity of what students are actually doing to support one another in negotiating classroom tasks, particularly when those interactions do not involve teachers. As findings from this study make clear, multilingual language practices were often essential to students' meaning making, but by no means were they the only resources that acted as affordances for language development. Students acted on a range of semiotic resources (often simultaneously) as affordances. For instance, all three examples described in Chapter 6 demonstrate how deictic and iconic gestures and mutual engagement with artifacts such as images, texts, and infographics played central roles in students' collective negotiation of instructional activities. Put differently, the intricacy of peer interaction in classrooms raises the question of the extent to which the concept of translanguaging can account for a network of semiotic resources relevant to meaning making-and whether it should.

A growing number of scholars have suggested views of translanguaging that embrace multiple forms of semiosis. For instance, drawing on Halliday's (2013) "trans-semiotic view," Lin (2015) argues that the concept of trans-semiotizing, that is, "plurilingual and heterographic practices" allows for examination of the array of discursive practices that are creatively woven together in meaning making. As I discussed in Chapter 2, others have proposed concepts such as semiotic repertoire (Kusters et al., 2017), semiotic assemblages (Pennycook, 2017) in an effort to make sense of the use of language resources with other semiotic resources. Questions remain, however, regarding the relationship between translanguaging and "non-
linguistic" forms of meaning-making, with regard to research on classroom interaction as well as the pedagogical implications for teachers and teacher education. Wagner (2018) for instance, raises the question: "[T]he integration of time, mobility, physical objects, space, bodies, and languages is a social fact. . . Can translanguaging become a theory of that broadly?" (p. 101). While this dissertation contributes to ongoing efforts to consider the range of semiotic resources relevant to communication, as Wagner (2018) points out, "it is not trivial to decide where to place the cut and to define what is 'in' and what is 'out' of language" (p. 101). As researchers continue to push the boundaries on what should be included in analyses of meaning making, questions about what counts as language (and what about human interaction is relevant to language development and learning) are likely to continue to emerge.

## Why Affordances?

The finding that students draw on a broad range of semiotic resources in order to make sense of academic tasks in interaction with their peers highlights the power of the notion of affordances for both research and practice. Ecological perspectives and the notion of affordances shed light not only on the meaning making resources available in the classroom environment, but also center the role of student agency. In the interaction surrounding carbon dioxide in Chapter 6, for instance, the folder sitting on the table only became an affordance for learning because Semira chose to use it to facilitate her explanation of how carbon dioxide is trapped in the atmosphere. For researchers, conceptualizing language learning in terms of ecological affordances
allows for exploration into the dynamic relationship between what students perceive in the environment and the actions that they take.

Consistent with research on affordances for language development (e.g. Aronin, 2012; Aronin \& Singleton, 2012; Guerrettaz \& Johnston, 2013; Kordt, 2018; Thoms, 2014; van Lier, 2004), findings from this study indicate that an ecological orientation and the notion of affordances offer important insight on language teaching and learning for educators. Aspects of the four classroom ecologies including but not limited to teachers' conceptualizations of language, the material resources available, and students' linguistic and cultural resources functioned collectively to provide unique networks of affordances for language development-some larger than others. An ecological perspective, van Lier (2004) argues, "says that language cannot be 'boiled down' to grammar or meaning only . . . Gesture, expression and movement cannot be stripped away from the verbal message" (p. 24). By embracing the ecological perspective that language learning emerges through perception and action (with autonomy) over something in the environment, teachers' emphasis might shift away from how much time students spend, for instance, on speaking, listening, reading and writing as a proxy for their language learning; instead they might focus on creating a "rich semiotic budget" and increasing students' perception of the semiotic resources available in the classroom environment (van Lier, 2004, 2007). The notion of affordances may also provide a way in which teachers can reflect on the extent to which students are noticing and acting upon resources presented by the instructional materials teachers provide.

From an affordances perspective, interactions with peers are a particularly fruitful source of semiotic resources because as learners interact with one another, they each bring their own unique set of skills, experiences, and perspectives that amplify the resources available to the individual. Peers may also perceive of different resources within the environment in ways that lead to other learners' perception of those resources, or to the perception of other semiotic resources that emerge through the unfolding interaction. Kordt (2018) argues that from an ecological orientation, the teacher focuses less on direct instruction. Instead, "[i]t is the teacher's task to support this process [of language learning] by trying to create a learning environment that makes the emergence of affordances that are conducive to language learning more likely and by encouraging their perception and use" (p. 139).

