

**Constructing Cohesive Meaning: A Textual** Analysis of Diseases in an 11th-Grade U.S. **History Textbook** 

Edgar Díaz 堕 University of Miami, United States

www.ijonses.net

#### To cite this article:

Diaz, E. (2021). Constructing cohesive meaning: A textual analysis of diseases in an 11thgrade U.S. history textbook. International Journal on Social and Education Sciences (IJonSES), 3(2), 197-215. https://doi.org/10.46328/ijonses.84

International Journal on Social and Education Sciences (IJonSES) is a peer-reviewed scholarly online journal. This article may be used for research, teaching, and private study purposes. Authors alone are responsible for the contents of their articles. The journal owns the copyright of the articles. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of the research material. All authors are requested to disclose any actual or potential conflict of interest including any financial, personal or other relationships with other people or organizations regarding the submitted work.



This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.





2021, Vol. 3, No. 2, 197-215

https://doi.org/10.46328/ijonses.84

# Constructing Cohesive Meaning: A Textual Analysis of Diseases in an 11th-Grade U.S. History Textbook

## Edgar Díaz

# **Article Info**

### Article History

Received:

08 November 2020

Accepted:

22 March 2021

#### Keywords

U.S. history textbooks Systemic functional linguistics Cohesive meaning Diseases

#### **Abstract**

Social studies texts often pose a challenge for readers because of their complex linguistics features, which can cause comprehension issues. Drawing upon Systemic Functional Linguistics (SFL), this study examines how authors create cohesive messages and meaning in an 11th-grade U.S. history textbook in relation to the history of diseases. Findings reveal four main cohesive resources: (1) referring words, (2) ellipses, (3) lexical cohesion, and (4) text connectives, are utilized to construct a message that holds together and builds from clause to clause. Consequently, a responsibility is placed on the reader to track the participant(s) while also forcing them to track the events in the rest of the clause. Although the function of cohesive resources helps the writer to express their ideas, it may also impede novice readers, such as emergent bilinguals, from keeping track of all the participants and information. Implications provide ways social studies teachers can take up a role as a language teacher to support comprehension of social studies content and language development.

## Introduction

Given the ultimate goal of the social studies to develop responsible and engaged citizens, educating emergent bilinguals becomes a civic imperative. If we hope to prepare citizens for a multicultural, global society, we must examine how we can utilize culturally relevant and inclusive social studies curriculum and pedagogy to meet language and content needs of emergent bilingual students (Salinas et al., 2017, p. 457)

I begin with a quote from Salinas et al. (2017) to challenge social studies teachers to become language teachers, if they are not already because language is the most urgent obstacle for emergent bilinguals. Notably, the —introduction of a second language through academic instruction and materials presents distinctive challenges" in social studies classrooms (Salinas et al., 2017, p. 444). For example, emergent bilinguals may not fully engage in schools due to language and cultural adjustments, resulting in and viewing social studies classes as —maningless and irrelevant" (Choi, 2013, p. 12). Additionally, social studies texts contain complex and distinctive features that may be unfamiliar to the everyday discourse of a student, such as nominalization, time markers, and noun groups (Zhang, 2017; Martin, 2002); thus, making the text challenging to comprehend for emergent bilinguals.

This comprehension issue creates a more profound problem as many states require testing in social studies at both the elementary and secondary school levels (Vogler & Virtue, 2007). For instance, in Florida, the End-of-Course (EOC) assessment for United States History is a requirement for 11th-grade students on the diploma track and constitutes 30% of the final course grade. Thus, if students in Florida cannot learn and comprehend social studies content, they may not be equipped to pass the EOC assessment; therefore, affecting their course credit for graduation. The effect of social studies state tests has been particularly more difficult for emergent bilinguals. Approximately 72.1% of non-ELLs and 24% of ELLs pass with a —Level 3" (Florida Department of Education, 2020). In comparing the differences in scores, I do not want to paint a deficit view of emergent bilinguals. Instead, I use the comparison in two ways: first, to focus this empirical study on emergent bilinguals to better support their literacy and language needs in social studies, and second, to demonstrate why social studies teachers need to become language teachers who explicitly teach language.

For my study, I selected the current 11th-grade U.S. history textbook in Florida to understand — hw language is used to make meaning" (de Oliveira & Smith, 2019 p. 19) and how authors' language choices create a cohesive message. Situated in the current COVID-19 pandemic, this study looks at the history of diseases as news media has looked to the past to examine diseases and pandemics. Namely, the Influenza Pandemic of 1918 gets compared to COVID-19 (Alison, 2020; Baskar & Kwong, 2020; Usero, 2020; Yan, 2020). The goal is to understand the content students are expected to learn in social studies classes and examine how textbook authors organize and communicate content on diseases across the textbook since it is a commonly used instructional resource (Gay et al., 2020). Zhang (2017) has called for —teachers [to] point out the discourse structure and help students see how the message is delivered throughout the text" (p. 205). Therefore, this study builds on prior studies that are —eritical of language and its usage in education" (Díaz & Deroo, 2020, p. 24) by utilizing Michael Halliday's (1978) theory of Systemic Functional Linguistics (SFL) to examine how textbook authors create cohesive messages and meaning about diseases in a U.S. history textbook. Two research questions guide this study: (1) How do authors' language choices create cohesive messages and meaning throughout an 11th-grade U.S. history textbook? (2) How might teaching reference devices affect text comprehension for emergent bilingual students?

## Literature Review

Teachers often make decisions as to what strategies and methods will be used —to perform teaching in the most effective way" for their students (Ozmantar, 2017, p. 327). These practices are often supported by the work of various scholars (Choi, 2013; Dong, 2017) who have produced research literature examining emergent bilinguals' experiences in social studies, particularly the challenges emergent bilinguals students encounter in schooling. For example, Cho and Reich (2008) examined the practices, challenges, and instructional needs of emergent bilinguals by surveying 211 teachers in Virginia. Their study reported that challenges included: the emergent bilinguals' lack of background knowledge and —lack of time, resources, and support" (Cho & Reich, 2008, p. 237). Moreover, Weisman and Hansen (2007) state some of the challenges emergent bilingual students face are due to the various cultures, languages, and prior educational experiences. Additionally, —Social studies may be the most difficult subject for ELLs" because it depends tremendously on language skills (Weisman &

Hansen, 2007, p. 181). Scholarly literature has sought to mitigate the challenges and found ways to support emergent bilingual students to learn historical content.

## Methods, Practices, and Pedagogy to Support Emergent Bilingual Students

Scholarly research (Fránquiz and Salinas, 2013; Mathews, 2016) continues to examine emergent bilinguals' experiences in social studies classrooms; particularly, by examining the best practices, pedagogy, and approaches to address the obstacles and challenges experienced by emergent bilingual students. For example, Wang et al. (2008) examined a teacher's experiences and needs of 9th-grade emergent bilinguals (n=340) mainstreamed in general education classes. Findings showed revealed differentiated instruction such as cooperative learning and peer teaching, oral instructions with visual aids, and understanding that emergent bilingual students—need multiple chances to access information" (Wang et al., 2008, p. 79). Similarly, Cho and Reich\_s (2008) surveyed 33 social studies teachers from ESL-centered high schools to elicit their practices, challenges, and needs when instructing English Language Learners (ELLs). The findings showed the collaboration between content teachers and those with specialized knowledge while also incorporating a range of media and technology helped during instruction. Additionally, results revealed specific accommodations by teachers, which include:—increase the comprehensibility of texts and speech, increase interactions between native speakers and ELLs, and increase teachers' linguistic and cultural awareness" (Cho & Reich, 2008, p. 238).

