

# Centering Language and Student Voice in Multilingual Literacy Instruction

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*In this article, the authors draw from 3 years of intensive work with multilingual students and their teachers to describe four principles to guide multilingual literacy instruction.*

The connections between language and literacy are critical and undisputed. However, literacy curricula and instructional practices have too often let the teaching of vocabulary stand in for more comprehensive language-based instruction, which is theoretically and pedagogically limiting. Constraining the connections between language and literacy is particularly problematic for multilingual learners who speak more than one named language or language dialect regularly and who may also be classified as “English learners” by their schools and districts. Multilingual learners negotiate issues of language, and its acquisition and development, in ways that are different from their non-multilingual peers. This is the case because language is centered to a greater extent vis-à-vis multilingual children’s lived experiences, resulting in a more deliberate focus on language use, switching, and flexibility (Grosjean, 2010). Unfortunately, many educational systems across the United States assume rigid, white, mainstream English norms of speaking and writing (Baker-Bell, 2020), including monolingual assessment paradigms that serve as gatekeepers for high school graduation and college entrance (García, 2020). Adding complexity is the fact that most teachers speak English as their primary language, and, irrespective of language background, report feeling unprepared to support multilingual learners in literacy instruction (Gándara & Santibañez, 2016). The reality, then, is that multilingual learners are too often forced to accommodate the monolingualism of the educational systems that should be serving them.

One way to disrupt English monolingualism in U.S. educational systems is to design multilingual literacy instruction that taps the breadth of linguistic resources that multilingual students bring to their classrooms. Multilingual literacy instruction requires consideration of the languages students speak, and their proficiencies and skills in those languages. Furthermore, it requires teaching that moves beyond vocabulary and more

squarely into language as a dynamic meaning-making system through which we learn and express understanding (e.g., García & Wei, 2014). In other words, multilingual literacy instruction requires a theory of language that informs instructional decision making.

In this article, we describe a set of practice-based principles for designing multilingual literacy instruction (see Table 1 for an overview). These principles were derived from extant theory and research, and then empirically explored as part of a 3-year, design-based, curriculum development project with upper elementary multilingual students and their teachers. We called the curriculum CLAVES (Comprehension, Linguistic Awareness, and Vocabulary in English and Spanish). The word *claves* is Spanish for *keys* or *clues*, and this name reflected our intention to work with students and teachers to use linguistic clues in instruction to understand and explore language within literacy instructional contexts.

We developed CLAVES over two academic years (2014–2016) in collaboration with third-, fourth-, and fifth-grade teachers and their students in bilingual and English-only programs in three districts across two U.S. states in the Northeast and Mid-Atlantic. Then, in 2016–2017, we conducted a quasi-experimental field trial in the same states, in which we placed the CLAVES curriculum in the hands of 22 teachers and literacy specialists who implemented it with 239 Spanish- and Portuguese-English bilingual students. Students who participated in CLAVES ( $n = 119$ ) outperformed those who did not

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(n = 120) on measures of “academic language,” reading comprehension, and argumentative writing (see Proctor et al., 2020; Silverman et al., in press).

Here we report on where the four principles came from, and what they looked like in practice. We begin by describing the design-based methodology we used to develop and document the small-group instruction that characterized CLAVES. Then we review the quasi-experimental field trial that resulted in instructionally meaningful effects on language, reading, and writing. From there, we address each of the four principles. For each principle, we articulate the extant theory and research that informed our instructional design, followed by a description of what we observed and learned about each principle from the instructional data we collected over the full 3-year project period. Finally, we discuss limitations and lessons learned in our own development as multilingual literacy educators.

## Developing CLAVES

In developing CLAVES, we worked in two states, six schools (three in each state), and three districts. In the first 2 years (2014–2016), we partnered with 40 teachers and 96 multilingual students. We employed a design-based, case study methodology and sought to embody an ethic of research in which “practitioners and researchers work together to produce meaningful change in contexts of practice” (Design-Based

Research Collective, 2003, p. 6). Together with students and teachers, our research team engaged in iterative cycles of development that included the following: (1) empirically driven unit and lesson development; (2) discussions of units and lessons with participating teachers for feedback; (3) revisions based on feedback; (4) field testing and documentation with small groups of third-, fourth-, and fifth-grade multilingual students; and (5) revisions based on student responses to instruction.

We documented the design-based approach using case study methods (Stake, 2006; Yin, 2003). Each participating school was a case (n = 6) composed of one “teacher working group” (TWG) and a few small “student working groups” (SWGs) of three to six students. In the TWGs, we worked with teachers to design and edit the lesson plans. In the SWGs, we worked with students to imple-

ment draft lessons and documented student responses to determine the utility of the approaches. We analyzed video and audio data, as well as field notes from the TWGs and SWGs to create school-level instructional case narratives that characterized how the different instructional approaches were received by teachers and students (see Figure 1). Aggregating these cases across the six schools and two states allowed us to then make a set of claims about the approaches that were most effective for inclusion in the final CLAVES curriculum. After the 2-year design period, we had a final version of CLAVES that consisted of three units and 40 lessons (30 minutes per lesson).

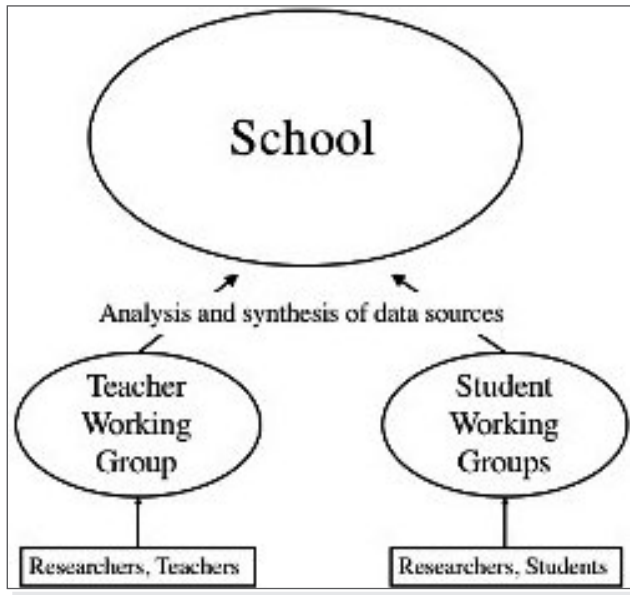
### PAUSE AND PONDER

1. Do you know what languages your students speak?
2. Do you invite your students to use and explore those languages through talk?
3. Do you think *language* can be used as a verb? If so, what does it mean?
4. Estimate a percentage of how much talking you do during literacy instruction compared with how much talking your students do.