At the same time that the concept of affordances illuminated opportunities for meaningful action, I found that detangling complex and interwoven relationships in order to identify a singular relationship that acted as an affordance was often impossible-and perhaps not desirable. For instance, during an interaction among peers in which a student provided an oral explanation that incorporated features of English and Spanish while simultaneously using iconic gestures and deictic gestures with an image, I was unable to identify which of these actions served as an affordance-even if the student gave clear indication that collectively the actions facilitated understanding and further language use. In the interaction described in Chapter 6 in which students in Ms. Aviva's reading class used images to make
predictions about an article, for example, it is impossible distinguish the students' perception of verbal utterances from joint engagement with the images themselves.

Although the ecological approach adopted here and the concept of affordances embrace this complexity and view multiple semiotic resources as functioning in tandem with one another, the fact that these relationships are intertwined makes pinpointing "an affordance" quite difficult from a researcher's standpoint. From a pedagogical perspective, this suggests that although teachers may not always be able to identify a particular resource as acting as an affordance for language development or content learning, affordances are more likely to emerge if teachers create, the richest possible semiotic budget (van Lier, 2004). In more concrete terms, teachers might consider designing instructional activities that call on students to grapple with difficult concepts in groups of three or more (rather than dyads) and with both textual and image-based resources that support sense-making through joint attention and embodied actions (such as physically moving a set of images into order to depict a narrative) and allow for meaningful participation among all group membersincluding those who feel less comfortable participating orally. In this way, as individual group members perceive and act upon distinct affordances available, the field of affordances (Kordt, 2018) expands for all group members.

It is important to point out that engagement of this type is only possible when students are engaged enough in the content itself to participate in the activity to the best of their ability. As I discussed throughout the dissertation, although students creatively expanded even the most repetitive activities in order to make them more
meaningful, the most dynamic interactions described in Chapter 6 hinged on students’ genuine interest in and engagement with complex, real-world issues such as gender and sexuality-based violence, racialization, and climate change.

## Embracing the Complexity of Peer Interaction

In all four classrooms, students found ways of supporting one another. Students' evaluations of their classmates' linguistic and cultural resources and ability to make sense of the content often resulted in collaborating and extending offers of support in order to ensure that peers could participate meaningfully. As I illustrated in Chapters 5 and 6, students' roles as seeker and provider of support varied—even over the course of a single interaction For instance, during the activity in which students in Ms. Lambert's ELD class at Sycamore High were tasked with using an image of an injured person to write what a doctor might say to this patient, described in Chapter 5, Saraí, Gisela, and Pedro collaborated fluidly, actively building on one another's contributions and shifting roles as provider of information and seeker of help multiple times over the course of this brief interaction.

These findings are consistent with literature that has argued that expertise in peer interaction is "fluid" and "fluctuates" (Devos, 2016; Kibler, 2017). Kibler (2017) points out that while conceptualizations of collective scaffolding sometimes assume peers are at similar levels, "it is perhaps more useful to view multilingual expertise as necessarily dynamic and multidirectional, regardless of how closely peers might appear to be matched on particular features" (p.201). This variability suggests that when peer interaction research assumes a static "more knowledgeable other" or an
"expert-novice" interactional dynamic, it is likely to miss the complexity of students’ fluctuating expertise. At the same time, the assumption that students at similar "levels" of language proficiency or content knowledge bring similar resources to a task may also fail to recognize students' unique contributions.

While expertise varied within and across peer interactions, I also found that students sometimes positioned themselves and one another in more enduring ways as either possessing or lacking the language proficiency or content expertise necessary to contribute meaningfully. Instances in which students positioned one another as deficient led to missed opportunities for learning. Flores and Rosa (2015) explain how raciolinguistic ideologies "conflate certain racialized bodies with linguistic deficiency unrelated to any objective linguistic practices" (p. 150). They call for additional attention not only to the actual language practices that are produced by minoritized speakers, but to how language practices are perceived from a "White gaze." As I described in Chapter 6, during the text prediction activity in Ms. Aviva's reading class, none of the group members acknowledged Nicanor's contribution of "homeless" as the group was trying to make sense of the word "hoodlum," perhaps because Nicanor (who spoke Mam in addition to Spanish, had darker skin than many of his classmates, and had experienced interrupted schooling) was not perceived by his classmates as someone with English language expertise. In contrast to this type of dismissive response, Jéssica (who had very pale skin, bluish-green eyes, and had not experienced any extended interruptions in her education) often positioned herself and was positioned by her classmates as an expert-whether or not she was able to
contribute linguistic or content knowledge relevant to a particular interaction. In other words, although Jéssica was among the more experienced users of English in her class, it is possible that her peers perceived her language use as more closely approximating whiteness. Martin-Beltrán (2010) argues that students' "perceived proficiencies" of their peers' language expertise are enacted both through moment-tomoment interaction and on a larger scale over time within a particular classroom ecology. She found that students' perceived proficiencies were often reinforced by students' own actions, by the accommodation practices of their peers, and by institutional categories that labeled students according to "levels" of English and Spanish language proficiency. While Flores and Rosa (2015) focus primarily on teachers' role in enacting approaches to "appropriateness" that reinforce racial normativity, findings from this study and others (e.g. Malsbary, 2014) indicate the ways in which students can contribute to both challenging and reinforcing raciolinguistic ideologies.

