Highlights: Systemic Functional Linguistics, Teacher Education, and Writing Outcomes for U.S.

Elementary English Learners: A Review of the Literature

- Instruction informed by Systemic Functional Linguistics supports English learners
- Systemic Functional Linguists promotes ELs' academic language and literacy skills
- Systemic Functional Linguistics facilitates content learning for English learners
- Explicit language-focused writing instruction develops critical language awareness

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Systemic Functional Linguistics, Teacher Education, and Writing Outcomes for U.S. Elementary

English Learners: A Review of the Literature

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If students are to be successful in school, at work, and in their personal lives, they must learn to write. This requires that they receive adequate practice and instruction in writing, as this complex skill does not develop naturally. A basic goal of schooling then is to teach students to use this versatile tool effectively and flexibly (Graham, 2019, p. 1).

In his recent review of K-12 writing instruction, Graham (2019) articulated the importance of writing for success in school and beyond. Indeed, while writing has long been viewed as an important skill, its mastery is increasingly essential for academic and professional success. As Brandt (2015) noted, "the powers of writing have never been more valuable to more people in so many places" (p. 46). Despite this reality, writing instruction in most classrooms remains inadequate, with an overemphasis on basic skills such as handwriting, grammar, and spelling at the primary level (Cutler & Graham, 2008) and an abundance of "writing without composing" (e.g., filling out a worksheet) at the secondary level (Graham, 2019, p. 280).

The current state of writing instruction has especially serious implications for English learners (ELs¹) in the United States, who continue to underperform on national assessments of writing proficiency (NCES, 2012). Understanding how to support ELs in becoming strong writers is especially important in elementary school, where students are developing foundational literacy skills whose mastery is vital for success in the later years of schooling. However, too many elementary educators feel underprepared when it comes to writing instruction, as evidenced by a recent national survey reporting that almost two-thirds of elementary educators did not feel their coursework prepared them to teach writing (Gilbert & Graham, 2010).

Given the increasing demands on elementary students to engage with linguistically and cognitively complex texts in the era of Common Core State Standards (CCSS; Fang, 2016), as

<sup>&</sup>lt;sup>1</sup> In SFL scholarship, various terms are used to refer to students who navigate more than one language, including English learner (EL), bilingual learner, and emergent bilingual. We use the term EL to denote students who speak a language other than English, who are in the process of acquiring English as an additional language, and who have not yet achieved full English proficiency, as measured by standardized assessments.

well as the limited research base on how to best support ELs in becoming strong writers (De Oliveira & Lan, 2014), it is critical that we deepen our understanding of effective, language-focused approaches for teaching writing to elementary ELs. While there is still much we do not know about effective writing instruction for ELs, there is general agreement that students who are simultaneously learning language and content benefit from instruction that makes academic language<sup>2</sup> and literacies explicit (Gebhard, 2019; Snow & Uccelli, 2009).

One promising approach for demystifying school-based language for ELs is a writing pedagogy grounded in systemic functional linguistics (SFL; Halliday, 1985, 1993). SFL is a theory of language that illuminates the relationship between language and context, revealing how individuals leverage semiotic resources in strategic ways to communicate effectively across a range of contexts. Applied to elementary writing instruction, an SFL approach highlights the connection between the communicative purpose and the discourse features of a text, providing an avenue for making school-based *genres*—or texts with a common social purpose—more explicit (Schleppegrell, 2004).

While SFL-informed pedagogies were initially developed in Australia (e.g., Christie, Martin & Rothery, 1989; Derewianka, 1990), they have since been taken up by scholars working in the U.S. toward improving writing instruction and outcomes for ELs (e.g., Brisk, 2012; Gebhard, Chen & Britton, 2014; Harman, 2013). In 2010, Meg Gebhard reviewed the findings from three major U.S. teacher education projects that had employed SFL theory and pedagogy to improve elementary literacy instruction (e.g., Achugar et al., 2007; Gebhard, Willett, Jiménez

<sup>&</sup>lt;sup>2</sup> We recognize that "academic writing" and the broader construct of "academic language" are contentious terms, fraught with assumptions about what is or is not considered "academic." In using these terms, we acknowledge these problematic framings yet seek to highlight the particular ways of engaging with texts that are valued in school and professional contexts (Harman, 2018; Schleppegrell, 2004), which, when made explicit, can provide ELs with access to powerful literacies without denying the validity of other ways of knowing and engaging with language(s) and literacy(ies).

Caicedo, & Piedra, 2011; Brisk & Zisselsberger, 2011). The review demonstrated the potential affordances of SFL pedagogies in supporting ELs' writing development and the need for more research on how SFL can be leveraged to understand the link between "sustained investments in teacher learning, changes in students' use of academic literacy practices over time, and issues of equity in schooling" (p. 801).

Since Gebhard's 2010 review, there has been ongoing research on SFL-informed teacher education in U.S. elementary contexts but few syntheses of the recent scholarship. One exception, albeit more broadly construed, is Gebhard, Accurso, & Chen's (2019) recent chapter, which included a brief review of the literature on SFL-based classroom practices and incorporated teacher and student findings at both elementary and secondary levels, as well as from contexts outside the U.S. Adopting a more focused lens, we respond to Gebhard's original call—and pick up where she left off—by presenting an analysis of findings and trends from the last decade of research on SFL-based teacher learning in the U.S.<sup>3</sup> Specifically, we consider the impact of SFL-based teacher education on elementary ELs' academic writing and disciplinary learning outcomes. Importantly, while this meta-review focuses on U.S.-based studies, our findings have broader implications for improving writing instruction for ELs globally, which is an especially pressing concern given recent increases in global migration (Meissner & Vertovec, 2015; Vertovec, 2007) and the relatively limited scholarship identifying instructional practices associated with better writing outcomes for ELs (Palmer & Martínez, 2013). Our review makes an important contribution, illuminating SFL-based pedagogy as a promising practice for supporting linguistically diverse students around the world in becoming strong writers.

<sup>&</sup>lt;sup>3</sup> For this review, teacher education includes any university coursework that provides instruction on SFL-informed writing instruction to pre-service and in-service educators and any professional development that trains teachers in the approach.

