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Using SFL-based text analysis to inform instruction for emergent bilingual learners

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Abstract

Emergent Bilingual Learners (EBs) need language-focused instructional support if they are to access content, make meaning, and engage critically with academic texts in English. Text analysis informed by systemic functional linguistics (SFL) helps teachers identify "the language of schooling" (Schleppegrell, 2004) which they will need to make visible to their students. The authors, both teacher educators in an ESOL endorsement program, recognize that both the teacher candidates who are analyzing texts and the students whose instruction will be informed by the analysis engage in literacy practices that may not be recognized and valued by all teachers or aligned with the language demands of mandatory, high-stakes assessments. With that in mind, we envision a text analysis assignment that promotes language as meaning based, rather than rule based, and additive, rather than subtractive (Garcia, 2009) in terms of the language resources of teachers and students in language learning settings. Additionally, we look for ways to support our teacher candidates in interrogating texts critically as part of their analysis to uncover dominant perspectives. This practice-based article models the process of SFL-based text analysis facilitated by a text analysis tool we designed. The goal is that teachers can apply what they have learned from their analysis to create language-focused instruction that both supports academic language learning and promotes critical stances towards the connections between language choices and meaning making in specific academic contexts/disciplines. Additionally, we encourage teachers to use a variation of this text analysis format with students to explore how language is used in the text to develop all languages in the students' linguistic repertoire.

Keywords systemic functional linguistics, text analysis, teacher education, academic language

1. Introduction

Unlike students whose dominant language is English, EBs enter classrooms with linguistic resources and literacy practices that frequently misalign with the classroom literacy practices that are valued by the school (Van Herk, 2018). Thus, they are not only tasked with learning academic content but also with learning new ways of using language that are valued as "academic" (Gebhard, et. al, 2008; Gibbons, 2015). Because of this twofold challenge faced by EBs, it is critical for educators to facilitate students' understanding and use of language to comprehend content while simultaneously learning the English language. This dual instructional focus on language form and function can be accomplished through explicit instruction regarding discipline specific language and the various discourses of language. Beyond supporting language development of all their students, teachers also are charged with developing students' abilities to think critically about text. Our approach to text analysis goes beyond helping teachers highlight the language of their discipline. Instead, it supports teachers in using their analysis to create instruction that helps EB students in being critical language users who disrupt and challenge dominant discourses and perspectives in their classroom texts.

2. What is Academic Language?

Academic language is a broadly used term that refers to the way meaning is made in school contexts. It is often associated with technical or field-based vocabulary, complex sentence structure, and linguistic density (i.e., the use of nominalizations to represent complex actions in one word). Zwiers (2014) uses the metaphor "brick and mortar" to describe academic language, explaining that "brick" terms are content-specific and technical, while "mortar" terms are connecting words necessary in constructing coherent thoughts. Diaz-Rico & Weed (2002), expand the idea of academic language beyond vocabulary and content words and phrases, defining it as a "cognitive toolbox—a set of thinking skills and language abilities used to decode and encode complex concepts" (p. 1). In that vein, Zweirs (2014) further defines it as "a set of words,

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grammar, and discourse strategies used to describe complex ideas, higher-order thinking processes and abstract concepts" (p. 22). In other words, academic language is not a set of memorized or high-level vocabulary. Instead, it's a skill set for interacting with academic language such as content specific vocabulary in academic textbooks.

This concept of academic language dominates educator preparation discourse, yet it is not without detractors, who interrogate the racial and social ideologies espoused by traditional definitions of academic language. While it is critical to focus on these aspects of academic language to present lessons that are accessible to students to facilitate content area comprehension and language development, Flores (2020) encourages us to shift our ideologies to thinking of academic language through a lens of language architecture to avoid labeling emergent bilingual students as linguistically deficient. He pushes back against deficit perspectives of multilingual students, stating, "... adopting the perspective of language architecture frames these students as already understanding the relationship between language choice and meaning through the knowledge that they have gained through socialization into the cultural and linguistic practices of their communities" (p. 25).