## Expanding Opportunities for Meaningful Collaboration

I found that students across classrooms often interacted with one another to provide support in the context of activities that had not been designed for collaboration. At the same time, highly constrained, forms-focused pair and group tasks (such as many of the activities in Ms. Cardoso's ethnic studies class and Ms. Lambert's ELD class at Sycamore High) resulted in relatively limited interaction among peers. These findings are consistent with existing literature on peer interaction that has highlighted the importance of examining how peers support one another,
regardless of whether or not this had been the teacher's intent. For instance, in a study that explored peer interaction among recently arrived immigrant students from East Africa, King and colleagues (2017) found that during choral reading (a task that teachers might assume is not conducive to peer interaction) students provided one another with extensive feedback and scaffolded classmate's successful completion of the task. But they also found that poorly designed pair tasks often fell short of facilitating the kind of meaningful interaction that comprises language learning (and all learning).

Taken together, this research suggests that methodological decisions to examine peer interaction within the context of activities explicitly designed for collaboration are likely to miss many of the affordances for learning that emerge when students have not been specifically instructed to work with their peers. At the same time, these findings illustrate the importance of attending to the substance of the interactions themselves, given that working together to negotiate tasks that have little meaning is unlikely to provide the most fertile ground for learning. Given this insight, in order for the concept of "participant structures" to provide a useful lens into opportunities for meaningful interaction, it may be necessary to attend to the specific structural factors designed to foster interaction and collaboration, as Galguera (2011) has outlined, rather than utilizing broad categories such as "pair work" or "small group work."

The students who participated in this study were eager to learn and they consistently extended activities to facilitate more meaningful negotiation. They were
also creative, resourceful, and highly capable of engaging with complex ideas when given the opportunity. However, students' opportunities for interaction with peers mean little if they never have opportunities to engage with intellectually stimulating content. Findings revealed that the ethnic studies and ELD classes at Sycamore High provided students with few opportunities to collaborate with their peers around meaningful topics. From a pedagogical perspective, these findings underscore the importance of dynamic, challenging curricula and instructional activities that facilitate agentive participation. As Walqui and Bunch (2019) argue, misinterpretations of scaffolding instruction have led some teachers to prioritize simplification when designing lessons for emergent multilinguals resulting in activities that call on students to "repeatedly apply discrete linguistic forms singled out for attention, without engaging their agency or creativity." This approach stands in stark contrast to Walqui and Bunch's vision of scaffolding, which consists of "support that assists students in gaining increasingly deeper and more complex understandings, simultaneously promoting their agency . . . [which] develops as a result of inviting students to participate in meaningful, collaborative environments" (p. 27).

Findings from this study echo the importance of cultivating interactive environments that provide opportunities for students to engage with a range of semiotic resources. A number of scholars have underscored the central role of teachers in facilitating effective peer interaction (Henderson \& Palmer, 2015; Sato \& Ballinger 2016; Walqui \& Bunch, 2019; Walqui \& van Lier, 2010). For instance, Sato
and Ballinger (2016) highlight that while promoting autonomy is essential, teachers play a critical role in creating the conditions that will allow students to effectively take the lead. As Walqui and van Lier (2010) point out, pedagogical scaffolding involves both structures and process: The structures provide opportunities for active participation (e.g., the relatively predictable ways in which a task is set up), while the processes involve the contingent scaffolding that emerges through unpredictable interactions that allow for students to act and facilitate increasing levels of autonomy.

