

Implementing Code-Breaking With Multilingual Learners: Principles and Instructional Planning

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Abstract: Content and language integration is a critical topic in the education of multilingual learners (MLs). This article draws on a language-based approach to content instruction (LACI), which is a teacher education framework, to highlight content instruction with a focus on language with MLs. Specifically, we apply the principles of one of the six Cs of LACI (i.e., code-breaking) to showcase an analysis of a text in social studies to help teachers focus on language and content simultaneously while planning instruction.

Keywords: language-based approach to content instruction, code-breaking, multilingual learners, social studies, content and language integration

INTRODUCTION

Subject matter in schools is constructed in language that is unique to the disciplines (Schleppegrell, 2004). This language is generally learned in school with proper instructional support, but it becomes more challenging as we progress through higher grade levels. For students who have little opportunity to use this language outside of school, it is crucial that the classroom environment facilitates the simultaneous learning of both language and content. (Brisk, 2015; de Oliveira, 2023). This is especially important for the many multilingual learners (MLs) who are present in schools across the United States, as it not only facilitates their engagement with the unique disciplinary practices of each subject area but also supports their overall disciplinary learning and language development. These students need instructional support in content and language as inseparable components—independent of whether they are placed in general education classrooms with no additional language services, in push-in or pull-out models of language instruction, or in bilingual programs.

This article offers examples of how to focus on content and language with MLs, highlighting a teacher preparation model—a language-based approach to content instruction (LACI) being implemented in classrooms in New York City Public Schools (NYC PS) through a 5-year collaboration with the Division of Multilingual Learners and the Department of Social Studies. LACI uses six Cs of support for scaffolding to highlight content instruction with a focus on language with MLs. In this article, we showcase part of this work by presenting an analysis of a text using the LACI framework to help teachers identify opportunities to focus on language. The opportunities refer to how teachers can

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implement the C of code-breaking, one of the six Cs of support. We show principles of code-breaking and how they can be used for planning instruction with a simultaneous focus on content and language.