Similar affordances of linguistic expertise should be recognized in the lives of the new educators we teach in our educator preparation program. Many of our students are bilingual or come from backgrounds in which linguistic experiences were rich, but mismatched with the linguistic expectations valued by the university faculty, the majority of whom identify as white, cisgender, middle-class, English dominant people. We view our approach and tools for language analysis as an opportunity to reframe the approach we have taken historically to increasing knowledge of language and critical thinking for the new teachers in our program. We aim to create a tool that promotes an instructional practice that allows our students to view language through an asset- based lens that uses their own students' funds of knowledge (Vélez-Ibáñez & Greenberg, 1992), funds of identity (Saubich & Esteban-Guitart, 2011), and language practices of emergent bilinguals (Flores, 2020) to augment language development, while providing a framework for forecasting the language needs of their own students for purposeful instructional planning.

3. What is Systemic Functional Linguistics?

Amid all of the contested ideas about the definition of academic language and the need to resist its dominant ideological basis, SFL has emerged as a tool for teachers to engage in language analysis (Gebhard & Accurso, 2023). SFL theorists conceive of language beyond arbitrary rules to be memorized and followed, but as an essential tool for meaning making. Every instance of meaningful communication derives from a series of language choices which function concomitantly to delineate the relevant topics (field), shape the expected level of familiarity and formality (tenor), and reflect whether something is written or spoken (mode). These three variables (field, tenor, and mode) work together to create a particular context in which language conveys meaning.

The way these register variables combine to make meaning is evident when contrasting texts with similar topics but different contexts. The first example presented to explore this notion represents a social encounter between friendly colleagues and the second example is an (author constructed) excerpt from a social studies textbook. These examples demonstrate the complexity of making meaning and of different uses of language within registers.

Table 1. Social vs. Academic Textbook Language Use

Social Language	**Text Message Between Two 8th Grade Social Studies Teachers**: Hey, we covered the American Revolution today in a flash! The kids loved the part about the Boston Tea Party. Did y'all finish the unit?😊	Notes: <u>Field</u>: Social Studies <u>Tenor</u>: Friendly, informal exchange established by direct address. <u>Mode</u>: Use of spoken discourse like "Hey" and direct address and questions.
Textbook Academic Language	**Social Studies Textbook for 8th Graders**: According to scholars, the American Revolution represents the most important historical event in United States History.	Notes: <u>Field</u>: Social Studies <u>Tenor</u>: Formal. Uses "According to Scholars" to establish authority. Uses appraisal resources to categorize the even as "the most important historic event." <u>Mode</u>: Reflects a written mode with nominalized forms such as "the important historical event"

SFL-based text analysis highlights the differences in contexts established by the language choices in each text by focusing on field, tenor, and mode. The first instance is a text message to a fellow teacher, who is also presumably, based upon the language choices in the text, a friend and colleague of the recipient, concerning what was taught in an 8th grade Social Studies class today. The second example is an excerpt from a social studies textbook designed for 8th graders. It is clear that while the broad topic of social studies remains the same in both instances, the contexts are radically different as evidenced by the level of engagement and formality, and the amount of

background provided. In the first instance, the field consists of topics related to government and/or history, but the tenor and the mode reflects language choices that construct an intimate relationship between friendly colleagues who share background knowledge of the topic. These friendly colleagues use informal terms, include semiotic resources such as emojis, and omit background information that would be superfluous given their shared background knowledge. In the second instance, a textbook designed for 8th grade students, the field may consist of similar historical topics, but the tenor would be more formal, and the mode would reflect written academic language typical of a textbook found in school.

The aspect of formality is interesting. Teachers frequently pinpoint when a written text seems formal or more academic, but may struggle to identify the exact linguistic features, beyond vocabulary, that contribute to this perceived formality. SFL analysis helps teachers to recognize the role certain language features play in the construction of a formal tenor so they may plan to highlight those features in their instruction to facilitate comprehension and language learning. For instance, starting the sentence with the clause "According to scholars" as the Theme (as SFL folks would call the initial position in the clause), establishes authority and makes arguing or questioning the Rheme (an SFL term used to refer to the new information shared in the clause) more difficult. We believe an SFL-based text analysis exercise helps our teacher candidates to raise their language awareness so they may recognize the way the language choices establish authority, privilege certain dominant perspectives, and silence others and design instruction that increases their own students' critical language awareness.

Many authors of academic textbooks, even those designed for younger children, may use language to construct a formal tenor in academic writing. However, in an effort to make connections with students, some authors weave aspects of spoken discourse or and/or social language into passages that are primarily academic. While such a rhetorical move may serve to connect with readers, teachers need to be aware that these examples of shift in tenor exist in textbooks, so that they underscore to their students that the shift is intentional and purposeful rather than random with the goal of facilitating student comprehension and language learning.