Other research scholars have utilized various pedagogies that aid emergent bilinguals in overcoming challenges in social studies. For instance, Choi (2013) examined a case study of an 8th-grade social studies teacher who implemented Culturally Relevant strategies engaged English Language Learners in social studies curricula. Findings demonstrated various practical methods for teaching social studies to emergent bilinguals, including emphasizing multicultural and global perceptive, creating collaborative learning communities, and incorporating literacy within the curriculum (Choi, 2013). Additionally, Dong (2017) examined how prior knowledge and meaningful connections to a student's culture and linguistic differences help in understanding social studies concepts. Utilizing a culturally relevant pedagogy and linguistically responsive teaching frame, Dong's (2017) study identified three strategies used by 25 preservice teachers to prompt effective social studies instruction for emergent bilinguals. These practices included: 1) —Uncovering and connecting ELLs' prior knowledge", 2)—Building on ELLs' prior knowledge for deeper understanding," and 3)—Developing ELLs' historical thinking skills through historical narrative and perspective comparisons" (Dong, 2017, p. 145). By including these in their lessons, teachers—made connections between their ELLs' backgrounds and perspectives" while also building students' confidence and critical-thinking skills (Dong, 2017, p. 149).

Additionally, scholars (de Oliveira & Schleppegrell, 2016) have pushed to integrate language and social studies to support emergent bilingual students' literacy development. For example, Fránquiz and Salinas (2013) utilized a case study approach to examine one Texas teacher, who infused literacy skills and social studies content through history inquiry on primary sources such as Document Based Questions (DBQs). The study identified strategies and practices that encourage emergent bilingual participation, including: 1) scaffolding, (2) use of

internet technologies, (3) building content vocabulary, and (4) even –accept compositions in native languages, second languages," or with a mix of both languages (p. 354-355). Additionally, Szpara and Ahmad's (2007) study focused on the effective instructional approaches of five high school teachers as a way to increase –the comprehension of course content and achieve competency in school subjects" of ESL students (p. 190). The results demonstrated three best practices for social studies classrooms: –(1) the development of socially supportive classroom environments, (2) the explicit teaching of academic skills through the Cognitive Academic Language Learning Approach (CALLA), and (3) approaches for reducing cognitive load in curriculum materials combined with strategies for increasing the accessibility of complex content" (Szpara & Ahmad, 2007, p. 190).

Moreover, educational linguistics have also largely contributed to the pedagogical recommendations that utilize SFL (Gebhard et al., 2014) for instruction of emergent bilinguals. Foundational work, such as Fang and Schleppegrell (2010), provide a functional linguistics approach that -provides a metalanguage for talking about the meaning in the choices authors make as they write clauses, sentences, and texts" (p. 588). The utilization of SFL in social studies text has been adopted as an alternative way to analyze content. For example, Wang (2010) applied a transitivity analysis, along with Critical Discourse Analysis, to two of Barack Obama's speeches. The findings revealed that use process types (e.g., action verb processes) provide evidence for hope in government while also demonstrating that pronouns can help shorten the distance between the reader and their audience (Wang, 2010). Furthermore, Díaz & Deroo (2020) took up an SFL approach, specifically ideational metafunction, to examine the representation of Latinx states, people, and communities across three U.S. high school history textbooks. Results demonstrated a biased history that positioned the United States as authoritarian and powerful while portraying Latinx identifying individuals in subservient and passive roles (Díaz & Deroo, 2020). Collectively, these studies demonstrate the important and vastly different approaches by researchers to support emergent bilinguals. However, additional work is needed, as scholars such as Zhang (2017) encouraged -teachers to point out the discourse structure and help students see how the message is delivered throughout the text" (p. 205). Therefore, I seek to contribute to the literature base by examining how textbook authors utilize cohesive resources to construct meaning through a U.S. history textbook to demonstrate why social studies teachers need to teach language.

# **Theoretical Framework**

This study explores —approaches to learning theory that are based on consideration of language" (Halliday, 1993, p. 94) by calling upon systemic functional linguistics (SFL). Halliday (1993) conceptualized learning as a semiotic process or —process of making meaning," which takes a —prototypical form" as language (p. 94). Put in other words, SFL sees language as a way to construct, organize, negotiate, and reconstruct human experiences (Fang, 2005) and —is best studied by observing how language is used in its situation" (O'Donnell, 2011, p. 7) or social context (Halliday & Matthiessen, 2014). The model of language for SFL can be divided into three general social functions for language (Martin & Rose, 2007) that Halliday (1978) calls metafunctions of language. The three general metafunctions of language are: (1) the interpersonal (i.e., language to —enact social relationships," (2) the ideational (i.e., language to —represent experience"), and (3) the textual (i.e., language to "organize text" (Martin & Rose, 2007, p. 7). The three metafunctions are interconnected and work together throughout the text

so all three social functions can be achieved concurrently (Martin & Rose, 2007). Through utilizing a linguistic approval with SFL, I seek to show —the power of language and the role it plays in the demands and challenges of schooling" (Schleppegrell 2004, p. 18), specifically in textbooks.

As textbook authors use language to —eonstruct a message that holds together and builds from clause to clause" (de Oliveira & Schleppegrell, 2016, pp. 46-47), it is vital to examine how content develops throughout the text. This study calls upon the textual metafunction, which focuses on the sequencing of discourse and the overall organization of and cohesion of text (Martin & Rose, 2007). The cohesion of text, or —the way in which a text is composed so it \_hangs together, "" is connected through various linguistic resources (Humphrey et al., 2012). Humphrey et al. (2012) state the five primary cohesive resources are references, ellipsis and substitutions, lexical cohesion, and text connectives. Table 1 provides examples and definitions of each cohesive resource (Humphrey et al., 2012, pp. 148-156).

Table 1. Cohesive Resources

Cohesive	Definition	Word Examples	Text Example	
Resource				
References	—Refrring words	• Personal Pronouns: I, me, mine, we,	The oesophagus lies	
(or referring	refer back to	ours, him, hers, it, its, theirs, you	beneath the trachea inside	
words)	people and things,	• Demonstratives: <i>the</i> (definite article);	the chest. It runs behind	
	even sections of	this, that, those, other (pronouns);	the lungs and heart. This is	
	text, which have	here, now, there, then (adverbs)	the view down the inside	
	been mentioned	• Comparatives: same/different;	of the oesophagus. (From	
	before in text"	more/less; other	The Human Body (Harris	
	(Humphrey et al.,	• Text Reference: this, these	2000:11 as cited by	
	2012, p. 148).	(Humphrey et al., 2012, p. 148).	Humphrey et al., 2012, p.	
			149).	
Ellipsis	-Omitting a clause	Original: The oesophagus lies beneath the	e trachea inside the chest. It	
	part"	runs behind the lungs and heart.		
	(Humphrey et al.,			
	2012, p. 150).	With Ellipsis: The oesophagus lies beneath	the trachea inside the chest	
		and (it) runs behind the lungs and heart.		
Substitutions	—Repacing a	Nonsubstitution: one, same, others, more,	She wore a red shirt, her	
	noun, verb or	else	friend wore one too, but I	
	whole clause with		wore something else.	
	a short word"	Verb substitution: do, does, did	They can't sing as well as	
	(Humphrey et al.,	he does.		
	2012, p. 150).	Clause substitution: so, not	Will it rain? – The forecast	
		says so, but I hope no		
Lexical	—Reefrs to word	Synonyms (i.e., words that similar	Wombats are Australia's	
cohesion	association, or the	meaning): herbivores/plant-eaters	largest burrowing	