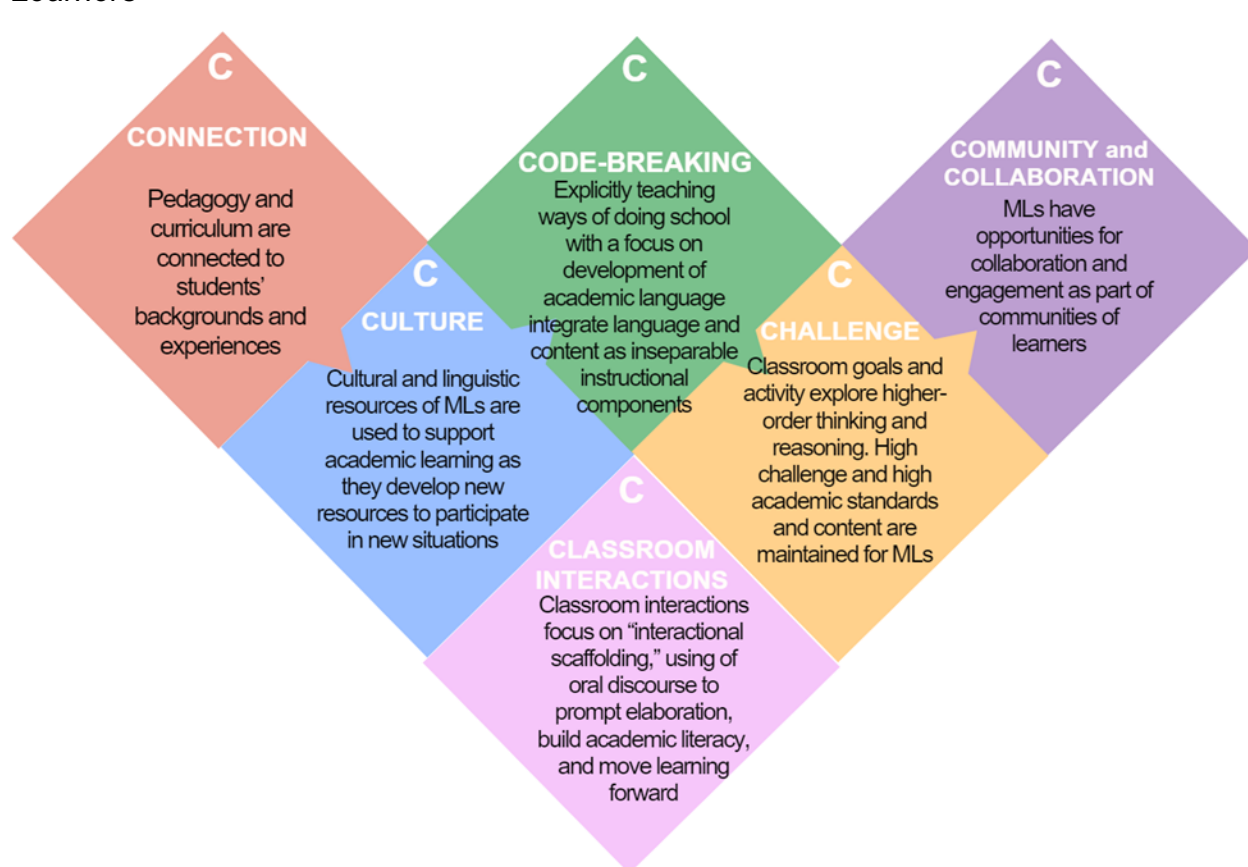
THEORETICAL FRAMEWORK

Language-Based Approach to Content Instruction

LACI prepares teachers to focus on content and language simultaneously with MLs. LACI is based on the theory of systemic-functional linguistics (SFL), which underscores the importance of language in the creation and interpretation of content (Halliday & Matthiessen, 2014; Schleppegrell, 2004). SFL encourages readers to go beyond traditional reading methods, allowing them to examine how content is communicated through unpacking meanings clause by clause (de Oliveira, 2020, 2023).

Figure 1

LACI's Six Cs of Support for Scaffolding Content Area Instruction for Multilingual Learners



Note. Adapted from de Oliveira (2023)

LACI highlights the subject matter in the classroom and helps teachers comprehend how language facilitates the formation of knowledge across various subjects (Honigsfeld et al., 2018). This approach offers a useful framework for application and

adaptation to content area classrooms (Honigsfeld & Dove, 2022). LACI is structured around six Cs of support for scaffolding (see Figure 1). The C of connection encourages teachers to connect different aspects of the curriculum to students' existing knowledge and experiences (Ladson-Billings, 2014). The C of culture assists teachers in forging connections between new skills and concepts and the cultural and linguistic assets of MLs (Valenzuela, 1999). The C of challenge involves creating learning goals and classroom activities for MLs that stimulate higher order thinking and reasoning and build high-challenge, high-support classrooms (Hammond, 2006). The C of community and collaboration underscores the importance of building communities, fostering collaborative work, and encouraging the collective generation of knowledge by both students and teachers (de Oliveira et al., 2021). The C of classroom interactions emphasizes the use of interactional scaffolding strategies, promoting oral discourse to stimulate further explanation, build academic literacy, and enhance learning (de Oliveira et al., 2020). The C of code-breaking highlights content and language integration as inseparable components and focuses on language development in the context of content learning. We highlight the C of code-breaking for English as a second language (ESL) teachers and bilingual specialists. Our guiding question is the following: How can code-breaking be demonstrated through a text analysis?

Code-Breaking

The C of code-breaking entails “explicitly teaching ways of doing school, academic language, as well as disciplinary, linguistic, and cultural codes of content learning” (de Oliveira, 2023, p. 18). Language and content are integrated as interdependent instructional components in code-breaking. Code-Breaking scaffolds academic language development. Viewing academic and everyday language along the same continuum is essential, as it encompasses the shifting dynamics between informal everyday language and formal technical language as well as transitions from spoken to written forms (Gibbons, 2006; Schleppegrell, 2013). Students learn a variety of registers—the variations in language use across different contexts and disciplines—in academic language that change depending on their age and the subject matter they study in class (Halliday & Hasan, 1989; Schleppegrell, 2004). To explore these registers, students must delve into their functioning by concentrating on the linguistic characteristics of the texts they engage with (de Oliveira, 2023). This is a significant component of code-breaking since it involves teachers and students talking about language. Teachers unpack the texts they use in instruction and design activities that help students center on language. Consequently, students gain insights into the registers employed by authors in specific content areas and equip themselves with linguistic resources they can incorporate into their writing. It is important to clarify the differences between code-breaking and code-switching. While code-breaking is a pedagogical approach focused on developing academic language proficiency, code-switching is a linguistic phenomenon in which individuals alternate between languages or language varieties in conversation (Kleyn & Garcia, 2019).

We developed five principles (see Figure 2) to guide teachers in implementing code-breaking to address academic language development in the content areas (de Oliveira, 2023):

- *Language is a meaning-making resource.* Every language has created ways of conveying various meanings. As a result, we highlight the role of language in the production of meaning. Our interest does not lie in a rule-based approach that defines which language is appropriate and which is inappropriate (Halliday & Matthiessen, 2014).
- *Language teaching needs to draw on full texts, not sentence-level work.* We examine language in the context of whole texts, rather than as separate, individual words and sentences (de Oliveira, 2023). Words or sentence-level activities that are unrelated to real-world tasks fail to enhance a student's ability to create meaning. Students should actively participate in unpacking texts and be given opportunities for communicating with the teacher and peers about these texts.
- *In language teaching and learning, we learn language, learn through language, and learn about language.* Language learning is a lifelong journey, it starts from birth and continues through adulthood. In every circumstance and setting, we are continually discovering new ways to use language. The language we learn is a reflection of our experiences. We learn through language since it is the medium of education in schools. Learn about language refers to building an understanding of how language functions in different circumstances and settings (Halliday, 1993).
- *Language is used in different ways in each content area to achieve disciplinary goals.* Since students develop both language and content knowledge at the same time, it is crucial that they comprehend the various expectations of academic language use across disciplines. Teachers should offer a classroom with a focus on language for MLs to discover how language contributes to the creation of knowledge in different subjects (de Oliveira, 2023).
- *Language teaching expands MLs' linguistic repertoires.* Teachers should draw on the cultural and linguistic resources that MLs bring to the classroom while also expanding their linguistic repertoires for meaning-making in various contexts and situations across the disciplines (de Oliveira et al., 2021).