**Table 1**  
**Four Principles of Multilingual Literacy Instruction**

Principle	Description
1. Focus on language and metalinguistic awareness	Target semantics, syntax, and morphology through explicit instruction and encourage reflection on, and manipulation of, language
2. Enact dialogic approaches to engage students	Encourage student talk. Step back and facilitate discussion about language and text that generates meaning and understanding.
3. Use multimodal texts and scaffolds to support comprehension and expression	Go beyond print into video, gesturing, acting, and movement to allow students to make sense across different modes and functions of language and text
4. Take a multilingual perspective	Encourage students to use their full linguistic repertoire to compare languages and make insights into language use for power and exclusion

**Figure 1**  
**Case Study Model for the 2-year, Design-based**  
**CLAVES Development Process for an Individual**  
**Participating School (n = 8 Total Schools)**



## The CLAVES Curriculum and Field Trial

CLAVES was made up of three units. Unit 1 addressed Human–Nature Interactions, Unit 2 explored Rights and Freedoms, and Unit 3 took on Immigration and Bilingualism. Each unit included three instructional cycles. The first two cycles of each unit were text-based, and included 4 days of language-based literacy instruction, culminating in a small-group discussion. On Days 1 and 2, students engaged in guided reading of texts, which included print-based and video texts, as well as discussion of semantics and vocabulary. On Days 3 and 4, students moved beyond vocabulary and participated in activities that highlighted morphology and syntax as they were reflected in the texts they had read or watched. On Day 5, students engaged in “dialogic reasoning” (Parra et al., 2016), a small-group discussion of a big question that asked students to take a stand on a text-related issue. The third cycle of a unit was 3 days of process writing in which students composed an authentic, persuasive text grounded in argumentation. See Table 2 for an overview of unit texts, discussion questions, and writing prompts. See Figure 2 for a graphic of the text and writing cycles for a CLAVES unit. For a detailed overview of the curriculum, including targeted vocabulary, morphology, and syntax, see Proctor et al., (2020).

To illustrate, consider the first text cycle in the Human–Nature Interaction unit from the Year 3 implementation.

This text cycle was anchored by *The Wolves are Back* (George, 2008), a picture book documenting the interdependence of the Yellowstone National Park ecosystem, and how wolves are central to it. This text was combined with an informational video on the tensions between environmentalists and local ranchers with respect to wolf reintroduction. In the first two guided reading/vocabulary days of the text cycle, students and teachers discussed targeted vocabulary such as *depopulate* and *reintroduce* and used them in discussing the texts as they read (see Figure 3). Students and teachers then considered the morphology of key vocabulary, such as *de-* and *re-*, and engaged in conversation about how these word parts can influence the meaning of many root words related to the topic they were discussing (e.g., *depopulation*, *reintroduction*). Students also considered how parts of speech affected syntax, and were guided by their teachers to generate simple sentences and to identify parts of speech with cut-up sentences in a word card game. Finally, students and teachers discussed the big question, “Should animals, like wolves, who eat other animals, be reintroduced into areas where they will encounter humans and livestock?” Following a second text-based cycle on the topic of species revival, students then engaged in a writing cycle that focused on writing a letter to a national park director or a member of the U.S. Congress arguing for or against either (a) the reintroduction of animals into populated areas or (b) the revival of extinct species such as the Tasmanian Tiger.

We tested the efficacy of the curriculum in a quasi-experimental field trial in a diverse set of eight schools (see Table 3). Approximately 75% of students in participating schools were considered low income. In total, 22 teachers (approximately half of whom were bilingual) implemented the program and 239 students, all of whom were Spanish– or Portuguese–English bilinguals, participated in the program. Their monolingual classmates were not part of the research. All of the student participants were currently or formerly designated as English learners by their school districts. Across sites, 119 students received CLAVES instruction and 120 students were in a “Business as Usual” comparison group.

In our analyses, we controlled for pre-test differences in language skills (vocabulary, morphology, and syntax) and reading comprehension (see Table 4). Findings showed that students who participated in CLAVES outperformed students who did not on academic language (Hedge’s  $g = .248$ ) and reading comprehension (Hedge’s  $g = .166$ ). Students who participated in CLAVES also outperformed control students in argument writing, producing more arguments ( $ES = .19$ ) and counterarguments ( $ES = .20$ ) in their compositions. Finally, observations showed