## **Conceptual Framing**

# A Functional Lens on Language

Systemic functional linguistics (SFL) is a theory of language developed by Michael Halliday (1978) that focuses on the semiotics or "meaning potential" of language within situated social and cultural contexts. Language, through this lens, is not a system of static rules but, rather, a "set of resources for making meaning" (Rose & Martin, 2012, p. 21). From this perspective, language—whether oral, written, or multimodal—is viewed as the choices that speakers and writers make to communicate a message. Halliday (1993) explains that these choices are informed by situational contexts, which include the content of the message (*field*), the relationship between the speaker/writer and the audience (*tenor*), and the organization of the text (*mode*). These intersecting factors, known collectively as the *linguistic register*, shape how speakers and writers leverage language to construct meaningful messages. Applied to K-12 schooling, an SFL perspective recognizes that academic success depends, in part, on the extent to which students can master institutionalized semiotic formations across disciplinary areas.

An SFL perspective also acknowledges that language (and texts) operate within the context of culture, shaped by particular understandings of and assumptions for communication shared by people in a community (Halliday, 1985, 1993). Martin and colleagues (1992; Martin & Rose, 2008) proposed using the term *genre* to refer to these culturally-embedded texts that share a common social purpose, discourse organization, and linguistic features. At school, students encounter a range of genres, including recounts, fictional narratives, reports, and arguments (Brisk & Zisselsberger, 2011). Each of these different types of school-based texts have specific organizational structures (referred to as "stages") and linguistic features (e.g., embedded clauses; nominalization, etc.) that often differ from the everyday ways that students engage with language

(Brisk, 2012; Halliday & Martin, 1993). However, students rarely receive explicit instruction in how to interpret and produce these genres, despite the fact that their academic success depends, in large part, on their ability to successfully master these school-based ways of communicating (Schleppegrell, 2004). This mastery is challenging for all students, but can be especially difficult for ELs.

In the 1990s, researchers and educators in Australia working within the Sydney School began to apply SFL theories to the design of literacy instruction, leading to the development of the teaching/learning cycle (TLC; Rothery, 1996), an SFL-informed pedagogy for writing instruction. While there have been adaptations to the original TLC model (e.g., the Expanded Ten-Stage TLC, Gebhard, 2019; the Teaching-to-Learn Cycle, Martin & Rose, 2005), the general framework involves a recursive pedagogical process with three main components: text deconstruction, joint construction of texts, and independent writing. In the first phase, teachers "build the field"—or develop students' content knowledge—and introduce the focal genre through the deconstruction of mentor texts (i.e., published texts that serve as models for schoolbased genres). Then, the class jointly constructs texts in the designated genre, with attention to its structural and linguistic components. In the final phase, students independently create texts in the given genre, having received the necessary scaffolding and preparation to complete their own writing (Derewianka, 1990). In recent years, U.S. scholars have taken up the TLC and other SFL-informed pedagogies to better meet the needs of ELs, recognizing the value of this approach for opening up spaces where students and teachers can engage in "powerful textual practices in service of equity" (Gebhard, 2019, p. vi).

#### **Supporting English Learners through SFL**

Over the past thirty years, the writer's workshop model (Calkins, 1986; Graves, 1983) has become a common approach to writing instruction in many classrooms across the U.S. Writer's workshop emphasizes a repeated cycle of writing and revision in which students plan, draft, revise, edit and redraft their work. While this technique supports students in learning how to revise their work, it often does not teach students how to write in the range of school-based genres, nor does it prepare students to engage with the rigorous disciplinary language required for academic success (Snow & Uccelli, 2009). This lack of explicit language instruction can make learning to write especially challenging for ELs, who are often unfamiliar with the types of texts valued in U.S. school contexts and who benefit from systematic instruction in academic English language and literacies (de Jong & Harper, 2005; Dutro, Nuñez & Helman, 2009).

An SFL-informed approach, on the other hand, foregrounds the explicit teaching of the "language of schooling" (Schleppegrell, 2004) through mentor text deconstruction and the joint construction of new texts prior to students' individual engagement with the writing process (Hyland, 2007). This approach highlights how language is organized for different purposes and audiences, providing clear instruction for ELs regarding the unique expectations of each genre (Byrnes, 2009b; Martin, 2000). And, as outlined in the discussion of the TLC, SFL-based writing pedagogies generally follow a cyclical learning model with repeated opportunities for drafting and revision. Thus, SFL pedagogies are not incompatible with process approaches; rather, they enhance such methods by providing students with a blueprint for text construction and a set of tools to make informed choices in their writing.

Implementing SFL-informed approaches to writing instruction also supports teachers in meeting the U.S. Common Core State Standards (CCSS; 2010), a set of academic standards in English language arts/literacy and mathematics that identify what a student should know and be

able to do at the end of each grade. The standards were created and adopted by state leaders in an effort to ensure that all students across the U.S. graduate from high school with the skills and knowledge necessary to prepare them for success in college, career, and life. While the standards have been criticized for their potential to perpetuate educational inequities by further promoting dominant discourses (e.g., Ravitch 2013), some scholars have noted that the standards place needed attention on the disciplinary literacy development of students (Harman, 2018; Zygouris-Coe 2012). That said, the CCSS do not provide specific guidance on how to teach the language features and organizational structures of academic genres. Moreover, the CCSS organize writing into three broad text types—narrative, informational/explanatory, and argument—categories that obscure, overly simplify, and sometimes misidentify the range of academic genres (Brisk, 2015). An SFL approach, on the other hand, provides teachers and students with specific information about the purpose of each genre and the range of linguistic choices available to the writer to accomplish this purpose within a given situational context. Thus, SFL theory can guide teachers in implementing the CCSS by providing clarity about each of these broadly construed text types.

# Methodology

This article reports on findings from a comprehensive review of the empirical scholarship exploring the intersection of SFL, elementary writing pedagogy, teacher education, and ELs. Our review was guided by the following research question: *How does teacher training in SFL theory and pedagogy impact writing and disciplinary learning outcomes for ELs?* To be included in this review, studies had to meet the following eligibility criteria:

- (a) Be an empirical study published in a peer-reviewed journal or edited volume
- (b) Involve English learners in U.S. elementary classrooms
- (c) Apply SFL theory as pedagogy

- (d) Address student writing and/or disciplinary learning outcomes
- (e) Be published in English
- (f) Be published between 2009 and June 2019<sup>4</sup>

Our sources included online digital databases/libraries (i.e., subject indexes), a Google Scholar alert (i.e., for new publications), expert consultation, and citation searches and reference reviews from relevant empirical and conceptual publications.