	ways words, or	Antonyms (i.e., words that have opposite	marsupial. There are two	
	lexical items, are	or contrastive meanings): long/short;	types of wombat, the	
	tied together by	coarse fur/soft	Common wombat and the	
	meaning in order	Repetition (i.e., words that repeated	Hairy-Nosed wombat. The	
	to contribute to	across a text): wombats, The Common	Common wombat has	
	text cohesion"	wombat; the Hair-Nosed Wombat	coarse fur and no hair on	
	(Humphrey et al.,	Collocation (i.e., words that tend to co-	its nose. Their <i>body</i> is 1.1	
2012, p. 151).		occur): sleep/day/feed/night	metres long and they have	
		Classification (i.e., words the identify a	a short tailIn	
		class or category and its sub-classes or	comparison, the Hairy-	
		sub-categories): burrowing	Nosed wombat has soft,	
		marsupial/wombat; nocturnal/wombat;	silky, furWombats are	
		herbivore/wombat	nocturnal. They sleep in	
		Composition (i.e., words the identify a	their burros during the day	
		whole and its parts): body fur/nose/tail;	and come out to feed at	
		wombat-Common/Hair-No sed	night. Wombats are also	
			herbivores, which means	
			that they are plant-eaters	
			(Humphrey et al., 2012,	
			pp. 151-152).	
Torrt	-Ideas in texts can	Extending meaning:	Then it was over, and all	
Text	Accas ili texts call	•	Then it was over, and an	
connectives	be connected	as addition: and	the people went home to	
	be connected logically by:	as addition: <i>and</i> as replacing/contrasting: but, yet, or not,	the people went home to bed and I went home to	
	be connected logically by: adding them	as addition: and	the people went home to bed <i>and</i> I went home to dream of dancing.	
	be connected logically by: adding them together,	as addition: <i>and</i> as replacing/contrasting: but, yet, or not,	the people went home to bed <i>and</i> I went home to dream of dancing. (Humphrey et al., 2012, p.	
	be connected logically by: adding them together, contrasting them;	as addition: <i>and</i> as replacing/contrasting: but, yet, or not, except that, instead of, besides (p. 59)	the people went home to bed <i>and</i> I went home to dream of dancing. (Humphrey et al., 2012, p. 59).	
	be connected logically by: adding them together, contrasting them; sequencing them	as addition: <i>and</i> as replacing/contrasting: but, yet, or not, except that, instead of, besides (p. 59)  Enhancing meaning:	the people went home to bed <i>and</i> I went home to dream of dancing. (Humphrey et al., 2012, p. 59).  Because you dance so	
	be connected logically by: adding them together, contrasting them sequencing them according to	as addition: <i>and</i> as replacing/contrasting: but, yet, or not, except that, instead of, besides (p. 59)  Enhancing meaning: sequence: before, after, since	the people went home to bed <i>and</i> I went home to dream of dancing. (Humphrey et al., 2012, p. 59).  Because you dance so well, you must dance for	
	be connected logically by: adding them together, contrasting them; sequencing to chronological	as addition: and as replacing/contrasting: but, yet, or not, except that, instead of, besides (p. 59)  Enhancing meaning: sequence: before, after, since time: when, as, while, until	the people went home to bed and I went home to dream of dancing. (Humphrey et al., 2012, p. 59).  Because you dance so well, you must dance for the people of the village.	
	be convected logically by: adding them together, contrasting them sequencing to chronological order on the contrological order convected order convected contrological con	as addition: and as replacing/contrasting: but, yet, or not, except that, instead of, besides (p. 59)  Enhancing meaning: sequence: before, after, since time: when, as, while, until manner: by, as if	the people went home to bed and I went home to dream of dancing. (Humphrey et al., 2012, p. 59).  Because you dance so well, you must dance for the people of the village. You must dance for the	
	be connected logically by: adding them together, contrasting them sequencing them according to chronological order or significance; and	as addition: and as replacing/contrasting: but, yet, or not, except that, instead of, besides (p. 59)  Enhancing meaning: sequence: before, after, since time: when, as, while, until	the people went home to bed and I went home to dream of dancing. (Humphrey et al., 2012, p. 59).  Because you dance so well, you must dance for the people of the village. You must dance for the people of the village one	
	be connected logically by: adding them together, contrasting them; sequencing them according to chronological order or significance; and relating them in	as addition: and as replacing/contrasting: but, yet, or not, except that, instead of, besides (p. 59)  Enhancing meaning: sequence: before, after, since time: when, as, while, until manner: by, as if	the people went home to bed and I went home to dream of dancing. (Humphrey et al., 2012, p. 59).  Because you dance so well, you must dance for the people of the village. You must dance for the people of the village one night when the moon is full	
	be connected logically by: adding them together, contrasting them; sequencing them according to chronological order or significance; and relating them in terms of time,	as addition: and as replacing/contrasting: but, yet, or not, except that, instead of, besides (p. 59)  Enhancing meaning: sequence: before, after, since time: when, as, while, until manner: by, as if	the people went home to bed and I went home to dream of dancing. (Humphrey et al., 2012, p. 59).  Because you dance so well, you must dance for the people of the village. You must dance for the people of the village one night when the moon is full (Humphrey et al., 2012, p.	
	be connected logically by: adding them together, contrasting them; sequencing them according to chronological order or significance; and relating them in terms of time, place, cause,	as addition: and as replacing/contrasting: but, yet, or not, except that, instead of, besides (p. 59)  Enhancing meaning: sequence: before, after, since time: when, as, while, until manner: by, as if cause: so, because, since, so that	the people went home to bed and I went home to dream of dancing. (Humphrey et al., 2012, p. 59).  Because you dance so well, you must dance for the people of the village. You must dance for the people of the village one night when the moon is full (Humphrey et al., 2012, p. 59).	
	be connected logically by: adding them together, contrasting them; sequencing them according to chronological order or significance; and relating them in terms of time, place, cause, manner, condition	as addition: and as replacing/contrasting: but, yet, or not, except that, instead of, besides (p. 59)  Enhancing meaning: sequence: before, after, since time: when, as, while, until manner: by, as if cause: so, because, since, so that  Elaborating meanings (i.e., restating,	the people went home to bed and I went home to dream of dancing. (Humphrey et al., 2012, p. 59).  Because you dance so well, you must dance for the people of the village. You must dance for the people of the village one night when the moon is full (Humphrey et al., 2012, p. 59).  Dance and music are very	
	be connected logically by: adding them together, contrasting them; sequencing them according to chronological order or significance; and relating them in terms of time, place, cause, manner, condition or concession"	as addition: and as replacing/contrasting: but, yet, or not, except that, instead of, besides (p. 59)  Enhancing meaning: sequence: before, after, since time: when, as, while, until manner: by, as if cause: so, because, since, so that  Elaborating meanings (i.e., restating, reformulating, describing, exemplifying,	the people went home to bed and I went home to dream of dancing.  (Humphrey et al., 2012, p. 59).  Because you dance so well, you must dance for the people of the village. You must dance for the people of the village one night when the moon is full (Humphrey et al., 2012, p. 59).  Dance and music are very closely linked; in fact,	
	be connected logically by: adding them together, contrasting them; sequencing them according to chronological order or significance; and relating them in terms of time, place, cause, manner, condition or concession" (Humphrey et al.,	as addition: and as replacing/contrasting: but, yet, or not, except that, instead of, besides (p. 59)  Enhancing meaning: sequence: before, after, since time: when, as, while, until manner: by, as if cause: so, because, since, so that  Elaborating meanings (i.e., restating, reformulating, describing, exemplifying, apposition): that is, like, such as, in fact,	the people went home to bed and I went home to dream of dancing. (Humphrey et al., 2012, p. 59).  Because you dance so well, you must dance for the people of the village. You must dance for the people of the village one night when the moon is full (Humphrey et al., 2012, p. 59).  Dance and music are very closely linked; in fact, according to the Balinese	
	be connected logically by: adding them together, contrasting them; sequencing them according to chronological order or significance; and relating them in terms of time, place, cause, manner, condition or concession"	as addition: and as replacing/contrasting: but, yet, or not, except that, instead of, besides (p. 59)  Enhancing meaning: sequence: before, after, since time: when, as, while, until manner: by, as if cause: so, because, since, so that  Elaborating meanings (i.e., restating, reformulating, describing, exemplifying,	the people went home to bed and I went home to dream of dancing.  (Humphrey et al., 2012, p. 59).  Because you dance so well, you must dance for the people of the village. You must dance for the people of the village one night when the moon is full (Humphrey et al., 2012, p. 59).  Dance and music are very closely linked; in fact, according to the Balinese dance is _music made	
	be connected logically by: adding them together, contrasting them; sequencing them according to chronological order or significance; and relating them in terms of time, place, cause, manner, condition or concession" (Humphrey et al.,	as addition: and as replacing/contrasting: but, yet, or not, except that, instead of, besides (p. 59)  Enhancing meaning: sequence: before, after, since time: when, as, while, until manner: by, as if cause: so, because, since, so that  Elaborating meanings (i.e., restating, reformulating, describing, exemplifying, apposition): that is, like, such as, in fact,	the people went home to bed and I went home to dream of dancing. (Humphrey et al., 2012, p. 59).  Because you dance so well, you must dance for the people of the village. You must dance for the people of the village one night when the moon is full (Humphrey et al., 2012, p. 59).  Dance and music are very closely linked; in fact, according to the Balinese	