**Table 2**  
**Overview of CLAVES Units and Cycles**

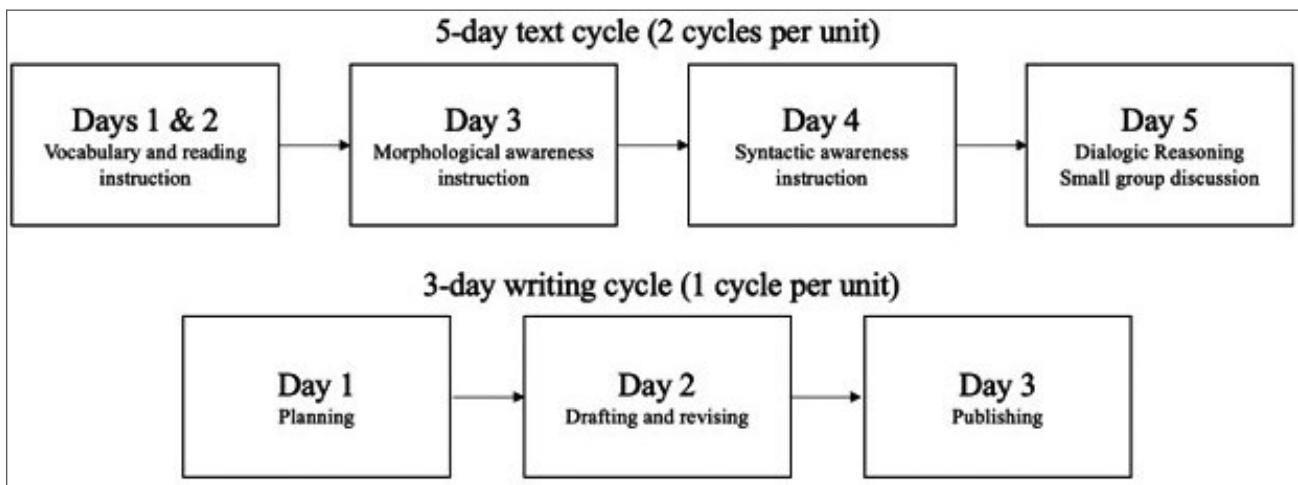
Unit	Cycle 1 Texts	Cycle 2 Texts	Cycle 3
1. Human–Nature Interaction	Text: <i>The Wolves Are Back</i> by George (2008) Video: “Wolves and People” Discussion Question: <i>Should animals, like wolves, who eat other animals, be reintroduced into areas where they will encounter humans and livestock?</i>	Text: <i>Species Revival</i> (CLAVES Research Team, 2015a) Video: “Revive and Restore” Discussion Question: <i>Should scientists revive extinct animals?</i>	Write a persuasive letter to the director of Yellowstone National Park OR the chairman of the Science, Space, and Technology committee about wolf reintroduction or species revival.
2. Rights & Freedoms	Text: <i>Ivan: The Remarkable True Story of the Shopping Mall Gorilla</i> (Applegate, 2014) Video: “Gorillas Reintroduced” Discussion Question: <i>Should people protest if they believe it is against animal rights to hold animals in captivity?</i>	Text: <i>¡Sí, Se Puede!/Yes We Can! Janitor Strike in L.A.</i> (Cohn, 2002) Video: “Chicago Teacher Strike” Discussion Question: <i>Should people/workers go on strike to protest working conditions?</i>	Write a persuasive speech about the ethics of keeping animals in captivity, or the reasons a group should go on strike.
3. Immigration & Bilingualism	Text: <i>Home at Last</i> (Elya, 2002) Video: “Immersion, Part I” Discussion Question: <i>Should immigrants change their language and culture when they move to a new country?</i>	Text: <i>Bilingual Education</i> (CLAVES Research Team, 2015b) Video: “Immersion, Part II” Discussion Question: <i>Should schools teach in English only or offer bilingual education?</i>	Write a persuasive article for a local/student newspaper about immigrants’ schooling experiences.

that teachers were able to implement the curriculum with fidelity (average fidelity =87%, min–max =75%–100%), meaning they were able to implement it as intended, without differences by instructional role (i.e., classroom teacher or instructional specialist).

### CLAVES Principles

To develop CLAVES, we first consulted the extant research to lay a foundation for lesson planning. Then, over the course of the 3-year project, we explored how these principles were brought to life by project research assistants

**Figure 2**  
**Text and Writing Cycles for Units in CLAVES Curriculum**





**Figure 3**  
Powerpoint Slides from *The Wolves Are Back* (George, 2008) for the Word *Reintroduce*, Links with Morphology, its Spanish Cognate *Reintroducir*, and Supplementary Definitions of the Term

(in Years 1 and 2), practicing teachers (in Year 3), and participating students (Years 1–3).

### ***Principle 1: Focus on Language and Metalinguistic Awareness***

**Theory and Research.** Our own prospective research had showed the need to move beyond vocabulary and more squarely into language. Specifically, we noted that language comprehension and ideation for writing required breadth and depth of oral language skills that included semantic, syntactic, and morphological knowledge (e.g., Silverman et al., 2015). At the same time, we drew on a series of language-based vocabulary interventions that had come before us, from which we extracted several takeaways for our instructional design, specifically (1) focus on high utility vocabulary words and word parts (Lesaux et al., 2014); (2) leverage multiple means of representation and engagement in vocabulary instruction (Proctor et al., 2011); (3) situate language and literacy in thematic units and engaging texts that provide authentic opportunities for discussion (Carlo et al., 2004); (4)

introduce challenging discussion questions and writing prompts that encourage debate and discussion (Snow et al., 2009); and (5) use small groups to foster engagement and interaction (Baker et al., 2014).

We also drew from research evidence indicating that multilingual students are adept at reflecting on and manipulating language (i.e., *metalinguistic awareness*). Theoretically, multilingual children are thought to be metalinguistically advantaged by virtue of their lived experiences in which they must negotiate with whom and how language is used within and across spaces (e.g., Grosjean, 2010). In a meta-analysis on the cognitive correlates of bilingualism, Adesope et al. (2010) found that Spanish–English bilinguals outperformed their non-bilingual counterparts on measures of metalinguistic and metacognitive awareness. Kuo & Anderson (2010) further argued that bilingual children have access to a broader array of language inputs, which makes “structural similarities and differences between languages more salient, allowing bilingual children to form representations of language structure at a more abstract level” (p. 370). Finally, García & Wei (2014) move beyond linguistic structures to

**Table 3**  
**Overview of Participating Districts and Schools for the Year 3 CLAVES Field Trial**

Region	District	School	Program Model	Student Languages
Northeast	A	1	Dual language (50:50 model)	Spanish–English
Northeast	A	2	TBE	Spanish–English
Northeast	A	3	TBE	Portuguese–English
Northeast	B	4	English-only	Spanish–English
Mid-Atlantic	C	5	English-only	Spanish–English
Mid-Atlantic	C	6	English-only	Spanish–English
Mid-Atlantic	C	7	English-only	Spanish–English
Mid-Atlantic	C	8	English-only	Spanish–English

*Note.* TBE = Transitional Bilingual Education; 50:50 model = 50% English, 50% Spanish instruction

describe *linguaging*, arguing that “language is not a simple system of structures that is independent of human interactions with others” but rather “the simultaneous process of continuous becoming of ourselves and our language practices” (p. 8). This articulation of linguaging was central to our deliberations about how to lift up and recognize the varied linguistic practices and modes of expression that students bring to schools.

**Theory and Research in Practice.** We included explicit instruction on specific words, word parts, and syntactic structures in developing CLAVES. To teach vocabulary, we provided definitions and examples across contexts, and included Spanish and Portuguese word-level translations, as well as attention to cognates (e.g., *depopulate*, *despoblar*, and *despovoar*). To teach morphology, we linked root words with vocabulary instruction and expanded them by exploring associated affixes. Finally, to teach syntax, we taught parts of speech and sentence structures.