#### **Review Process**

We began with a comprehensive search of the empirical scholarship on SFL to gain a sense for the scope and breadth of the literature on this topic. The search term "systemic functional linguistics" in the Education Resources Information Center (ERIC) database yielded 274 results. We reviewed all titles and abstracts to identify studies that matched our eligibility criteria. Of this group, only eight articles met our criteria. Many articles were excluded due to their lack of focus on elementary contexts or their use of SFL as a tool for analysis (e.g., Seah, Clarke & Hart, 2015), as opposed to a pedagogical approach or intervention. Other studies were excluded due to their focus on SFL pedagogies in elementary contexts outside of the U.S, as we were specifically interested in how SFL pedagogies have been taken up with ELs in U.S. classrooms.

We continued our search in other venues with a more narrowed focus to target articles that aligned with the inclusion criteria (i.e., empirical studies that involved SFL as pedagogy in U.S. contexts and reported on writing outcomes for ELs). We reviewed the University of Colorado-Boulder library database for peer-reviewed journal articles with the following search terms: ((systemic functional linguistics) AND (writing) AND (elementary)) NOT ((university)

 $<sup>^4</sup>$  For a review of earlier studies exploring SFL and K-12 education with a focus on English learners, see Gebhard (2010).

OR (college) OR (higher education)). We also set up a Google Scholar alert to identify recent publications on SFL and writing. In these searches, we intentionally did not use the search term "English learner" to ensure we would account for studies using different terminology (e.g., "bilingual learner"); however, only those studies that specifically addressed ELs were included in the review. We also sought recommendations from experts in SFL and elementary writing and reviewed their curricula vitae to identify any scholarly work that had not appeared in our earlier searches, which led to the review of books with empirically-oriented chapters, such as Harman's (2018) *Bilingual Learners and Social Equity: Critical Approaches to Systemic Functional Linguistics*. Finally, we reviewed the reference sections of all texts that met our inclusion criteria to ensure we did not miss any additional relevant studies.

#### **Coding and Analysis Procedures**

After our extensive review, we identified 28 empirical studies that met the inclusion criteria (see Appendix A for full list). An annotated bibliography was generated for each source using the following categories: (a) key concepts/descriptors, (b) research question(s), (c) context for research (location, grade-level, student demographics, etc.), (d) study design and methodology, (e) findings, (f) implications, and (g) quality of source and/or reliability of findings. We later expanded the annotated bibliography to include the specific genre or linguistic feature targeted, type of SFL training (e.g., semester-long university course, professional development workshop, etc.), and more nuanced findings categories that aligned with our research question (e.g., "impact of SFL training on writing outcomes"). The process of annotating the literature served as our first cycle of coding, as we attended to patterns and discontinuities and took notes on our emerging interpretations of the literature.

Next, we engaged in a more focused, second cycle of coding, aimed at drawing out themes from the literature. Using our research question to frame our analysis, we generated a codebook with emergent thematic codes and coded all of the included pieces with these themes, enabling us to classify meaningful findings from each study as they related to our research question. As we conducted this cycle of coding, we sought out overlapping themes, as well as relationships and contradictions among studies. This process led to the identification of our central findings categories, which we present in the subsequent section.

#### **Findings**

Much of the reviewed scholarship was generated from three long-term, large-scale projects. Thus, prior to presenting the findings, we provide a brief overview of these projects, along with short summaries of other relevant studies that have contributed to the body of knowledge on SFL-informed pedagogies and ELs in the U.S. Then, we present central themes that emerged from our analysis of the existing literature, accompanied by illustrative examples.

## Recent U.S. Projects involving SFL in Teacher Education

"The Genres of Writing" in Massachusetts. Since Gebhard's (2010) review, Maria Brisk and colleagues (e.g., Brisk, Hodgson-Drysdale & O'Connor, 2011; Brisk & Ossa Parra, 2018) have continued their collaborative partnership with school districts in Boston, Massachusetts that serve a large Latinx student population. Now in its tenth year, this research-practice partnership continues to explore the potential of SFL-informed pedagogy for supporting Latinx ELs in their academic writing development. Various studies emerging from the larger project have considered how training teachers in SFL-informed methods such as the TLC has impacted writing instruction and student writing outcomes.

The ACCELA Alliance in Massachusetts. In 2002, Jerri Willet, a critical literacy scholar at the University of Massachusetts-Amherst, initiated the ACCELA (Access to Critical Content and Language Acquisition) Alliance, which established a partnership between the university and two urban school districts in response to various policies impacting literacy instruction for ELs (e.g., No Child Left Behind, high-stakes testing, the passage of an English-only referendum; Gebhard et al., 2007). For twelve years, researchers in the ACCELA Alliance explored how teachers participating in a UM-Amherst master's program took up SFL-informed instruction to support ELs in literacy learning (Gebhard, et al., 2007; Gebhard et al., 2011).

Design-Based SFL Professional Development in Michigan. In Gebhard's (2010) review, she discussed the California History Project (CHP), through which Mary Schleppegrell and her colleagues supported teachers in using SFL analytic methods to deconstruct history textbooks and primary sources. A few years later, Schleppegrell moved her SFL-oriented work to Michigan, where she and her colleagues engaged in a three-year Design-Based Research project with a school district serving a large population of Arabic-speaking families (e.g., Moore, Schleppegrell & Palincsar, 2018). The project began with an introduction to SFL concepts at one school with eight teachers and 200 students (Grades 2-5) and, by its final year, included twenty teachers across five schools (serving approximately 500 students). Many of their publications that met the inclusion criteria for this review centered on the impact of SFL metalanguage as a tool to support ELs' academic writing.

Other Relevant Studies. Several smaller scale studies have explored the intersection of teacher education and SFL in service of supporting ELs at the elementary level. At the University of Georgia, Ruth Harman has led research on genre-based literacy professional development in schools with a high population of bilingual students (e.g., Harman & Khote,

2018). Her recent work (e.g., Harman, 2018) considered how SFL can be critically leveraged to validate students' cultural and linguistic repertoires. In Massachusetts, Patricia Paugh worked closely with classroom teachers to implement SFL-informed instruction in elementary school classrooms with high populations of ELs. Although her work was informed by other SFL scholars in the state (i.e., Brisk and Gebhard), her research was independent from the large-scale projects. In Texas, Zenaida Aguirre-Muñoz examined the impact of SFL instruction on the writing performance of mixed-ability students (Aguirre-Muñoz, Chang & Sanders, 2015), revealing an improvement in students' descriptive writing over time as a result of SFL-informed instruction. Finally, in Indiana, de Oliveira explored how teachers made sense of and implemented SFL pedagogies learned through coursework at Purdue University (e.g., de Oliveira & Lan, 2014), work that de Oliveira termed a "language-based approach to content instruction" (LACI).