These linguistics features help writers structure information, present logical meanings, refer back to points already made, and elaborate ideas (de Oliveira, 2011). Therefore, the textual metafunction best suits this study as it seeks to focus and understand the cohesion of text and how it develops throughout the U.S. history textbook. This study contributes to the research field by taking a linguistic approach to social studies, which has been absent in social studies (Yoder & Kibler, 2016). Simultaneously, I seek to challenge and change the roles of social studies teachers by becoming language teachers.

## Methodology

## Researchers' Perspectives

My identity as a bilingual Xicano drives my work in social studies education. As a former reading and social studies teacher, I am committed to the belief that social studies teachers are language teachers. Teaching language does not have to be taught separately from social studies content. Instead, language and social studies content can and should be taught together. However, not every social studies teacher takes up a similar belief and stance. Therefore, I implore teachers to consider a shift to the explicit teaching of language features in history texts to help emergent bilingual students develop their language skills while simultaneously learning historical content.

#### **Data Collection**

For this study, I used the most recently adopted U.S. textbook from Florida, *Florida United States History* (Lapsansky-Werner et al., 2018), published by Pearson. The textbook will be referred to by its publisher to guide the reader. This textbook's examination is pertinent because, as one of the largest school districts, Miami-Dade County Public Schools (M-DCPS) relies on this textbook as an instructional resource. Moreover, I examined this textbook to understand how social issues such as pandemics are communicated to readers. This examination is incredibly vital, as, in contemporary times, we are faced with the COVID-19 pandemic, which has resembled other crises concerning diseases such as the Influenza pandemic of 1918 and AIDS in the 1980s. Therefore, my study calls into question what textbook authors state about diseases and how they communicate their message to the reader.

#### **Data Analysis**

In this study, I first used the index to identify all the diseases in the Pearson (2018) textbook. In total, six diseases (e.g., AIDS, cholera, Influenza) were identified. After this identification process, I conducted a page-by-page analysis for all the paragraph passages that mentioned each of the diseases. However, while extracting passages, I came across the disease Malaria, located in the same sentence Yellow Fever was mentioned. Similarly, Whooping Cough was mentioned along with Tuberculous in the same sentence, although it was also omitted from the index. While both Malaria and Whooping Cough were not mentioned in the index, I included both diseases to reflect a total of eight diseases. Collectively, 15 passages were extracted from the textbook. The details of the passages are below (see Table 2) and organized alphabetically by disease.

Table 2. Passage Details

Disease	Topic	Page	Number of
		Number(s)	Passages
Acquired immune deficiency	Topic 12: Post War America	709	3
syndrome (AIDS)			
Cholera	Topic 2: Industry and Immigration	133	2
Influenza	Topic 5: WWI and the 1920s	292-293;	6
		297-298	
Polio	Topic 6: The Great Depression and	368;	2
	the New Deal		
	Topic 5: WWI and the 1920s	525	
Tuberculosis (& Whooping	Topic 5: WWI and the 1920s	525	1
cough)			
Yellow Fever (& Malaria)	Topic 4: America Comes of Age	244	1

After the identification and extraction process, I used *ATLAS.ti: The Qualitative Data Analysis & Research Software* to code the passages. Utilizing a grounded theory approach (Glaser & Strauss, 1967), I engaged in opening coding of each passage (Charmaz, 2014). This coding resulted in 41 codes generated (e.g., Defining AIDS/HIV; Origin of the Flu; Creating feelings of "doom and dread"; Demonstrations by AIDS activist; Creation of polio vaccine).

After another round of coding, the open codes were organized into 13 focused codes (e.g., Defining disease; Government response to diseases; Placing the responsibility of deaths on diseases; Consequences of disease in the United States). The focused codes were then categorized into three overarching themes about diseases: (1) Defining the disease (e.g., origin of disease; symptoms), (2) Impact of disease in the United States (e.g., Creating feelings of "doom and dread;" Cholera becomes an epidemic); and (3) Response to the disease (e.g., government reaction to AIDS; Developed vaccine for polio). While these themes demonstrate what information the author typically presents about diseases, this study is more interested in how the content is organized to create meaning (i.e., how cohesive messages flow and are connected).

Therefore, I also engaged in coding cohesive resources for each of the eight diseases identified. The decision to code them individually is because I am examining how ideas flow from clause to clause, so it is best to keep each paragraph intact. I utilized various typographical emphasis to identify the five cohesive resources within each of the passages:

- 1. —Ellipsis (leaving words out, forcing the reader to infer them from the previous text) are indicated by inserting the omitted words and placing them by a strikethrough, like this."
- 2. Reference items and who they are referring to are in *italics*. The arrow connects the referred to the referrer.
- 3. Text connectives are **bold**."
- 4. The arrows used for the reference links being made between items. In addition, lexical cohesion

devices are underlined.

#### 5. Substitutions are double underlined.

My analysis of the passages builds on Derewianka's (2011, p. 166) example of analyzed text to code the cohesive resources that are used to track the participants in a clause. I identified the different cohesive resources for each of the 15 passages and used the typographic emphasis, as mentioned above, to classify how each was used. Below (see Table 3), I present an example of one passage about AIDS that was analyzed for cohesive resources.