We promoted metalinguistic awareness by developing lessons that asked students to consciously reflect on language. Students were challenged to play, or *tinker* (Jones, 2020), with specific words, word parts, and syntactic structures and use them to make meaning. For example, in one game, students had to draw a card with a subject written on it (e.g., *wolf pup*) then make a sentence with that subject by adding a verb (e.g., *grew*). This game helped students see how words with different parts of speech combine to make meaningful sentences. In another activity, students had to draw a prefix card (e.g., *re-* or *de-*) and a base word card (e.g., *populate*) and define the resulting word (*repopulate*, *depopulate*). Discussions became particularly engaging when students created words about whose “realness” they were unsure (e.g.,

*destore* versus *restore*). Through discussion, students worked to define these words, then searched to see if the word in question was included in an online dictionary. This approach to creative word constructions and definitions sparked engagement while also guiding us toward an understanding of *linguaging* as an active system of meaning making.

### ***Principle 2: Enact Dialogic Approaches to Engage Students***

**Theory and Research.** Simply put, dialogic approaches center student voice in instruction. And while there is ample research showing the benefits of dialogic teaching, its documented use in literacy instruction is limited (Silverman et al., 2014). Much theory and research has identified student talk as a critical dimension of human interaction that can support language, reasoning, and meaning making across a variety of instructional contexts (e.g., Wells, 2007). Mercer (2000) used the term *interthinking* to describe how dialogic interactions between students allow for the combination of cognitive resources to achieve particular purposes. Bailey & Orellana (2015) further noted that such opportunities to use language, to collaborate with others, and to articulate thoughts affect the academic performance of children.

We intentionally created lessons that provided opportunities for open-ended questioning and sense-making around language and content. Each lesson plan asked students to share what they were thinking and to participate in collaboratively constructing meaning. We also encouraged teachers to gradually release responsibility (Pearson & Gallagher, 1983) for language use across each cycle as students prepared for discussing the big question. After guided readings and text-based

**Table 4**  
**Overview of Measures and Effect Sizes**

Pre-test	Measure	Description	Reliability
Vocabulary	Woodcock-Muñoz (Woodcock et al., 2005)	Individual assessment. Expressive picture naming activity in which the assessor points to a picture and asks “what is this?” Student responds with a one-word answer that is marked correct or incorrect.	Cronbach’s alpha for 8 and 11 y/o = .90,.92
Morphology	Extract the Base (Anglin, 1993)	Group assessment. Students are read a target word (e.g., <i>happiness</i> ) and a corresponding sentence (e.g., “My pet dog makes me very ___”). Then, they are asked to extract the base from a derived word (e.g., happy from happiness) and write their responses.	Rasch-based Reliability = .98
Syntax	Comprehensive Assessment of Spoken Language (Carrow-Woolfolk, 1999)	Individual assessment. Students are orally presented sentences with or without grammatical errors (e.g., “The baby is crying”; “Her goes into the house”) then asked if the sentence is or is not grammatically correct. If no, students are asked to correct the sentence by changing only one word without changing the meaning of the sentence. Items scored on a scale of 0–2.	Test–retest $r = .91$
Reading Comp	Gates-MacGinitie (MacGinitie et al., 2002)	Group assessment. Students read passages independently and respond to multiple-choice questions about the text.	Kuder–Richardson reliability = .94–.96
Post-test			
Academic Language	CALS (Uccelli et al., 2015)	Group assessment. Taps students’ language skills relative to connecting ideas, tracking themes, organizing texts, breaking words, comprehending sentences, identifying definitions, epistemic stance, and metalanguage.	Cronbach’s alpha = .93
Reading Comp	Gates-MacGinitie (MacGinitie et al., 2002)	Group assessment. Students read passages independently and respond to multiple-choice questions about the text.	Kuder–Richardson reliability = .94–.96
Argument Writing	Researcher measure (Reznitskaya et al., 2001)	Group assessment. Students write an argumentative essay about why or why not a boy should report another boy for cheating.	Inter-rater reliability (Kappa) >.8

instruction on vocabulary, morphology, and syntax, we followed early approaches to small-group discussions by Chinn et al., (2001), called *Collaborative Reasoning*, in which teachers asked students a big discussion question, then stepped back and let students take control of the conversation. Teachers provided facilitation if the conversation stalled or students got off track, but conversations were student-centered rather than teacher-centered, which is at the heart of dialogic approaches to literacy instruction.

**Theory and Research into Practice.** Documenting teachers' practice of this principle provided some important insights for talking about language and ideas in text. In one interaction during vocabulary instruction, students encountered the word *ashamed* and the teacher asked what that meant. One student announced that "everybody knows that." The other students agreed, extending this thinking to "It's when you're embarrassed. It's when you feel bad." The teacher then defined *ashamed* as "Feeling bad about yourself usually because you did something wrong." This prompted students to question whether *ashamed* really "count[s] as *embarrassed*." The conversation went on to include the students and teacher offering examples and negotiating similarities and differences between the two semantically related, yet distinguishable, words.

Discussions of the big ideas in text were another way to center discourse. In the Rights and Freedoms unit, students read *Ivan: The remarkable true story of the shopping mall gorilla* (Applegate, 2014) and were asked whether animals should be kept in captivity. Students prepared for the conversation by taking notes from the text as well as including their own experiences so they would be ready to contribute to the conversation. Then, the teacher asked the students to turn and talk to a partner about what they thought and why. Finally, the teacher opened the conversation up to a whole-group discussion. The students eagerly jumped into the conversation. In one exchange, a student started by saying, "I think they shouldn't be kept in captivity because the animals are taken away from their families." Another student added, "Yeah, and it also messes up the food chain." The teacher asked the students to add on and clarify, at which point a third student chimed in, "Well, I say yeah they should because they can't always protect themselves." The conversation continued. All students had a chance to participate, each adding on to what others said, or sharing an opposing viewpoint or example. Throughout this dialogue, students had the opportunity to use what they had been learning throughout the text cycle to share their opinions in authentic ways.

### **Principle 3: Use Multimodal Texts and Scaffolds to Support Comprehension and Expression**

**Theory and Research.** We initially chose print texts that encouraged critical conversations about relevant topics, and also included rich language with which to anchor discourse around vocabulary, morphology, and syntax (per Principles 1 and 2). However, we recognized the need to move beyond just books and .pdf documents to also include digital text, which is more interactive and less bounded by time and space (Dalton & Proctor, 2008). Our review of the research also suggested the benefits of multimodal scaffolds (linguistic, visual, audio, gestural, and spatial) that contribute to meaning making (New London Group, 1996) and informed our conceptualization of *linguaging* as more than just speaking, listening, reading, and writing.