## The Impact of SFL-Informed Teacher Training

Four central themes emerged from our review and analysis of the existing literature. Specifically, we found that teacher training in SFL theory and pedagogies supported ELs in (1) composing genre-specific texts, (2) mastering academic language and literacy skills, (3) learning content across academic disciplines, and (4) developing critical language awareness. In what follows, we discuss each of these trends, with examples from emblematic studies. Some studies are cited across two or more themes, as their findings addressed multiple foci.

Theme 1: SFL-informed writing instruction supports ELs in producing genrespecific texts. Many of the reviewed studies addressed how SFL-informed teacher education contributes to writing instruction that supports ELs in understanding and producing specific academic genres, including *reports* (Brisk et al., 2011), *personal recounts* (Pavlak & HodgsonDrysdale, 2017), procedural recounts (de Oliveira & Lan; Paugh & Moran, 2013), fictional narratives (Brisk & Zisselsberger, 2011; Gebhard et al., 2011), biographies (Brisk & Ossa Parra, 2018; Gebhard, et al., 2014; Pavlak, 2013), arguments (O'Hallaron, 2014; Shin, 2018), and explanations (Accurso, Gebhard & Selden, 2016; Gebhard et al., 2014; Hodgson-Drysdale, 2014). Findings revealed that when provided with robust, genre-specific instruction, ELs can successfully produce texts that attend to the purpose, stages (i.e., organization), and linguistic features typical of a given genre.

For example, Pavlak and Hodgson-Drysdale (2017) presented a case study of a sixth grade English Language Arts (ELA) teacher who supported students in writing personal recounts. From a functional perspective, the organizational stages of a recount include an orientation (i.e., Who?, Where?, When?, What happened?), a chronological sequence of events, and (sometimes) a conclusion that explains the significance of the events (Brisk, 2015). Through the intentional use of the TLC, the teacher developed students' knowledge of these three stages. She also supported students in learning linguistic features of the genre through targeted minilessons, including a "verb hunt"—to recognize that recounts are told in the past tense—and a discussion of audience to help students in "jazzing up" their sentences (i.e., using more precise and descriptive words). While this study largely focused on the teacher and how she adapted SFL-informed pedagogies, the authors noted that, as a result of the genre-focused support, the students (nearly all ELs) began making more conscious and strategic decisions about language in their writing, which enabled them to produce high-quality personal recounts. These decisions were reflected in students' writing in the form of precise and captivating orientations that provided readers with relevant background information to help understand the recounted experience.

Similarly, Brisk and Zisselsberger (2011) showed how bilingual kindergarten students' fictional narratives improved with targeted SFL-informed instruction. The three-week writing unit included modeling the structural elements of the genre (i.e., orientation, complication, and resolution) and explicit discussion of purpose and audience. By the end of the unit, the three focal students successfully produced a fictional narrative that included all stages of the genre, and two of the students integrated imaginative language into their narratives to entertain the reader, demonstrating their attention to purpose and audience.

Finally, de Oliveira and Lan (2014) demonstrated how the implementation of an SFL-informed fourth grade science unit on procedural recounts supported the writing development of one EL (Ji Soo). The authors analyzed the writing samples that the student produced before and after explicit genre instruction. In his initial text, Ji Soo used colloquial, non-specific terms to reference the participants (i.e., noun groups) and processes (i.e., verb groups) of the experiment. For example, Ji Soo described one of the liquids as "the soap thingy" and repeated the process term "pour" several times. After genre instruction, however, he employed more technical language, including specific vocabulary to index experiment materials (e.g., "dishwasher soap"), temporal connectors (e.g., "first," "then," "finally") and a wider range of process verbs (e.g., "float," "put," "mixed"). The authors concluded that the genre-focused pedagogy supported Ji Soo in successfully composing procedural recounts.

While findings in relation to ELs' mastery of school-based genres are promising, some studies noted that, even after SFL-informed instruction, students may continue to mix genre elements, such as incorporating elements of a procedure into a report (Brisk et al., 2011) and incorporating elements of a personal recount into a fictional narrative (Brisk & Zisselsberger, 2011). However, these challenges were generally attributed to students and teachers' limited

experience with SFL theory and pedagogies. Indeed, studies that reported on findings from sustained and ongoing training in SFL (e.g., Brisk & Ossa Parra, 2018; Gebhard et al., 2011; Moore et al., 2018) highlighted the strong potential of SFL-informed writing instruction for supporting students in successfully engaging with academic genres over time.

Theme 2: SFL-informed writing instruction supports ELs' academic language and **literacy development.** Several of the reviewed studies illustrated the potential of SFL-informed teacher education to develop writing instruction that supports ELs in developing academic language and literacy skills. Many of the studies addressing this finding considered the impact of teachers' use of *metalanguage*, an SFL tool that provides teachers and students with a language for talking about language (e.g., Schleppegrell & Moore, 2018; Symons, Palinscar, & Schleppegrell, 2017). For example, students used metalanguage to identify register features of historical explanations (e.g., the use of generalized participants such as "scientists" or "animals"; Gebhard et al., 2014) and to develop more nuanced understandings of character development (e.g., by analyzing doing, saying, sensing, and being processes; Schleppegrell, 2013). In this way, SFL metalanguage provided ELs with "robust opportunities to engage in noticing and attending to the ways the language works" (Schleppegrell, 2017, p. 384), which, in turn, supported their academic language and literacy development. Two sub-themes emerging within this finding are that SFL-informed instruction supported ELs in (1) strategically using language to accomplish a range of academic tasks and (2) developing complex and technical writing skills.

Strategic use of language for academic purposes. Findings from the review revealed that SFL-informed pedagogies support students in strategically leveraging language for a variety of academic purposes, including to index audience/voice (Brisk, 2012), to shift from oral to written registers (Gebhard et al., 2011), to convey grammatical mood (Schleppegrell, 2013), and

to evaluate and deploy evidence (Palincsar & Schleppegrell, 2014; Symons, 2017). For example, Schleppegrell (2013) showed how one second grade teacher guided students in learning how different speech functions (offer, statement, question, command) can be realized through grammatical mood choices (i.e., declarative, interrogative, imperative) in literary texts.

Students—the majority of whom were Arabic-speaking ELs—demonstrated an understanding that the same speech function (in this case, command) can be manifested in different grammatical moods (e.g., declarative: "I'd like you to close that door."; interrogative: "Would you mind closing the door?" imperative: "Close the door!"; p. 161). Schleppegrell argued that this focus supported students' second language development by increasing their awareness of how language choices contribute to the meaning of a literary text and how different forms of language can be leveraged to accomplish the same function.