Although all four teachers were encouraged to draw on features of their home languages to make sense of classroom tasks in interaction with their classmates, both Ms. Lambert and Ms. Cardoso (the ELD and ethnic studies teachers, respectively, at Sycamore High) consistently prioritized students' accurate production of discrete linguistic forms over meaningful interaction and collective sense making. Neither class at Sycamore High created opportunities for students to use their multilingual resources to share their experiences and perspectives surrounding meaningful issues relevant to their lives. This approach is particularly striking in the context of an ethnic studies course for newcomer students, which could serve as an opportunity for students to critically investigate and challenge dominant ideologies surrounding race, class, language, and citizenship.

As I have demonstrated, when peers did have opportunities to collaborate on complex and meaningful tasks, they acted by skillfully pooling semiotic resources in ways that led to deeper understanding. A number of scholars have used the metaphor of dance for the graceful and fluid process through which peers scaffold one another's
language and content learning (Devos, 2016; Guerrero \& Villamil, 2000). This metaphor is a particularly apt for the complex process through which the students described in this study invited one another to the floor and combined careful choreography with artful improvisation.

## Appendix A

## Observation Protocol

| What: | Classroom Observation |
| :--- | :--- |
| Where (school, classroom): |  |
| Teacher: |  |
| Position: |  |
| Date/ Time: |  |
| Follow ups: |  |


| Number of students present |  |
| :--- | :--- |
| Number and description of <br> teachers / aides / volunteers <br> present |  |
| Classroom description |  |
| Text types or other materials <br> students used |  |
| Materials gathered |  |

Running Record (Use this space to keep detailed notes on the class, focusing on instructional activities, participant structures, and focal student interactions).

Noteworthy Peer Interactions (Use this space to note examples of students providing one another with support)

Reflections/Comments/Ideas (Use this space to keep a record of emergent ideas, concerns, connections etc..

## Appendix B

## Protocol-Teacher Participant Interview 1

Introduction: Thanks for agreeing to let me record our conversation. I have some questions that I want to be sure to get to, but please also feel free to bring up anything else that you think is important. I'm going to ask a few questions about you, your goals for this course, the kinds of resources that are available, and which of them you find students using. Do you have any questions?

1. To start, I'd just like to ask you how you came to work with recent immigrants and teaching here at [school].
2. And what does your position consist of now (what classes do you teach)?
3. What is your primary goal or few goals for this $\qquad$ class?
a. What do you want students to be able to do after leaving this class?
4. What aspects of this class do you find that students do well?
5. What aspects of this class you think that students find especially challenging?
6. How do you know when students are confused or stuck? What do you observe them doing to try to move forward?
7. What kinds of resources do you provide in an effort to support students' development of English?
a. Which of those resources do you see students utilizing the most?
b. Which do they utilize the least?
8. How do students use their home languages in class?
a. How is this different for students who speak languages other than Spanish?
9. Can you tell me a little bit about when do you find yourself using Spanish in class?
10. Anything else you'd like to add?

## Appendix C

## Protocol-Teacher Participant Interview 2

COVID Context Introduction: A lot has happened since we last talked! How is everything going since schools were forced to close? (How are students doing? What does remote instruction consist of? etc.)

Official Introduction: Thanks for agreeing to let me record our conversation. I have some questions that I want to be sure to get to, but please also feel free to bring up anything else that you think is important. Last interview we spoke a little bit about the program and the $\qquad$ class. Today I'd like to talk a little bit more about the curriculum. Do you have any questions?

## Professional preparation and development

1. During our last interview, I remember you telling me that ... [teacher's degree program] Can you tell me a little bit about that program?

- How long was it? What kind of course work did you take related to English learners? Did you have any preparation for working with newcomers?
- Can you give me an example of what was particularly useful? Why?
- What wasn't useful? Why?

2. What other kinds of professional development relevant to working with newcomers have you participated in?

- Can you give me an example of a professional development experience that was especially useful?
- What about one that was not useful?

3. What kind of professional development would you wish for?

## Curriculum

4. Can you tell me a little bit about how you decide on what to teach in the $\qquad$ class I was observing?

- During our last interview, you mentioned ...

5. As far as the curriculum for this class, if it were totally up to you, what would you focus on?

- What else would you wish for more or less of in the curriculum?

6. Can you describe a unit or a lesson that you're particularly proud of?

- What do you think students' experience has been with that lesson/unit?


## Language development

7. Can you describe a student in the class who is particularly successful as a language learner?

- What has this student been able to do that makes you think of them as successful?
- Why do you think that's the case?
- What about that student's school experience do you think made a difference?

8. As you know, [focal student names] are the focal students I selected. Can you tell me a little bit more about those students?

- How have they been doing overall?
- How are they doing academically?
- And in terms of their language development?

