Explicit and Meaningful:
An exploration of linguistic tools for supporting
ELLs' reading and analytic writing in the English Language Arts

by

Jason Patrick Moore

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Doctoral Committee:

      Professor Mary J. Schleppegrell, Chair
      Professor Anne L. Curzan
      Professor Elizabeth B.Moje
      Professor Annemarie S. Palincsar

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Abstract

This dissertation explored ways in which teachers might offer explicit support and strategies for English Language Learners (ELLs) to read and respond to literature in analytical ways, a central goal of the English Language Arts (ELA). Data were collected as part of a larger development project that called upon socio-linguistic and socio-cultural theories of language and learning to design professional development materials and classroom lessons for primary-grade teachers in a high-poverty, urban school district. One strand of the project's curriculum focused on supporting students to interpret and evaluate literary characters and to write arguments. The dissertation focused on three aspects of the project: students' classroom conversations about literature, teachers' writing instruction and students' written analyses, and the iterative research process that supported the development of instructional approaches.

The first area of investigation employed qualitative analysis of classroom conversations, offering evidence that grammatical metalanguage from systemic functional linguistics (SFL) and related artifacts can support ELLs in meaningful discussions about literature in which they interpret and evaluate characters. The second area of inquiry explored the implementation of writing lessons informed by socio-linguistic genre theory, as well as the students' writing of *character analysis,* a form of argument valued in secondary ELA. Qualitative analyses found that students participated in classroom conversations that highlighted natural constraints and choices consistent with the target genre and its social purpose, but at times, the teachers imposed unnatural constraints on students. Sociolinguistic analyses of the students' writing found that students successfully responded to the prompts, using language appropriate to the genre and its

purpose. Specifically, students took varied evaluative stances in response to prompts, modified their interpretations of character attitudes using nuanced lexis, and provided differing, but relevant evidence in support of their claims. The last area of inquiry focused on the project's Design-Based Research (DBR) approach, an iterative, cyclical research method committed to producing both instruction and theory in authentic classrooms. There are few concrete examples of how DBR is conducted to best support these goals, particularly the development of instructional theory. The dissertation offers one such example. The analysis that employed theoretical constructs from *narrative inquiry* to detail the first two years of research, uncovering ways theory and instructional practice functioned and interacted during our development process. Cumulatively, the dissertation contributes to existing research by offering evidence of teachers and students using linguistic tools to focus on language in explicit *and* meaningful ways, ultimately supporting students to analyze literature.

CHAPTER 1: INTRODUCTION

As a teacher of 9th grade English, my work was guided by two main learning goals, something I explained to parents at back-to-school-night every year. To introduce the first, I referenced one of the novels their children would read that year, *To Kill A Mockingbird* (Lee, 1960/1988), noting that it was the young children and not the adults who cried during the trial of falsely accused African American man. My point was that kids often have a perspective on the world that should be listened to, valued and cultivated, and I aimed to do that by engaging them with literature. I wanted to give them skills for reading between the lines of texts in ways that helped them to enjoy literature while also learning about the world that exists beyond the limits of their own personal experiences. The other primary aim of the course was what I told parents was the watershed event of the ninth grade: learning to write an academic essay. I showed them graphic organizers, promising to provide explicit support to students to make this often-intimidating task accessible and concrete.

I called upon many research-based strategies to make good on my promises, but ultimately, some kids were successful and others were not. For some, reading literature was a mystifying experience that left them frustrated by the fact that they could not find the "hidden meanings" in the novels and poems we read and discussed in class. Even more students struggled to analyze those texts in their essays. I struggled to make these important skills more concrete for them. I found myself writing vague comments in the margins of their papers: "What does this

show about the character?" or "Why is this important?". Some students instinctually knew what was expected, and others were left in the dark.

All kinds of students fell into that latter category, including students in my Advanced Placement Literature course. But there was nonetheless a disproportionate number of my English Language Learners (ELLs) represented in that group. Many of these students were incredibly bright and hard working, often spending hours after school with me reading novels aloud and revising their essays. And while they often read fluently, they struggled to make the kind of inferences and evaluations of characters, which in turn limited their written responses as well. My students were frustrated, and so was I.

I longed for strategies and tools that would enable me to be more explicit about how to teach my students to read literature closely, and I desperately needed tools for making literary analysis less intimidating and more accessible. I wanted my students to be capable of writing essays about literature that were alive with their voice, that were logical and organized, and also charged with relevance. In short, I longed for a better balance between explicitness and meaning in my instruction. This is what motivated me to study this issue in a doctoral program and conduct the research presented in this dissertation.

Exploring the issues

Many research findings echoed the problems I had experienced. Rather unsurprisingly, ELLs in the U.S., particularly those who speak Spanish, have not fared well on standardized tests of reading and writing, and the gap between them and native English speakers was greater in the secondary grades (Goldenberg, 2008; Ruiz-de-Velasco & Fix, 2000). Like my students reading aloud to me after school, ELLs were more likely to achieve "adequate performance" on word-

level reading and decoding than on measures of vocabulary, comprehension, and writing (August & Shanahan, 2006). They decoded the words on the page, but they didn't comprehend.

More surprisingly, research on English language instruction also indicated that teachers and scholars alike were also searching for a balance between explicitness and meaning. Some research findings suggest that instruction for ELLs has emphasized explicitness at the cost of meaning-making. According to the National Literacy panel report on language-minority children and youth, the major impediment to ELLs success with reading comprehension is their limited oral English proficiency (August & Shanahan, 2006). However, there is evidence suggesting that many ELLs are in classrooms in which they are experiencing individual seatwork and teacher-directed whole-class presentations that address low-level skills, and are provided too few opportunities to use language to explore interesting ideas, generate their own questions, and attain important personal and academic goals (Arrega-Mayer & Perdomo-Rivera, 1996; Assaf, 2006; Gersten, 1996). In short, explicit attention to language addressing low-level skills in decontextualized ways can preclude students' opportunities to make meaning of challenging and interesting texts.

That is not to say, however, that explicit attention to language is not needed or important. ELLs need opportunities for explicit focus on language itself in the context of meaningful interaction about curricular topics (August & Shanahan, 2006; Genesee et al., 2006; Gersten et al., 2007). The argument for an explicit focus on language sometimes calls upon the notion that the everyday language of informal interactions varies significantly from the often dense and abstract language encountered in texts at school, or *academic language* (Schleppegrell, 2004). Scholars have argued that the features of academic language need to be made explicit to students. Schleppegrell (2004) noted that teachers' attention is typically on the content they are teaching,

and "not on the ways language construes that content" (p. 2). For this reason, educational linguist Fran Christie (1985) has called language the "hidden curriculum" of schooling. The consequences of *not* attending to language are significant. According to Schleppegrell, "[w]hen students use linguistic styles typical of ordinary conversational interaction to present information or make an argument in schooling contexts, they may be judged illogical or disorganized in their thinking" (Schleppegrell, 2004, p. 2). Teachers have a responsibility not only to recognize the inaccuracy of these judgments, but also to provide "explicit induction into the genres of power if [students] are to participate in mainstream textual and social processes within and beyond the school" (Macken-Horarik, 2000, p. 17).

Access to the academic language of schooling also requires time. For example, Hakuta, Butler and Witt (2000) summarized the research in this area, reporting that it can take immigrant students in elementary grades four to seven years of instruction to attain grade-level proficiency in using language in academic settings. [1] As such, we might hope that these immigrant students—who have received almost all of their schooling in English—might be well-launched into their high school careers. Unfortunately, this does not seem to be the case. Carhill, Suárez-Orozco and Páez (2008) studied the language proficiencies of 274 high school ELLs who had, on average, attended U.S. schools for about seven years. Only 7.4 percent of the sample scored at or above the mean for English speakers the same age. Overall, the sample's scores were equivalent to the 2nd percentile of native English-speaking peers (p. 1165). These findings suggest that simply giving students enough time to acquire academic language of school is not sufficient.

Many of the aforementioned research findings deepened my understandings of the problems I faced as a teacher, such as the need for explicit and meaningful tools for language

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[1] Referred to as "Academic English" proficiency by Hakuta, Butler, & Witt (2000).

instruction for ELLs. And while I always strongly identified myself as a *high school* English teacher, I realized the importance of considering the learning experiences students had prior to arriving in high school. Perhaps if I wanted to best help ELLs meet the demands of high school English, I might be more successful if I helped them sooner. But before I could offer instructional support, I needed to learn more about the specific linguistic challenges of academic language in Language Arts as related to the two overarching goals I had identified at the outset. The primary tools for this endeavor were offered by systemic functional linguistics (SFL) and the vast body of research applying this tool to school texts.

Connecting language form with meaning

SFL is a theory of language that was developed specifically for connecting language form to meaning in social context (Halliday, 1985). It provides systematic ways of recognizing grammatical choices at varying levels of text: word-, sentence-, and text-level. A functional approach puts meaning first and *then* considers form. Grammatical analyses are a "means to an end, rather than as an end in themselves" (Halliday, 1985, p. xiv). In contrast with traditional grammar, SFL provides a *functional grammar,* terms that reflect language's function in a sentence. It can enable a reader to "show how, and why, the text means what it does" while also enabling her to "say why the text is, or is not, an effective text for its own purposes" (p. xv). As such, it is well-suited for understanding and evaluating academic texts, and has great potential for language instruction that is both explicit and meaningful.

Researchers have demonstrated SFL's power to deconstruct the language of schooling (Martin & Rose, 2008; Christie & Derewianka, 2008; Fang & Schleppegrell, 2008). Two concepts are centrally important to describing SFL-based text analyses: *genre* and *register.* In SFL, *genre* is characterized as "staged, goal oriented social processes" (Martin & Rose, 2008, p.

6). Analysis of *genre* is generally focused on identifying the social purpose of texts in school and the common moves (or stages) that support that goal. However, the specific language features of a genre can vary significantly, based on the situation. The notion of *register* is helpful to describing language at a finer grain size. Halliday (1978) defines register as "a set of meanings that is appropriate to a particular function of language, together with the words and structures which express these meanings" (p. 195). Briefly, *register analysis* is concerned with describing the clause-level language features of a text and how they fit with the particular situation (these terms are addressed in more detail in Chapter 3).

For the past 30 years, scholars (primarily from Australia's so-called "Sydney School") have applied tools from these constructs to make explicit many of the language features and challenges particular to texts in the different subject areas across grade levels (for more in-depth overviews, see Christie & Derewianka, 2008; Fang & Schleppegrell, 2008; Martin & Rose, 2008). Particularly relevant to this investigation, such work has offered insight into the linguistic challenges students might face when reading and responding to literature.

SFL as a tool for literary analysis

SFL can serve as a powerful tool for literary analysis. Consider the following example, Annabelle Lukin's analysis of a sonnet originally written in 1923 by Edna St. Vincent Millay (1988). She applied various types of SFL analyses of the language features to make insightful comments about the poem's meaning. For example, her exploration of *experiential meanings* (the content being conveyed) was particularly useful in understanding what the speaker was communicating to an ex-lover. In one analysis, Lukin looked closely at the *processes* of the major *participants* in the poem (the woman and her lover). Part of her analysis focused on the following lines:

So subtly is the fume of life designed,
To clarify the pulse and cloud the mind,
And leave me once again undone, possessed.

She found that "the fume of life" was actually the grammatical *participant* deemed responsible

for the speaker's sexual excitement. "… [I]t is not her lover who clouds her mind and causes her

pulse to race, but rather some general state of affairs that is part of being human" (p. 96). The sex

was good, but was "insufficient reason / for conversation when we meet again" (Millay, 1988).

Perhaps discussing the nuances of the brilliant, subtle manner in which the speaker conveys her

"scorn" "seasoned with pity" for the ex-lover could potentially help students understand the

poem more deeply by discussing how those language features related to the meaning they made

of the poem.

However, Lukin's analysis also helps to illustrate one of my central points about SFL: it's

incredibly complex. In addition to the analytical selection presented above, Lukin applied five

additional analytical tools from SFL to make sense of: the poem's sound systems, patterns in

word choice, a breakdown of the poem's clauses, its interpersonal meanings, as well as its

overall structure. Of course, Lukin's purpose is to highlight some of the payoffs of linguistic

analysis, not to suggest specific instructional approaches. However, it's important to note that the

transition between the two is not a simple one. Choosing from SFL's multi-faceted analytical

toolkit can be challenging, for the selection of an analytical approach depends on the context of

use, including, among other factors, the text itself, as well as the reader's purpose. This raises

important questions regarding SFL as a pedagogical tool: What linguistic knowledge do teachers

(of different subjects) need to help their students meet specific curricular goals? How much

linguistic knowledge is enough? In what ways do concepts and metalanguage offered by SFL

need to be modified to meet the needs of different learning contexts and goals? These are not

easy questions to address, but a discussion of how SFL has been applied in the context of the English Language Arts across the grades can provide some much needed footing.