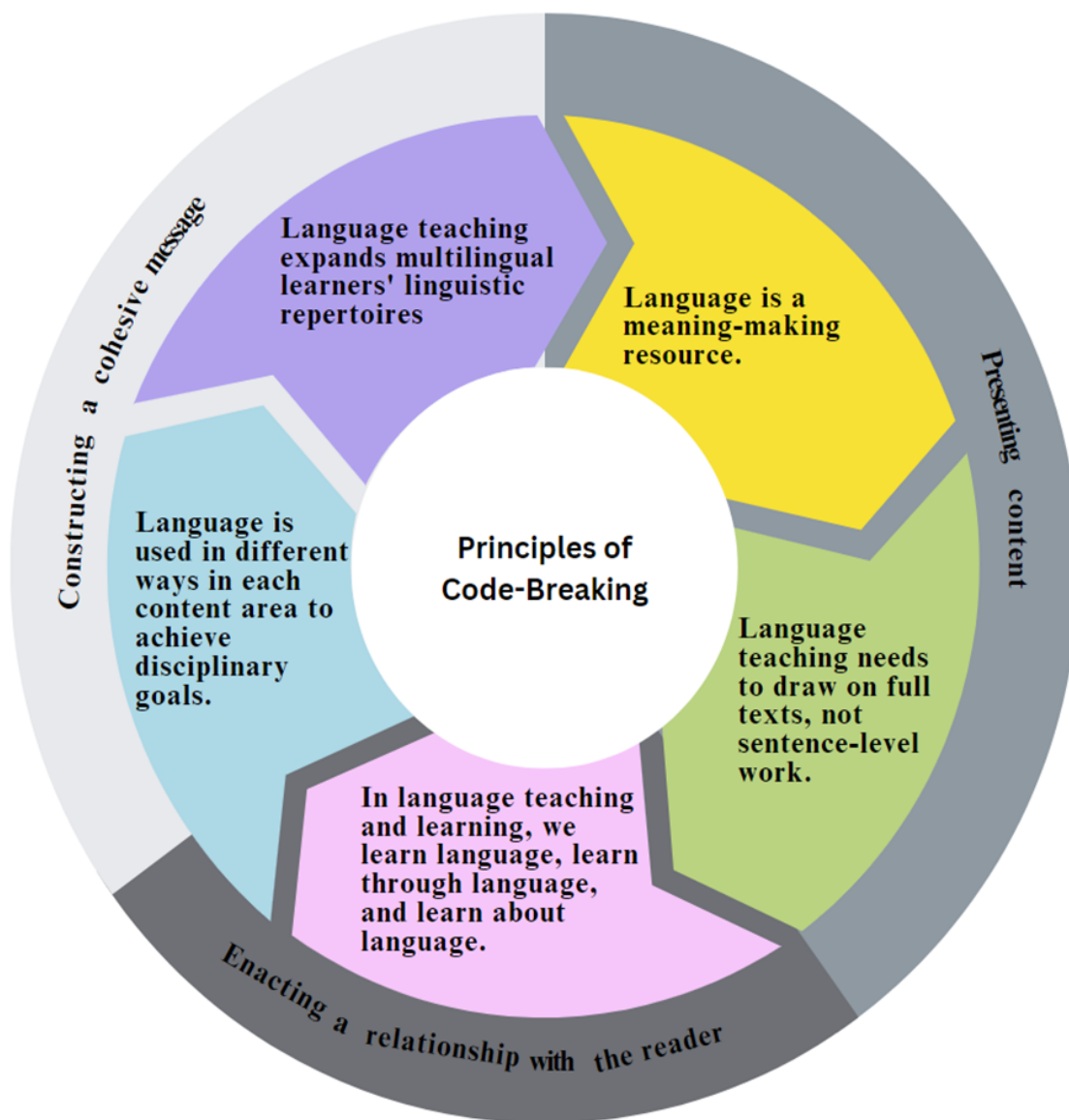
Drawing on SFL theory, in order to enact the principles of code-breaking, we focus on three areas of meaning (see Figure 3): presenting content, enacting a relationship with the reader, and constructing a cohesive message (de Oliveira & Schleppegrell, 2015). The three areas of meaning area reframing of the three metafunctions (ideational, interpersonal, and textual) from Halliday (2014) to make them more suitable for classroom applications (see Appendix A for more detailed examples of the three areas of meaning). The metafunctions were conceptualized with metalanguage that teachers have found more useful and understandable (de Oliveira et al., 2021).