Pedagogies employing SFL metalanguage also supported ELs in evaluating and leveraging evidence, an important skill for academic literacy development. For example, Palincsar and Schleppegrell (2014) showed how elementary teachers used the concept of *likelihood* to support ELs in evaluating the strength of scientific evidence. The authors described likelihood as a "language feature of science" (p. 619) that reveals how writers use language to indicate the extent to which the evidence they cite supports a claim. As students read science texts, they identified the language used to denote likelihood using a likelihood scale—a pedagogical tool for categorizing language as representative of low, middle or high degree of likelihood. They also engaged in "oral rehearsal for writing about the evidence" (p. 622), an opportunity to practice presenting textual evidence in their arguments and adjusting the strengths of their claims. In a related study, Symons (2017) explored how the concepts of *usuality* and *likelihood* facilitated fourth-grade ELs' evaluation of textual evidence. Specifically, students in

the focal classroom leveraged their knowledge of these concepts to support their selection of evidence, engage in argumentative reasoning, and critique one another's arguments in writing. Findings from both studies illustrated how instruction in SFL metalanguage supported ELs in these academic discussions, which helped them to better understand and write complex texts.

Developing complex and technical writing skills. SFL-informed pedagogies also contributed to ELs developing more complex and technical academic writing (Aguirre-Muñoz et al., 2015; Gebhard et al., 2014; Gebhard et al., 2011; Harman, 2013). In a mixed methods study examining the use of SFL-informed writing instruction in fourth grade classrooms, Aguirre-Muñoz and colleagues documented a significant improvement in students' descriptive writing over the course of a semester. The authors provided both quantitative and qualitative examples to illustrate the increase in students' use of linguistic features and structures, including expanded noun phrases and verb groups, embedded clauses, relative clause structures, and adverbials to express additional details (e.g., place, time, manner). The authors maintained that these findings demonstrate the affordances of SFL-informed instruction in facilitating opportunities for teachers to provide explicit, yet meaning-focused, instruction on the linguistic features of specific genres, which in turn, supports students in writing more linguistically complex texts.

Relatedly, Gebhard and colleagues (2011) revealed how an SFL-informed, blog-mediated writing curriculum supported a second grade EL in progressing from simple sentences (e.g., "I like your litter [letter].") to complex clause structures and verb tenses such as "I have not wrote to you" (present perfect) and "because my mom said go to sleep because we have to wace [wake] up at 5:30" (past tense, imperative, future intention; p. 298). These improvements were also reflected in the student's growth on district benchmark assessments. Harman (2013) reported similarly positive findings on a study involving *intertextuality*, an SFL tool that involves

analyzing and borrowing language from mentor texts. Findings revealed that explicit instruction in intertextuality supported two focal students (both ELs) in learning how to appropriate particular lexicogrammatical resources from children's literature to build cohesion in their writing. Other studies demonstrated how SFL-informed pedagogies can support ELs in writing the technical language associated with reports and explanations (Accurso, Gebhard, & Selden, 2016; Brisk et al., 2011; Gebhard et al., 2014; Shin, 2016). In sum, SFL-informed instruction appears to provide ELs with linguistic tools to make deliberate choices that improves their academic writing.

Theme 3: SFL-informed writing instruction to support ELs' disciplinary content learning. In addition to bolstering ELs' academic language and literacy development, the review of existing studies found that SFL-informed teacher education promotes instruction that supports students in acquiring content knowledge across academic disciplines. The three content areas addressed in the reviewed studies were English Language Arts, science, and social studies.

English language arts. Several studies from the Michigan Design-Based Research project explored how SFL-informed pedagogies support students in conducting character analyses, both as readers and as writers. Moore and Schleppegrell (2014) illustrated how developing an SFL metalanguage supported ELs in interpreting and evaluating characters' attitudes in texts, such as identifying how a character is feeling based on the author's use of figurative language (e.g., "red as a cherry") and "showing" descriptions (e.g., "He stormed into the house"). Using data from the same study, Moore (2019) analyzed how two upper elementary teachers applied concepts from the appraisal framework (Martin & White, 2005)—an SFL analytic tool for interpreting attitudes presented in texts—to help students recognize polarity (positive, negative, or neutral) and force ("turned up" [intensified] or "turned down" [softened]

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language) in relation to attitude. Explicit instruction in these concepts seemed to help students strengthen their claims as indicated by analysis of final writing samples that showed students successfully employing different evaluative stances. At the same time, Moore and his colleagues (2018) addressed how the language of "turning up" and "turning down" was sometimes confusing for ELs. They provided an example of a teacher equating highly emotional writing with good writing and, thus, only encouraging students to "turn up" attitudes. As a result, one student incorporated strong emotions into her writing at the expense of the text's purpose. The authors highlighted the need to support teachers' deeper understanding of how and why particular linguistic tools are used, rather than simply engaging teachers in using the tools. Nonetheless, as a whole, studies have found that SFL metalanguage offers many pedagogical supports to boost ELs' ability to interpret and engage with school-based texts in English Language Arts (Klingelhofer & Schleppegrell, 2016; Schleppegrell, 2013; Schleppegrell & Moore, 2018; Symons et al., 2017).

Science. SFL-informed instruction also has the potential to expand ELs' use of language features to strengthen their understanding of scientific concepts (e.g., O'Hallaron, Palincsar, & Schleppegrell, 2015; Paugh & Moran, 2013). For example, Hodgson-Drysdale (2014) explored how a 5th grade teacher supported students in learning about the rock cycle. In their discussions of scientific concepts, the teacher leveraged SFL-informed strategies by teaching content-specific terms (e.g., igneous, sedimentary, metamorphic rocks) through links to key participants (i.e., noun groups) and processes (i.e., verb groups). For example, for igneous rocks, she introduced various participants associated with volcanoes (e.g., lava, magma, landforms, pressure). She also connected participants with processes (e.g., form, melt, erupt, cool) to help students understand similarities and differences in how each rock type is formed through the

phases of the rock cycle. Analyses of student writing revealed that this SFL-informed approach to teaching science enabled students to move beyond simply classifying the three rock types to understanding the interrelation between their unique components and the different processes that lead to their formation. While Hodgson-Drysdale acknowledged that students' written explanations could have included stronger engagement with the concept of sedimentary rock formation, she found that, overall, student texts displayed growing understanding of the linguistic features of the focal genre, which allowed students to "transform their experiences into knowledge" (p. 66), thus facilitating scientific content learning.