For example, video "texts" communicated information not only through words but also through images, action, and sound, which can help support the development of conceptual understanding and vocabulary knowledge (Dalton & Proctor, 2008). Multimodal content and scaffolds can also support students by incorporating multiple means of representation, expression, and engagement (Meyer et al., 2014). Students differ in the ways in which they best perceive or comprehend content. Some learners grasp information more efficiently through print while others benefit more from video or other digital media. Given this, we designed lessons that presented content through multiple means, and scaffolded comprehension with graphic organizers, sentence stems, and hands-on activities.

**Theory and Research in Practice.** We sought to provide a wide range of opportunities for students to take in new information and express what they understood. For example, the unit on Rights and Freedoms focused in part on how protests and strikes are ways to gain representation. Students read a print-based text, *Sí Se Puede* (Cohn, 2002), and watched videos about a teacher strike in Chicago and a telecommunications worker strike in their own community. Teachers encouraged students to think about their own understanding of the concepts of protests and strikes (e.g., how they knew the word *strike* from baseball or bowling) and consider how the different texts they read and watched represented a different meaning of *strike*. Here, the multiple (con)texts constituted the opportunity not only to build metalinguistic awareness (per Principle 1) but also to visualize and understand the weight of workers choosing to strike as a form of protest against their working conditions. This use of a multimodal approach to text thus facilitated the students' construction and evaluation of multiple meanings



of the word *strike*, with implications for reading, listening, and expression.

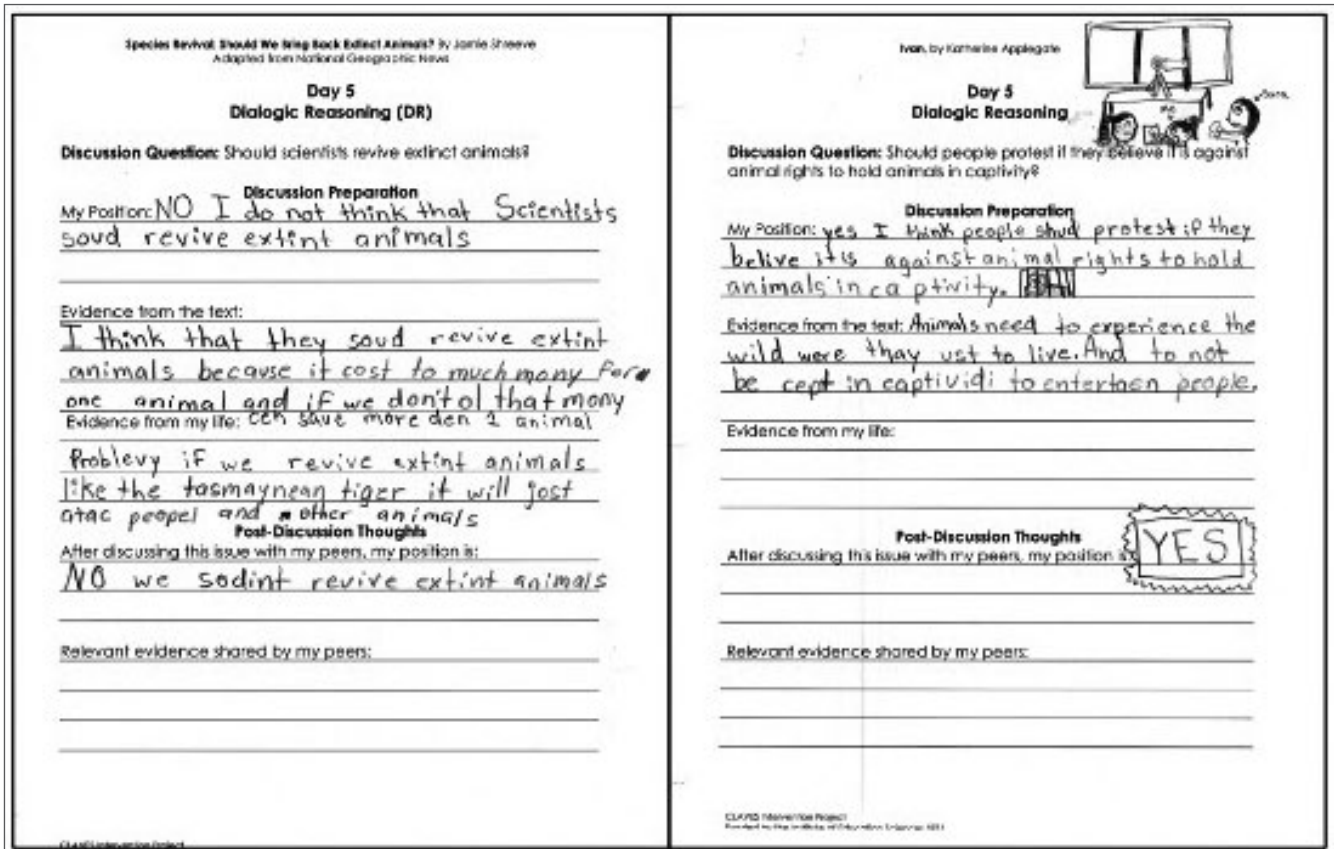
In tapping writing as a linguistic modality, we used scaffolded graphic organizers inspired by Systemic Functional Linguistics (Brisk, 2015) that supported students in thinking through their positions and reasonings, as well as the language and structure of argumentation. Process writing served as an effective means by which to further extend students' opportunities to use language on their own. Writing cycles were always the final three instructional days of a unit, and in them, students were prompted to write an argumentative/persuasive speech, letter, or article on a unit-related topic. Working in groups, pairs, or individually, students had spoken and written opportunities to think about and offer their opinions, which they supported with reasons and evidence, just as they might do in contexts outside of school. They also had the option of choosing more and less scaffolded graphic organizers, structured around written and spoken argumentation. See Figures 4 and 5 for differentially scaffolded written arguments across the big questions in the CLAVES units.