Contrasting the excerpts from a friendly text and an academic textbook illustrates key aspects of how language choices construct a particular context. In the text message, the writer starts with the interjection, "Hey" that directly addresses the reader and serves to claim the floor and get attention and ends with a question directly posed to her friend. Text messages, while meant to be read, are designed to replace speech and often resemble a conversation in print. Therefore, employing an idiom such as "in a flash" instead of "quickly" or "expeditiously" is expected. As is the direct question, using the inclusive pronoun "y'all."

In contrast, the academic textbook excerpt begins with the dependent clause "According to scholars" that functions to establish authority of the subsequent claim (in SFL terms this clause serves as an element of tenor,

particularly drawing on the appraisal framework). Furthermore, the writer chooses the actions ``represent" and "constitute" which are considered existential processes in SFL and function to show something exists and is happening, but that the actor or agent is not the most important part of this clause (similar how the use of passive voice in history, civics, and science can deemphasize agency and emphasize the action over the agent).

Additional language choices that help to construct a more formal tenor in a social studies or civics textbook typically include:
• avoiding direct address of readers;
• employing technical terms for aspects of geography and history;
• creating nominalizations to deemphasize agency in historical events;
• adding temporal markers frequently to emphasize chronological advancement.

When we use language in situations such as those illustrated above, we most likely do not consciously consider these choices, and given that they have been adopted as part of our routine language use, they may seem to come "naturally" to us. For emergent multilingual students, who indeed may enter the classroom with sophisticated ways of making meaning in their dominant language, are in the process of learning a new language and learning content through that new language; therefore, it is important to remember that implicit ways of making meaning in their new language don't come "naturally" at all and need to be made visible through language- focused classroom instruction (Gibbons, 2015).

4. SFL in Teaching and Teacher Education

SFL has become increasingly useful for educators to deepen their understanding of how language functions in academic settings and use their language knowledge to enrich their teaching of EBs (Accurso & Gebhard, 2023; Moore, Schleppegrell, & Paliscar, 2018). That linguistic knowledge can inform their construction of language supports in the multilingual classroom (Brisk, 2015; de Oliveira, et al 2021, Schulze, 2016). Teacher educators are increasingly incorporating SFL-based text analysis into their teacher preparation programs to help new teachers gain an understanding of how language works in their discipline (i.e., social studies, math, and science) and how to translate that linguistic knowledge into culturally relevant language teaching practices (Schulze, 2015; Harmon & Burke, 2020; Mizzell, 2020).

5. Academic Textbook Analysis: Definition and Importance

With this need for language to be made explicit to EB students, SFL informed text analysis can help teacher candidates systematically examine how language is used to make meaning at the discourse level (it's organizational

structure and how it unfolds to accomplish its purpose), the clause level (how syntax and lexical choices combine), and even more minutely at the lexical (word choice) and morphological (word part) level. This level of analysis allows teachers to see how discipline specific texts construct meaning using language that is recognized and valued in school settings.

Textbook analysis has received the attention of a number of researchers (deOliveira, et. al 2021; To, 2018). These researchers approach textbook analysis through comparative analysis, content analysis, or structural analysis. Previous significant research has explored analysis of the language of textbooks, using SFL among other theories, to gain a deeper understanding of meaning making resources such as discipline specific language (Schulze, 2015) and multimodal semiotic resources in foreign language textbooks (O'Halloran & Fei, 2014; Liu, 2022).

As teacher educators, we have long employed Ragan's (2005) practice-based article in our classes. Ragan guides readers through the textbook analysis process by introducing a tool that helps the reader/analysts move through three actions: identifying the main ideas and objectives, pinpointing difficult language (i.e., vocabulary, grammatical structures and cohesive devices), and deciding what to teach based on the analysis. Our approach to textbook analysis builds on Ragan's significant work but aims not only to assist teachers in analyzing academic textbook language use but also to value and use the linguistic knowledge students already possess to discover ways to interrogate texts from a critical perspective. Through our reconceptualization of the textbook analysis process, we hope to assist teachers as they analyze school texts to uncover hidden biases and interrupt dominant discourses through authentic language use, while maintaining Ragan's emphasis on transforming analysis into language focused teaching practices. Ultimately, our text analysis approach aims to provide equity for EB students by providing access to language and content area information through road mapping anticipated challenges in a text and translating that road map into effective lesson plans.