Social studies. Two reviewed studies demonstrated how SFL-informed pedagogies strengthen content learning within social studies curricula (Brisk & Ossa Parra, 2018; Gebhard et al., 2014). Gebhard et al. (2014) explored how one ESL teacher, Lynne, introduced her bilingual learners to SFL metalanguage in order to deconstruct grade-level disciplinary texts aligned with the social studies curriculum on immigration. Following Lynne's modeling, students were able to identify the stages of mentor texts (e.g., the orientation, record of events and evaluation in a biography on Sonia Sotomayor) and identify reasons behind authors' linguistic choices (e.g., shifting tenses to convey meaning). A longitudinal analysis of changes in student writing from three Spanish-speaking ELs over an academic year revealed that students successfully expanded their semiotic resources, especially in relation to content-specific text comprehension. Each student made gains in their reading and writing abilities, albeit to varying degrees. These advances included improved proficiency scores in reading and writing for all three students, a steady increase in the length of writing samples from two students, and revisions that attended to genre stages and register features for one student. The authors suggested that SFL metalanguage provided the teacher and students with tools for reading and writing texts within the discipline of

social studies that meaningfully engaged them in the content. In sum, the reviewed studies highlight how SFL can expand students' semiotic resources to simultaneously support literacy development and mastery of content knowledge.

Theme 4: SFL-informed writing instruction can foster ELs' critical language awareness. A final theme across the research on SFL-informed pedagogies is the potential of this approach to foster ELs' critical language awareness and, in doing so, contribute to more equitable schooling. Critical language awareness, from an SFL perspective, is defined as "the ability to recognize that text is an object that can be analyzed, that authors make choices in the language they use, and that authors have points of view that can be considered, engaged with, and responded to" (Schleppegrell & Moore 2018, p. 24). This focus was especially prevalent among recent studies, revealing increasing interest in understanding how SFL theory can be leveraged to promote culturally and linguistically sustaining classrooms. Harman's (2018) edited volume is emblematic of this shift, and includes a range of studies (some of which are included in this review) situated under the umbrella of critical SFL praxis. Harman and Khote (2018) explained that this critical approach helps teachers to conceptualize and implement pedagogical interventions "that actively incorporate the multisemiotic and cultural repertories of students while co-constructing disciplinary knowledge through explicit and carefully crafted scaffolding" (p. 64). Additionally, these critically-informed pedagogies can be leveraged to support ELs in speaking back to power, providing students with the linguistic tools to deconstruct and construct texts in ways that elevate their voices and ideas.

Some of the studies focused on how SFL-informed pedagogies could support students in becoming critical text analysts. For example, O'Hallaron et al. (2015) designed and implemented elementary classroom literacy activities with participating third grade teachers that helped

students recognize that, in addition to narratives, informational texts present an author's attitude/voice (i.e., opinion), address the reader, and make strategic linguistic choices that shape a reader's response. For example, one teacher led a class discussion around the author's use of the word "fortunately" in reference to the lack of earthquakes in Michigan. During this interaction, a student noted how the author combined fact and opinion: "You see how is her opinion, you see that she is saying that fortunately, there are no large earthquakes in Michigan, it's kind like a fact" (p. 61). This type of explicit focus on the author's linguistic choices raised students' awareness of how authors reveal their opinions in informational texts. Likewise, Schleppegrell and Moore (2018) explored how metalanguage promoted students' interpretation of character attitudes in literary texts and recognition of authors' perspectives in informational texts. Both studies illustrated how elementary-aged children were able to recognize and discuss how texts engage interpersonally with a reader, which they contend are emergent steps toward developing critical language awareness.

Other studies addressed critical language awareness from a humanizing and culturally responsive stance, considering how SFL-informed pedagogies can support lessons that connect to students' lived experiences. For example, in Zisselsberger's (2016) study, the focal teacher incorporated discussions on issues that related to students' lives (e.g., increased police presence in their neighborhoods to address violence) when teaching persuasive writing. The author described how, in addition to learning the structural features of the arguments, students saw the genre as "an important tool for challenging inequities found in schooling and even society" (p. 133). Furthermore, Gebhard and colleagues (2014) demonstrated how an SFL-based pedagogy can support teachers in designing lessons that are culturally responsive in a high-stakes English-language assessment context. Through the teacher's strategic use of Sonia Sotomayor's

biography to teach about immigration and the biography genre, the students (all Puerto Rican ELs) demonstrated increased participation in classroom activities and were able to successfully read and write grade-level texts. The burgeoning literature around this theme reveals great potential for future work that continues to engage in critical explorations of who students are and what they bring to academic writing experiences.

#### **Implications and Future Directions**

#### **Implications**

Gebhard's (2010) review highlighted the need for more a "robust research agenda" that explores the connections between SFL and students' academic literacy learning, as well as issues of equity in school. Since then, the growing body of research suggests that SFL-informed instruction can be an effective approach for addressing persistent educational inequities for ELs. In this literature review, we have largely focused on the second component of this "agenda" by investigating the impact of SFL on students' academic literacy learning. Specifically, our review identifies four broad themes that reveal how SFL-informed pedagogies impact writing and disciplinary learning outcomes for ELs, which include strengthening students' ability to write genre-specific texts, deepening their academic language and literacy skills, enhancing content learning, and fostering critical language awareness.

#### **Emerging Directions**

Our review also reveals several emerging and/or underdeveloped areas within the recent SFL-informed scholarship. First, despite the length of many of the university-district collaborations, there is a dearth of recent research in the U.S. analyzing the *longitudinal* impact of SFL-informed professional development on elementary student writing (e.g., tracking ELs'

writing growth over time)<sup>5</sup>. The majority of studies present case studies analyzing a few samples of classroom discourse and/or student writing over the course of a single semester or academic year. While this method is useful for examining localized shifts in the application of SFL-informed tools, it is also important to track progress over time to illuminate how these skills continue to shape student outcomes throughout their academic careers (and beyond).

Longitudinal methods have been used to trace the writing development of university students (e.g., learning German through SFL-informed approaches; Byrnes, 2009a), yet similar analytic approaches have rarely been applied in the context of U.S. elementary EL student outcomes. SFL researchers at the elementary level might draw on these longitudinal methods to further investigate the impact of SFL-informed education on elementary ELs' writing development and content learning.