9. What do you think about this statement from the Common Core State Standards Initiative?
"...the development of native like proficiency in English takes many years and will not be achieved by all ELLs especially if they start schooling in the US in the later grades. Teachers should recognize that it is possible to achieve the standards for reading and literature, writing \& research, language development and speaking \& listening without manifesting native-like control of conventions and vocabulary."
10. Is there anything else you'd like to add?

## Appendix D

## Protocol—Focal Student Interview

Intro: Thanks for agreeing to let me record our conversation. I have some questions that I want to be sure to get to, but please also feel free to bring up anything else that you think is important. I'm going to ask a few questions about your own experience at school here and about your experiences with learning English. Do you have any questions before we start?

1. To start, can you just tell me your name and where you're from?
2. How long have you been studying here at [name of school]?
3. What was your experience with English before enrolling at [name of school]?
4. What do you like about school?
a. What do you like about this class?
5. What part of going to school at [name of school] has been the most challenging?
a. What part of this class has been the most challenging?
6. In this class, when you find yourself stuck (like you don't understand the instructions or you don't understand a text) what do you usually do?
a. And what about in other classes?
7. What do you find is the most helpful for others to do (your teacher or your classmates) when you don't understand something in English?
8. When do you use Spanish in this class?
a. How about in other classes?
9. If you could give recommendations to other recent immigrants who just started attending this school, what would you tell them?

## Versión en español:

Introducción: Gracias por dejarme grabar esta conversación. Tengo algunas preguntas que quiero hacer, pero debes mencionar cualquier otra cosa que te parece importante. Voy a hacer algunas preguntas sobre tu propia experiencia con el aprendizaje del inglés en general y en esta clase. ¿Tienes alguna pregunta antes de empezar?

1. Para empezar, ¿puedes decirme tu nombre y de dónde eres?
2. ¿Por cuánto tiempo has estudiado aquí en [nombre de la escuela]?
3. ¿Cuál fue tu experiencia con el inglés antes de inscribirte en [nombre de la escuela]?
4. ¿Qué te gusta de esta escuela?
a. ¿Qué te gusta de esta clase?
5. ¿qué parte de asistir [nombre de escuela] ha sido la más difícil?
a. ¿Qué parte de esta clase ha sido la más difícil?
6. En esta clase, cuando no puedes seguir con el trabajo (porque no entiendes las instrucciones de la maestra o no entiendes un texto), ¿qué haces normalmente? a. ¿Y en tus otras clases?
7. ¿Qué te parece lo más útil que hagan los demás (tu maestro o tus compañeros de clase) cuando no entiendes algo en inglés?
8. ¿Cuándo usas español en esta clase?
a. ¿y en tus otras clases?
9. ¿Si pudieras darles unas recomendaciones a los inmigrantes recién llegados quienes acabaron de empezar a asistir esta escuela, que les dirías?

## Appendix E

## List of Codes

| Teacher Interview Codes | Video Log Codes |
| :---: | :---: |
| Teacher: | Participant Structure: |
| Teacher background | Teacher fronted whole-class work |
| Teacher preparation | Teacher fronted station work |
| Teacher responsibilities | Individual work |
| Teacher challenges | Pair work |
| Teacher collaboration | Small group work |
| Professional development | Individual performance |
| Program and Class: | Whole-class discussion |
| Program design | Materials/Text types: |
| Curriculum design | Video |
| Focal class context | Open written questions |
| Instructional goals | Forms-focused worksheet |
| Instructional activities | Closed/known answer questions |
| Participant structures | Extended narrative text |
| Instructions | Images/infographics |
| Material resources | Models |
| -Video | Realia |
| -Images | Student actions / Peer interactions: |
| -Narrative text | Questioning / Doubting |
| -Other Student background | Translating oral or written instructions for peer |
| SIFE | Explaining content using features of |
| Approaches to language: | Spanish |
| Theory of additional language development | Revising explanation |
| Theory of language | Gesturing |
| Language ideologies | -Deictic gesture |
| Home language \& literacy development | -Iconic gesture |
| Vocabulary | -Metaphoric gesture |
| Grammar | Pointing to material resources |
| "Speaking English" | Labeling/annotating texts/images |
| Perspectives on students: | Drawing metalinguistic connections |
| Student strengths | Teacher's actions: |
| Student challenges | Eliciting Spanish translation |
| Responses to being stuck | Instructing students to translate |
| Negotiation of meaning | Giving instructions |
| Noticing affordances | Explaining content |
| Students' use of home languages | Modeling |
| Other: | Providing metalinguistic comparison |
| Noteworthy | Managing classroom |
|  | Eliciting student ideas /perspectives |
|  | Encouraging peer support |
|  | Building on students' ideas |


|  | Labeling / annotating text / images <br> Other: <br> -Teachers' view of language/language <br> development <br> -Noteworthy |
| :--- | :--- |