SFL as a tool for describing (and supporting) students' writing about literature

Functional linguistic analyses of student writing offer valuable descriptions of the ways students are often asked to write about literature across the grade levels. First, genre analyses based on thousands of student writing samples offered evidence that young students were asked to write about literature in ways that have very different purposes than the genres assigned in later grades. Young students were more often asked to respond to literature in writing in the form of *personal responses* (how they *feel* about a story or character), or *reviews* (or "book reports") (Christie & Derewianka, 2008; Martin & Rose, 2008). This is a disservice to students because "personal responses are actually the least valued response type in formal evaluations" (Martin & Rose, 2008, p. 93). Instead, "factual and analytical genres are often used for assessment and evaluation purposes in advanced literacy tasks" (Schleppegrell, 2004, p. 77).

In addition, some of the language features of personal responses may make it difficult for some students to write in ways that fulfill the purposes of the "analytical" genres common to the secondary English classrooms, such as a *character analysis* (which often asks one to interpret or evaluate a character for a particular purpose). In fact, register analyses of student writing offered evidence to support that argument. Rothery and Stenglin (2000), who analyzed literary analyses written by high school students for a standardized exam in Australia, reported that the most successful writers of literary analyses were able to evaluate texts and make judgments about characters and their actions, while struggling writers responded to texts in more personal, emotional ways—which are register features of *personal responses* and *reviews*. Here, SFL genre and register analysis made clear the differences between academic language in the primary

and secondary responses to literature. These findings suggest that students even in younger grades might benefit from some opportunities to write in ways that will be valued in the later grades.

In addition, such linguistic analyses can also bring much-needed clarity to "analytical" writing genres, sometimes also referred to as essays or more generally, academic arguments. Writing arguments is a key skill for success in high school, college, and beyond, but it is something most students struggle to do well (NAEP, 1999). In general terms, argument is most commonly defined by calling upon Toulmin's model of argumentation (1958/2003). In simplified terms, an argument can be described as a text that: presents a claim (or stance on a topic) and supports it with both evidence and rationale (or analysis or warrants). This model has influenced both research and practice on argument writing instruction.

SFL's notions of *genre* and *register* can help to uncover some of the subtle ways argument genres across subject areas realize those more general stages. As Christie and Derewianka (2008, p. 211) noted, "Even where children write genres found in other subjects ... [those same genres] do not mean in the same ways." Depending on the content and context, language is deployed in different ways. Analysis of argument genres' *registers* across school subjects can bring some clarity about what "analysis" is and ways to do it. In the *character analysis* genre common to secondary English classes, students are often expected to offer quotes or details from the text, and offer a "character judgment" by evaluating a character. Students are likewise expected to provide elaboration by relating their evaluations to a more general topic, which "by implication at least, often leads to reflection about life" (Christie & Derewianka, 2008, p. 71). This is a concrete, functional description of "analysis" as it is realized in this particular genre. (More specific language features of this stage and other stages of character analysis are

offered in Chapter 3.). In turn, greater clarity of purpose and function of written analysis can inform ways SFL might be used to support students' writing. For example, knowing that students are expected to make ethical judgments of characters, their reading might be best supported with tools from SFL's *appraisal* system, which is designed specifically for discussing attitudes in text. By contrast, the analysis offered by a scientific argument would realize "analysis" in different ways, serving a slightly different purpose and deploying different language differently (Christie & Derewianka, p. 69).

While the SFL-based analyses of student writing can bring clarity and specificity regarding the purposes and linguistic features of academic genres relevant to responses to literature, these descriptions are not readily transformed into writing instruction. In fact, SFL genre theory is sometimes characterized as reductionist and rigid, potentially leading to prescriptive and harmful approaches to writing instruction (Freedman, 1993). While this is contrary to SFL's aim to describe (rather than prescribe) patterns of meaning in school, these are reasonable concerns. Rhetorical approaches to language teaching, despite their best intentions, can be thwarted by existing practices when it comes to classroom implementation (Lefstein, 2009).

Bringing SFL to the English classroom

The research presented here informed my search for explicit *and* meaningful approaches to teaching language and literature, but it also complicated it. Academic language development may very well be supported by explicit attention to language in the context of meaningful activities, but it also requires time and repeated exposure. Students in the elementary grades are not generally asked to write about literature in analytical ways despite the well-documented notion that such argument genres are the most valued and necessary for success in secondary

school and beyond. Primary-grade students, ELLs in particular, need opportunities to read and respond to literature in analytical ways *before* they arrive to the 9th grade, and they need concrete tools for doing so. SFL offers a theory of language and powerful analytical tools developed *specifically* for connecting language form and meaning. However, it is a very complex analytical tool that has primarily been applied to school texts by trained linguists. Few examples of research offer examples of teachers and their students using SFL in classrooms.

The *Language And Meaning in Text (L&M)* project, an IES-funded federal grant under the direction of co-principal investigators Mary Schleppegrell and Annemarie Palincsar, provided the opportunities and resources to systematically explore many of these issues. As a Design-Based Research (DBR) project, its primary aim was to develop professional development materials and classroom lessons that utilized SFL to support primary grade ELLs' reading and writing of grade-level texts, particularly in the subject areas of ELA and science. I served as the lead curriculum designer of the ELA instructional units, which were implemented in approximately 30 classrooms across six schools in the Dearborn School District from 2010 through 2013. The dissertation examines data collected from this project and presents three manuscripts with separate, but complementary areas of inquiry and pursues each with varied theories and research methods.

Overview of manuscripts

Paper #1: Using a functional linguistics metalanguage to support academic language development in the English Language Arts

Chapter 2 shows how SFL metalanguage offers tools for supporting specific curricular goals of ELA, providing explicit and concrete assistance to students in learning to interpret literature and evaluate characters in stories. In this work we take the perspective that dialogue

about texts and their meaning is the primary context through which learning is accomplished, and we offer evidence from classroom talk that shows how grammatical metalanguage and related artifacts can support ELLs in meaningful discussion that extends both their language and content knowledge.

The conceptual framework of this paper aligns with this learning perspective, calling upon the work of Gordon Wells and his landmark synthesis (1994; 1999) of Vygotsky (and socio-cultural perspectives of development) and Halliday (and his socio-linguistic theory of language in SFL)—the two primary theories informing the project's pedagogy. Wells' focus on dialogic interaction was well-suited for this qualitative analysis of classroom conversations about literature, for it offered helpful constructs for examining the roles SFL metalanguage played in the context of instruction and conversation. Specifically, his notions of *activity,* mediating *artifacts,* and *dialogue* provided precise language for uncovering SFL's function in the classroom conversations.

Among the findings reported, SFL metalanguage supported explicit talk about figurative language in literary texts, and helped students to make inferences about characters' attitudes that were implied through actions or other abstract language, reflected in both the students' conversations and enactments of texts. Likewise, the activities and teachers supported students in using text as well as personal experience to articulate and support multiple interpretations. Students actively constructed meaning together, at first with a great deal of support from the SFL metalanguage and teacher; and later, articulating well-formed ideas in extended talk relatively independent of the teacher and without the use of metalanguage. These findings bolster the argument for applying limited SFL constructs in supporting specific, but important curricular goals. The paper also underscores the important, and mutually beneficial relationship between

SFL metalanguage and abstract disciplinary terms (such as indirect characterization). In this sense, the paper speaks to the issues of how much SFL, and how it fits in. That is, SFL can be useful to teachers without being overwhelming, and it can be incorporated and connected to the practices and goals in ELA classrooms.

Paper #2: Essays in Elementary: An SFL-based genre approach for supporting ELLs in primary grades to write analytical responses to literature

Chapter 3 homes in on the application of SFL genre theory to support students' argumentative writing in the ELA. In the second year of the project, the research team modified SFL constructs in order to develop an instructional unit that supported students to write *character analysis* responses to literature, a highly-valued form of argumentation in the English Language Arts (ELA), particularly in secondary school. The pedagogy engaged students in discussions about literary texts (the focus of Chapter 2), introduced them to the genre by addressing the purpose and common structures and language features, and ultimately supported their independent planning and writing in the genre. This paper focuses on the instruction and student writing from two classrooms (one fourth grade, one fifth).

SFL's notion of genre, with its careful and detailed descriptions of patterns that emerge in valued school genres, is sometimes raises concerns about implications for pedagogy (as noted previously). The analysis presented in this chapter explores our pedagogy with those concerns in mind. The analysis first focuses on the genre-based pedagogy by examining whether the instruction supported classroom talk that highlighted the genre in explicit and meaningful ways (rather than prescribing rules to be followed). To support this qualitative analysis of classroom talk, I generated new theoretical constructs (relating to natural and unnatural constraints and choices inherent to genre) to analyze the classroom conversations and instructional materials.

The second aim of the analysis is to explore the students' writing: 1. a close analysis of the language features and discussion of whether they align with the goals and expectations of the genre; and 2. a broader description of patterns identified in the class sets that highlight the ways students' writing was similar or varied. Analytical tools from SFL (stage and register analyses) enabled this examination.

This chapter provides evidence that students participated in classroom conversations that highlighted some of the natural constraints and choices consistent with the target genre. At times, however, the instruction also imposed unnatural constraints on the students as they wrote. The student writing samples provided evidence that young students are capable at writing analytical responses to literature in a simplified task. Close analysis of student responses illustrated that they were able to write in ways (appropriate registers) that serve the purpose of the genre and are highly valued in ELA classrooms. In addition, the analysis found significant variety among the student products: they often took varied evaluative stances in response to prompts, modified their interpretations of character attitudes using nuanced lexis, and provided differing, but relevant evidence in support of their claims. Many students were likewise able to provide elaborated analysis of evidence from literary texts in a variety of ways.

Paper #3: Links in Developing Instruction and Theory: An Analysis of a Design-Based Research Project Supporting ELLs' Literacy in Language Arts

Chapter 4 focuses on the overall research approach adopted by the L&M project, that of Design-Based Research (DBR). Since the 1990s (Brown, 1992; Collins, 1992), DBR has garnered significant interest from education researchers for its potential to better connect research, theory and practice. It aims to accomplish this by simultaneously developing educational interventions in (and in response to) authentic classroom contexts, while also

generating local (and context-bound) instructional theories. DBR uses both qualitative and quantitative methods as the intervention and theories are refined through iterative cycles of development, evaluation, and refinement.

Despite this potential, Anderson & Shattuck's (2012) review of recent literature found evidence for only "guarded optimism that the methodology is meeting its promised benefits" (p. 16). The practical benefits of DBR (in the form of various tools, software, curricula) have been well evidenced in research, but the creation of educational theory has not: only 33 percent of DBR studies yielded "new understandings about educational phenomena" (p. 23). Ormel and colleagues' (2012) own review of current DBR literature provides some insight into why. They reported that little attention is given to how (re)designs are informed by research. They view such work as crucial to the development of DBR and contend that additional research, "driven by different methodological choices, is needed to explore the connections between empirical warrants and both design decisions and theory-building" (p. 20). While there is substantial evidence of its practical contributions—and some promising, but limited examples of theory creation—there are very few examples of *how to actually conduct* DBR in ways that yield both intended products.

This manuscript provides one such example, making the design choices for the L&M project explicit and underscoring the various ways practice generated new understandings and then those new understandings informed new design choices. This paper provides a design narrative illustrating how DBR processes supported the interplay and development of both theory and practice. To make analytic sense of this narrative, I applied constructs from narrative inquiry, which enabled a holistic approach, bringing coherence to vast amounts of varying types of data. This general approach was given much-needed analytical traction from theoretical constructs

specifically relevant to DBR, its processes, and most common theories. The analysis ultimately yielded theoretical propositions describing the interaction and iterative development of instructional practice and theory in the first two years of the project. In addition, the findings propose disciplinary specific instructional theories (diSessa & Cobb, 2004) that make conjectures regarding how SFL-based metalanguage can support ELLs' analytical reading and writing (specific propositions that are supported and discussed in detail in Chapters 2 and 3).

The sum of these three chapters makes a case for an approach for teaching English Language Arts that applies SFL concepts to make the challenging task of reading, writing and discussing literary texts in analytical ways more accessible to young ELL students. In a final chapter, I discuss the dissertation's implications for both practice and research.

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CHAPTER 2: USING A FUNCTIONAL LINGUISTICS METALANGUAGE TO SUPPORT ACADEMIC LANGUAGE DEVELOPMENT IN THE ENGLISH LANGUAGE ARTS[2]

Introduction

Academic language is the language through which learning in schools is accomplished, but to be a useful construct, academic language needs to be specified in relation to the goals of the curriculum across grade levels and disciplinary contexts. The forms and features of academic language vary by task, subject matter, and grade level, so those who want to support children's development of academic language need to situate that support in particular contexts of use and in the service of disciplinary meaning making.

In this article we focus on the academic language of English language arts[3] (ELA) in the primary school, with a focus on meaning in the literature students read. Two major foci of the ELA curriculum are the study of language and the study of literature, making the ELA classroom unique in including in its subject matter an explicit focus on language. However, that focus is seldom linked meaningfully to other disciplinary activities. Explicit instruction about language is often realized as the teaching of isolated decoding skills or as labeling parts of speech. As a result, some of the most important and challenging goals of the curriculum, such as literary

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[2] Co-authored chapter: Moore & Schleppegrell (in press).
[3] English Language Arts is the term used in the United States for instruction in English language and literature; known in other contexts as subject English (Christie, 2010).

interpretation, remain a mystery to many students, leaving them ill-equipped to read and respond to literature in the analytical ways valued in later grades.