6. Methods: The Process

In this section, we demonstrate the step-by-step process we use in our language acquisition and educational linguistics classes in our ESOL endorsement program courses.

Step 1. Identify the genre.

Teachers can follow a step-by-step procedure to analyze texts they will be using with their learners. The first step is to identify the overarching purpose of the text, or what SFL calls the macro-genre (Martin & Rose, 2008) by locating the main ideas and purpose in the text. While several genres may be embedded within a text as secondary genres (i.e., an argumentative essay may contain explanations and narratives), when beginning the text analysis, teachers should first ask, what is the overarching purpose of this text? This intended purpose indicates the expected genre structure of the text. Rose and Martin (2012) identify three primary expectations for how students are to use language in school: engage, inform, and evaluate. They then break down these major purposes first into a number of genres, then into some recognizable text types teachers may be familiar with. Figure 1 depicts this in detail (Rose & Martin, 2012).

Step 2. Identify the Genre Structure and Language Features

Texts that are representative of a particular genre follow recognizable discourse structures and use language to accomplish their purpose. When analyzing the genre of a text, one should consider its purpose and how the text is organized to help fulfill that purpose. For instance, academic social studies texts customarily include chronologies of historical events (e.g., the Boston Tea Party or The Moon Landing). Chronological events are typically structured as a recount with events unfolding in chronological order. Temporal connectors (i.e., "initially", "at first", "meanwhile," and "after") and words and clauses (i.e., "upon the completion of" and "before"), facilitate coherence and cohesiveness when recounting historical events.

Another genre often found in civics and social studies textbooks is explanation. Readings in Civics and Social Studies often attempt to convey the responsibilities of citizenship by explaining the duties of citizens in society. The genre of explanation would be structured with units and chapters composed of paragraphs explaining the history, policy, and details related to these duties. Within those units and corresponding chapters and paragraphs, readers would expect subtitles summarizing key themes found in the subsequent paragraphs, general statements with details about laws and processes, historical recounts of events, and analysis of the impact of those events on present civic duties. Readers expect language to be used in a way that is aligned with the text's purpose. Below, we present a chart that shows some of the language choices that help accomplish the genre of academic explanations. Analyzing the genre structure & corresponding text features prior to reading a text with students allows a teacher to plan for teaching specific structures & features that may be new to students in order to facilitate comprehension and language development.
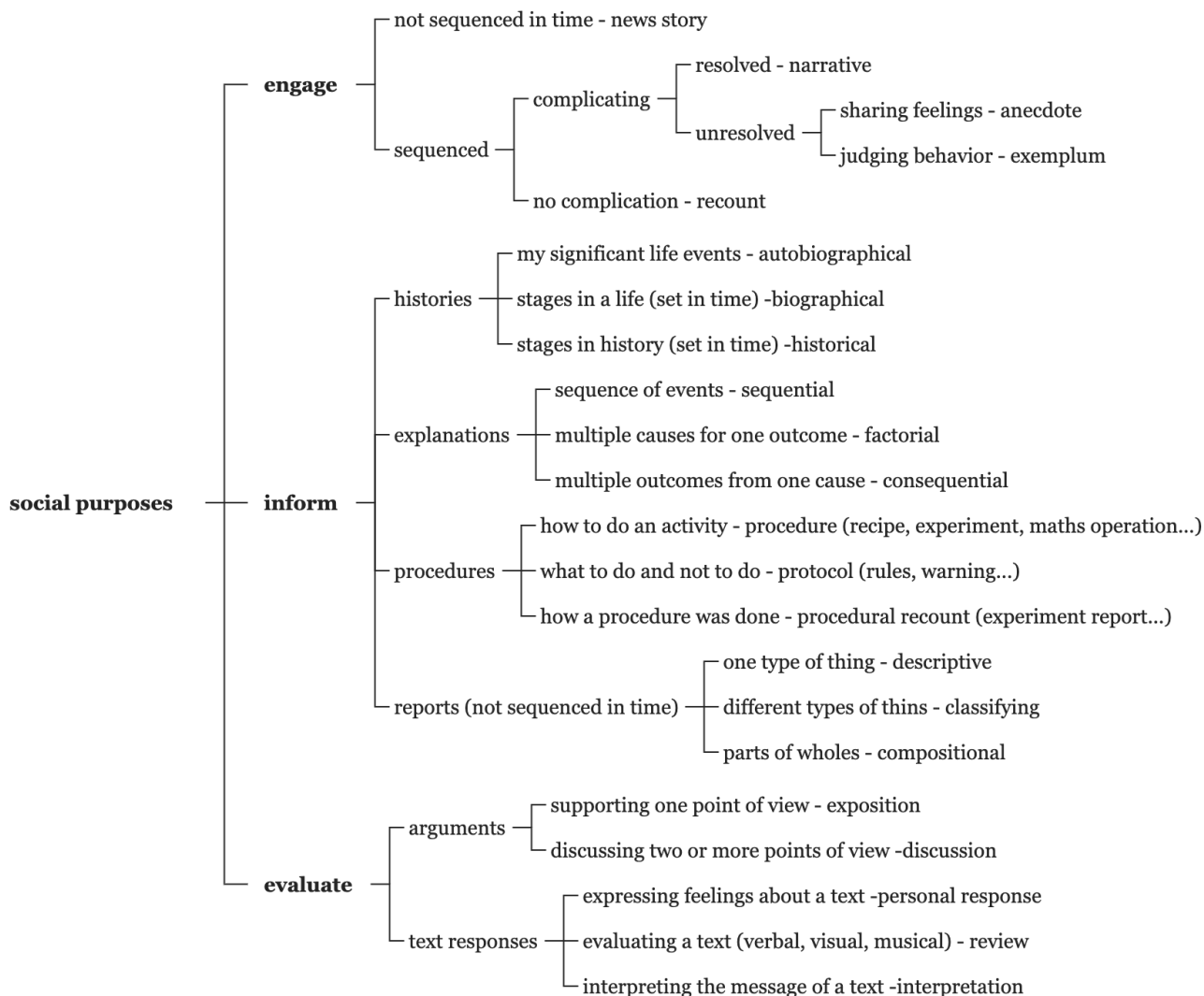
Figure 1. Map of genres from Rose & Martin, 2012