## Table 3. Analysis of Passage using SFL

In addition, the nation faced the threat of a new disease, Acquired Immunodeficiency Syndrome (AIDS), which AIDS first came to doctors' attention in 1981. AIDS is the latest stage of the Human Immunodeficiency Virus (HIV), which AIDS attacks the immune system of its victims. There is no known cure for AIDS. When AIDS first reached the United States, it spread mainly among homosexual men and intravenous drug users. Later, the virus began injecting various other groups of people. By 1994, AIDS had killed more than 250,000 Americans.

The example above demonstrates how each of the cohesive resources was identified. This type of textual analysis allows understanding how the text builds and progresses throughout the passage (Díaz & Deroo, 2020) while also tracking essential parts of the clause, such as participants. Additionally, this approach helps to identify the way authors link together text to create cohesive and coherent ideas and information (Derewianka, 2011).

#### Limitations

There are various limitations to this study. First, the examination of diseases only accounts for 15 paragraphs of the 776 pages in the Pearson (2018) textbook. Future studies should consider adopting the textbook entirely or at least the content covered by the standards. Additionally, the study only analyzed the most current U.S. history textbook. I encourage researchers to explore how diseases (or other topics) in textbooks have evolved over time. For example, exploring textbooks from various decades may reveal ways diseases are defined, reacted/responded to, and communicated to students. Furthermore, SFL is seen as very complex and not very practical to the classroom. Scholarly research should purposely incorporate linguistic approaches like SFL into classrooms and examine its practical use from the view of students and teachers.

## **Findings**

Findings from this study revealed the four main cohesive resources used included: (1) Referring Words, (2) Ellipses, (3) Lexical Cohesion, and (4) Text Connectives. The fifth cohesive resource, Substitution, was not found to be in these passages, which is not surprising since substitutions are typically more common in spoken texts (Humphrey et al., 2012). In the next section, the cumulative results are arranged by the four cohesive resources mentioned above to demonstrate the application of theory to findings based on the author's use of

cohesive resources. Lastly, I demonstrate how the cohesive resources work together to build meaning.

#### **Referring Words**

Referring Words tend to refer back to the previous sections of the text and also include referring back to people and things that have already been mentioned (Humphrey et al., 2012). Specifically, textbooks authors relied on personal pronouns (e.g., his, he, it, they), text references (e.g., these, this), and demonstratives including adverbs (e.g., there) and the definite article (e.g., the), (Humphrey et al., 2012). For instance, the passages about AIDS (see Table 4) reveal various ways referring words are used to track people and other nouns as the text unfolds (Humphrey et al., 2012). As a reminder for the reader, reference items and whom they are referring to are in *italics* and are connected by the arrow that connects the referred to the referrer.

## Table 4. Example of Referring Words in Passage

In addition, the nation faced the threat of a new disease, Acquired Immunodeficiency Syndrome (AIDS), which first came to doctors' attention in 1981. AIDS is the latest stage of the Human Immunodeficiency Virus (HIV), which attacks the immune system of its victims. There is no known cure. When AIDS first reached the United States, it spread mainly among homosexual men and intravenous drug users. Later, the virus began injecting various other groups of people. By 1994, AIDS had killed more than 250,000 Americans.

President Reagan was criticized for *the* government's lack of response to *the* AIDS epidemic. Congress consistently felt *that* Reagan's requests for funds to battle *the* epidemic were too low and nearly doubled *the* money earmarked for AIDS research and education.

Meanwhile, *AIDS activist groups* demonstrated throughout *the* country. In Washington, D.C., *they* unveiled a memorial quilt containing *the* names of some 2000 people who had died of AIDS. But not until George H.W. Bush's presidency did funding for research on *the* disease rise substantially. (Pearson, 2018, p. 709)

In the passage above, the pronouns *it* and *its* refer back to the participant previously introduced, *Acquired Immunodeficiency Syndrome (AIDS)*. Instead of referring to AIDS, using the pronouns minimizes the disease by substituting the subject or participant of the sentence. Furthermore, the use of the definite article *the* in front of the nouns is used, which assumes the reader understands whom the authors refer to. For instance, as seen in the example above, the authors expect the students to know *the* nation refers to the United States.

Additionally, the adverb *there* is used to introduce the fact that there is no cure for AIDS. Collectively, referring words requires students to remember multiple people or participants in the text, which may be difficult because the referring word may be far back in the text or vague (Derewianka, 2011). Therefore, social studies teachers need to purposefully and intentionally teach students how references are used in texts (e.g., to avoid repetition) (Humphrey et al., 2012) in order to avoid comprehension problems, especially since references are not straightforward (Derewianka, 2011).

## **Ellipses**

As defined previously, ellipses can refer to participants by leaving them out to delete repetition (Derewianka, 2011). Across the passages, ellipsis was utilized to avoid repetition by omitting various participants, processes, and circumstances (Humphrey et al., 2012). Throughout the textbook, the textbook authors deleted various participants in the form of nouns (e.g., *the virus*, *Americans*, *AIDS*) and circumstances (e.g., from Santiago's harbor). Below (see Table 5), I provide an example where ellipsis was utilized when explaining polio, which will be identified by inserting the omitted words and placing them by a strikethrough, like this.

## Table 5. Example of Ellipses

While vacationing, FDR slipped off his boat into the chilly waters of the North Atlantic Ocean. That evening, he awoke with a high fever and severe pains in his back and legs. Two weeks later, Roosevelt was diagnosed with polio, a dreaded disease that at the time had no treatment. He never fully recovered the use of his legs. (Pearson, 2018 p. 368)

During the 1950s, American families benefited from numerous advances in medicine. By 1952, Dr. Jonas Salk was refining a vaccine against polio, the disease that had struck down Franklin Roosevelt and that, in 1952 alone, polio had crippled tens of thousands of Americans and polio killed 1,400 Americans, mostly children. By 1960, the widespread distribution of Salk's new vaccine and the widespread distribution of an oral vaccine developed by Albert Sabin had nearly eliminated the disease. (Pearson, 2018, p. 525)

By omitting various parts of the clause, textbook authors force readers to think about what words were deleted and what they refer to (Derewianka, 2011). For instance, *ocean* was omitted, which leaves students to figure out the type of body of water the *North Atlantic* refers to and forces them to think about the event geographically. This may pose a challenge for some students if they have not received quality instruction about the world's geography because it expects them to figure out the setting of where FDR first had an accident that led to him being diagnosed with polio. Furthermore, both *polio* and *Americans* were left out of the example above. Therefore, when the authors mention the number of deaths because of the disease polio, the insinuation is that readers will understand they are referring only to Americans, although polio affected the entire globe. The only reference students can refer back to is *American families* to figure out who specifically was -erippled...and killed..." because of the disease (Pearson, 2018, p. 525).

Additionally, the deletion of larger parts of the clause, such as *the widespread distribution of*, demonstrates students should understand both vaccines helped to —carly eliminate the disease" (Pearson, 2018, p. 525) while simultaneously having students differentiate between how the two vaccines are administered without being implicitly stated. The overuse of cohesive resources such as ellipsis can become —cry tiresome for the reader if the information is difficult to \_retrieve'" (Humphrey et al., 2012, p. 150). Consequently, social studies teachers can help to draw attention to the deleted or omitted word(s), which can aid students who may be struggling with reading fluency (Derewianka, 2011).

#### **Lexical Cohesion**

Lexical cohesion refers to the way words or lexical items are —tied together by meaning" to add cohesion to a text (Humphrey et al., 2012, p. 151). These links tie text together through synonyms, antonyms, repetition, collocation, classification, and composition (Humphrey et al., 2012). The textbook authors heavily used synonyms and repetition to construct meaning about diseases, as seen in the example below (see Table 6). Each of the lexical cohesion devices will be <u>underlined</u>.