This is a particular problem for students learning English as an additional language. In the U.S. context, students classified as English Language Learners (ELLs) are more likely to achieve "adequate performance" on word-level reading and decoding than on measures of vocabulary, comprehension, and writing (August & Shanahan, 2006, p. 633). Research suggests that these students need opportunities for explicit focus on language itself in the context of meaningful interaction about curricular topics (August & Shanahan, 2006; Genesee et al., 2006; Gersten et al., 2007). But outside of traditional literary terminology (metaphors, similes, and figurative language more generally), ELA teachers typically have few resources that support them in this endeavor.

In this article, we show how the functional linguistics metalanguage of SFL offers tools for supporting the goals of ELA, providing explicit and concrete assistance to students in learning to interpret literature and evaluate characters in stories. We draw on data from an ongoing design-based research project that is developing tools for talk about text across the elementary school years, using the theory of systemic functional linguistics (SFL). In this work we take the perspective that dialogue about texts and their meaning is the primary context through which learning is accomplished, and we offer evidence from classroom talk that shows how grammatical metalanguage and related artifacts can support ELLs in meaningful discussion that extends both their language and content knowledge.

Theoretical and Research Perspectives

Theory of Language & Grammar

Talk about the meaning of texts calls for *metalanguage,* language for referring to the choices authors have made in writing those texts. In the ELA classroom, teachers often draw on two metalanguages, each serving different purposes. When reading and discussing literature, teachers and students have a *disciplinary* or *literary metalanguage* (terms such as *symbol, metaphor* and *characterization)* to help make meaning of stories and discuss author's craft. When responding to writing, teachers often use the metalanguage of traditional grammar in service of improving the "correctness" or "mechanics" of student writing. These metalanguages serve very different purposes, but neither provides students with robust tools for making sense of how language choices contribute to the meanings made.

Systemic functional linguistics (e.g., Halliday, 1985) offers a *functional grammar metalanguage* that connects language forms to meanings in contexts of use. It offers a means of engaging students and teachers with the language of curricular texts, for it enables teachers to foreground meaning while also being explicit about language forms. Table 2.1 presents examples of the three metalanguages that offer resources for teaching ELA. SFL represents *grammar* as "networks of interlocking options" (Halliday, 1985, p. xiv) rather than as rules to be followed. As speakers and writers, we make choices from grammatical systems that enable meaning-making about our experience and that enable us to enact relationships as we create coherent spoken and written texts. The SFL metalanguage provides a means of being explicit about the ways different meanings are realized in choices at multiple levels (word, clause, and text).

Type of metalanguage	Examples
disciplinary or literary	simile, symbol, characterization, dialogue
traditional grammatical	noun, noun phrase, adjective, verb, predicate
functional grammatical	process, participant, polarity (positive/negative), amplify (turn up), soften (turn down)

Table 2.1. ELA metalanguages

The SFL metalanguage provides teachers and students with a language for talking about language, to "show how, and why, the text means what it does" (Halliday, xv). Guided by a focus on *how* meaning is expressed, close attention to language supports a linguistic awareness that can deepen and refine students' understanding of the meanings made in literary texts. At the same time, use of the metalanguage positions readers to evaluate texts, to "say why the text is, or is not, an effective text for its own purposes" (p. xv), providing students with tools not only to better understand how disciplinary knowledge is constructed but also to evaluate it, participate in disciplinary discourses, and ultimately contribute to shaping those discourses.

A disciplinary focus is needed in considering the challenges of academic language for ELLs. Students encounter academic language in patterns that vary in response to differences in the content knowledge, interpersonal relationships being enacted, and modes of discourse relevant to the different subject areas and task expectations of schooling (Halliday & Hasan, 1989; Schleppegrell, 2004). Vygotsky's notion of "everyday" and "scientific" concepts resonates with this perspective, as SFL metalanguage embedded in and supportive of disciplinary learning in ELA needs to enable students to focus on the scientific concepts (in the Vygotskyan sense of systematically organized) to be developed in the study of literature. For Vygotsky, learning scientific concepts requires conscious focus and attention, different from everyday concepts learned through personal experience without conscious attention. We see the need, then, to bring together metalanguages from the disciplinary context with SFL metalanguage in a pedagogy that supports students' use of everyday language and concepts as resources for meaning-making.

Theory of Learning

Our theory of learning is situated at the intersection of socio-cultural and socio-linguistic perspectives, as articulated in Wells' (1994; 1999) synthesis of Vygotsky's and Halliday's

contributions to a theory of language and learning. Wells underscores the value each of these theorists placed on the role of language in knowledge construction. For Halliday, language is the "essential condition of knowing" (Halliday, 1993, p. 94) and for Vygotsky, language is a social semiotic tool that is internalized, mediating mental activity (Wells, 1994). Drawing on and extending these theories, Wells draws implications for education:

> "While it is the case, in educational settings in particular, that language serves as the principal medium in which the understandings gained in the past are made available for uptake and use in the present, the process whereby these understandings are 'shared' is very far from being one of simple transmission and reception" (1999, p. 106).

Knowledge is created through dialogic interaction and co-constructed through classroom talk rather than transmitted from teacher to student. Wells references Halliday's descriptions of the "synoptic" (crystallized) and "dynamic" (evolving) differences in academic and everyday registers, highlighting the important role of the teacher and activities in this co-construction of knowledge and suggesting that it:

> "… is most likely to occur when activities are carried out in situations of collaboration with the teacher or other children, in which the new, synoptic mode of construing experience is related to the more familiar dynamic mode through talk that moves back and forth between the two modes, building bridges between them" (1994, p. 42).

In the work described below, the teacher plays varying roles in facilitating talk in the classroom depending on the learning context and goals, but a key feature of supporting discussion about literary text is a focus on the choices an author has made, where the more synoptic features of the text are discussed and made meaningful in more familiar ways of talking.

In addition to dialogic interaction, Wells (1999) also highlights the roles of *activity* and *mediating artifacts* in supporting the development of new knowledge. Here we use *activity* to describe what the students and teachers do and their purposes; the goal-oriented actions that

build toward a broader instructional goal. Wells defines *artifacts* as non-human participants that "can be used as the mediators of the activity" (Wells, 2000, p. 71), and we adopt that term to refer to the SFL metalanguage and other supports for meaning-making incorporated into the lessons, including literary texts, diagrams illustrating concepts in focus, charts that collected segments of text for analysis, and worksheets or diagrams that displayed student interpretations of the texts they were reading. The artifacts both mediated classroom activities and represented the collective meanings made during the lesson.

As Wells points out, it is in dialogue in the context of purposeful activity that children co-construct new knowledge, and both more expert others and mediating tools and materials (artifacts) play important roles in supporting this. In the work reported below, academic language development and the development of understanding of literary analysis are supported through dialogue about language and literature mediated by artifacts that include SFL and literary metalanguage.

Empirical support for the work

Previous SFL-inspired research offers empirical support for explicit attention to language form-meaning connections in the context of dialogic interaction focused on achieving content goals (e.g., Gibbons, 2006; French, 2010; Quinn, 2004; Polias & Dare, 2006; Williams, 1998; 2000; 2004.) French (2010) offers evidence that SFL can help children develop more conscious control of their writing and more critical understanding of their reading. Williams (1998; 2000) illustrates how SFL offers children conceptual tools for reflection on language, showing how an explicit focus on grammar supports critical thinking about a text. In subsequent work, Williams (2004, p. 241) explores "the ontogenesis of abstract thought about language which children might develop by learning to use grammar as an intellectual, semiotic 'tool' in Vygotsky's sense,

"offering examples of children aged six using SFL metalanguage to talk about procedures and of 11 year-olds using it to reflect on how they structure their texts.

Gibbons' (2006) two-year qualitative study of 5th grade science classrooms in a low SES urban school in Australia with a high proportion of ELLs shows how students developed knowledge of language and science together over time as their teachers engaged them in focused work on language in the context of learning about magnets. Teachers used SFL metalanguage to talk about the forms language takes and explicitly taught students how to structure assigned oral and written tasks. Gibbons demonstrates how this metalanguage supported dialogic interaction and a simultaneous focus on science and language.

Quinn (2004) highlights the role of oral language in using SFL metalanguage with 6th grade students to support their writing of explanations in science. This case study of a student identified by her teacher as a "poor writer" illustrates that using the metalanguage enabled a less successful student to more clearly articulate what she had learned than some of the stronger students could. Polias and Dare (2006) offer case studies of teachers using SFL to scaffold 7 year-olds' writing of sequential explanations and 12 year-olds' writing of narratives and arguments, showing ELLs gaining increasing control of their writing and incorporating advanced language features typical of the genres. Students used SFL metalanguage to analyze text meaning and organization and to learn more effective ways of structuring their own texts. These studies indicate that one way to offer ELLs a "high challenge, high support" curriculum (Hammond, 2006) is through use of metalanguage that connects language and meaning.

Summary

Our theory of language, theory of learning, and review of empirical studies indicate that SFL metalanguage has the potential to support ELLs in developing academic language and

concepts in the context of dialogic interaction about meaning in the literary texts they read. This article draws on data from research through which we are developing linguistic tools for supporting the challenging curricular goals of ELA. We describe activities designed to support teachers' and students' learning and use of the SFL metalanguage as they engage in talk about text, and illustrate how these activities support talk and writing through which children in the early grades interpret literary texts and engage in evaluation of characters. We then further illustrate how this approach to language analysis has to evolve as students encounter the more complex texts of the upper elementary school classroom.

Methods

Context and purpose

The work presented here comes out of a larger project exploring the affordances of SFL constructs in supporting the academic language development of ELLs. Our goal was to develop curricular materials that use SFL to engage bilingual elementary students (grades 2-5) in talk, reading, and writing about disciplinary texts in both ELA and science. Data presented here focus on the ELA lessons implemented during the second year of a three-year project. Research was conducted in five elementary schools in a high poverty urban public school district that serves large proportions of bilingual students, many of whom enter kindergarten with limited English. In four of the schools, a majority of students were non-native speakers of English and bilingual or emergent bilingual students were a significant minority (approximately one-third) in the fifth school. Across the participating schools, more than 90 percent of the children speak Arabic as a first language, but there is great variety in the dialects spoken, as students have immigrated from Yemen, Lebanon, Iraq, and other countries. Likewise, more than 90 percent of students in these schools qualified for free or reduced lunch, indicative of lower socio-economic status.

In this second year of the project, a total of 12 classroom teachers and nine instructional support coaches participated in professional development that prepared them to use SFL metalanguage to engage students in rich talk about curricular texts and to support them in writing valued genres. Prior to the lessons described below, teachers attended a week-long summer institute and participated in two additional day-long workshops where researchers introduced SFL concepts and modeled lessons that applied SFL metalanguage to curricular materials. The ELA lessons were implemented in 11 classrooms grades 2-5 (one of the 5th grade teachers taught only science content and did not implement the ELA-focused lessons). Here we report on examples from three of these classrooms (grades 3, 4, and 5) to illustrate the varied ways discussion mediated by SFL metalanguage and related artifacts supported disciplinary goals. We provide evidence from two units of instruction, each consisting of approximately five to seven one-hour lessons. The first unit of instruction (described in 4.2.1) was implemented in all grades. The second, more advanced unit (described in 4.2.4) was implemented in one 4th grade classroom.

Design-based research

As our research is aimed at both developing a local curriculum as well as more generalizable applications of SFL in disciplinary tasks, we adopted a design-based research (DBR) approach (Brown, 1992; Cobb et al., 2003; Edelson, 2002). DBR is particularly suitable for research that needs to (1) address theoretical questions about the nature of learning in context; (2) approach the study of learning phenomena in the real world rather than the lab; (3) go beyond narrow measures of learning; and (4) derive research findings from formative evaluation (Collins, Joseph, & Bielaczyc, 2004). The process of DBR is often a cyclic, iterative engagement in analysis, design, evaluation, and revision (Van den Akker, 1999). For example, in

the first year of our project, we worked closely with teachers to identify ways to situate the SFL metalanguage within a school's literacy curriculum, and through that process developed guiding principles that informed the development of supports in the following year (Schleppegrell, 2013). The design principles include:

- Supporting dialogic interaction about meaning in the texts students read
- Using metalanguage in support of that meaning-making
- Using other artifacts that make explicit the knowledge to be developed, both for reading and for writing

In the second year of the project, we developed, piloted and co-taught lessons in classrooms before formatively evaluating and revising materials for implementation by project teachers in different grade levels and school contexts. For DBR, context is key, as the primary focus is not on the product, but instead on generating models of what an innovation can achieve. This is accomplished through documentation of successful enactment and triangulation from multiple data sources.