**Principle 4: Take a Multilingual Perspective**

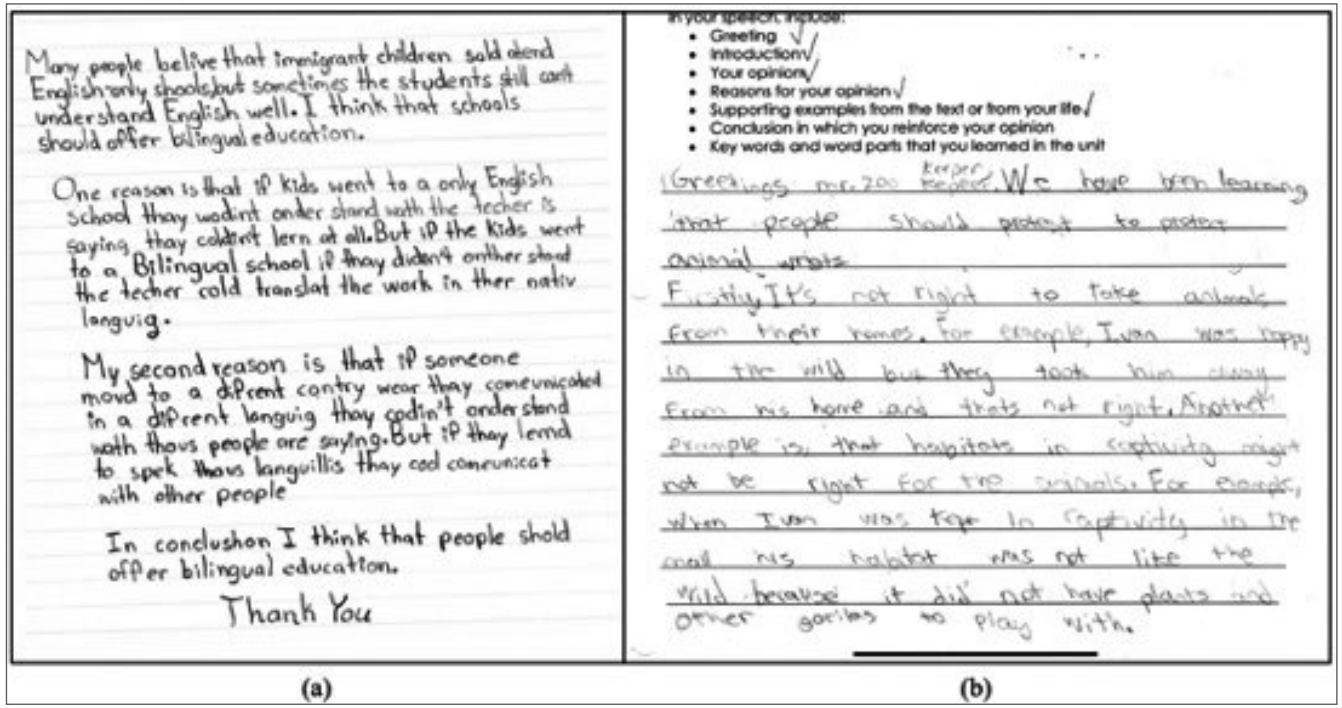
**Theory and Research.** Our initial views on leveraging multilingualism in literacy instruction focused on the concept of *bridging* (Beeman & Urow, 2012) to support vocabulary, morphology, and syntax. At a base level, vocabulary was bridged by identifying cognates (Hernández et al., 2016) or translation (Puzio, Keyes, Cole, & Jiménez, 2013). Morphologically, English, Portuguese, and Spanish share common bound morphemes, such as *-tion*, *-ção*, and *-ción*, that when added to a cognate root word like *satisfy*, create the words *satisfaction*, *satisfação*, and *satisfacción*. Holding up language for examination in the bridging tradition links to Principle 1's focus on language and metalinguistic awareness.

We were also influenced by conceptualizations of *translanguaging* (García & Sylvan, 2011) which move beyond bridging, incorporate languaging, and also challenge us to rethink named languages (e.g., Spanish, English, Portuguese). As a theory, translanguaging requires us to consider bilingualism as dynamic and unbounded; a continuous array of linguistic features that

**Figure 4**  
Scaffolded Written Argument Organizers for Small-group Dialogic Reasoning and Later Writing Activities



**Figure 5**  
**Unscaffolded Persuasive Article in Favor of Bilingual Education (a) and Scaffolded Persuasive Speech to Protect Animal Rights (b)**



is always open for the bilingual individual's use. These features are variably tapped depending on the linguistic context in which one is situated (see Solorza et al., 2019). We were keen to promote the idea that all linguistic channels are critical elements of schooling that can be used for academic purposes (Bailey & Orellana, 2015). We aimed to support students' knowledge of language and intentional meaning making by centering, not marginalizing, their linguistic repertoires and proficiencies by being open to the languages, dialects, and modes of expression that allow for students to reflect who they are and what they know.

**Theory and Research in Practice.** The multilingual principle was particularly useful because, in English only, some students had limited experiences with the vocabulary or language under discussion. But taking a multilingual perspective gave students the space and freedom to engage more fully in CLAVES activities. For example, when teaching the word *captivity*, students were prompted to share what they knew or noticed about the word. Since the word was unfamiliar, the students shared insights about *captivity* being similar to *activity* in spelling and sound. From these initial insights, the teacher affirmed student hypotheses before going on to highlight the morphological ending “-ity” denoting “the condition

of.” In one example, a CLAVES teacher noted, “So captivity means the condition of taking something or controlling it.” She did not, however, end the discussion with her final word. At this point, the teacher provided imagery of a bear in captivity alongside the word's use in text. This further set up students to extend their internalized meanings of captivity through discussion that connected captivity to prisons, being held captive, and being under control. When the teacher also asked students to draw on their communicative repertoires to name the Spanish cognate for *captivity*, they incorrectly suggested *captividad* (the actual translation is *cautividad*) which highlighted not only their knowledge that *-idad* is a morphological cognate for *-ity*, but also that many Spanish words and cognates have very similar spelling and phonology with English. Dialogic interactions such as these show how fruitful it can be to make time to talk about language and how it works by tapping students' knowledge.

## Limitations and Lessons Learned

We first note that the work described here was undertaken in the upper elementary grades, with Spanish- and Portuguese-English bilinguals, whose English proficiency ranged from “Developing” to “Reaching.” That is, these

were students who had already developed some degrees of English proficiency. While this limits any broad claims we are able to make about the effectiveness of CLAVES, we offer these principles as an invitation for exploration across grade levels and languages, and invite readers to consider four lessons learned.

First, less is more. We learned that slowing down to provide space and time for students to talk was needed to accomplish our goal of centering student voice and fostering language and text comprehension. It was difficult for many teachers and students to forgo hand raising, to redistribute the conversational patterns, and to feel comfortable using all linguistic resources. These dialogic approaches take time because they are often a departure from what constitutes typical literacy instruction. Early on, attempts can fall flat as teachers and students get acclimated to the changes, but over time, everyone gets better at the recalibrated expectations and conversations become deep and sustained.