Presenting Content

The functional approach to language that draws on SFL focuses on meaningful segments in context, as opposed to traditional approaches that concentrate on individual words in a sentence. Presenting content delves into *Participants* (nouns), actively involved in various *Processes* (verbs), under specific *Circumstances*

(prepositional and adverbial phrases; Halliday & Matthiessen, 2014). Teachers can identify segments of participants, processes, and circumstances to help MLs comprehend the meaning and linguistic aspects of each phrase while teaching content area texts. To show who is taking part in the process, participants are formed as nouns or noun groupings, which could be human or nonhuman. *Processes* are made up of verbs or verb groups, such as doing verbs, thinking verbs, relating verbs, feeling verbs, and saying verbs. Adverbs and prepositional phrases are used to describe *circumstances* in order to convey information about time, place, manner, reason, etc.

Figure 2
Principles of Code-Breaking



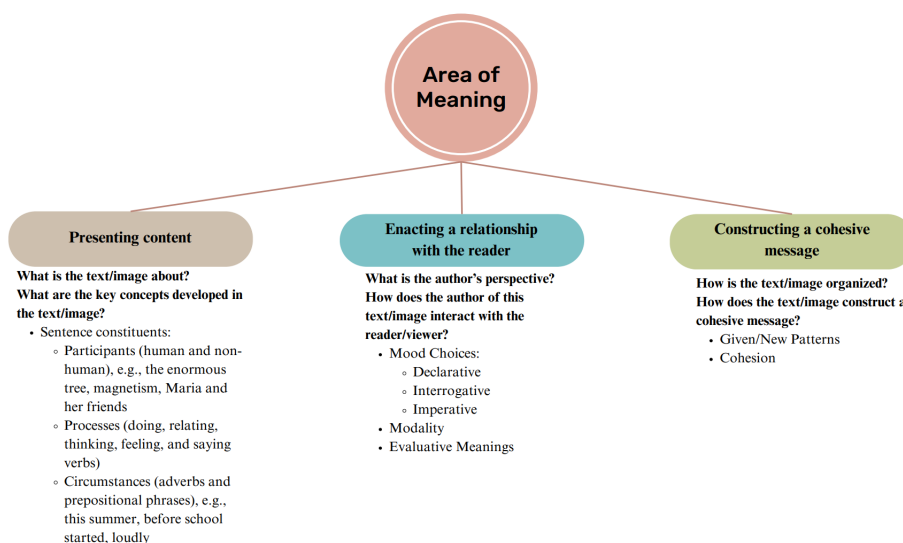
Enacting a Relationship With the Reader

Enacting relationship looks at aspects such as mood, modality, and evaluative language (de Oliveira, 2023; de Oliveira & Schleppegrell, 2015). There are three grammatical moods in English: declarative, interrogative, and imperative. The declarative mood is commonly employed for speech functions that make statements, interrogative for those that ask *questions*, and imperative for those that provide *commands*. Modality refers to modal verbs, modal adverbs, modal adjectives, and modal nouns that allow us to express possibility, normality, and necessity. Students will have a better understanding of how an author interacts with the reader by learning to recognize mood choices. The use of language in an evaluative manner is referred to as evaluative meanings. To be more precise, they may be attitude expressions, and these expressions may be assessed as demonstrating strength or power.

Constructing a Cohesive Message

Cohesion, which explores Given/New patterns, play a pivotal role in structuring the text and facilitating the content flow from sentence to sentence. The Given refers to known information, which is typically positioned at the beginning of a clause, while the New, or *unknown information*, takes up the rest of the clause (Halliday & Matthiessen, 2014). To provide more information, the new information in one clause is introduced as given in the next clause. Following Given/New patterns enables us to see how the language is structured from clause to clause and paragraph to paragraph (de Oliveira, 2023). Cohesion refers to the way a text stays together with cohesive devices—words or groups of words that create links within the text. Examples of cohesive devices include pronouns, demonstratives, connectors, synonyms and substitutes, and time and place makers.

Figure 3
Three Areas of Meaning



Note. Adapted from de Oliveira, 2023

AN ILLUSTRATIVE EXAMPLE

Context

This article draws on de Oliveira's 5-year collaboration with the Division of Multilingual Learners and the Department of Social Studies in the NYC PS, the largest school district in the United States, aimed at integrating language development with the content area of social studies.

To demonstrate how to implement code-breaking in the classroom, we selected a social studies text from the Hidden Voices curriculum from NYC PS. Hidden Voices is the result of collaboration between the NYC PS, a number of educational institutions, and scholars and is used in K-12 classrooms. This curriculum aims to develop a comprehensive set of skills in students, fostering critical and analytical thinking, empathy, personal relevance, research and communication skills, civic engagement, reflective practice, inclusivity, and historical thinking.

Specifically, the text comes from the *Hidden Voices: LGBTQ+ Stories in United States History Lesson Plans*, which is connected to the Passport to Social Studies curriculum. The text is part of the Grade 4 unit titled The Development of the Constitution. The Hidden Voices resource provides lessons for teachers that highlight LGBTQ+ voices that are often omitted from history teaching. This resource helps students in understanding and respecting individuals who challenged and disrupted conventional gender and sexuality norms, and as a result, were frequently overlooked in traditional historical narratives. These figures impacted society, politics, art, and the economy in various ways.