### Table 6. Example of Lexical Cohesion

The movement from war to peace would have been difficult even in the best of times. But the end of 1918 and 1919 were not the best of times. In September 1918, an unusually deadly form of the <u>influenza</u>, or <u>flu</u>, <u>virus</u> appeared. Research in recent years shows that the <u>1918 influenza virus</u> was originally a <u>bird flu that mutated</u> to spread to humans. Many historians now believe that the <u>virus</u> originated in the United States, then the virus traveled around the world, thus the virus becoming a pandemic.

As many as 50 million people died—among them, about 675,000 Americans. The <u>Great Influenza pandemic</u>, also called the <u>Great Pandemic</u> or the <u>Flu Pandemic of 1918</u>, coming on the heels of the Great War, gave a sense of doom and dread to people around the globe.

The <u>pandemic</u> may have even reached <u>Wilson</u> at the Paris Peace Conference. He fell seriously ill, and his temperature reached 103 degrees. Wilson's physician diagnosed the <u>president</u> as suffering from the flu. Although there is some doubt that it was actually the flu, there is no doubt that <u>Wilson's sickness</u> kept him from participating in many meetings. <u>His illness</u> may have been a factor in <u>Wilson</u> not achieving all he had hoped to. (Pearson, 2018, pp. 292-293)

Here, we see various lexical items used to describe the participants, which are often repeated. *Virus*, *flu*, and *pandemic* are repeated five times throughout the three paragraphs. Although the same term is used repetitively to identify the participant, it serves as an advantage for readers. However, textbook authors also utilize synonyms to refer to their participants, which are presented in the form of nouns and noun groups. For instance, influenza is referred to with five different names (e.g., influenza; bird flu that mutated; flu; virus; 1918 influenza virus), while pandemic is referred to with four synonyms (pandemic; Great Influenza pandemic; Great Pandemic; Flu Pandemic of 1918). These varying synonyms –add interest and subtlety to the text," but simultaneously can make it difficult for readers to track participants (Derewianka 2011, p. 156). Readers will have to differentiate whether the authors refer to influenza as a disease (e.g., flu; 1918 influenza virus) or as an event (e.g., Flu Pandemic of 1918).

# **Text Connectives**

Text connectives contribute to the text's cohesion by developing and linking stretches of text (e.g., therefore, next, to illustrate) (Derewianka, 2011). Namely, text connective words were used to clarify, indicate time, show

cause and effect, and contrast. The example below (see Table 7) demonstrates the text connectives that contributed to the cohesion of passages on tuberculosis and whooping cough and will be **bolded**.

#### Table 7. Example of Text Connectives

At the same time, antibiotics, such as penicillin, came into widespread use. The antibiotics helped control numerous infectious diseases caused by bacteria, such as whooping cough and tuberculosis. As a result of these medical advances and a better understanding of the importance of diet, children born after 1946 had a longer life expectancy than those born before 1946. (Pearson, 2018, p. 525)

As illustrated above, various text connectives are utilized to further the content on diseases. Words and phrases such as *after 1946* and *before 1946* indicate a specific time period when life expectancy changed for children. Furthermore, text connectives that show cause and result included *caused by* and *as a result of*. These phrases emphasize the reasoning why children lived longer, which was —as a result of these medical advances and a better understanding of the importance of diet" (Pearson, 2018, p. 525). Additionally, authors use clarifying text connectives (e.g., such as) to elaborate on the *numerous infectious diseases* by specifically naming whooping cough and tuberculosis. Because these text connectives serve various functions, students may confuse them with conjunctions, which leave teachers needing to delineate the two because when reading, students will need to learn to —decode" conjunctions and text connectives accurately (Humphrey et al., 2012, p. 74).

## **How Cohesive Resources Work Together**

Separating cohesive resources may help to understand how each individually functions. However, in text, cohesive resources often work simultaneously with one another and should therefore be examined together. In Table 8, I refer back to the example on AIDS but include how the four cohesive resources jointly create meaning.

### Table 8. Cohesive Resources in Text

In addition, the nation faced the threat of a new disease, Acquired Immunodeficiency Syndrome (AIDS), which AIDS first came to doctors' attention in 1981. AIDS is the latest stage of the Human Immunodeficiency Virus (HIV), which AIDS attacks the immune system of its victims. There is no known cure for AIDS. When AIDS first reached the United States, it spread mainly among homosexual men and intravenous drug users. Later, the virus began injecting various other groups of people. By 1994, AIDS had killed more than 250,000 Americans.

<u>President Reagan</u> was criticized for *the* government's lack of response to *the* <u>AIDS epidemic</u>. <u>Congress</u> consistently felt *that* <u>Reagan's</u> requests for funds to battle *the* <u>AIDS</u> epidemic were too low **and** <del>Congress</del> nearly doubled *the* money earmarked for <u>AIDS</u> research and education.

Meanwhile, AIDS activist groups demonstrated throughout the country. In Washington, D.C., they unveiled a memorial quilt containing the names of some 2000 people who had died of AIDS. But not until George H.W. Bush's presidency did funding for research on the disease rise substantially. (Pearson, 2018, p. 709)

As seen above, information is jam-packed into each paragraph and brought together through various cohesive resources. Students are required to keep track of time and dates (e.g., By 1994, Meanwhile, But not until), while simultaneously following the participants (e.g., AIDS, HIV, Congress, Reagan) through the text, which becomes complex since the participants are referred to by various synonyms (e.g., virus, AIDS, disease). Building on tracking the participants throughout the passages, various government branches are discussed vaguely because it is assumed students understand the difference between Congress and the president's responsibilities. Furthermore, the use of references and referring words (e.g., it, they, its) refers to previous participants' names already introduced previously in the text. While the tracking of participants is overwhelming when texts are packaged with information, as seen in many social studies texts, teachers can draw attention to the cohesive resources while still teaching the content. In other words, social studies teachers can teach language and history content concurrently. By explicitly focusing attention on language features, students, among all emergent bilingual students, stand to benefit from understanding how the text—Imgs together" (Humphrey et al., 2012, p. 148), which in turn can aid their reading fluency and develop their writing skills.

# **Discussion**

This study demonstrated how the textbook authors use cohesion resources to tie and connect the text and create meaning. Through the utilization of SFL's textual metafunction, the findings reveal the use of four cohesive resources: (1) Referring words, (2) Ellipses, (3) Lexical Cohesion, and (4) Text Connectives, across the passages on diseases. Specifically, the analysis shows that the cohesive resources work jointly to: refer back to previous parts of the text in various ways, sometimes specific, but more often vague; omit different parts of the clause, specifically the main participant; emphasize certain ideas and terms over others through repetition; and link and develop the text by utilizing signposts indicating time, clarifying, showing cause and effect, and sequencing events. The results of these cohesive resources place responsibility on the reader to track the participants while forcing them to track what is going on in the rest of the clause. Put another way, textbook authors jam-pack each paragraph with mounds of information and leave the reader to figure out and comprehend the text on their own.