Table 2. Analyzing the Language of the Genre of Explanation

Language	Purpose	Example
Participants/Nouns	To discuss ideas and events and aspects of citizenship.	Voting remains a duty of all eligible citizens.
Processes/Linking Verbs	To connect a cause with an effect on citizenship.	Maintaining voting rights requires continuous vigilance.
Circumstances/Adverbs /Adjectives	To describe the impact and the importance of duties of citizenship.	Citizens who vote infrequently are not having their perspectives adequately represented.
Tense: Timeless Present	To describe actions that occur with regularity through time e.g., represents, means, signifies, relies upon, etc.	Voting requires citizens to make a choice.
Passive Voice	To deemphasize the agency in an event, and put the focus on the noun.	The measure was passed by voters.

Step 3. Examine the Text from a Critical Perspective.

This third step in text analysis requires analysis of the text from a critical perspective. To do so, text analysts must consider how the author uses language to position the participants in a text. For example, if students analyze the processes (actions/verbs) in a text, they can see that there are opportunities to consider how meaning is constructed in terms of gender, race, and socioeconomic status. Are certain verbal processes associated with females or males, for instance? And how does pairing those processes with certain participants (see chart below) contribute to

reinforcing gender or racial stereotypes?

A teacher can use text analysis tools to analyze language used in a text for critical examination of topics related to justice and equity in order to disrupt inequitable ideologies in classrooms. For instance, teachers can ask students to extract all the verbs in a text associated with each character and then facilitate discussions surrounding gender roles. This takes the text analysis to the next level by interrogating a text at the word level to explore societal issues such as gender equity and stereotyping. In Table 3, it is noted how characters and key societal issues can be explored through examination of verbal processes in a text.

Table 3. Critical Examination of Word Analysis

Character	Verbs	Notes
Female character	sweeps, washes dishes	-Discuss gender roles -What other verbs can describe a female?
Male character	goes to work, mows the lawn	-Discuss gender roles -What other verbs can describe a male?

Step 4. Determine What Language to Teach.

After analyzing the structure of the genre, the associated structures and features, and pinpointing language used for critical analysis of the text content, teachers can use the information to inform their instruction by determining exactly which language needs to be taught explicitly. Identifying the language that needs to be taught is essential for providing students with instruction and skills that allow them access to the text. In addition, identifying and planning for the language that needs to be taught facilitates making meaning of content area instruction and understanding language use.