Data collection and analysis

Various data informed our evaluation and refinement of the intervention, including interviews with teachers and students, multiple records of practice, and formative and formal assessments of student learning. Records of practice included videotaped observations of lessons, classroom artifacts such as completed graphic organizers, and teacher logs where participants reflected on their teaching experiences. Of particular importance were samples of student writing, such as their extended responses to literature in the form of *recounts* and *character analyses*. Key data sources for the analysis reported here were video recordings of classroom lessons that engaged students in discussion of narrative texts and the classroom artifacts that mediated these discussions. The lessons of interest encompass two units of study, the first of which was implemented in 11 classrooms. In some cases, the classroom teachers co-taught with an

instructional coach. In one 5th grade classroom, a member of the research team piloted the first unit, data from which were included in this analysis. We videotaped and observed a total of 33 (60-90 minute) lessons: 29 from the first unit and four from a second, more advanced unit of study piloted by one 4th grade teacher. Classroom artifacts that mediated discussion about the texts such as student annotations and completed worksheets were also collected and analyzed.

Classroom video data were initially coded by participation structure and content during the observations. Video logs noted when and how SFL metalanguage was used by teachers and students orally and in writing, and during observations, researchers made notes evaluating the use of SFL metalanguage in terms of the project's overarching design principles. The next level of analysis was guided by this report's research question: *What are the affordances of SFL metalanguage in supporting students to talk about literary text, particularly in interpreting and evaluating characters?* We reviewed the video logs of all 33 observations to identify those focused on discussion of the texts students read, eliminating 16 lessons focused on supporting student writing and three lessons that did not support meaning-making through dialogic interaction. (For example, one teacher focused on correct labeling with SFL metalanguage rather than using it to support discussion about text meaning.) The lessons in which the approach was not implemented in ways we had supported in the professional development were of particular importance in analyses aimed at refining the curriculum and learning opportunities of teachers, but do not figure in this report.

This process narrowed our focus to 14 lessons that engaged students in productive talk about narrative texts. To serve our close analysis of the talk during the lessons, we likewise narrowed our unit of analysis to *episodes* of productive talk. Informed by Lemke's (1990) definition and Gibbons' application (2006), we define episodes as "a unit of discourse with a

unifying topic and purpose" (Gibbons, 2006, p. 95), As such, a lesson often consists of many episodes marked by changes in topic, participation structure, or purposes. Many of these episodes were identified in the observation logs by the initial observer. We re-analyzed the videotapes from these lessons to identify episodes where classroom conversations illustrated constructive, meaningful discussion about text, and transcribed these conversations to generate more specific analytical notes that identified the roles the SFL metalanguage played in supporting talk about text. Each episode was analyzed by two members of the research team. The roles that were identified in this analysis were:

1. prompting discussion of vocabulary (word-level meaning);
2. teacher questioning to challenge students to elaborate on interpretations;
3. prompting physical enactment of text;
4. connecting text to prior knowledge and experience;
5. discussing broader text-level meaning;
6. generalizing about text features and author purpose.

For this article, we chose three classrooms (one each at grades 3, 4, and 5), where many such productive episodes representative of these categories were available for further analysis. Guided by Wells' theoretical framework, we closely examined the semiotic mediation supported by the instruction, asking ourselves the following questions: *What are the features of the classroom talk? Who is talking? Who is using the SFL metalanguage? What is the role of the teacher/student in the conversation? How do the activities and SFL metalanguage and other artifacts promote or impede meaningful talk about the text? What other forms of metalanguage are the teacher and students using?* Transcripts, artifacts, and analysis of episodes from these classrooms illustrate the potential of the SFL metalanguage to interact with disciplinary metalanguage in support of the goals of ELA.

<div align="center">**Findings**</div>

Overview

The following section first explains the ways in which SFL terms were modified and applied to narrative texts, and then provides evidence that the activities supported student talk in different ways. The section first illustrates how the SFL-inspired metalanguage of *positive/negative, turned up/turned down*, and *process types* was introduced in order to help students explore the ways authors use language to develop characters by presenting their attitudes in implicit and explicit ways. Then, we provide evidence that the metalanguage supports elaboration and enactment of meaning and exploration of patterns and author's purpose in the texts students read. This results in extended discourse by students in which they also connect text meaning to their personal experiences. In order to demonstrate how the units of instruction progressed, the episodes are presented in the order they appeared in the curriculum.

An SFL-based curriculum for analyzing characters

The lessons developed for the ELA curriculum supported students' use of SFL metalanguage in analyzing the feelings of characters in a narrative text and then writing a *character analysis*, a valued type of *response genre* in the ELA classroom (Christie & Derewianka, 2008). A character analysis asks students to explain how a character changed and why, or to evaluate a character's words or actions for a particular purpose. In order for students to successfully write in this genre, however, they need to have understood the text beyond a simple grasp of events. In particular, they need to recognize *indirect characterization*—how an author presents and develops a character, often in very implicit ways. To promote such understanding, we engaged students in working with SFL concepts to support their interpretation and evaluation of characters, and then offered a writing scaffold that supported students in organizing and elaborating those ideas. In this article our focus is on the interpretation and classroom discussion.

To support students in learning to interpret characters' attitudes in narrative text, we drew on the SFL metalanguage of *Appraisal* (Martin & White, 2005) to focus students on the attitudes and judgments infused into a text by an author through word choice and other language features. More specifically, teachers and students discussed the *polarity* of characters' attitudes (using the terms *positive* and *negative*) as well as the *force* of those attitudes (using *turned up* and *down*). The concepts were represented in an "Attitude line" (Figure 2.1), which often became an important scaffolding artifact for supporting classroom talk around text.

Attitude Line

Negative | Neutral | Positive

I don't like soccer. *I like soccer.* *I really like soccer.*

I hate soccer. *I love soccer.* *I absolutely love soccer.*
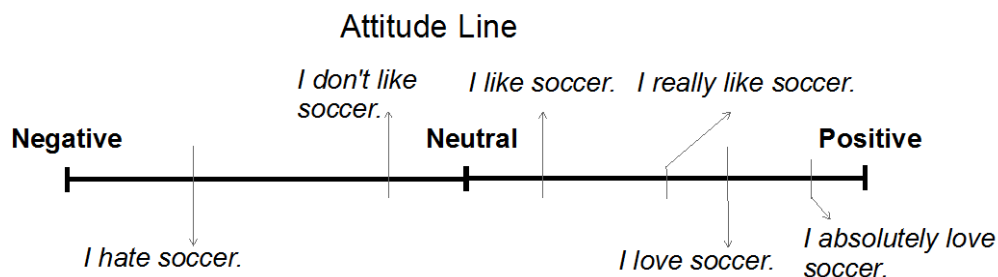
Figure 2.1. Example of the "Attitude Line," a classroom artifact representing the *polarity* continuum.

In Figure 2.1, the attitude line presents different positive attitudes about soccer. The sentence *I like soccer* can be *amplified*, or *turned up* by adding words that modify the process (*I really like soccer*) or by choosing different words (*I love soccer*), or a combination of the two (*I absolutely love soccer)*. Likewise, a rather strong negative statement (*I hate soccer*) could be *softened,* or *turned down (I don't like soccer)*. The appraisal framework is well-suited to our instructional goals for it foregrounds attitudinal meanings, but also attends to the ways language construes those meanings.

Since character attitudes are often realized in what characters do, say, think, and feel, *transitivity analysis* (Martin & Rose, 2003) also supported our goals. Teachers and students were

introduced to the notion of *types* of *processes*[4] (the "happenings" in a text) and how authors make choices about the ways characters' attitudes are construed through processes of different types.

The SFL metalanguage of *positive/negative, turned up/turned down*, and *process types* was introduced in order to help students explore the ways authors use language to develop characters by presenting their attitudes in implicit and explicit ways. While authors of literary texts sometimes explicitly *tell* readers what a character is thinking or feeling, those meanings can also be realized in more subtle ways by being *shown* to the reader (this is illustrated below). The terms *show* and *tell (indirect* and *direct characterization)* are part of the literary metalanguage we used to discuss character development.

The work supporting *character analysis* was designed to build up students' understanding of attitudes through engagement first with a simple text and writing task that we constructed for this purpose, and then through engagement with a more complex, authentic text from their curricular contexts. The first text was a short story based on a (likely fictitious) legend about George Washington, the first U.S. president, cutting down a cherry tree as a young boy. In the story, George receives an ax as a present from his parents. To test his strength, he cuts down a cherry tree in his father's beloved garden. His father becomes angry upon discovering the tree and asks his son if he knows what happened to it. George, faced with the dilemma to conceal or reveal his transgression, decides to tell the truth, and his father rewards him, saying that he was proud of him for the admission. Throughout the story, many of George's (and his father's) emotions are implied in their actions, leaving some ambiguity as to whether George felt

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[4] We presented four *types* of *processes*, adapted from Martin & Rose (2003)*: doing* processes describe actions (He *ran*); *being* processes describe or define (He *is tall*); *sensing* express feelings or thoughts (I *felt happy*); and *saying* processes signal speech (He *said*).

genuinely remorseful. These implied attitudes became the focus of many of the classroom conversations aimed at evaluating the characters. The lessons engaged students in conversations and writing about George's actions and his father's reaction to them that would ultimately help them respond to the prompts: *Is George a good boy? Why or why not?* or *Is George's dad a good parent? Why or why not?* During the reading-focused lessons, SFL metalanguage supported students' interpretation of the two characters' attitudes (especially feelings) as presented in their actions and dialogue. Writing-focused lessons provided students with functional labels for the stages and language features of a *character analysis*.

In the context of the reading lessons, the SFL metalanguage helped students pay close attention to how the language of the text was *showing* and *telling* attitudes of the two characters, George and his father. Consider the following examples from the *George and the Cherry Tree* text. At the start of the story, George wields his ax to a cherry tree in the garden, testing his strength. He succeeds in cutting it down. The text then says:

> *But he didn't feel strong. He felt anxious.*

The author explicitly *tells* us how George felt after cutting down the tree. However, the attitudes of his father, after discovering the felled tree, are presented in a less direct manner in the following sentence:

> *He stormed into the house looking for George.*

The text doesn't tell us that George's father is furious, but his actions certainly *show* it. To understand this sentence, students need to recognize that he is angry, and that this is shown in the fact that he *stormed* into the house. We might also argue that the author is showing us that the father already knows *who* cut down the tree because he was "looking for George." Recognizing these points is an interpretive step that readers need to be able to make.

Characters' attitudes are often *told* through *being processes* (He *was angry and disappointed*) and *sensing processes* (He *felt anxious*). Typically, the reader need not do much work to make meaning here. However, *doing* and *saying processes* often *show* how the characters feel (He *stormed into the house*). In such examples, the attitudes need to be interpreted. Figure 2.2 is an example of an artifact that supported understanding the relationship between process type and the ways attitudes are presented in literature, completed by a 5th grade student who worked collaboratively with a partner.

Figure 2.2. Scaffold for a focus on processes that *show* and *tell* feelings

Prior to engaging in this lesson, students had been introduced to the process types. Their task here was to work in pairs to explore the characters' attitudes and the language realizing them. After working through an example together as a full class, students identified attitudes by circling processes that represented either George's feelings or his father's, and wrote brief (often one-word) interpretations of how they thought the characters were feeling in the text they circled. They then considered whether the attitudes were *shown* or *told,* writing "showing" or "telling" on the sheet. Lastly, they identified the *process type* that realized this feeling. The purpose of this task was two-fold: first, to help students pay close attention to what characters were feeling and how language made meaning at the sentence level; and secondly, the artifact also supported

students in finding more general patterns in how and why language *shows* and *tells* characters'
attitudes in text. Examples of both types of conversation are reported in the following section.

Metalanguage in dialogic interaction in service of ELA disciplinary goals

In this section we use classroom dialogue to illustrate the affordances of the SFL
metalanguage and related artifacts in stimulating explicit talk about text meaning and supporting
students in developing more elaborated understandings of the text. We show that the
metalanguage and artifacts enable elaboration and enactment of meaning and exploration of
patterns and author's purpose. This results in extended discourse by students in which they also
connect text meaning to their personal experiences.

Beyond "happy" and "sad": Elaborating and challenging initial interpretations

After students worked in pairs to complete the text analysis task (Figure 2.2), teachers led
conversations that provided students with a chance to report and discuss their findings in a whole
class participation structure. Examining feelings that were *told* often stimulated conversation
about meaning that revealed misunderstanding at the word level. For example, the author *tells* us
George "felt anxious," and students in two of the three classrooms interpreted "anxious" as a
positive feeling–an inaccurate but understandable misreading (someone might be "anxious" to
open presents on her birthday). In response, teachers and students talked about how the meaning
of a word depends on the situation.