## Appendix F

## Sample Video Log

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Video | Time window | Breif description of video segment | Participants present | Comments, Interactions of Interest |
| 2 | Video <br> data_Cedar_Bio_Part 1 <br> (Explanation impacts of <br> climate change poster <br> activity)_2020-02-18 | 0-2:00 | Ms.L passes our images of natural disaster for individuals or pairs to choose | Ms. L, Ss |  |
|  | Video <br> data_Cedar_Bio_Part 1 <br> (Explanation impacts of <br> climate change poster <br> activity)_2020-02-18 | 2:00-4:00 | Ms. Lexplains poster activity | Julia, Nero, Haakim | Ms. L models what Ss are going to do on the overhead. Ss write statements on sticky notes about their image of a natural disaster, using the same framework they do for the Do Nows: I see... I think... I'm curious about... |
| 4 | Video <br> data_Cedar_Bio_Part 2 <br> (Pair work forest <br> fires)_2020-02-18 | 4:00-6:00 | Ss work in pairs to generate questions about their natural disaster | Julia, Nero, Haakim | Julia and Nero jointly construct statements abotu their image of a forest fire. Julia supports his making sense of the meaning of the question. Explanations in English and Spanish, pointing to screen up front, pointing to image, building on each other's explanations |
| 5 | Video <br> data_Cedar_Bio_Part 2 <br> (Pair work forest <br> fires)_2020-02-18 | 6:00-8:00 | Ss work in pairs to write their questions | Julia, Nero, Haakim, Semira, Gervin | Nero continues, asks Gervin for help, Semira interjects |
| 6 | Video <br> data_Cedar_Bio_Part 2 <br> (Pair work forest <br> fires)_2020-02-18 | 8:00-10:00 | Ms. L explains poster activity | Ms. L, Ss | Ms. L expalains content of poster, including title, image with labels, and description. Ms. L models labeling parts of the picture |

## Appendix G

## Key Features of Transcription Conventions

The following conventions were developed based on guidelines from Sacks, Schegloff, and Jefferson (1974) and adjusted for the context of this study.

| '@, | : laughter, with approximately one @ for each laugh utterance |
| :---: | :---: |
| '-' | : abrupt stops due to interruptions or "false starts" |
| [PAUSE] | : pauses longer than two seconds |
| ',' | : slight pauses |
| ',' | : indicate that the speaker is at the end of a complete phrase or thought |
| '! | : excitement in tone and/or raising of volume for the whole utterance |
| '? | : rising tone or inflection (whether or not the speaker is asking a question) |

Capital letters : indicate a word or phrase emphasized with tone or volume
Italics : Spanish speech
\{ \} : translations
[] : paralinguistic actions
Number : number in left column of transcript indicates turn

## Appendix H

Fire on Bus 57 Text

11th Grade Reading Class
Readings

Name


管
Purpose:

## The Fire on the 57 Bus in

## By DASHKA SLATER

JAN. 29, 2015


It was close to 5 o'clock on the afternoon of Nov. 4, 2013, and Sasha Fleischman, a $12^{\text {th }}$ grader at $\qquad$ High School in $\square$ was riding the 57 bus home from school. Sasha wore a T-shirt, a black fleece jacket, a gray newsboy cap and a gauzy white skirt. For much of the long bus ride through Calif., Sasha - who identifies as agender, neither man nor woman had been reading a paperback copy of "Anna Karenina," but eventually the teenager drifted into sleep, skirt draped over the edge of the bus seat.

Sasha explains that when they were younger, "I assumed that I was this heterosexual man, because I didn't have any reason to assume I wasn't." Then later in high school, they identified as genderqueer because "genderqueer

Name $\qquad$
includes an aspect of questioning. And that was a big part of it for me. The fact that I was questioning my gender meant that I was genderqueer," Sasha explains. Since preschool, Sasha had attended small, alternative schools, where challenging gender norms was common. Now, Sasha identifies as agender as they do not feel like they belong to one specific gender. Sasha also uses "they" pronouns instead of "he" or "she."