Second, multilingual literacy instruction requires both contextualized and decontextualized language teaching. Too often, we teach vocabulary independent of text, and while some may argue this is necessary, too much decontextualized instruction divorces language from literacy. In our initial lessons, we did not make sufficient connections between semantics, morphology, and syntax, and we missed too many opportunities to link language to text. We learned that discussion of language in specific contexts, followed by connecting and extending across texts and contexts, supports both comprehension and linguistic awareness.

Third, multilingual literacy instruction should encourage critical perspectives on language, content, and context. At first, we developed lessons that approached content and concepts without a critical lens, and in so doing, we unintentionally reified white, monolingual perspectives on language learning. For example, in our unit on Immigration and Bilingualism, we included a text called *Home At Last* (Elya, 2002) about a mother who was discriminated against for not knowing English. In the end, she learns English and all is well. In retrospect, we missed an important opportunity to critically engage students in thinking about our selected vocabulary (i.e., *assimilation* and *adaptation*), and whether immigrants should change their language and culture when they move to a new country. We failed to consider that language is never neutral, and this awareness should be part of all multilingual literacy instruction.

Finally, we need to recognize how multilingualism applies to intra-linguistic repertoires such as Black English (Baker-Bell, 2020), and its representation among students and texts. Supporting students' capacity to navigate the complex multiple meanings and ideologically

layered language across texts and contexts in school and beyond is imperative. To these ends, contemporary movements such as #disrupttexts (Ebarvia et al., 2020) advocate for "inclusive and restorative" pedagogy that asks teachers to engage in (1) examination of biases; (2) centering BIPOC voices in pairing or replacing texts to create counternarratives; (3) becoming conscious of different ways of knowing by identifying and resisting dominant narratives; and (4) community building. As we evolve as multilingual literacy educators, we look to integrate these lessons learned in order to support children's development and growing capacity for critical engagement with language and society.

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## TAKE ACTION!

1. Document the languages spoken in your classroom and consider how they interact with English. Explore this with your students. Let the students who speak those languages teach what they know about their languages.
2. Devote small reading groups to ask and discuss big questions that come up in the texts you are reading. Don't require hand raising, and try to be an engaged facilitator, not the mediator of all talk.
3. Consider how to supplement core texts with multimodal texts that provide different perspectives and insights that also use language and visuals in different ways.
4. Embrace the concept of *linguaging* in your classroom by letting students use their linguistic repertoires in different ways. Document how your students do this.
5. Form a small discussion group of interested colleagues to meet regularly and document the successes and challenges of implementing the four principles into your instruction. Consider how the different principles overlap with one another.



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## Conflict of Interest

None

## REFERENCES

- Adesope, O.O., Lavin, T., Thompson, T., & Ungerleider, C. (2010). A systematic review and meta-analysis of the cognitive correlates of bilingualism. *Review of Educational Research, 80*(2), 207–245. <https://doi.org/10.3102/0034654310368803>
- Anglin, J. M. (1993). Vocabulary development: A morphological analysis. *Monographs of the Society for Research in Child Development, 58*. <https://doi.org/10.2307/1166112>
- Bailey, A., & Orellana, M. F. (2015). Adolescent development and everyday language practices: Implications for the academic literacy of multilingual learners. In D. Molle, E. Sato, T. Boals, & C. A. Hedgspeth (Eds.), *Multilingual learners and academic literacies: Sociocultural contexts of literacy development in adolescents* (pp. 53–74). Routledge.
- Baker, S., Lesaux, N., Jayanthi, M., Dimino, J., Proctor, C. P., Morris, J., & Newman-Gonchar, R. (2014). *Teaching academic content and literacy to English learners in elementary and middle school* (NCEE 2014-4012). National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.
- Beeman, K., & Urow, C. (2012). *Teaching for biliteracy: Strengthening bridges between languages*. Caslon.
- Baker-Bell, A. (2020). Dismantling anti-Black linguistic racism in English language arts classrooms: Toward an anti-racist Black language pedagogy. *Theory Into Practice, 59*, 8–21. <https://doi.org/10.1080/00405841.2019.1665415>
- Brisk, M. E. (2015). *Engaging students in academic literacies: Genre-based pedagogies for K–5 classrooms*. Routledge.
- Carlo, M. S., August, D., McLaughlin, B., Snow, C. E., Dressler, C., Lippman, D. N., & White, C. E. (2004). Closing the gap: Addressing the vocabulary needs of English-language learners in bilingual and mainstream classrooms. *Reading Research Quarterly, 39*, 188–215. <https://doi.org/10.1598/rrq.39.2.3>
- Carrow-Woolfolk, E. (1999). *The comprehensive assessment of spoken language*. Pearson.
- Chinn, C., Anderson, R. C., & Waggoner, M. A. (2001). Patterns of discourse in two kinds of literature discussion. *Reading Research Quarterly, 36*(4), 378–411. <https://doi.org/10.1598/RRQ.36.4.3>
- CLAVES Research Team. (2015a). *Species revival*. Boston College.
- CLAVES Research Team. (2015b). *Bilingual education*. Boston College.
- Dalton, B., & Proctor, C. P. (2008). The changing landscape of text and comprehension in the age of new literacies. J. Coiro, M. Knobel, C. Lankshear, & D. Leu (Eds.), *Handbook of new literacies* (pp. 297–324). Erlbaum.
- Design-Based Research Collective. (2003). Design-based research: An emerging paradigm for educational inquiry. *Educational Researcher, 32*, 5–8.
- Ebarvia, T., Germán, L., Parker, K. N., & Torres, J. (2020). #Disrupt-texts. *English Journal, 110*, 100–102.
- Gándara, P., & Santibañez, L. (2016). The teachers our English language learners need. *Educational Leadership, 73*, 32–37.
- García, O. (2020). Translanguaging and Latinx bilingual readers. *The Reading Teacher, 73*, 557–562.
- García, O., & Sylvan, C. (2011). Pedagogies and practices in multilingual classrooms: Singularities in pluralities. *The Modern Language Journal, 95*, 385–400. <https://doi.org/10.1111/j.1540-4781.2011.01208.x>
- García, O., & Wei, L. (2014). *Translanguaging: Language, bilingualism, and education*. Palgrave, Macmillan. <https://doi.org/10.1057/9781137385765>
- Grosjean, J. (2010). *Bilingual: Life and reality*. Harvard University Press.
- Hernández, A. C., Montelongo, J. A., & Herter, R. J. (2016). Using Spanish–English cognates in children’s choices picture books to develop Latino English learners’ linguistic knowledge. *The Reading Teacher, 70*, 233–239.
- Jones, R. L. (2020). *(Meta) Linguaging: Exploring metalinguistic engagement within a language-based reading intervention for upper elementary bi/multilingual students*. Unpublished doctoral dissertation.
- Kuo, L., & Anderson, R. C. (2010). Beyond cross-language transfer: Reconceptualizing the impact of early bilingualism on phonological awareness. *Scientific Studies of Reading, 14*, 365–385. <https://doi.org/10.1080/10888431003623470>
- Lesaux, N. K., Kieffer, M. J., Kelley, J. G., & Harris, J. R. (2014). Effects of academic vocabulary instruction for linguistically diverse adolescents: Evidence from a randomized field trial. *American Educational Research Journal, 51*(6), 1159–1194. <https://doi.org/10.3102/0002831214532165>
- MacGinitie, W., MacGinitie, R., Maria, K., & Dreyer, L. (2002). *Gates–MacGinitie reading tests* (4th ed.). Riverside.
- Mercer, N. (2000). *Words and minds: How we use language to think together*. Routledge.
- Meyer, A., Rose, D. H., & Gordon, D. (2014). *Universal design for learning: Theory and practice*. Center for Applied Special Technology.
- New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review, 66*, 60–93.
- Parra, M. O., Wagner, C., Proctor, C. P., Leighton, C. M., Robertson, D. A., Paratore, J. R., & Ford-Connors, E. (2016). Dialogic reasoning: Supporting emergent bilingual students’ language and literacy development. In C. P. Proctor, A. Boardman, & E. Hiebert (Eds.), *Teaching emergent bilingual students: Flexible approaches in an era of new standards* (pp. 119–137). Guilford.
- Pearson, P. D., & Gallagher, M. C. (1983). The instruction of reading comprehension. *Contemporary Educational Psychology, 8*, 317–344.
- Proctor, C. P., Dalton, D., Uccelli, P., Biancarosa, G., Mo, E., Snow, C. E., & Neugebauer, S. (2011). Improving Comprehension Online (ICON): Effects of deep vocabulary instruction with bilingual and monolingual fifth graders. *Reading and Writing: An Interdisciplinary Journal, 24*, 517–544.
- Proctor, C. P., Silverman, R. D., Harring, J. R., Jones, R. L., & Hartranft, A. M. (2020). Teaching bilingual learners: Effects of a language-based reading intervention on academic language and reading comprehension in grades 4 and 5. *Reading Research Quarterly, 55*, 95–122. <https://doi.org/10.1002/rrq.258>
- Puzio, K., Keyes, C. S., Cole, M. W., & Jiménez, R.T., (2013). Language differentiation: Collaborative translation to support bilingual reading. *Bilingual Research Journal, 36*, 329–349. <https://doi.org/10.1080/15235882.2013.845118>
- Reznitskaya, A., Anderson, R. C., McNurlen, B., Nguyen-Jahiel, K., Archodidou, A., & Kim, S. (2001). Influence of oral discussion on written argument. *Discourse Processes, 32*, 155–175.
- Silverman, R. D., Coker, D., Proctor, C. P., Harring, J. R., Piantedosi, K. W., & Meyer, A. G. (2015). The relationship between language skills and writing outcomes for linguistically diverse students in upper elementary school. *Elementary School Journal, 116*, 103–125.
- Silverman, R. D., Proctor, C. P., Harring, J. R., Jones, R. L., & Hartranft, A. M. (in press). The effect of a language and literacy intervention on upper elementary bilingual students’ argument writing. *Elementary School Journal*.
- Silverman, R. D., Proctor, C. P., Harring, J. R., Meyer, A., Doyle, B., & Mitchell, M. (2014). Teachers’ instruction and students’ vocabulary and comprehension: An exploratory study with English monolingual and Spanish-English bilingual students in grades 3–5. *Reading Research Quarterly, 49*, 31–60.