However, teachers more often focused students' attention on attitudes that required
interpretation: that is, ones that were *shown*, most often through the *doing processes* of
characters. During the whole class conversations, the SFL metalanguage helped teachers engage
students in talk that extended the initial one-word interpretations. In the following excerpt, a 4th
grade teacher at a school that serves a high proportion of ELLs engages students in a

conversation about how George's father was feeling after his son told him the truth about the tree, as realized in the *doing process* "patted his son on the head." One student shares "He felt proud of him for telling the truth." The teacher notes this on the board. Hassan then offers "He felt happy." The teacher continues[5]:

1. Teacher: Sometimes when I tell you guys to use a synonym for happy, you guys give me excited, . . 'cause you guys <u>turn up</u> the words. So why don't you think excited is a good idea here?
2. Student 1: Because, like, um, excited is like um, like when you're telling someone something and they can't WAIT for it. Like, excited means, you can't, like, like you're really happy [that.
3. Teacher: [REALLY happy!
4. Student 2:   REALLY [REALLY!
5. Teacher: [And even though the father *patted his son on the head* and he felt happy, do you think he felt REALLY happy?
6. Multiple students: No!
7. Teacher: Why not? Why didn't he feel REALLY happy? Why was he just kind of happy?
8. Student 3: He wasn't really happy because he was still a little mad about the, the tree [that
9. Teacher: [Yes, probably was still a little mad about the tree.

At the beginning of the conversation, Hassan responds to the teacher's question with a simple "happy," which the teacher accepts and adds to the text she is developing on the board. She then engages the students in discussion about whether "happy" would be an appropriate way to characterize the father's feelings (turns 1-5). The concept of *force* from the Appraisal framework plays an important role in the teacher's follow-up questioning here, as she uses the notion of *turned up* to ask if "excited" would be a reasonable substitution for "happy" (turn 1). The question prompts Student 3 to expand and refine Hassan's initial interpretation to "He wasn't

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[5] Transcription conventions: Students who were identifiable were provided with pseudonyms that maintain the students' gender and ethnicity; those not identifiable because they were off camera are called "Student" followed by a number to indicate different students. Narrative text quoted in dialogue in *italics;* functional metalanguage <u>underlined</u>. Stressed words in CAPS. Elided material marked as […]. Pauses one second or less indicated by ',' longer pauses by '. . .'. Incomprehensible talk marked by xxxx. Brackets [ ] denote overlapping speech.

really happy because he was still a little mad about the tree" (turns 7-8). In effect, the *turned up* "excited" prompts students to elaborate on and *turn down* the too simplistic "He felt happy." Instead, the students consider that the father was at once proud, even happy, but at the same time, perhaps still upset about his son's transgression. This is a nuanced reading supported by close attention to the text as well as to the language of the students' interpretations.

At this early point in the sequence of lessons, it is the teacher who uses SFL metalanguage to support a meaningful focus on language. She draws on it to mediate conversation about the father's feelings, crafting specific questions that support the co-construction of meaning. Though the student responses demonstrate understanding of the concepts, their talk does not make use of the *turned up* metalanguage. However, guided by the teacher, the students actively construct meaning as they explain why "excited" is not a reasonable interpretation (turn 2) and elaborate on their original reading (turn 8). The attitude line, conversation, and the teacher's adaptive questioning supported by the SFL metalanguage all enable students to make and develop interpretations of characters' attitudes in the text.

Come on up! "Reading" characters' attitudes by "doing"

The SFL metalanguage also supported engagement with the meaning of the text by prompting teachers to ask students to act out characters' actions to illustrate character attitudes that were implied rather than directly stated. As teachers and students focused particularly on places where attitudes are *shown* through *doing processes,* at multiple points in the lessons teachers improvised on the original lesson plan by asking students to act out those processes. In a 5th grade classroom with a diverse student body, including a small group of ELLs, acting out mediated the children's understanding. After working in small groups to complete the worksheets (similar to the one presented in Figure 2.2) by circling language that presented

characters' feelings, the students shared back their findings to the whole class. One student identified a sentence particularly telling of the father's feelings after discovering the fallen tree in his beloved garden: *He _stormed_ into the house looking for George.* The teacher circled the language on the overhead projector and that same student shared an initial interpretation: "It shows that he was mad." At this point, the teacher asked what "stormed" meant, but didn't get any responses. The teacher then asks for volunteers to "storm" into the room:

1. Teacher 2: Alright, uh, Thomas. Storm into the room! I want to see how his dad walked into the room. . 'Cause the author didn't just say 'WALKED,' he said *STORMED*.

Thomas walks into the room pumping his fists and stomping feet (but smiling).

2. Teacher 2: Good. Who else wants to do it? [Many students bid to be called on] Who can do a really good storm? DeShaun, why don't you try and do a really good, you've got big boots on so I know that you'll be able to do it really well. Thomas, that was a good *storming into the room*, although you started to smile toward the end of it. I don't think George's dad was smiling. But you did try to do, make a face, right? Alright, here comes DeShaun. Look at him.

Student comes stomping into the room loudly, hunched over, and looking from side to side with an exaggerated scowl on his face. Kids laughing.

3. Teacher: There you go. Alright. Very good, DeShaun. So what was he doing that, that showed he was mad? Seneca?
4. Seneca: He made a face that was mad.
5. Teacher: He made a face that was mad? Jolene, what else did he do?
6. Jolene: He was stomping.
7. Teacher: He was stomping? Good. Mustafa, what else was he doing?
8. Mustafa: He was looking around for George.
9. **Teacher:** Maybe he was looking around for his son. He's like 'I'm gonna get him.'

In this example, the acting out supports students in elaborating on the meaning of the text, making an abstract phrasing, "stormed", more concrete and the meaning more accessible. In their discourse, "stormed" becomes a more specific description of actions involved: "making a mad face" (turn 4), "stomping" (turn 6), and "looking around for George" (turn 8). Identifying both the SFL (*doing process)* and literary (*showing*) metalanguage in relation to one another helped students discuss the meaning implied in "stormed" as wording was translated into action. The

interpretive performance provided a valuable way of engaging with text and supporting readers' comprehension of more subtle meanings. Following this and discussion of *he took a deep breath and then called his son,* the class connected the meanings made to the overall prompt, having a rich conversation about whether the father was a good dad or not.

We observed this spontaneous acting out of emotionally-charged *doing processes* across classrooms, stimulated by the use of the SFL metalanguage. The focus on *doing* not only led to meaningful talk about the text, but also engaged students in the construction of meaning through performance of characters' actions in text and enhanced the quality of the subsequent discourse about meaning. Such engagement by teachers and students highlights the important interplay of artifacts, activity and discourse in supporting the co-construction of knowledge.

Offering generalizations about language use is important for supporting students in recognizing patterns in discourse, but it also needs to be clear that these patterns are not *rules*. After taking notes about the characters' feelings and identifying whether they were *shown* or *told,* the 4th grade children were asked to look for patterns in the chart they had made (Figure 2.2). Students reported finding a pattern in the form-function relationship: namely, that *doing* and *saying* processes often *show* attitudes while *being* and *sensing* processes usually *tell* them. However, when the teacher asked if anyone disagreed with this idea, one group identified an example that goes against this pattern: "George's face became as red as a cherry." This *being* process (a simile) actually *shows* how George feels. The teacher replies:

> Teacher: This is NOT a RULE. It doesn't mean that EVERY time there's a <u>doing or a saying</u> that it's a <u>showing</u>. Or that EVERY time there is a <u>being and a sensing</u> it's a <u>telling.</u>

The teacher then initiates a discussion of this example. While her goal is to evoke the word

simile, we see that the student responses instead focus on the meaning of the phrase *became red*

as a cherry, and that they illustrate purposeful application of the SFL metalanguage.

1. Teacher: Now, if you guys look at *George's face became as red as a cherry*, what is that? Does anyone know what that is?
2. Student 1: Looks like, uh. . .
3. Teacher: Do you know what that is?
4. Student 1: George like, uh, he felt, uh, guilty.
5. Teacher: Yeah, but what is it when you're saying somebody's . . Yes.
6. Student 2: You're <u>turning up</u> the feeling?
7. Teacher: Ok, besides the fact that you're <u>turning up</u> the feeling, but what IS that? Zahra.
8. Zahra: He's <u>showing</u> us he's feeling bad he was so scared.
9. Teacher: Ok, but when you're saying, when someone says that *his face became AS RED AS a cherry*, when you are comparing a HUMAN...
10. Student 3: To a flower, er, to a cherry.
11. Teacher: What is that?
12. Student 4: You're kind of like comparing?
13. Teacher: Kind of like comparing, . It starts with the letter S.
14. Zahra: OH!
15. Teacher: Yes.
16. Teacher: Zahra?
17. Zahra: Simile!
18. Teacher: <u>Simile</u>! Very good! So HERE, we notice that, MAYBE anytime we're going to have a <u>simile</u>? It's a <u>being process</u>? Maybe that's gonna be an exception to the rule, where it's gonna be <u>showing</u> even though it's a <u>being process</u>.

In response to the question "What is that?", students provide an interpretation of the simile (turns

4 & 8), noting that George felt "guilty," "bad," and "so scared" at this moment in the story.

Likewise, they use metalanguage (*turn up* and *showing*) in the service of expressing those ideas

(turns 6 & 8). The students are focused on meaning, using both literary and SFL metalanguage

to talk about *what this means* and *how this means*. In this and other such episodes, we see the

children engaged in discussion of an author's craft in ways that link form and meaning (even, in

this case, where the teacher's focus is on eliciting a literary term). Ultimately, the teacher is able

to make a meaningful connection between the linguistic pattern established and more traditional literary terminology, a relevant explanation of the exception to the pattern.

Learning to recognize an author's craft and consider why an author makes particular choices for particular effects is an important goal of ELA. The chart in Figure 2.2 and the SFL metalanguage mediated discussion about how the language was functioning in the text throughout this set of lessons, as we see below, when the same 4th grade classroom wrapped up their conversation about what they had recorded on the chart, focusing on *why* it made meaning in the way it did:

1. Teacher: And why do you think the author used the wording he did? Why do you think he used the words that he did in the story. . With George and his father. . I need more hands. Why do you think he used the words that he used? Ahmad.
2. Ahmad: Well, maybe, uh so he could turn up the feeling, make it seem like . .
3. Teacher: Turn up the feelings, good job.
4. Ahmad: Like, make it seem, I can't really. .
5. Teacher: That's ok, try your best. Mahmud can you sit down (student is eagerly bidding to answer). Yes, Zayna.
6. Zayna: Show us more feelings about George and his father.
7. Teacher: Show us more feelings of George and his father.
8. Student 3:   Um, he used the words, the author used the wording he used is because um the, he wanted us to feel a part of the story.
9. Teacher: He wanted us to feel a part of the story. Ok, yes, Mahmud.
10. Mahmud: Yeah, he uh, used the words to, so uh uh so we uh don't get bored. He used the turned up words so we don't get bored and don't get lost—
11. Teacher: [Ok,
12. Mahmud: [and let us, like, see what happens next.
13. Teacher: Very good, very good.

The teacher prompts the conversation with a rather abstract question about author's craft (turn 1). Again, the students use the metalanguage of *turn up* and *showing* to present their ideas, making important observations about the attitude-laden language the author uses (turns 2, 6), and even more generally about the function of emotional connection between the author and reading in narrative texts (turns 8, 10). Authors of narrative text very well might *turn up* the attitudes in

their stories in order to, as Zayna says, "show us more feelings about George and his father" (turn 6). Or, as Student 3 notes, to engage the reader by making us "feel a part of the story" (turn 8). This speaks to one of the central purposes of the ELA curriculum and the reason reading and engaging with literature personally and intellectually is valuable: it enables us to learn from experiences outside of ourselves. Students, using metalanguage, are able to articulate their awareness of this purpose for reading and discussing literature, while at the same time, discussing the specific ways the language accomplished this goal by *showing* emotions. In contrast with some of the earlier excerpts provided, the students have taken a more active role in constructing meaning in the text. The teacher's role in facilitating the conversation has evolved at this stage in the unit as well. In the earlier episodes, the teacher was often the only one using the metalanguage, generally to ask pointed questions to guide students to meanings in the text. However, in much of the discourse presented in the excerpt just provided, the teacher plays a less active role in the construction of meaning by primarily re-casting or repeating what the students themselves have contributed in the discourse.

Supporting extended talk and connections to personal experience

The SFL metalanguage and sequence of activities and discussion resulted in more elaborated explanations that prepared students for writing. Following the conversations already described, students wrote interpretations of George's feelings, working in collaborative groups to turn statements that *show* attitudes into statements that *tell* them. This task made the notion of interpretation concrete, providing a heuristic students could use in their writing as they quoted the author and then interpreted and evaluated the quotation. The teachers and our materials drew their attention to an important linguistic resource available to them for the task: they would likely be changing the *doing* processes into processes of *being* or *sensing*. The students were also asked

to write notes that explained their reasons for the interpretation, responding to the question "How do you know George feels this way?"