The lesson plan we used is entitled "Walt Whitman: A Poetic Vision for an Inclusive America." The focus question for the lesson plan is "What do Walt Whitman's poems reveal about his vision of American society and his role as a poet in that society?" (NYC PS, n.d., p. 66). The lesson objective is the following: "Students interpret the changing definition of democracy in 19th century American society by examining the poems of Walt Whitman and analyze Whitman's view of his own role in the nation's evolving inclusivity" (NYC PS, n.d., p. 66). The lesson plan also includes several New York State (NYS) Next Generation English Language Arts Learning Standards, which the entire lesson addresses. One in particular is relevant for the illustration we provide in this article: "4W5: Draw evidence from literary or informational texts to respond and support analysis, reaction, and research by applying Grade 4 reading standards" (NYC PS, n.d., p. 67). The lesson plan also addresses an important social studies standard: "Standard 1: History of the United States and New York," which is part of the NYS K-12 Social Studies Framework (NYS Education Department, 2014). This standard specifically states, "Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in the history of the United States and New York (NYS Education Department, 2014, p. 3). Therefore, an important social studies learning goal for this lesson is understanding the contributions of Walt Whitman to the United States and New York in particular, which the text we selected helps students to comprehend. By breaking down the text using code-breaking, teachers help students identify who and what the text is about, what content the text presents, the evaluative meanings presented in the text, and how the text is organized.

FINDINGS AND DISCUSSION

Drawing on the LACI framework, we analyzed the language of the text using the three areas of meaning. The text analysis revealed that sentence constituents, mood choices, evaluative meanings, Given/New patterns, and cohesion were the most relevant language areas.

Text Analysis

The text below is part of the “Walt Whitman: A Poetic Vision for an Inclusive America” lesson plan. It provides a biography of Walt Whitman. The text is marked by different colors and symbols to represent different academic language features.

Text: Biography of Walt Whitman

Walt Whitman was born, the second of nine children, in Huntington, Long Island, New York, on May 31, 1819. His family had lived in the area for over 125 years.

In 1823, the family moved to the city of Brooklyn. Walt loved reading and was largely self-educated. By 1835, he was working as a printer. Hard times forced him to return to Long Island with his family the following year. He stayed with them until 1841. From then on, he worked as a journalist and writer.

In the spring of 1855 Whitman published his epic *Leaves of Grass*. It was a thin volume of poems written in an all-new style, called “free verse.” He was a personal and political poet, and his poetry celebrated the self, the city, nature, and the future of America. Today *Leaves of Grass* is considered a masterpiece of world literature.

Walt’s brother was wounded at the start of the Civil War, so Walt left Brooklyn to search for him. Shocked by what he saw, he made over 600 visits to military hospitals around the capital to comfort and care for the wounded as a volunteer nurse. His time in the war provided him with material for a new addition to *Leaves of Grass* entitled “Drum Taps,” and changed his poetic focus. He was no longer just a poet from New York or Long Island; he now belonged to and spoke for the nation.

Walt spent the remainder of his life in Camden, New Jersey. He filled his time with travel, revising *Leaves of Grass*, and writing new prose and poetry with the help of friends. His final edition of *Leaves of Grass* appeared in 1892, the same year he died. By the end of his life, Whitman had become the first American poet to achieve international fame.

Using Figure 3, we deconstructed the text and highlighted the language features with different colors and marks. Participants are in light blue, processes are highlighted in yellow, and circumstances are in purple (place) and pink (time).

Presenting Content

The main participant of the text is *Walt Whitman*, referred to as *Walt*; *Whitman*; and the pronouns *he*, *his*, and *him*. One key nonhuman participant that is important in the text is *His time in the war*, which is important to understand how the war influenced Whitman’s

poetry. Processes are in the past tense (e.g., *moved, loved, stayed, published*) because this is a biographical recount of Whitman's life. Circumstances show where Whitman was born, where he lived, and where he traveled to. The circumstances of place show that his influence moved from local to "the nation" and internationally by the end of the text (e.g., *in Huntington, Long Island, New York; to the city of Brooklyn; from New York or Long Island; for the nation.*)

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Enacting a Relationship With the Reader

The entire text uses declarative mood (statements) to present factual and straightforward information about Whitman, and the author does not interact with the reader by asking questions or using imperatives. Some examples include the following: "His family had lived in the area for over 125 years" and "In 1823, the family moved to the city of Brooklyn."

The aim here is to convey accurate details about Whitman's life, career, and contributions without expressing doubts, commands, or questions. Evaluative meanings are mainly used to evaluate *Leaves of Grass* or describe Whitman's poetry. In the annotated text below, these evaluative meanings, particularly those pertinent to *Leaves of Grass* and Whitman's poetic techniques, are marked in green. It is important to note that this annotation highlights only a selection of evaluative meanings that are directly relevant to Whitman's work and style.