Additionally, while several studies highlighted intersecting identities of some ELs, including race and socioeconomic status (e.g., Gebhard et al., 2014; Zisselsberger, 2016), there were no studies addressing the potential of SFL-informed instruction to support ELs with dis/ability classifications. Despite the large number of dual-identified students in U.S. schools, there is a persistent challenge in providing differentiated instruction that is both culturally and linguistically responsive (e.g., Hoover & Soltero-González, 2018). Researchers have called for special education teacher training that includes evidence-based practices to support exceptional ELs (e.g. More, Spies, Morgan & Baker, 2016). While some of the reviewed studies addressed the benefits of SFL-informed instruction for students identified as struggling academically (e.g., Gebhard et al., 2011; Klingelhofer & Schleppegrell, 2016), the field would benefit from research

<sup>&</sup>lt;sup>5</sup> One exception is Brisk's (2016) documented work with one school, which over the course of ten years went from a "failing school" designation to a "high performing school." This chapter was not included in our review as it is conceptual in nature, but it does offer some evidence of the longitudinal impact of this work in the United States.

that explicitly focuses on the potential of SFL-informed teacher education to support ELs with special education designations.

Finally, while a few studies highlighted how ELs' participation in literacy activities improves through SFL-informed pedagogies (e.g., Gebhard et al., 2014), we know little about the ways students are making sense of SFL theories and pedagogies. Research in the field of second language acquisition has consistently demonstrated that student valuation of classroom language practices in relation to their own identities significantly impacts learning outcomes (Hawkins, 2005; Norton, 2013). Thus, there is a need for additional student-centered research that explores student perspectives of and experiences with SFL theory and pedagogies.

## **Promising Directions**

In our review, we identified two promising directions for future research. First, scholars have begun to consider what it means to establish strong research-practice partnerships when engaging in SFL-informed pedagogy, reenvisioning this relationship as an iterative and ongoing collaboration. Several studies emphasized the importance of long-term collaboration between researchers and school districts (e.g., Brisk, 2012; Gebhard et al., 2011; Moore et al., 2018). Brisk and Ossa Parra (2018) explained that the long-term nature of their university-school partnership was instrumental in changing writing instruction and outcomes for ELs. One especially promising methodological approach for building and sustaining partnerships is Design-Based Research (see Moore et al., 2018), which involves iterative cycles of exploration, research design, evaluation, and reflection (Collins, Joseph, & Bielaczyc, 2004). Design-Based Research aligns well with the move to establish of long-term partnerships for SFL-oriented work, as the design approach inherently involves long-term collaboration, close partner relations, and a commitment to recursive design (Penuel, Fishman, Cheng, & Sabelli, 2011).

A second direction for SFL research is to consider its potential in bilingual education contexts. As demonstrated in this review, research has highlighted the promise of SFL-informed pedagogies for improving the English writing outcomes of ELs in English-medium education contexts. However, relatively little is known about how to operationalize this pedagogy for educators serving ELs in *bilingual* contexts—educational settings that are associated with higher academic outcomes for this student population (Thomas & Collier, 2012). As Brisk and Ossa Parra (2018) argued, while SFL-informed instruction may benefit ELs, "without instruction in the two languages, students cannot be expected to develop full biliteracy" (p. 149). Research consistently shows that ELs who receive sustained, high-quality instruction in both English and their home language outperform their peers in English-only instructional models (August & Shanahan, 2006; Cheung & Slavin, 2012; Slavin & Cheung, 2005). Thus, more research is needed that explores the impact of SFL-informed instruction for maximizing bilingual learners' literacy and learning potential in bilingual education contexts.

## Conclusion

An increasing number of researchers have highlighted SFL-informed writing pedagogy as an effective approach for addressing the academic and linguistic needs of English learners. While the majority of research exploring SFL in teacher education has been conducted outside of the U.S.—particularly in Australia, where the concept originated (e.g., Christie, 2012; Halliday & Matthiesen, 2004; Martin, 2000)—this review highlights the growing prevalence of SFL-informed studies at the elementary level in the U.S. and their impact on student learning. Through our analysis of research emanating primarily from three long-term research-school partnerships in the U.S., we have shown how SFL-informed pedagogies are increasingly demonstrating their potential to impact writing outcomes for ELs in elementary school by

strengthening students' ability to write genre-specific texts, promoting their academic language and literacy skills, facilitating content learning, and developing their critical language awareness. These findings are relevant for classrooms across the globe, especially given the increased transnational movement of peoples in our present era of "superdiversity" (Vertovec, 2007). It is critical that minoritized language speaking students everywhere have access to high-quality writing instruction that engages them in composing and analyzing texts for authentic academic and professional purposes. As highlighted in this review, SFL-informed teacher education has the potential to support teachers in this effort through a focus on explicit and systematic instruction in academic language and literacies.

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# Appendix A: Included Studies, Purpose, Context, and SFL Focus

Study	Purpose	Context	Genre / SFL Focus
Accurso, Gebhard & Selden (2016)	To explore the potential of SFL-based instruction to support students' academic literacy development.	The ACCELA Alliance in Massachusetts; Grade 4	Scientific explanation; nominalization
Aguirre-Muñoz, Chang & Sanders, 2015	To examine the use of SFL- inspired writing instruction in fourth grade classrooms to develop students' descriptive writing.	Masters course in Texas, Grade 4	Functional grammar; descriptive language
Brisk (2012)	To investigate how bilingual students use grammatical person across genres and to analyze what patterns in students' language choices reveal about their understanding of different genres and audiences.	"The Genres of Writing" in Massachusetts; Grades 3-5	Grammatical person; metalanguage; audience / voice
Brisk, Hodgson- Drysdale & O'Connor (2011)	To examine the impact of teachers' introduction to SFL theory on the report writing of their elementary students.	"The Genres of Writing" in Massachusetts; Grades K-5	Reports; tenor
Brisk & Ossa-Parra (2018)	To examine which genre writing pedagogy practices teachers took up in their classrooms and how bilingual students participated in the related activities.	"The Genres of Writing" in Massachusetts; Grades 3-5	TLC; biographies; metalanguage
Brisk & Zisselsberger (2011)	To report on an SFL-informed professional development and its impact on writing instruction in mainstream classrooms with bilingual learners.	"The Genres of Writing" in Massachusetts; Grade K	Fictional narratives
de Oliveira & Lan (2014)	To examine how a teacher incorporated genre-based pedagogy to teach science writing and its impact on an EL's procedural recount.	University course in Indiana; Grade 4	Procedural recounts; field-specific vocabulary
Gebhard, Chen, & Britton (2014)	To examine how one teacher used metalanguage to design disciplinary literacy instruction, and how her students used metalanguage in literacy activities.	The ACCELA Alliance in Massachusetts; Grade 3	Metalanguage; TLC; text deconstruction
Gebhard, Shin & Seger (2011)	To analyze how a teacher and students participated in genre-based instruction both in class and online, and the impact of this approach on the literacy development of ELs.	The ACCELA Alliance in Massachusetts; Grade 2	Metalanguage; multiple genres (recounts, informational reports, arguments, explanations)