The following excerpt comes from a 3rd grade class at a school often referred to as the "landing pad" for new immigrants in the district. All of the children are bilingual and many are ELLs, and here they are discussing the author's words after George is called to speak with his father: *George walked slowly into the room.* Students have worked in pairs to write a *being* or *sensing* process that interprets what this wording means, and here the teacher has asked for reports from the groups. Nadra volunteers on behalf of her group:

1. Nadra: I, uh, I … put George felt, George felt frustrated, sad, down and hurtful and bummered out.
2. Other students: Bummered? He felt bummered?
3. Teacher: He felt frustrated and what?
4. Student 1 (from Nadra's group): Bummed out.
5. Student 1: (Reading off Nadra's paper) Frustrated, hurt and bummed out. Sad, down, [bummed out.
6. Teacher: [Wow, all of those words. Those are a lot of emotions. WHY do you think he felt like that?
7. Nadra: Because he, because when he, because, you know how he cut the, uh he felt, he cut the tree down, then uh, when his dad wake up in the morning and he saw it, he went, he called his, uh, son. Then George went, said he called him in like a, like in a bad voice, not like a good voice, and George was like walking SLOOOWLY to him, and that's how I got all of these words, because he got like frustrated like he's not going to know what to do, and SAD because he cut the tree.

A striking aspect of the discussions mediated by the metalanguage at this point was the number of extended turns and the multiple, supportable interpretations that were shared in the full-class conversations. Nadra's interpretation recognizes that George may be feeling many emotions. She highlights two: George's sadness for cutting down the tree, but also the fact that he's frustrated about the impending confrontation. The structure of the conversation, while still spoken language, nonetheless bears features of the less interactive structure of written language. Nadra provides multiple interpretations of the language with textual references to support them.

Two forms of instructional support that were apparent in the earlier discourse, teacher questioning and the metalanguage, are not needed at this point. The student, drawing on her written work and the rehearsal of discussion about meaning in the pair task, demonstrates independent competence at skills that earlier in the unit were co-constructed in dialogue between the teacher and students, using the SFL metalanguage (*being, sensing*) to support explicit interpretation. The explicit text reference that Nadra demonstrates here is challenging for teachers to cultivate even among students who are not second language learners.

In these explanations we also see children relating the literary meanings to their out-of-school lives. For example, one pair has written *George feels disappointed.* While this explicitly states an interpretation of the attitude shown in the text, it lacks development and justification. The teacher probes for this:

1. Teacher: Ok, so *George feels disappointed* [records this on the chart]. And . . . did you write why he feels disappointed?
2. Sani: No, but could I share why he's disappointed?
3. Teacher: Sure.
4. Sani: I think that George feels disappointed because, George, um, when his father called him into the room, George *walked in slowly into the room* and I think when you *walked in slowly* he already knew that his father knew that he cut down the tree, so he was disappointed in himself for cutting down the tree.
5. Teacher: Very good! Ok, so (writing on the board) *George feels disappointed because he cut down the tree.* And then, how do you know he felt that way, Sani?
6. Sani: [brief interruption of the class] um, I think that he's disappointed because think about it. Maybe, pretend that you're George and pretend that your father, your father is George father and pretend that you just got called from your father and you know your father thinks that you cut down the tree, so, you're gonna, when he calls you you're going to be disappointed in yourself for killing a nice, beautiful little tree.

In this elaboration, Sani makes specific reference to the text that informed her interpretation (turn 4, "walked in slowly"), and then supports the interpretation with an elaborated explanation. She is able to interpret George's actions and draw some interesting and supportable conclusions: that

George was already disappointed in himself for killing the tree, but also that he knew his dad was going to find out, amplifying his regret. The teacher presses her to further explain how the *doing process,* "walking slowly" led her to those conclusions.

> Sani: He actually doesn't want to get there. He's, that's why, let's pretend … like if somebody walks slow like this, do you think that they're in a hurry? (*gets up and walks slowly with head down*). They could run if they're in a hurry but instead they wanna walk. [discussion with the class continues for three minutes]

As this example shows, the discussion of *doing* sometimes led students to act out the behaviors in focus in the text, much like the impromptu performances supporting the full-class conversations reported earlier. In this case, while Sani's interpretation is singularly focused on the text, she also uses her own knowledge of the world to elaborate and justify her interpretation of why George is walking slowly and not quickly. The activities, the SFL metalanguage, and the teachers supported students in using details from the text as well as their own experiences to inform their analyses and make explicit how the two inform one another.

There is a difference between reading and responding to literature through feelings and attempting "to explain the work's overall effect by reference to specific features of the text seen as instances of more general literary categories" (Wells 1999, p. 140; see also Christie & Derwianka, 2008). As students move into secondary school, reasoned analysis, generalizing about features of text, is more highly valued (Macken-Horarik, 2006). This example demonstrates that that both close attention to language and personal response can support interpretive analysis and that the SFL metalanguage can mediate and support interpretive moves that are text-based and engage students' own experiences. Having looked closely at the language of the story and talked about it extensively, students are able to interpret what is *shown* in text rather subtly, and they elaborate on their readings by supporting them with evidence from the text and from their own experiences. These conversations demonstrate the potential of the

functional, meaning-based metalanguage of SFL for supporting purposeful and meaningful textual analysis in the ELA classroom.

Making meaning with more sophisticated texts and tasks

As literary texts become more complex and abstract, other SFL metalanguage can further support students' reading and talk about texts. In our second set of lessons, one fourth grade class worked with the story *Pepita Talks Twice* by Ofelia Dumas Lachtman. This increased the level of complexity of the tasks in a variety of ways. The text itself posed more challenges, as it was much longer and it presented characters' attitudes in more abstract ways, requiring additional SFL metalanguage to support students' interpretations. Likewise, the writing prompt that students were preparing to respond to required them to develop multiple claims to be supported with multiple pieces of evidence: *How do Pepita's feelings about speaking two languages change throughout the story? Does she handle the situations well?*

In *Pepita Talks Twice,* Pepita's growing frustration with having to translate for her Spanish-speaking neighbors is presented not in processes that Pepita is engaged in, but in processes with an abstract grammatical *participant* (the noun phrase)*,* a "grumble":

Pepita did what Mr. Hobbs asked. But deep inside of her a grumble began.

Pepita's frustration is developed throughout the story, particularly through the *grumble* and what the *grumble* does *(*"the grumble began/grew/grew larger/grew so big it exploded"*).* Students discussed the ways the *participant* and the *process*, in interaction, showed Pepita's feelings while recording them on the "attitude line" (see Figure 2.3 below).
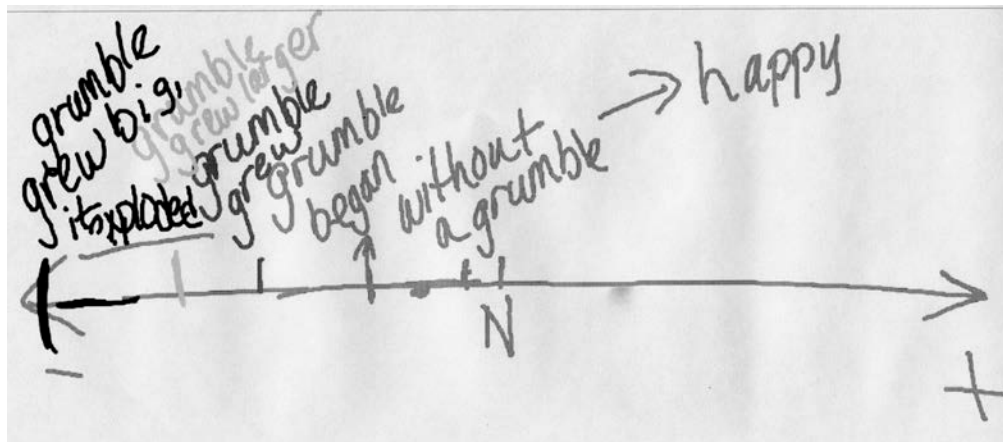
Figure 2.3. Student- and teacher-created "Attitude line" tracking the way Pepita's "grumble" (her feelings) became increasingly negative.

Supported by this co-constructed visual artifact and the discussion of the meaning of each

individual "grumble," students then engaged in a conversation about how Pepita's feelings

changed across the examples:

1. Teacher: What's happening here? Let's just stop for a moment before we continue.
                 What's happening with how Pepita is feeling?. . Malik?
2. Malik: She's getting like more mad and she's getting not okay with it …

Teacher engages students in a discussion about Pepita's feelings, and they share different words
suggested to characterize her feelings (e.g., intense, exhausted, uncomfortable).

12. Teacher: What's happening as we're moving on in the story? Is she getting, she's
                 [becoming
13. Student 2:   [Her grumble is growing.
14. Teacher: Her grumble is growing, [ok?
15. Student 3:   [Her feelings <u>are turning up</u>.
16. Teacher: Her feelings <u>are turning up</u>. What kind of feelings are <u>turning up</u>? <u>Negative</u>
                 <u>or positive feelings</u>?
17. Multiple students: <u>Negative</u>.
18. Teacher: <u>Negative</u> feelings are definitely <u>turning up</u>. Very good.

Again we see the SFL metalanguage and artifacts mediating elaboration of meaning and

exploration of patterns in the text. The students are able to identify the ways in which Pepita's

frustration is presented in the text, (turns 13, 15) but also talk about how and why those feelings

are becoming amplified ("turned up negative feelings"). Their responses are specific and text-

focused. In ELA, the skill of tracking changes in character is highly valued both in classroom

discourse and in written responses to literature. Similar to the lessons presented in 4.2.1 and 4.2.2, the metalanguage and the teacher play more prominent roles in the classroom discourse during this first close reading of a more challenging text.

Summary

We have shown how the SFL metalanguage supported explicit talk about figurative language ("red as a cherry") and helped students engage with the disciplinary metalanguage of *showing* ("stormed", "walked in slowly"), even when it is expressed in an *abstract participant* (a "grumble"). Students, both in their talk and "performances" (4.2.3.), were able to make sense of characters' feelings conveyed through their actions, focusing simultaneously on both the experiential and interpersonal meanings presented. Likewise, the activities and teachers supported students in using text as well as personal experience to articulate and support multiple interpretations. Students actively constructed meaning together, at first with a great deal of support from the SFL metalanguage and teacher; and later, articulating well-formed ideas in extended talk relatively independent of the teacher and without the use of metalanguage.

These episodes illustrate how interaction and talk about language, using a meaning-based grammatical metalanguage, can support academic language development and achievement of curricular goals in the ELA classroom. Students are not just learning labels but are learning to use grammatical metalanguage to make meaning in discussions about texts, engaging with the language of the author in interaction with each other. This work helps students rehearse interpretations of the texts, and articulating how they know what they are asserting helps them make text-based claims and support them.

Discussion

In beginning this article we made the point that academic language varies according to

situation and purpose. The same can be said for metalanguage, as its role in facilitating classroom talk changed in response to the situation and the goals of the unit and individual lessons. As teachers and students engaged with new, challenging tasks and language features, teachers used SFL and literary metalanguage to ask pointed questions about meaning and author's craft. In subsequent activities, students often used the linguistic terms to construct meaning themselves. After a great deal of talk and informal writing about a text, students formulated well-supported interpretations without the SFL metalanguage surfacing in the discourse. As our curriculum transitioned from the text analysis lessons described here to more writing-centered lessons, the role of the SFL metalanguage changed once more, pointing students to the language resources they would need to meet the expectations of the character analysis genre. Throughout, our focus was to use the SFL and literary metalanguage in lessons, artifacts and classroom talk in ways that would offer the greatest affordances for the learning goals at hand.

A primary principle of this work is that close attention to language form should not make the study of literature a pedantic exercise in naming and classifying forms, but rather should enrich understanding and appreciation of literature through a focus on the meanings conveyed and the effects produced by language choices of different kinds. Throughout these transcripts we see children eagerly engaged in classroom discussion, anxious to participate and share their interpretations. The rich moments of classroom interaction reported here greatly contrast with the kind of classroom interaction more typical of ELL classrooms, where learners say little and the curriculum is thus more restricted (e.g., Wedin, 2010).

Students' use of a meaning-focused grammatical metalanguage during activities that provide them with opportunities to talk with each other positions them to participate in whole-

class conversations in richer ways. At the same time, these activities align with the goals of ELA and support the challenging tasks outlined in the new Common Core State Standards (2012) for grades 3-5, such as identifying, describing and analyzing characters' actions, thoughts and motivations (R.NT.03.03); engaging in interactive extended discourse to socially construct meaning (S.DS.03-05.01); and in-context, meaningful vocabulary development (R.WS.03.08). Supported by the SFL metalanguage and activities, even students who otherwise struggle to participate are engaged in achieving the curricular goals of schooling and developing the academic language of ELA.

The supporting pedagogy and connection to curricular goals are crucially important aspects of connecting form and meaning with the metalanguage. From the teachers' and students' perspectives, teaching the SFL metalanguage in isolation from other disciplinary tools and clear instructional goals may serve no clearer purpose than other forms of decontextualized grammar instruction. In the data presented here, the SFL metalanguage is explicitly connected to the literary metalanguage in the service of teaching skills central to the discipline, and the meaning of the disciplinary metalanguage is illuminated through use of SFL constructs. The notion of *process types* can clarify the rather vague concepts of indirect and direct characterization (*show* and *tell*) by bringing to light meaningful patterns in the language authors use to show and tell. Conversely, the overarching instructional goals (to interpret attitudes, evaluate characters) and literary metalanguage give the application of *process types* a clear purpose—without such purpose, a focus on process types can devolve into decontextualized labeling.