Step 5: Putting it all Together.

Teachers can use several tools for approaching text analysis. Again, the intent of these resources is to provide a framework for analyzing language in content area texts so that teachers may more effectively scaffold meaning making by creating explicit instruction regarding the text's genre structure, discipline specific vocabulary (Gibbons, 2015), and critical analysis of topics in the text to ensure that the teacher is delivering comprehensible input (Krashen, 1981), and that students are also able to learn the English language through the subject area teaching (Echevarria & Graves, 2010).

Expanding on Ragan's (2005) tool, we have refined and developed two new formats for analyzing texts to inform instruction of EBs. One such tool is the Language Detective Worksheet (Appendix A). This tool allows teachers an opportunity to take a deep dive into the text they are preparing to use with students to plan ahead for instruction of language forms, vocabulary, sentence structures for oral language practice and written expression, employing guiding questions intended to examine language choices through an SFL perspective.

Another tool is the Text Analyzer (Appendix B). This chart also emphasizes key areas where emergent bilingual students need explicit instruction to access the content teaching and the English language. Using this chart provides teachers with insight on what to plan and what specific strategies to implement. It also offers students a framework for analyzing language in texts to expand their own understanding of how the English language functions in a variety of ways. This type of analysis takes this tool beyond use for planning, and actually teaches components of language itself to language learners. It allows for learning new content specific vocabulary, making cross-linguistic connections, and learning about language forms so that students are not only learning content, but are building their linguistic repertoire in all languages they know and use.

Both of these tools may support teachers immensely in identifying essential areas of language instruction that need to be addressed in the delivery of their lesson to provide access to core curriculum and to promote language development. Uncovering these potential barriers and anticipating challenges students may have with the text, allows teachers to plan specific supports for EBs so that comprehension of disciplinary language and language development is deep and meaningful.

7. Discussion

These frameworks can deeply inform and enhance teachers' instructional practices when preparing content area lessons for emergent bilinguals. The challenge would be moving from using the framework just for analysis, but for intentional mapping and planning in order to explore SFL topics, components of language, and critical examination of societal topics. Additionally, using the Text Analyzer with students could provide opportunities to explore how and why the English language functions as it does. This takes the guesswork out of supporting language learners and equips teachers with the knowledge necessary to select essential teaching methods, such as graphic organizers, word walls with visuals, sentence frames, educational linguistics mini-lessons, cross-linguistic strategies, and more. We understand the immense amount of time it takes to plan lessons, but once educators become familiar with these analyzing tools for mapping instruction, planning will become less cumbersome and more focused, leading to positive outcomes for emergent bilingual students by capitalizing on their language knowledge and practices, providing access to content area teaching, and developing all languages in their linguistic repertoire. In the end, we envision that the use of these tools fosters the development of emergent bilinguals becoming language architects (Flores, 2020) in order to succeed in their

academic experiences.

8. Recommendations

In order to better serve emergent bilingual students, it is our recommendation that teachers use the Text Analysis Steps in table 4 and one of the text analysis tools presented in this article to investigate the texts they are presenting to students during instruction. The goal for using both the Text Analysis Steps table and a text analysis tool is to intentionally uncover portions of the text that may hinder EBs comprehension of the content by using students' language practices and linguistic repertoire to create comprehension and build language connections, and to focus instruction in order to provide EBs access to the content while developing language. Additionally, we hope the text analysis process will reveal opportunities to teach disciplinary literacy and languages explicitly, within the subject area teaching, with an approach that builds on students' bank of knowledge of language. The ultimate goal is to better serve our EB students through purposeful forecasting and intentional planning. We have a compelling case and highly recommend that these tools be introduced and used in teacher preparation programs to equip teacher candidates with skills to analyze, forecast and plan for language used in texts so that emergent bilingual students learn of, about, and through language to find success in their academic settings.

Table 4. Text Analysis Steps

Select text	• Align text to standards and objectives
Select text analysis tool	• Select a tool that meets lesson goals for content area comprehension and English language development
Analyze text using tool	• Complete the steps in the text analysis tool. • Identify at least three challenges EBs may face with vocabulary, language forms, text structure etc. • Identify metalanguage that can provide cross-linguistic connections (ie: cognates, idioms, syntax study).
Transfer text analysis discoveries to lesson planning	• Select instructional strategies that address the challenges noted above (ie: multilingual vocab walls, visuals, graphic organizers, sentence frames, translanguaging etc.)
Reflect on effectiveness of instructional choices	• Evaluate student performance on lesson activities in regards to learning vocabulary, language form and function use etc. • Note areas where EBs home language, language practices & linguistic assets can be valued, utilized, connected to & expanded upon.