Essentially, the overuse of cohesive resources poses potential challenges for novice readers and/or those students struggling with fluency (Derewianka, 2011). As Martin and Rose (2007) state, —In order to make sense of discourse, one thing we need is to be able to keep track of who or what is being talked about at any point" (p. 156). However, if readers, such as emergent bilinguals, cannot follow as the text develops through various cohesive resources, comprehension will be compromised relatively quickly. For instance, comprehension problems can be triggered by the use of referring words, such as pronouns (e.g., he, him, they), determiners (e.g., these, there), and definite article (e.g., the), because the participant —being referred to is far way in the text; there are multiple characters in a story being referred to; the referring word refers back to a long stretch of text or to something valued and difficult to retrieve" (Derewianka, 2011, p. 152). In the example about AIDS, the analysis demonstrates referring words often are vague and simultaneously leaves readers to figure out what other social groups besides homosexuals and intravenous drug users were infected with AIDS/HIV. In other words, keeping track of participants, events, and things can become an overwhelming task in itself, but also

filling in the vague information on your own makes it more challenging to comprehend. If students are not aware of AIDS, it exposes them to fill in the gap with information from other media sources that may be more biased.

However, this challenge of tracking the participant(s) becomes more complicated when certain parts of the clause are omitted. The textbook authors use the ellipsis to avoid repetition (Humphrey et al., 2012), redundancy, and clumsiness in texts (Derewianka, 2011), but consequently, leave the reader to figure out the deleted word(s), which causes comprehension issues as emergent bilingual students will —often find such deletions...mystifying" (Derewianka, 2011, p. 154). For instance, omitting main participants, such as *Americans* and *polio*, and parts of the circumstance (e.g., ocean), the textbook authors force readers to identify the deleted word and what that word refers to in the text (Derewianka, 2011). Having to think back to what the omitted word refers to can cause a breakdown of comprehension if the link between the text is not made.

Furthermore, understanding the function of cohesive resources may also contribute to fluency and comprehension issues. In particular, the function of text connectives, which links between sentences of other sections of the texts, vary from conjunctions, which connects two clauses and only operates within a sentence" (Derewianka, 2011, p. 154). Thus, understanding whether the meaning is linked to another part of the text or just joining two sentences is necessary. In the example of whooping cough and tuberculosis, various text connectives refer to time (e.g., after 1946; before 1946), situate the event occurring. Moreover, the cause/result text connectives (e.g., as a result of) were utilized to show a causal relationship. However, because history texts tend to utilize these cohesive resources, it is imperative students can follow the sequence of events and understand when events happened chronologically.

Additionally, textbook authors utilized many lexical items (e.g., synonyms, antonyms, repetition) to add cohesion to the text. Specifically, synonyms were utilized, which places responsibility on the reader to remember all the names of Influenza and the Great Pandemic. Also, it requires students to understand when the lexical items are being used to a singular noun (e.g., flu) or as a noun group that refers to an event (e.g., Flu pandemic). These synonyms weave throughout the text require students to identify the patterns and associations between ideas (Derewianka, 2011).

The analysis of the passages in a U.S. history textbook demonstrates how cohesive resources are utilized and how they may cause problems for readers, specifically for emergent bilinguals. While a social studies textbook that targets the needs of emergent bilinguals does not yet exist (Szpara & Ahmad, 2007), social studies teachers can meanwhile —point out the discourse structure of text," which may benefit —students to see how the message is being delivered throughout the text" (Zhang, 2017, p. 205). Drawing the students' attention to a text's structure can "raise their consciousness about how English works" (de Oliveira & Schleppegrell, 2016, p. 71). In other words, emergent bilingual students can benefit tremendously from explicit grammar instruction from social studies teachers by meeting their language and content needs (Salinas et al., 2017).

However, the tension for social studies teachers is —hw to support students in learning both language and

content as they participate in classroom instruction" (de Oliveira & Schleppegrell, 2016, p. 50). Therefore, I believe SFL can be used as a tool to analyze the organization of text and can demonstrate a way to identify where readers are —unable to manage the flow of information through text" (Derewianka, 2011, p. 143). Textbook authors tend to use cohesive resources to organize their ideas; thus, explicit instruction of cohesive resources is important because the context of the student varies from the writer and —so do not have access to clues such as gestures and tone of voice to guide them thought the text and to focus their attention on the meanings the writer wants to foreground" (Humphrey et al., 2012, p. 156). SFL offers a way to engage students in social studies text by being —eritical of language and its usage" (Díaz & Deroo, 2020, p. 24). By understanding what makes the text difficult for readers, authors and publishers may have a —maningful direction for future efforts" to develop textbooks that are culturally and lingually inclusive (Ozmantar, 2017, p. 327).

## **Implications**

In my commitment to ensuring equity for all students, especially emergent bilinguals, I believe that social studies teachers should be/are language teachers. As de Oliveira & Schleppegrell (2016) state, —Neither a focus solely on form nor a focus solely on meaning is sufficient in helping children engage with and use the complex language expected in participating in school subjects" (p. 55). In other words, social studies teachers need to teach both language and content if they genuinely want their students to succeed academically. SFL offers students a way to critically engage with text while also supporting their comprehension of social studies content and language development. Below, I provide some implications for educators to consider.

Teachers can first teach the function of reference devices and help to avoid repetition (Humphrey et al., 2012). Humphrey et al. (2012) recommend teaching students —hw to refer the reader to a previous section of the text" and ensuring their emergent bilingual students are accurately using the reference device (e.g., gender, number) (p. 149). Additionally, social studies teachers should consider the positive results that come from explicitly teaching the structure of the text. For instance, reading a text aloud containing various types of clauses and —sing intonation to indicate boundaries and chunks" may help understand the relationship between ideas instead of skimming the text (Derewianka, 2011, p. 102). Furthermore, de Oliveira and Schleppegrell (2016) provide activities to incorporate SFL into elementary and secondary classes, such as drawing the students' attention to process types (i.e., verb processes) to help understand the structure of the text. Educational researchers, teacher educators, and teachers should consider SFL as a way to disrupt power structures in schools that keep students from learning history and seek more effective ways to be inclusive of culturally and linguistically diverse backgrounds in schools.

# Conclusion

Emergent bilingual students deserve access and opportunities to engage with social studies texts and learn history. Therefore, social studies educators need to expand their teaching repertoire by embedding culturally responsive practices (e.g., learning about students' culture and prior learning) (Dong, 2017) and include explicit

instruction of language to show how meaning is created in written texts. This study utilized SFL as a linguistic approach to analyze the cohesive resources (i.e., referring words, ellipses, lexical cohesion, and text connectives) used throughout a U.S. history textbook to develop further and link ideas about diseases. Collectively, the study contributes to the growing field of social studies education and emergent bilinguals by providing an alternative approach to potentially teach language in social studies classrooms. The development of language is the responsibility of all teachers. Thus, the opportunity must be seized now to provide students the equitable education and access to history they deserve.

# Acknowledgements

I would like to thank Mr. Frank White for your consistent support from the start to the end of the paper. I express extreme gratitude to Dr. Matthew R. Deroo for your feedback and encouragement.