This finding has theoretical implications as well. Derewianka and Jones (2012) have eloquently argued that choosing a grammar for instruction is not necessarily a traditional vs. functional dilemma. Instead, "it is more a matter of what we want the model to do for our

students" (p. 7). The meaning-based metalanguage of SFL is well-suited for helping students make language form-meaning connections and is thus our curriculum's primary tool for supporting students' close analysis of texts. On the other hand, traditional grammar provides a familiar terminology that can help students "learn the structure of English sentences with a focus on syntactic accuracy" (p. 7). Some scholars (Myhill et al., 2011; Myhill, 2003; Kolln, 2007) have argued that a contextualized application of traditional grammar (a "rhetorical grammar") embedded within other reading and writing tasks could support students' awareness of how language form relates to meaning, and in 1998, policymakers in the U.K. adopted this view of grammar in the National Literacy Strategy (Lefstein, 2009). Recent research by Myhill and colleagues (2011) provides evidence that contextualized grammar instruction focused on rhetorical effects with students aged 11-18 produced significant positive effects on student writing, particularly for the most able writers. However, Lefstein (2009) also shows that applications of traditional grammar in discussing a text's rhetorical effects may be thwarted due to the long history of using traditional grammar as a decontextualized tool. Research and practice could benefit from exploring the ways that traditional grammar and the functional grammar of SFL presented here might inform and complement one another.

Our findings demonstrate that SFL metalanguage holds great potential for supporting students' meaning making. Informed by Wells' theory and our own research, we recommend that research and curricula focus on and present examples of instruction with tools such as SFL metalanguage working in purposeful cooperation with other tools. As we explore high-leverage applications of SFL in the ELA classroom and beyond, we must not only consider how SFL can help students engage with disciplinary texts, but how it can connect with and clarify the meaning

of disciplinary metalanguage, working in harmony to help students achieve clearly-articulated, significant curricular goals.

The SFL metalanguage can be challenging, but we have seen that even where teachers are struggling with it, the dialogue about language helps students talk about meaning. Interpretation and analysis are challenging skills, and the purpose of discussion of literature in the ELA classroom is not only for students to empathize with characters, but also to understand how we arrive at interpretations and to recognize why some interpretations are more valued than others. We have shown how dialogic interaction to interpret a text can be supported with SFL, a mediating tool in the context of activities that are meaningful and connected with disciplinary goals.

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**CHAPTER 3: ESSAYS IN ELEMENTARY: AN SFL-BASED GENRE APPROACH FOR
SUPPORTING ELLS IN PRIMARY GRADES
TO WRITE ANALYTICAL RESPONSES TO LITERATURE**

Introduction

The ability to make effective written arguments is an essential academic skill, a point
usually made in regard to secondary and post-secondary education. But the teaching of argument
writing is becoming increasingly important in the primary grades as well, particularly in the U.S.
context of accountability. The widely-adopted Common Core State Standards (National
Governors Association for Best Practices, 2010) place a particular emphasis on argument writing,
requiring students as early as age 6 to write general opinion pieces, and to write subject-specific
arguments by 12. Argument writing is something students of all ages struggle to accomplish
(NAEP, 1999; 2002), and their teachers often feel ill-equipped and unprepared to support them
for this complex task (Gilbert & Graham, 2010). This is particularly problematic for English
Language Learners (ELLs), who lag behind their native-speaking peers on standardized literacy
measures (Goldenberg, 2008; August & Shanahan, 2006; Moore et al., 2009) and who need extra
time and support to become proficient in the academic language of school.

Our multi-year, Design-Based Research (DBR) project addressed this issue, calling upon
tools from Systemic Functional Linguistics (SFL) to develop an instructional approach that
would support young students (many ELLs) to write subject-specific arguments. SFL is a
valuable tool for it offers detailed, functional descriptions of school genres and makes explicit
some common patterns in structure and language features. The following analysis focuses on
instruction supporting primary-grade ELLs to write *character analysis* responses to literature, a

highly-valued form of argumentation in the English Language Arts (ELA), particularly in secondary school. Our pedagogy utilized SFL constructs to engage students in discussions about literary texts, introduce them to the written genre, and support their independent planning and writing.

The analysis of our approach presented here explores both the classroom instruction as well as the students' written products from two participating classrooms, addressing some of the controversy surrounding SFL genre theory as a tool for writing instruction. The explicit descriptions of genres offered by SFL are sometimes characterized as reductionist and rigid, and potentially harmful to students' writing (Freedman, 1993). While such instruction would be counter to SFL theory, these concerns are reasonable, for rhetorical approaches to language instruction can be thwarted by existing instructional practice (Lefstein, 2009). This analysis addresses these concerns directly. The first aim of this chapter is to examine our team's genre-based pedagogy, exploring if and how the instruction supported classroom talk that highlighted the genre in explicit and meaningful ways (rather than prescribing patterns or rules to be followed). The second goal of the chapter is to explore the students' writing and if it aligned with the goals and expectations of the genre in varied ways. The paper will first describe the ways in our work called upon and modified SFL constructs to develop units of instruction prior to reporting our research methods and findings guided by the following research questions (RQs):

1. In what ways did classroom conversations and instructional materials engage students with potential constraints and choices of the *character analysis* genre, its purposes, structure, and language features?
2. What are the features of *character analysis* responses written by primary grade L2 students who participated in the lessons? (In what ways were their responses varied/similar?)

This chapter provides evidence that the lessons often supported students to actively engage in classroom conversations that highlighted some of the natural constraints and choices consistent

with the target genre. At times, however, the instruction also imposed unnatural constraints on the students as they wrote. The student writing samples provide evidence that young students are capable of writing analytical responses to literature in a simplified task. Close analysis of student responses illustrated that they were able to write in ways that served the purpose of the genre and are highly valued in ELA classrooms. In addition, the analysis found significant variety among the student products: they took varied evaluative stances in response to prompts, modified their interpretations of character attitudes using nuanced lexis, and provided differing, but relevant evidence in support of their claims. Many students were likewise able to provide elaborated analysis of evidence from literary texts in a variety of ways.

Conceptual framework

What is argument, and why is it important?

Multiple perspectives of argument inform this work. First, the "Common Core" offered a useful working definition, noting the purpose of argument is to "support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence" (p. 21). This definition bears strong resemblance to Toulmin's (1958/2003) model of argumentation, which offers stages of argument. These are sometimes simplified to: a *claim* offers a position on an issue and supports it through *evidence* and reasoning (*warrants)*. These notions have been influential and supportive of research on argumentation (Reznitskaya, Anderson, & Kuo, 2007), resources for teachers (Hillocks, 2011; Smagorinski, 2011), as well as the work presented here (discussed in more detail later). Hillocks (2011) offered additional perspective that brings clarity to the genre's purpose: "Argument is not simply a dispute, as when people disagree with one another or yell at each other. Argument is about making a case in support of a claim in everyday affairs ..." (p. xv). Likewise, he suggests that argument is different from "persuasive" writing,

which he likened to advertising and propaganda for it is more concerned with being convincing in its efforts to persuade readers, whereas logical appeals "are the essence of argument" (p. xv).

Writing arguments is crucial to success in secondary school and beyond, but many students struggle with this important skill. In college, the "argumentative essay" is the most common genre students will be asked to write (Mei, 2006) and the ability to support and develop an argument is a key feature valued across academic disciplines (Lea & Street, 1998). The significance of argument is also evident in both K-12 school reform and research. In their review of recent research, Newell, Beach, and Smith (2011) note:

> "Acquiring argumentative reading and writing practices reflects a key component of recent curricular reforms in schools and universities throughout the United States and the world as well as a major challenge to teachers of reading and writing in K-12 and college classrooms" (p. 273).

Recent curricular reforms emphasizing written argumentation, such as the "Common Core," are at least partially in response to the numerous standardized tests and research studies that indicate that students of all ages in the U.S. (including ELLs) struggle with this important skill (National Assessment of Educational Progress [NAEP], 1999, 2002, 2011). On the NAEP (2011) writing test, which includes a "persuasive" writing task, 27 percent of 8th grade students scored at or above proficient; 12 percent of students from families with lower incomes scored similarly. Only 2 percent of fourth graders can present a position and support it with reasons (NAEP, 1999). One might draw the reasonable conclusion that these numbers are even bleaker for ELLs, given their performance on other more general standardized literacy measures (Goldenberg, 2008, Ruiz-de-Velasco & Fix, 2000).

Part of the problem may be the lack of clarity regarding what "argument" means. Teachers sometimes present argument writing in vague and inconsistent ways, and students have inadequate understandings of it. Wingate (2012) found that first-year college students in the U.K.

often described arguments in ways that "disclosed schemata which are in conflict with the target genre" (p. 148). Less than half of students noted the need for evidence, and only eight of the 101 respondents mentioned the need for analysis. The study, which also examined tutors' writing guidelines and feedback on student writing, identified a lack of clarity and consistency in the ways students are guided in developing their arguments. Wingate's analysis noted that different labels are often used to describe the same idea ("critically," "evaluate," "discussion," "analysis"). In addition, these terms are not explicitly defined or related to "argument." In effect, "unknown concepts are used to explain unknown concepts" (p. 152). We likewise identified limitations in the tools available to teachers in our participating pilot school, which served a large proportion of ELLs. Prior to the intervention described here, we saw teachers attempt to support students' argument writing with a generic scaffold that provided one box for a topic and three for supporting details. As a result, students did not attempt to develop arguments despite this being an expectation of the prompt (O'Hallaron, 2012). A subsequent attempt using materials based on Toulmin's model resulted in students making attempts at providing warrants for claims, but still had its limitations (a point examined more closely in Chapter 4).

In the elementary grades, there is evidence that writing of arguments is not a primary focus in U.S. classrooms. Cutler and Graham's (2008) survey of 178 primary teachers reported that the vast majority of teachers engage students in writing narratives (96 percent), and other less formal responses (such as journals or letters to friends) while 36 percent of teachers asked students to write to "persuade." The average amount of time students spent writing texts of paragraph length or longer may also contribute: 21 minutes per day, according to the survey. The most frequent writing activities focused on the teaching of basic writing skills such as spelling, capitalization and handwriting. Gilbert and Graham's (2010) survey of teachers of grades 4 and 6

reported that they teach writing for an average of 15 minutes per day. These findings suggest that an increased emphasis on writing is called for, but even so, teachers are not confident in their ability to teach it. More than two-thirds of teachers report that they received little preparation to teach writing in their college teacher preparation courses (Gilbert & Graham, 2010). Teachers of all students need more tools for teaching writing, particularly arguments.

Additional challenges for ELLs

Writing arguments is hard for all, but ELLs face additional literacy challenges that could make it even more daunting. For example, it can take immigrant students in elementary grades four to seven years of instruction to attain grade-level proficiency in using language in academic settings (referred to as "Academic English" proficiency by Hakuta, Butler, & Witt, 2000). ELLs' reading scores are typically significantly lower than native English-speaking peers. In the elementary grades, ELLs often perform as well as native English speakers on word-level skills such as decoding, but "this is not the case for text-level skills, like reading comprehension, which rarely approach the levels achieved by their monolingual peers" (August & Shanahan, 2006, p. 13). This can prove a serious impediment to students' ability to write certain kinds of arguments that require students to provide evidence and analyze it. In addition, there is evidence suggesting that many ELLs are in classrooms in which they are experiencing individual seatwork and teacher-directed whole-class presentations that address low-level skills, and are provided too few opportunities to use language to explore interesting ideas, generate their own questions, and attain important personal and academic goals (Arrega-Mayer & Perdomo-Rivera, 1996; Assaf, 2006; Gersten, 1996).

A long history of research in contrastive rhetoric highlights cultural and linguistic differences in the ways students write and argue. For example, Wu and Rubin (2000) found that

college students from Taiwan and the U.S. varied in their "orientations" (collectivist or individualist) and that this was reflected in the linguistic features of their writing. Students from Taiwan (writing in English) often used first person plural pronouns and tended to use more proverbs in sentence completion tasks whereas U.S. students used first person singular pronouns and provided personal anecdotes. Such cultural differences in ways of thinking and linguistic expression could be an asset or a disadvantage (Hirvela, 2013).

Research in the area of teaching argumentation may provide reason for cautious optimism, although an extensive review of this literature is not possible here (see Newell, Beach & VanDerHeide, 2011). For example, Richard Anderson and colleagues, in their "collaborative reasoning project," engaged fourth grade students in verbal conversations that drew on argument strategies (Reznitskaya & Anderson, 2002). Over time, they found that new students started to adopt these strategies in their classroom conversations. In a subsequent quasi-experimental study with 128 fourth and fifth grade students, they found that students' participation in the discussions improved performance on a persuasive "reflective essay" (Reznitskaya, et al., 2007). Such findings underscore the importance of oral language for generating academic arguments, corroborated by research that has shown value in oral rehearsal as a productive way to support writing as well (Myhill, 2009).