Gebhard, Willet, Jiménez Caicedo & Piedra (2010)	To explore how changes in one teacher's approach to narrative instruction shaped her student's ability to produce written narratives.	The ACCELA Alliance in Massachusetts; Grade 4	Narratives
Harman (2013)	To examine if / how one teacher's instructional focus on intertextuality supported ELs in expanding their meaning-making processes.	The ACCELA Alliance in Massachusetts; Grade 5	Narratives; intertextuality
Hodgson-Drysdale (2014)	To explore if / how the use of SFL-informed language instruction helped deepen students' knowledge of science content.	"The Genres of Writing" in Massachusetts; Grade 5	Explanations; experiential metafunction; field-specific vocabulary
Klingelhofer & Schleppegrell (2015)	To investigate how use of functional grammar supported ELs in literacy tasks and in developing new language resources.	Design-Based SFL PD in Michigan; Grade 4	Persuasion (character analysis); functional grammar; metalanguage
Moore (2019)	To explore how SFL-informed discussions and instructional materials engaged students in literacy activities.	Design-Based SFL PD in Michigan; Grades 4-5	Persuasion (literary response); author's attitude; appraisal framework
Moore & Schleppegrell (2014)	To explore the affordances of SFL metalanguage in supporting students in talk about literary texts, particularly for interpreting and evaluating characters.	Design-Based SFL PD in Michigan; Grades 3-5	Metalanguage; character analysis
Moore, Schleppegrell, Palincsar (2018)	To present learning from the implementation of SFL-informed pedagogies and to evaluate the affordances of Design-Based Research for engaging in this work.	Design-Based SFL PD in Michigan; Grades K-12	Metalanguage; character analysis
O'Hallaron (2014)	To describe how fifth grade ELs engaged with argumentative writing in English language arts.	Design-Based SFL PD in Michigan; Grade 5	Persuasion; metalanguage
O'Hallaron Palincsar & Schleppegrell (2015)	To document how teachers and students developed a critical orientation to reading informational texts in science.	Design-Based SFL PD in Michigan; Grades 2-5	Interpersonal meaning; critical language awareness; author attitude
Palincsar & Schleppegrell (2014)	To present an overview of an SFL-informed PD and research project with a brief illustration of the impact of project implementation for writing in science.	Design-Based SFL PD in Michigan; Grade 4	Metalanguage; linguistic features of scientific texts (i.e., likelihood)
Paugh & Moran (2013)	To explore how one teacher created a classroom community that supported students in learning academic language	Action research in Massachusetts;	Procedural recounts; purpose

through gardening activities and SFL-informed instruction. Grade 3

Pavlak (2013)	To present how SFL-informed teaching enhanced language instruction for one Sheltered English immersion teacher.	"The Genres of Writing" in Massachusetts; Grade 3	Biographies; TLC
Pavlak & Hodgson- Drysdale (2017)	To examine how the Teaching and Learning Cycle was enacted in the classroom of a teacher new to SFL theory.	"The Genres of Writing" in Massachusetts; Grade 6	Personal recount; TLC; character analysis; register
Schleppegrell (2013)	To report on design-based research that supported teachers of ELs in implementing SFL-informed metalanguage within classroom activities.	Design-Based SFL PD in Michigan; Grades 2-5	Metalanguage; character analysis; register; grammatical mood
Schleppegrell & Moore (2018)	To describe how SFL-informed tools engaged teachers in learning more about the ways interpersonal meaning is infused into school-based texts.	Design-Based SFL PD in Michigan; Grades 2-5	Metalanguage; critical language awareness; interpersonal meaning; author attitude
Shin (2018)	To investigate if / how a teacher's use of online multimedia platforms supported students in learning to construct multimodal persuasive writing.	The ACCELA Alliance in Massachusetts; Grade 6	Persuasion; metalanguage
Symons (2017)	To explore how close attention to language can support ELs in identifying and arguing about evidence, as well as the challenges teachers may encounter when adopting this approach.	Design-Based SFL PD in Michigan; Grade 4	Persuasion; metalanguage
Symons, Palinscar, & Schleppegrell (2017)	To explore if / how ELs use functional grammar analysis for meaning-making with text.	Design-Based SFL PD in Michigan; Grade 4	Metalanguage; ideational meaning
Zisselsberger (2016)	To examine how a language arts teacher used SFL-informed tools to promote humanizing classroom practices.	"The Genres of Writing" in Massachusetts; Grade 5	Persuasion

#### **Authors' Biographies**

**Dr. Vanessa Santiago Schwarz** is a Post-Doctoral Research Associate with the BUENO Center for Multicultural Education and the Department of Educational Equity and Cultural Diversity (EECD) within the School of Education at the University of Colorado-Boulder. She received her Ph.D. in 2018 from the School of Education at CU-Boulder in EECD. Her dissertation explored the special education process at a Dual Language elementary school. She has an M.S. in Bilingual and Special Childhood Education and spent eight years working as an elementary school teacher in New York City public schools. In her current role at CU-Boulder, she is collaborating with Professor Millie Gort and Dr. Laura Hamman-Ortiz on research exploring the impact of a systemic functional linguistics approach to teaching writing in bilingual classrooms. Dr. Santiago Schwarz also teaches courses to in-service teachers for CU-Boulder's EECD program.

**Dr. Laura Hamman-Ortiz** is a Post-Doctoral Research Associate with the BUENO Center for Multicultural Education and the Department of Educational Equity and Cultural Diversity (EECD) within the School of Education at the University of Colorado-Boulder. Laura is an educational linguist who specializes in two-way bilingual education, classroom discourse analysis, and translanguaging theory. In her role at CU-Boulder, she is collaborating with Professor Millie Gort and Dr. Vanessa Santiago Schwarz on research exploring the impact of a systemic functional linguistics approach to teaching writing in bilingual classrooms.

Dr. Hamman-Ortiz is also a faculty member with the English as a New Language (ENL) program at the University of Notre Dame. In this position, she teaches graduate-level courses on second language acquisition and leads professional development workshops on supporting emergent bilingual students in mainstream classrooms.