As Sasha slept, three teenage boys, $11^{\text {th }}$ graders at High School laughed and joked nearby. Then one surreptitiously flicked a lighter. The skirt went up in a ball of flame. Sasha leapt up, screaming, "T'm on fire!" Two other passengers threw Sasha to the ground and extinguished the flames, but Sasha's legs were left charred and peeling. Taken by ambulance to a burn unit, Sasha would spend the next three and a half weeks undergoing multiple operations to treat the second- and third-degree burns that ran from thigh to calf.


Sasha Fleischman in Calif, in June, seven months after being set on fire on a city bus. Credit Katy Grannan for The New York Times

The next day when Richard Thomas was arrested, the officers asked him a few questions. The conversation is below:
"What do you think about dudes who dress up in skirts?" Police Officer Jones asks.

Name
Period___ Date Date
"T'm not with that," Richard says. "I wouldn't say that I hate gay people, but I'm very homophobic."

Jones nods. "O.K. Why would you call yourself homophobic?"
"I don't have no problem with somebody if they like men. But like if you do too much? Nobody cares, really. ${ }^{\text {b }}$
"Do too much?"
"Taking it to the next level," Richard explains. Jones asks for an example.
"Cross-dressing and like - some people, like they try to make everybody know that they are that."

After asking Richard to go through the events on the bus a couple of times, the police reveal that they have video of the incident. They know he did it. They just want him to tell them why.
"Being stupid," Richard says, his voice low.
"What would even remotely make you think about setting something on fire like that - someone's clothing?" Anderson asks. "Was it because the dude was wearing a dress? Did you have a problem with him?"
"I don't know."
"People do things for a reason," the officer says. "We've all made decisions in life that may not have been the best choice to make at a given time. What we're trying to figure out is why this happened."
"T'm homophobic," Richard says at last. "I don't like gay people."
"Did you get angry because he's a gay dude in a skirt, not just being gay but 'doing too much?' " Jones asks.
$\qquad$
Period ate
"Actually, I didn't know that his skirt was going to do that, that it was going to catch like that," Richard says. "It was like a little flame. I thought it was just going to go out."


Richard Thomas, left, with his brother, Derriyon, before the attack. Credit Photograph from Jasmine Jackson

On Nov. 8, four days after lighting Sasha's skirt on fire, Richard wrote Sasha a letter.
"Dear Victim," it began. "I apologize for my actions, for the pain that I brought to you and your family. I was wrong for what I did. I was wrong. I had no reason to do that to you I don't know what was going through my head at that time. I'm not a monster, I have a big heart I never even thought of hurting anyone like the way I hurt you. I just wanted you to know that im deeply sorry for my actions. I think about what happened every second, I pray that you heal correctly and that you recover and live a happy life. Please forgive me that's all I want. I take responsibility for all my actions, I'll take all the consequences," he wrote. "I'm not just saying this because im incarcerated I honestly mean every word." He signed it, "Love, Richard Thomas."

A few days later, he wrote a second letter, this one addressed to "Mr. Fleischman. ${ }^{\text {I }}$ It was nearly three pages long, written in neat cursive.

"I had a nightmare last night and I woke up sweating and apologizing," he wrote. "I really hope you get back to the way you were. I went to court yesterday and there still making me seem like a monster, but I'm not. I'm a good kid if you get to know me. I'm sure you would have been a nice person to," he continued. "I was hoping that I can meet you face to face so I can apologize to you."

He went on to detail the charges against him, explaining that he was willing to accept the assault charges but that he rejected the hate-crime enhancements. "I don't have a problem with homosexual's," he explained. "I have friends that's homosexuals and we never had problems so I don't look at you wrong because of your sexualitie. Honestly I could care less if you like men you weren't trying to talk to me in that way."

As for himself, he said: "I am not a thug, gangster, hoodlum, nor monster. I'm a young African American male who's made a terrible mistake." Perhaps, he suggested, he and Fleischman had things in common. "I've also been hurt alot for no reason, not like I hurt you but I've been hurt physically and mentally so I know how it feels, the pain and confusion of why me? I've felt it before plenty of times."

On Nov. 14 the judge sentenced Thomas to five to seven years in state prison but said Thomas could have his term reduced if he showed good progress before his 18th birthday, which is this Thursday.

Sasha hopes Thomas "can become an ally and stand up against the bullying of gay and transgender people."

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[^1]:    ${ }^{1}$ Names of participants and schools are pseudonyms.

[^2]:    ${ }^{2}$ I am grateful to Aída Walqui (personal communication) for this insight.