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Constructing a Cohesive Message

Cohesion is achieved through using pronouns (in orange) to refer back to Whitman (e.g., he, his, him). Time markers—the circumstances identified under presenting content—organize the text chronologically (e.g., *on May 31, 1819; In 1823; By 1835; the following year; until 1841; From then on; In the spring of 1855; Today; at the start of the Civil War; in 1892, the same year; By the end of his life.*) As we are reading this text, we can understand the various events of Walt Whitman’s life organized in a chronological sequence.

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Our analysis of the Walt Whitman text using the three areas of meaning highlights the principles of code-breaking identified in this article. By looking closely at the language features that construct content in social studies, we show how *language is a meaning-making resource*. The analysis is at the text level, not decontextualized sentence-level or word-level work, showing that *language teaching needs to draw on full texts*. We explore language patterns in the biography genre so that in our teaching we can unpack this language with all students and especially MLs. By doing so, we are learning language, learning through language, and learning about language. This work specifically highlights *learning about language*, as the teacher and students build an understanding of how language functions. Teachers can explore the sentence constituents (participants, processes, and circumstances), show how the biography is constructed with statements in the declarative mood with evaluative meanings to illustrate perspectives, and identify how the text is organized with time markers and pronouns.

The content area of social studies often uses chronology to organize sequences of events, as we show in our analysis, and this highlights that *language is used in different ways in each content area to achieve its goals*. As we show in the next section on instructional planning, language teaching expands MLs' linguistic repertoires. As teachers explore the language of the text, they expand MLs' linguistic repertoires for meaning-making in the content area of social studies.

Instructional Planning for Language and Content Integration Through Code-Breaking

After a detailed language analysis of the text using the three areas of meaning, we developed more questions regarding the content that were not specified by the general guiding questions in Figure 3. This section shows how to plan instruction that emphasizes language and content at the same time using the LACI framework.

In Table 3, Instructional Planning With an Emphasis on Language and Content, the left column displays the three areas of meaning. The second column shows questions of content features that could help teachers to deconstruct the language in the text. We are aware that instructional planning is undoubtedly multifaceted. However, the emphasis on teacher questioning in this table speaks to its importance in effective teaching. Through questions, teachers can create dynamic, interactive, and reflective learning experiences that cater to the diverse needs and abilities of their students. The third column lists the language focus that teachers can use to identify specific language features in the text. The column on the far right gives examples of the language functions and features that were identified in the text.

Besides asking students, "What is the text about?," the teacher could add the question, "Who is Walt Whitman?" to help them learn about his occupation as a poet, journalist, writer, and printer. A third question could be, "What was Whitman's first

publication?” Students should know that the poetry collection *Leaves of Grass* is Whitman’s most famous work. The next question, “What does Whitman’s poetry celebrate?,” provides students a chance to learn a parallel construction “. . . his poetry celebrated the self, the city, nature, and the future of America.” Students can explore how the war influenced Walt’s poetry to change it to what it became after the war by answering the following question: “How did Walt’s brother influence Walt’s poetry?” The last question of presenting content is, “How did the war impact Whitman’s poetic focus?” The answer, “His time in the war provided him with material for a new addition to *Leaves of Grass* entitled ‘Drum Taps,’ and changed his poetic focus,” gives examples of prepositions that show cause and effect.

After learning the mood of the text (see Findings and Discussion section for details), the teacher could guide students to focus on the tenses of the text. For example, “Walt Whitman was born. . .” is past tense, and “His family had lived in the area for over 125 year.” is past perfect. “He was working as a printer” is past continuous. It is better to have students find the rest of the tenses, compare them, and discuss their usage.

The question, “During what time did Whitman leave Brooklyn to search for his brother?” offers students a chance to learn the function of time markers in the text.

Table 3

Instructional Planning with an Emphasis on Language and Content

Area of meaning	Questions of Content Features to Guide Language Deconstruction	Language Functions and Features	In the Text
Presenting content	What is the text about? Who is Walt Whitman?	<ul style="list-style-type: none"> • Participants • Professional nouns 	<ul style="list-style-type: none"> • Walt Whitman • poet, journalist, writer, printer
	What was Whitman’s first publication?	<ul style="list-style-type: none"> • Participant • Poetry collection 	<ul style="list-style-type: none"> • Leaves of Grass
	What does Whitman’s poetry celebrate?	<ul style="list-style-type: none"> • Parallel construction 	<ul style="list-style-type: none"> • “...his poetry celebrated the self, the city, nature, and the future of America”
	How did Walt’s brother influence Walt’s poetry?	<ul style="list-style-type: none"> • Pronoun he • Process made 	<ul style="list-style-type: none"> • “...he made over 600 visits to military hospitals around the capital to comfort and care for the