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Conflict of Interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Appendix A

TEXT ANALYSIS FOR TEACHERS: BE A LANGUAGE DETECTIVE!!

Directions: Use this worksheet to guide your text analysis. The goal is to understand more about the potential challenges students who are emergent bilinguals may face when making meaning from the texts you use in class.

Don't worry! You are not expected to be a linguistic expert! Just use what you have learned in class to find out more about the language of the text you will use with your students, so you can better plan your instruction for emergent bilinguals/ELs. Remember, your analysis depends upon finding specific language from the text to support your point. I don't have to agree with your interpretation, but I should see examples of language that brought you to the conclusion. There are three columns in the worksheet.

Column 1: Guiding Questions

Good detectives examine the scene of the crime (*No, a text is not a crime, but just go with the metaphor…*) This space contains guiding questions that focus on the three aspects of language that contribute to a text's REGISTER: the field (i.e., the topic/subject matter), the tenor (the relationship between reader and text), and the mode (how closely it resembles a written text). You are not expected to answer every guiding question, but you should use them to promote your thinking and help you make a thorough analysis of the text.

Column 2: Textual Evidence

Good detectives gather evidence! This space is for your linguistic evidence you have gathered from the text. Include specific examples from the text that align to the guiding questions you have chosen to answer.

Column 3: Teaching Focus

Good detectives take notes to help them make conclusions based on evidence. In light of your linguistic discoveries made during your text analysis, what might you focus on in your teaching? This column is for note taking purposes only. Your informed analysis will be included in your write up.

Guiding Questions	Evidence	Teaching Focus
Field: What is the text about? What action is going on? Is the action being presented using processes (action words/verbs) that show something going on internally or externally? In other words, could someone see the action or is it in the character's thoughts? e.g., –Jeannette wondered why she felt so nervous vs. Jeannette ran from the room in panic screaming for help. In what tense are the processes (verbs/actions) presented? Past, Present, Future, or a mix? Who or what are the participants? (the actors). Are they human? Are they things? Are they concepts? e.g. Jeannette ran away in a panic. or Jeannette's shadow appeared in the doorway. or		

Fear overwhelmed Jeannette. or (from a math text) In Geometry, the tangent is defined as a line touching circles or an ellipse at only one point.		
Tenor: What is the relationship of the reader with the text? How does the author use language to make connections or interact with the reader, if at all? e.g., Is the reader directly addressed at all by the author(s)? Are there sidebars that explain information? Are the participants in the text hard to identify? Is active voice or passive voice more prevalent? What words have particular impact or power? Are there words that are chosen over others that may provoke an emotional reaction or urge folks to take action? Appraisal: Do any words signal judgment or evaluation? In other words, are there word choices that reflect a positive or negative opinion or connotation? Is there a lot of technical or discipline specific vocabulary that would only be known by folks who know about the topic?		
Mode: Is it meant to be read as a written text or is there a mix of speech and writing? How is the text mapped? What language features serve as "signposts" to guide its readers? How does time advance in the text? (How does language signal that time or ideas are going forward? Or how is the complication or resolution signaled to readers?)		

How are connector words used? [sequence? classification? cause/effect?] How are pronouns used? [are they used to help extend and explain?] Are there lexically dense portions of text with compound words and sentences? Are there many sentences that begin with dependent clauses? Would you consider it lexically dense? (More content words than filler words like prepositions?) Is there multimodality? Are there links to websites or other areas? Are there visuals? Do the visuals match the text? What is the purpose and effect of these multimodal elements?		

Appendix B
Text Analyzer

Steps for Instructor		
Note learning objective associated with text		
Note the field		
Note the tenor		
Note the mode		
Identify content/discipline specific language vocabulary		
Identify language function vocabulary		
Identify educational linguistics/language forma		
Note metalanguage needed: language to discuss language		
Note cross-linguistic connections: cognates, idioms		
Examine text structure		

Steps for Student		
Note learning objective/purpose for reading		
Examine text structure		
Vocab I don't know		
Note the field		
Note the tenor		
Note the mode		