- Snow, C. E., Lawrence, J. F., & White, C. (2009). Generating knowledge of academic language among urban middle school students. *Journal of Research on Educational Effectiveness*, 2, 325–344. <https://doi.org/10.1080/19345740903167042>
- Solorza, C.R., Aponte, G.Y., Leverenz, T., Becker, T., & Frias, B. (2019). *Translanguaging in dual language bilingual education: A blueprint for planning units of study*. CUNY-NYSIEB, The Graduate Center, CUNY. <<https://www.cuny-nysieb.org/wp-content/uploads/2019/09/Translanguaging-in-Dual-Language-Bilingual-Education-A-Blueprint-for-Planning-Units-of-Study-RSVD.pdf>>
- Stake, R. (2006). *Multiple case study analysis*. Guilford Press.
- Uccelli, P., Phillips Galloway, E., Barr, C. D., Meneses, A., & Dobbs, C. L. (2015). Beyond vocabulary: Exploring cross-disciplinary academic-language proficiency and its association with reading comprehension. *Reading Research Quarterly*, 50, 337–356. <https://doi.org/10.1002/rrq.104>
- Wells, G. (2007). The mediating role of discoursing in activity. *Mind, Culture, and Activity*, 14, 160–177.
- Woodcock, R. W., Muñoz-Sandoval, A.F., Ruef, M.L., & Alvarado, C.G., (2005). *Woodcock-Muñoz language survey—revised*. Riverside.
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Sage.
- Cohn, D. (2002). *¡Sí, se puede!/Yes, we can! Janitor strike in L.A. Cinco Puntos*.
- Elya, S. M. (2002). *Home at last*. Lee & Low.
- George, J. C. (2008). *The wolves are back*. Dutton.

#### LITERATURE CITED

Applegate, K. (2014). *Ivan: The remarkable true story of the shopping mall gorilla*. Clarion.

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- “3 ways to speak English” by Jamila Lyiscott [https://www.ted.com/talks/jamila\\_lyiscott\\_3\\_ways\\_to\\_speak\\_english?language=en](https://www.ted.com/talks/jamila_lyiscott_3_ways_to_speak_english?language=en)
- “Immersion” by Richard Levien <http://www.immersionfilm.com/>
- A clarification of languaging and translanguaging by Mike Mena <https://www.youtube.com/watch?v=ybAS3IT6FLc&t=122s>
- CUNY-NYS Initiative on Emergent Bilinguals <https://www.cuny-nysieb.org/>
- Read *Linguistic Justice: Black language, literacy, identity, and pedagogy* (2020) by April Baker-Bell