			<ul style="list-style-type: none"> wounded as a volunteer nurse.” Explore “over 600 visits to military hospitals around the capital to comfort and care for the wounded as a volunteer nurse” with students to show how the war influenced Walt’s poetry to change it to what it became after the war.
	How did the war impact Whitman’s poetic focus?	<ul style="list-style-type: none"> Prepositions that show cause and effect 	<ul style="list-style-type: none"> “... His time in the war provided him with material for a new addition to Leaves of Grass entitled ‘Drum Taps,’ and changed his poetic focus”
Enacting a relationship with the reader	How does the author of this text interact with the reader?	<ul style="list-style-type: none"> Declarative: to give statements about Walt Whitman Past tense, past perfect, past continuous 	<ul style="list-style-type: none"> “Walt Whitman was born...” “His family had lived in the area for over 125 years.” “He was working as a printer.” (there are so many examples in the text)
Constructing a cohesive message	How is the text organized?	<ul style="list-style-type: none"> Cohesion - using time markers to organize the text Using referrers, especially pronouns, to refer back to Walt Whitman as participant 	<ul style="list-style-type: none"> Time Markers: May 31, 1819; In 1823; By 1835; From then on; In the spring of 1855... Pronouns: his, him, he...

During what time did Whitman leave Brooklyn to search for his brother?

• Time markers

• “Walt’s brother was wounded **at the start of the Civil War**, so Walt left Brooklyn to search for him.”

The three areas of meaning and their general guiding questions helped us analyze the text. To transition from analysis to effective instructional planning, there is a need to integrate an additional layer—the consideration of content features. This integration is crucial for guiding the process of language deconstruction. By aligning the questions related to content features with those of the three areas of meaning, teachers can more effectively dissect and address complex language and content. This approach not only aids in a deeper understanding of the material but also equips teachers with the necessary tools to tailor their instruction to meet diverse learning needs. Such a comprehensive strategy ensures that teaching transcends beyond basic text analysis, fostering an environment in which language and content are cohesively presented for enhanced educational outcomes.

CONCLUSION AND RECOMMENDATIONS

In this article, we introduce an approach to implement the C of code-breaking in classrooms with MLs using three areas of meaning: presenting content, enacting a relationship with the reader, and constructing a cohesive message. We also describe the five principles of the C of Code-Breaking that connect to these three areas of meaning. Code-breaking and classroom interactions are the core of the LACI framework because code-breaking is how teachers plan and focus on language in an ESL pull-out context, bilingual classroom, or content area classrooms with the content standards. Classroom interactions focus on the use of interactional scaffolding moves. These two Cs are supported by the other Cs, which include teachers utilizing students’ home cultures; relating to their experience; and creating high-challenge, high-support classrooms to move beyond simplification of both language and content, in collaborative ways that enhance communities of learners.

Next, we present some general recommendations for teachers to teach texts to MLs. To engage MLs and other students in discussions about content area texts—in any content area—teachers can use the following questions to guide their work. It is important to select key texts that are a few paragraphs or longer so students have opportunities to engage with the content they are learning and also learn more about the language that constructs that content.

- **What is the text about?** To answer this question, teachers should identify the key participants and their roles in the text, which are nouns or noun groups that appear as participants together with processes (verbs); identify processes—*doing, relating, thinking, feeling, and saying verbs*—that show what is going on; and identify the circumstances—*adverbs and prepositional phrases* that provide information about time, place, cause, manner and so on.

- **How does the author of the text interact with the reader?** Teachers should identify the mood choices of the text, such as, “Is the clause declarative, interrogative, or imperative?” Teachers should also identify evaluative meanings that help construct the author’s perspective.
- **How is the text organized?** Teachers should identify cohesive devices, such as *pronouns, demonstratives, connectors, synonyms, and substitutes*; as well as *time and place markers*.

The recommended practices are applicable to texts in different content areas and can be used by content area teachers as well as ESL teachers. Different texts in various genres include language features appropriate for those genres. We encourage teachers to apply this approach with various texts in their classrooms to offer more opportunities to enhance MLs’ content and language development. Teachers have the flexibility to focus on specific meaning domains or linguistic features tailored to the content area text at hand, without the necessity of covering every aspect in each analysis. We also encourage teachers to use the principles of the C of code-breaking to guide their thinking and application of this approach in their classrooms.

REFERENCES

- Brisk, M. E. (2015). *Engaging students in academic literacies: Genre-Based pedagogy for K-5 classrooms*. Routledge.
- de Oliveira, L. C. (2020). Planning and application using a language-based approach to content instruction (LACI) in multilingual classrooms. *MinneTESOL Journal*, 36(2), 1-8.
- de Oliveira, L. C. (2023). *Supporting multilingual learners’ academic language development: A language-based approach to content instruction*. Routledge.
- de Oliveira, L. C., Braxton, D., & Gui, J. (2021). Planning for instruction using a language-based approach to content instruction for multilingual learners. *Journal of English Learner Education*, 13(1), 12-29.
- de Oliveira, L. C., Jones, L., & Smith, S. L. (2020). Interactional scaffolding in a first-grade classroom through the teaching–learning cycle. *International Journal of Bilingual Education and Bilingualism*, 26(3), 270-288.
<https://doi.org/10.1080/13670050.2020.1798867>
- de Oliveira, L. C., Jones, L., & Smith, S. L. (2021). A language-based approach to content instruction (LACI) for multilingual learners: Six Cs of scaffolding in first grade. *Journal of language, Identity & Education*, 1-16.
<https://doi.org/10.1080/15348458.2021.1885409>
- de Oliveira, L. C., & Schleppegrell, M. J. (2015). *Focus on grammar and meaning*. Oxford University.
- Gibbons, P. (2006). *Bridging discourses in the ESL classroom: Students, teachers, and researchers*. Continuum.
- Halliday, M. A. K. (1993). Towards a language-based theory of learning. *Linguistics and Education*, 5(2), 93-116.