## References

- Alison, M. (2020, June 11). This week in history: A second wave breaks in 1918 flu pandemic. *Chicago Suntimes*. https://chicago.suntimes.com/2020/6/11/21286861/this-week-in-history-flu-pandemic-second-wave
- Baskar, P., & Kwong, E. (2020, May 15). What the 1918 flu can teach us about handling today's pandemic. NPR. https://www.npr.org/sections/health-shots/2020/05/15/855319598/what-the-1918-flu-can-teach-us-about-handling-todays-pandemic
- Charmaz, K. (2014). Constructing grounded theory: A practical guide through qualitative analysis (2nd ed.). London, UK: Sage.
- Cho, S., & Reich, G. A. (2008). New immigrants, new challenges: High school social studies teachers and English Language Learner instruction. *Social Studies*, 99(6), 235–242. https://doi.org/10.3200/TSSS.99.6.235-242
- Choi, Y. (2013). Teaching social studies for newcomer English language learners: Toward culturally relevant pedagogy. *Multicultural Perspectives*, *15*(1), 12-18. https://doi.org/10.1080/15210960.2013.754640
- de Oliveira, L. C. (2011). Knowing and writing school history: The language of students' expository writing and teachers' expectations. Charlotte, NC: Information Age Publishing, Inc.
- de Oliveira, L. C., & Schleppegrell, M. J. (2016). Focus on grammar and meaning. Oxford, UK: Oxford University Press.
- de Oliveira, L. C., & Smith, S. L. (2019). Systemic functional linguistics in teacher education. Oxford Research Encyclopedia of Education. https://doi.org/10.1093/acrefore/9780190264093.013.494
- Derewianka, B. (2011). *A new grammar companion for teachers* (2nd ed.). Riverwood, Australia: Primary English Teaching Association Australia.
- Díaz, E., & Deroo, M. R. (2020). Latinxs in contention: A systemic functional linguistic analysis of 11th-grade US history textbooks. *Theory & Research in Social Education*, 48(3), 375-402. https://doi.org/10.1080/00933104.2020.1731637
- Dong, Y. R. (2017). Tapping into English language learners' (ELLs') prior knowledge in social studies

- instruction. The Social Studies, 108(4), 143-151. https://doi.org/10.1080/00377996.2017.1342161
- Fang, Z. (2005). Scientific literacy: A systemic functional linguistics perspective. *Science Education*, 89(2), 335-347. https://doi.org/10.1002/sce.20050
- Fang, Z., & Schleppegrell, M. J. (2010). Disciplinary literacies across content areas: Supporting secondary reading through functional language analysis. *Journal of Adolescent & Adult Literacy*, *53*(7), 587-597. https://doi.org/10.1598/JAAL.53.7.6
- Florida Department of Education (2020). *U.S. history eoc.*https://edstats.fldoe.org/SASPortal/navigate.do?PortalPage=PortalPage%2Bomi%3A%2F%2FMETASE
  RVER.Foundation%2Freposname%3DFoundation%2FPSPortalPage%3Bid%3DA5YWB4SY.BN00000
  A
- Fránquiz, M. E., & Salinas, C. (2013). Knowing English is not enough! Cultivating academic literacies among high school newcomers. *The High School Journal*, *96*(4), 339-357. https://doi.org/10.1353/hsj.2013.0012
- Gay, A. S., Barry, A. L., Rothrock, K. S., & Pelkey, M. M. (2020). Mathematics student teachers' views and choices about teaching and textbooks in middle and high school classrooms. *International Journal of Research in Education and Science*, 6(1), 120-132. https://eric.ed.gov/?id=EJ1229007
- Gebhard, M., Chen, I. A., & Britton, L. (2014). –Miss, nominalization is a nominalization:" English language learners' use of SFL metalanguage and their literacy practices. *Linguistics and Education*, 26, 106-125. https://doi.org/10.1016/j.linged.2014.01.003
- Glaser, B. G., & Strauss, A. L. (1967). *Discovery of grounded theory: Strategies for qualitative research*. New York, NY: Routledge.
- Halliday, M. A. K. (1978). Language as social semiotic: The social interpretation of language and meaning. Baltimore, MD: University Park Press.
- Halliday, M. A. (1993). Towards a language-based theory of learning. *Linguistics and education*, 5(2), 93-116. https://doi.org/10.1016/0898-5898(93)90026-7
- Halliday, M. A. K., & Matthiessen, C. M. (2014). *Halliday's introduction to functional grammar*. New York, NY: Routledge.
- Humphrey, S., Droga, L., & Feez, S. (2012). *Grammar and meaning*. Riverwood, Australia: Primary English Teaching Association Australia.
- Lapsansky-Werner, E. J., Levy, P. B., & Taylor, A. (2018). *Florida: United States history*. New York, NY: Pearson.
- Martin, J. R. (2002). Writing history: Construing time and value in discourses of the past. In M. J. Schleppegrell, & C. C. Colombi (Eds.), *Developing advanced literacy in first and second languages:*Meaning with power (pp. 87–118). New York, NY: Routledge.
- Martin, J. R., & Rose, D. (2007). Working with discourse: Meaning beyond the clause. New York, NY: Bloomsbury Publishing.
- Mathews, S. A. (2014). Reading without words: Using the arrival to teach visual literacy with English Language Learners. *Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 87(2), 64-68. https://doi.org/10.1080/00098655.2013.843499
- O'Donnell, M. (2011). Introduction to systemic functional linguistics for discourse analysis. *Language, Function and Cognition*, 12, 1-8.

- Ozmantar, M. F. (2017). A Historical Analysis of Primary Mathematics Curricula in Terms of Teaching Principles. *International Journal of Research in Education and Science*, 3(2), 327-342. https://eric.ed.gov/?id=EJ1148467
- Salinas, C. S., Rodríguez, N. N., & Blevins, B. (2017). Emergent bilinguals in the social studies. In M. Manfra, & C. Bolick (Eds.), *The Wiley handbook of social studies research*, (pp. 440-460). Chester, UK: Wiley Blackwell.
- Schleppegrell, M. J. (2004). *The language of schooling: A functional linguistics perspective*. New York, NY: Routledge.
- Szpara, M. Y., & Ahmad, I. (2007). Supporting English-language learners in social studies class: Results from a study of high school teachers. *The Social Studies*, *98*(5), 189-196. https://doi.org/10.3200/TSSS.98.5.189-196
- Usero, A. (2020, May 24). Reopening too soon: Lessons from the deadly second wave of the 1918 flu pandemic. *Washington Post*. https://www.washingtonpost.com/history/2020/05/24/second-wave-pandemic-flu-1918-coronavirus/
- Vogler, K. E., & Virtue, D. (2007). "Just the facts, ma'am": Teaching social studies in the era of standards and high-stakes testing. *The Social Studies*, 98(2), 54-58. https://doi.org/10.3200/TSSS.98.2.54-58
- Wang, J. (2010). A critical discourse analysis of Barack Obama's speeches. Journal of Language Teaching and Research, 1, 254–261. https://doi.org/10.4304/jltr.1.3.254-261
- Wang, Y., Many, J., & Krumenaker, L. (2008). Understanding the experiences and needs of mainstream teachers of ESL students: Reflections from a secondary social studies teacher. *TESL Canada Journal*, 25(2), 66-84. https://eric.ed.gov/?id=EJ806792
- Weisman, E. M., & Hansen, L. E. (2007). Strategies for teaching social studies to English-language learners at the elementary level. *The Social Studies*, *98*(5), 180-184. https://doi.org/10.3200/TSSS.98.5.180-184
- Yan, H. (2020, April 16). The Spanish flu killed more than 50 million people. These lessons could help avoid a repeat with coronavirus. CNN. https://www.cnn.com/2020/04/16/health/spanish-flu-coronavirus-lessons-learned/index.html
- Yoder, P. J., & Kibler, A. (2016). Instruction for English language learners in the social studies classroom: A meta-synthesis. *Social Studies Research & Practice*, 11(1), 20–39.
- Zhang, Y. (2017). Supporting English language learners in social studies: Language-focused strategies. *The Social Studies*, 108(5), 204-209. https://doi.org/10.1080/00377996.2017.1354808

## **Author Information**

## Edgar Díaz

https://orcid.org/0000-0001-6081-272X

University of Miami

5202 University Drive, Coral Gables, FL 33124

United States

Contact e-mail: exd152@miami.edu