[^3]:    ${ }^{3}$ Some scholars, however, trace the metaphor further back. Bang and Trampe (2014), for instance, point to the 19th century model of language as an organism, followed by the view of language as a life form (Wittgenstein, 1953), before Haugen (1972) popularized the language-as-ecology metaphor (p. 84). Hult (2012) points out that while Huagen (1972) is best known for bringing the metaphor to wider audience, linguistic anthropologists and sociologists (e.g. Trim, 1959; Voegelin \& Voegelin, 1964) introduced the concept significantly earlier.
    ${ }^{4}$ For instance, Larsen-Freeman (2018) positions her work within Complex Dynamic Systems Theory as an ecological approach, yet she also refers to it as a sociocognitive approach that intentionally combines sociocultural and cognitive approaches to language development.

[^4]:    ${ }^{5}$ Notably, the notion of whether it is possible to refer to an affordance that is not realized (perceived and acted upon) is debated. For instance, Gaver (1991) distinguishes between perceptible affordances, those in which an actor perceives of an affordance and acts upon it and hidden affordances, those in which the affordance is available but there is no perceptible information.

[^5]:    ${ }^{6}$ Several studies have explored affordances of bilingualism and metalinguistic awareness for second or additional language development (Dewaele, 2010; Henry, 2016; Otwinowska-Kasztelanic, 2011). However, these studies are focused exclusively on the affordances of one language for the development of another (rather than on affordances of interactions with the environment that include but extend beyond language use) and thus, differ significantly from the focus of the proposed study.

[^6]:    ${ }^{7}$ CLIL has been referred to as an "umbrella term" to describe a range of approaches to integrating language and subject area learning (Cenoz et al., 2013; Stoller, 2008). While content based instruction (CBI) is the preferred term in Canada and the US, CLIL is generally associated with European models (Cenoz, 2015).

[^7]:    ${ }^{8}$ Since García's (2009a) original discussion of the relationship between codeswitching and translanguaging in which translanguaging includes but extends beyond code-switching she has revised this description. She underscores that the concept of code-switching reflects a view of language as code that does not align with the

[^8]:    ${ }^{9}$ Notably, although students who have a home language in common still differ with regard to their unique language and educational backgrounds, literature on translanguaging and classroom discourse has demonstrated that different opportunities for second language development emerge when students share a home language and when there is greater linguistic diversity among peers (Bartlett \& García, 2011; García \& Sylvan, 2011).

[^9]:    ${ }^{10}$ Several focal students had only taken the Initial ELPAC at the time of focal student selection.

[^10]:    ${ }^{11}$ Kramsch and Steffensen (2008), for instance, underscore that ecological research on second language development must take an axiological position; "since the researcher interferes with the object under study, he/she (sic) is committed-as meticulously, conscientiously and explicitly as possible-to a praxis that furthers a development which is beneficial" (p. 19)

[^11]:    ${ }^{12}$ This commitment included providing the school district with a report outlining the findings from the study along with implications for practice.
    ${ }^{13}$ Dufon (2002) argues that is critical that video-recordings capture whole events in order to determine their structure and organization and to interpret discourse.
    ${ }^{14}$ Erickson (2011) also recommends a wide-angle view to provide a better sense of the whole interactional event, including more participants. With a wide-angle view, " $[\mathrm{w}]$ e can see how the participants are responding to a given speaker at any given moment in time, both linguistically and extralinguistically" (DuFuon, 2002, p. 46).

[^12]:    ${ }^{15}$ Even when class was organized into stations, all students rotated through the same set of stations. Therefore, recordings of the focal student's time spent engaging in individual work, pair work, small group work, etc. would match that of any other student in the classroom during that class period.

[^13]:    ${ }^{16}$ These numbers reflect the average number of students enrolled in each class between September 2019 and March 2020. The actual number of students enrolled in each class fluctuated by as many as five students over the course of data collection.

[^14]:    ${ }^{17}$ Age listed is based on the student's age at time of the first interview.

[^15]:    ${ }^{18}$ @ Signals laughter. See Appendix G for key features of transcription conventions.
    ${ }^{19}$ Students had not yet completed the Summative ELPAC when data were collected.

[^16]:    ${ }^{20}$ It is important to note that my observations provided little insight into the academic standards to which she held students given that I did not systematically collect student work that she had graded, nor was my primary focus on her interactions with students during instruction.

[^17]:    ${ }^{21}$ It is important to note that these categories were not neatly bounded. For instance, some interactions included both an explanation of instructions and correcting a classmate's answer, and others involved explanations of both what was being asked of students and how to respond. In those instances, I coded the interval for multiple forms of peer support.