- Halliday, M. A. K., & Hasan, R. (1989). *Language, context, and text: Aspects of language in a social-semiotic perspective*. Oxford University Press.
- Halliday, M. A. K., & Matthiessen, C. M. I. M. (2014). *An introduction to functional grammar* (4th ed.). Routledge.
- Hammond, J. (2006). High challenge, high support: Integrating language and content instruction for diverse learners in an English literature classroom. *Journal of English for Academic Purposes*, 5, 269-283.
- Honigsfeld, A., & Dove, M. (2022). *Co-planning: 5 essential practices to integrate curriculum and instruction for English learners*. Corwin Press.
- Honigsfeld, A., McDermott, C., & Cordeiro, K. (2018). Preparing social studies and ESOL teachers for integrated language and content instruction in support of ELLs. In L. C. de Oliveira & K. Obenchain (Eds.), *Teaching history and social studies to English language learners: Preparing pre-service and in-service teachers* (pp. 127-158). Palgrave Macmillan.
- Kleyn, T., & García, O. (2019). Translanguaging as an act of transformation: Restructuring teaching and learning for emergent bilingual students. In L. C. de Oliveira (Ed.), *The handbook of TESOL in K-12* (pp. 69-82). Wiley & Sons.
- Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: A.k.a. the remix. *Harvard Educational Review*, 84(1), 74-84.
<https://doi.org/10.17763/haer.84.1.p2rj131485484751>
- New York City Public Schools. (n.d.) *Hidden voices: LGBTQ+ stories in United States history lesson plans*. <https://www.weteachnyc.org/resources/resource/hidden-voices-lgbtq-stories-in-united-states-history-lesson-plans-Public-facing/>
- New York State Education Department. (2014). *New York State K-12 social studies framework*. <https://www.nysed.gov/sites/default/files/programs/curriculum-instruction/ss-framework-k-12-intro.pdf>
- Schleppegrell, M. J. (2004). *The language of schooling: A functional linguistics perspective*. Erlbaum Associates.
- Schleppegrell, M. J. (2013). Systemic functional linguistics. In J. P. Gee & M. Handford (Eds.), *The Routledge handbook of discourse analysis* (pp. 21-34). Routledge.
- Valenzuela, A. (1999). *Subtractive schooling: U.S.-Mexican youth and the politics of caring*. State University of New York.

Appendix A

Three Areas of Meaning and Language Features

Area of Meaning	Language Features		
Presenting content	Sentence Constituents	Participants (nouns)	E.g., the enormous tree, magnetism, Maria and her friends
		Processes (verbs)	Doing verbs (e.g., move, stay, publish)
			Relating verbs (e.g., is, have)
			Thinking verbs (e.g., know, believe, think)
			Feeling verbs (e.g., love, appreciate)
Saying verbs (e.g., ask, explain, suggest)			
Circumstances (adverbs, prepositional phrases)	E.g., this summer, before school started, loudly		
		Enacting a relationship with the reader	Mood choices
Interrogative (question)			
Imperative (command)			
Modality	Modal verbs (e.g., can, could, may)		
	Modal adverbs (e.g., probably, certainly)		
	Modal adjectives (e.g., possible, necessary)		
	Modal nouns (possibility, uncertainty)		

	<p>Evaluative Meanings</p>	<p>Positive Evaluations</p> <p>Weak: His performance was not bad.</p> <hr/> <p>Moderate: The breakfast was good.</p> <hr/> <p>Strong: The concert was fantastic!</p> <hr/> <p>Negative Evaluations</p> <p>Weak: The ending of the novel was a bit disappointing.</p> <hr/> <p>Moderate: The meeting was unpleasant.</p> <hr/> <p>Strong: The accident was horrible.</p> <hr/> <p>Neutral Evaluations</p> <p>This painting is different from her usual work. The ecosystem in the rainforest is varied.</p>
<p>Constructing a cohesive message</p>	<p>Given/New Patterns</p> <hr/> <p>Cohesive devices and links</p>	<p>Walt Whitman was born, the second of... His family had lived...he was working as a...</p> <hr/> <p>Pronouns (e.g., he, they, her)</p> <hr/> <p>Demonstratives (e.g., these, those)</p> <hr/> <p>Synonyms and substitutes (e.g., The book provides a comprehensive overview of American history. This resource is invaluable for students studying the subject. The book – This resource)</p> <hr/> <p>Connectors (e.g., and, then, if, so)</p> <hr/> <p>Time and place markers (e.g., In 1823..., at the start of the Civil War...</p>