While these findings are promising, teaching students to write arguments is likely more complicated, particularly for L2 students. Reznitskaya and colleagues argue that the concept of schema should enable the "transfer of argumentative knowledge" into different contexts because of its "field invariant" nature (p. 451), meaning that all arguments make a claim, support it with evidence and provide a rationale. This may be true, but the genres, functions and linguistic features of argumentation vary greatly by discipline, making students' (especially L2 students')

ability to transfer argumentative knowledge to new contexts challenging. As Newell et al. note, "Structural notions of argumentation are necessary but insufficient for analyzing complex argumentative social practices in specific literacy events" (p. 275). Across the academic subject areas, a range of genres and text types can function as arguments, such as an evaluation of a literary character in ELA or a scientific argument about an environmental issue. Students struggle to provide warrants or analysis, and in order to provide more explicit support, we have to consider the subtle ways analysis (or warrants) is constructed in specific genres, for the types of knowledge valued and the way knowledge is constructed can vary by discipline (Moje, 2007).

Why genre, and why SFL?

Some writing teachers and researchers who emphasize writing process over product might dismiss the notion of genre-based writing pedagogy. Traditional, formal views of genre often treat texts as static, rigid products operating outside of social context, and sometimes paved the way for prescriptive instruction that unnaturally limited student choice in their writing. A common example of this in the U.S. context is the Jane Schaffer Method to teaching the "multi-paragraph essay," which was adopted by many ELA teachers hungry for writing instruction support (Schaffer, 1995). The approach encountered resistance from teachers and scholars for its formulaic approach that went so far as suggesting specific numbers of sentences per paragraph (Wiley, 2000).

However, genre-based pedagogy need not be formulaic or rigid. Contemporary genre theory sees genres as forms of social action—patterns of language used in order to achieve some purpose in social situations (Bazerman, 1988; Devitt, 2004; Martin & Rose, 2008). In line with this reasoning, a better understanding of school genres might help students make their way through the often-opaque academic world. SFL scholar Mary Macken-Horarik argued that at-risk

students (including ELLs) fare better within a "visible curriculum": "[S]tudents need explicit induction into the genres of power if they are to participate in mainstream textual and social processes within and beyond the school" (2002, p. 17). SFL offers powerful tools for this difficult task.

The SFL model of genre (or the "Sydney School") is rooted in Halliday's (1985) meaning-based theory of language developed specifically for connecting language form to meaning in social context. SFL recognizes grammatical choices as they relate to meaning, at different levels: word-, sentence-, and text-levels. Central to this theory is the notion that language is constructed in context, which is recognized by the theory at two levels: culture and situation.

To map language patterns at the level of culture, SFL offers its notion of *genres,* characterized as "staged, goal oriented social processes" (Martin & Rose, 2008, p. 6). Genres are not static and rigid; they are patterns, or "recurrent configurations of meaning in a culture … that … enact the social practices of a given culture." As a "goal-oriented" construct, analysis of genre aims to make explicit patterns in the social function of texts. Making the social purpose of texts in school is helpful, for research has demonstrated that teachers failed to recognize distinctions between writing tasks, referring to all student writing as "stories" (p. 18). But this notion of genre also attends to patterns in structure—as a "staged" process, meaning that it often takes multiple steps to accomplish a particular goal. So, SFL genre analysis is also concerned with describing those steps that writers and speakers often make in order to achieve particular goals.

The context of particular situations influences *how* a particular genre takes shape. These variations can be described as the register, defined by Halliday (1978) as "a set of meanings that is appropriate to a particular function of language, together with the words and structures which

express these meanings" (p. 195). *Register analysis* is concerned with describing the clause-level language features of a text and how they fit with the particular situation. Take the *anecdote* genre, for example. Its general goal is to "share an emotional reaction" and is generally accomplished by sharing a sequence of events before a reaction to those events (Martin & Rose, 2008, p. 56). However, the particular language features of an anecdote will vary based on the specific situation. SFL's notion of *register* systematically considers a situation through the variables: the *field* (the content being communicated), *tenor* (tone of language depending on relationship of participants) and *mode* (form—written or spoken, whether accompanying other semiotic resources, etc …). In response to these variables, an adept writer makes language choices to fit the situation and achieve their goal. As these variables are multifaceted, so are the functions of the meanings a writer conveys. Simultaneously, a text:

- presents an idea or message (the *ideational meanings*)
- attends to the relationships of the participants in the exchange (the *interpersonal meanings*),
- uses language to guide the reader through the text and make it cohesive (the *textual meanings*).

SFL offers many analytical tools for describing patterns of meaning and illuminating language choices at the clause level through *register analysis*. By studying register features of genres as they are realized in different situations, scholars can identify specific ways of using language that are supportive of accomplishing the genre's goal (Christie & Derewianka, 2008; Rothery & Stenglin, 2000).

To summarize, analysis of *genre* is generally focused on identifying the social purpose of texts and the common moves (or stages) that support that goal, whereas *register analysis* is concerned with the clause-level language features that construe the particular situation. Register analysis of multiple texts across situations can yield generalizations about those language

features and how they support the overarching goal. Both the pedagogy and analysis presented

here were influenced by these constructs and related research, and are explained in more detail

later in the paper.

In the past three decades, applications of both *genre theory* and *register analysis* have

deepened understanding about texts that students encounter and produce in school. In the 1980s,

Martin and colleagues trained their *genre* lens on Australia's primary schools and began

mapping the genres of student writing by examining more than 2,000 texts produced by students.

Subsequent work has developed detailed, functional descriptions of common school genres, their

purposes, and structures (Christie & Derewianka, 2008; Christie, 2012; Martin & Rose, 2008).

Register analyses of school genres have deepened knowledge of those genres. Christie and

Derewianka's *School Discourses* (2008)*,* also based on analysis of a large corpus of texts, further

developed and refined descriptions of the purposes and structures of school genres, and their

register analyses of these genres highlighted many of the specific language features common to

those texts in ways that connected with the overarching purpose of genres. Scholars in the U.S.

have likewise provided rich descriptions of discipline-specific texts, making the types of

challenges they might pose to inexperienced readers more explicit (Fang & Schleppegrell, 2008;

Schleppegrell, 1998).

However, one criticism of the SFL genre theorists has been that the text has been over-

emphasized, at the cost of instruction, its context, and the students. SFL offered a theory of

pedagogy in its *Teaching-Learning Cycle* (Rothery, 1996) in which instruction generally follows

the progression of: building content knowledge, deconstructing a model text, joint construction,

and independent construction. Despite the fact that SFL genre theory explicitly addressed

pedagogy through this cycle, few published examples are available to show teachers and students

actively using SFL genre descriptions to deconstruct and construct the school genres that the research has described. In addition, pedagogical approaches need to be adapted to the local contexts (Schleppegrell et al., 2013). The pedagogy reported here incorporated aspects of the *Teaching-Learning Cycle*, but focused our units of instruction on achieving the literacy goals of the curriculum (both reading and writing) and supporting the teachers and students in our specific research context. This paper therefore contributes analysis of classroom instruction that puts SFL genre theory in the hands of teachers and students to illustrate additional ways it can be adapted to meet local goals.

As already noted briefly, SFL genre theory has also been critiqued for presenting genres in seemingly rigid and static ways; descriptions of genres make explicit the forms (structures) and specific language features. Christie (1987) noted this as a misunderstanding of SFL: "When systemic linguists begin to identify particular elements of texts, they are sometimes, wrongly, heard to be suggesting a very simple and invariable relationship between some linguistic element(s) and a particular social function or meaning" (p. 25). In SFL, the forms and features of genres are seen as *"patterned* in deliberate ways," not containers to be filled (p. 25). The forms and features are patterns in genres; they do not *define* the genres. The goal is not to transmit genre forms and features to students, but instead to help them actively engage with texts in ways that uncover how language forms are linked to meaning in context.

SFL researchers have made headway in demonstrating the potential of SFL genre theory to support students' literacy skills. For example, U.S. researchers have called upon SFL theory to inform the development of writing interventions for L2 students in primary and secondary classrooms. For example, Maria Brisk and colleagues have reported on a project with predominantly Spanish-speaking primary grade students in which researchers and teachers use

SFL concepts to support students to write in different expository genres. Brisk, Hodgson-Drysdale and O'Connor (2011) introduced students in pre-K through grade 5 to the *report* genre, its purpose and general structure, prior to asking students to write their own reports describing an animal. Their text analysis found that students' responses generally aligned with the overall purpose of the genre. In addition, students were able to successfully organize their responses by sub-topics (as opposed to chronologically), something Brisk et al. attributed to "careful scaffolding by teachers through shared writing, questions, or deconstructing text with graphic organizers" (p. 9). However, the ordering of those sub-topics was not always logical. In addition, students also demonstrated some problems with producing fluent texts. This project has spawned other reports on the use of SFL in similar ways to support students' writing in different genres, such as Pavlak's (2013) unit teaching students to write biographies, and Brisk and Zisselsberger (2011), which supported kindergarten students to write fictional narratives. Work from this project demonstrates that SFL can be applied in culturally- and linguistically-sensitive ways (for example, students could choose to write a *report* in Spanish). While these interventions highlighted genre purpose and structure, they did not explicitly teach language features.

Schleppegrell (2013), in particular, presented evidence in support of the explicit teaching of language features to ELLs. Central to her work is the notion that SFL offers teachers and students a *metalanguage,* a language for talking about language and how it shapes meaning. Of course, *how* that metalanguage is used in classrooms is important: "Learning to use new metalanguage is a skill in itself that needs to be taught, but to be meaningful, the learning of metalanguage needs to be situated in instructional contexts where it resonates with and helps support content goals" (p. 158). Schleppegrell and colleagues (2013; Chapter 2) provided evidence of teachers and students using metalanguage to make inferences about characters'

attitudes as they read, as well as to explore patterns of language and discuss an author's

purpose(s) in literary texts. The lessons and conversations reported there were often in support of

the kind of writing lessons discussed in this paper.

In addition, Schleppegrell and colleagues (Schleppegrell et al., in press) provided an

example of how their SFL-based genre approach modified SFL's description of the *historical*

recount genre to support students' responses to meet their curricular goals in ELA by adapting

the description to help students write about events in a story. It demonstrated that SFL genres can

be adapted to suit different learning contexts and pedagogical goals. However, research to date

has not provided a close examination of the ways in which SFL metalanguage has been used in

classroom writing instruction, an aim of this paper.

Devitt's (2004) discussion of genre was particularly helpful to making sense of our own

project's treatment of genre in the classroom. She notes that genres both constrain and offer

choice to writers. Genres constrain people "because they are functional and make rhetorical

sense" and also because "general etiquette constrains people if they want to belong to a group" (p.

148). Likewise, genres offer choice, for "not every aspect of every text is specified by any genre,"

and within "any genre, there is a great deal of 'free variation'" (p. 149). For the analysis

presented below, I considered these *natural constraints* and *choices* of the target genre. The

content of these categories was informed by SFL's description of the *character analysis* genre

(described in detail later), which addresses the overall purpose of the genre, as well as

identification of structural and linguistic patterns (or register features) common to the genre. The

analysis was also concerned to identify presentations of the genre that were perhaps too rigid, or

unnatural constraints that surfaced in the pedagogy. The materials and instruction sometimes

imposed unnatural constraints in order to provide additional support for students. Table 3.1

provides a definition and example of each.

Construct	Definition	Examples (*character analysis*)
natural constraint	a necessary feature due to rhetorical goals and functional purpose(s) of the genre	evidence demonstrates character action, attitude, or speech that is supportive of an evaluative claim about a character
natural choice	different options available to a writer that would successfully accomplish the genre's rhetorical goal and functional purpose	many textual quotations might serve as adequate evidence for an evaluative claim about a character
unnatural constraint	a requirement or expectation due to classroom materials, instruction or task	the teacher asks all students to use the same piece of evidence to support a co-constructed evaluative claim

Table 3.1. Definitions and examples of character analysis genre constraints and choices.

These constructs provided analytic traction for examining the ways in which the classroom

instruction and conversations analyzed here treated the *character analysis* genre, a contribution

to SFL genre research. In addition, the analysis of student writing examines whether the register

features of student work aligned with the purpose of the genre. The analysis will also consider

variety across responses, addressing the ways choices and constraints established in instruction

are realized in the writing. Each of these analyses is informed by research on the *character*

analysis genre, as described by SFL theory and modified by our research team.

What is *character analysis* and why teach it?

Our work is aimed at supporting students in disciplinary ways in the ELA, which is

uniquely challenging for two reasons: 1) ELA in the primary grades is not always conceived of

as a specific subject or discipline, but is instead conceived of in more generic terms as "reading"

and "writing"—often taught separately and at different times during the school day; and 2) even

in the secondary grades, the goals of ELA or "subject English" are contested and shifting

(Christie & Macken-Horarik, 2011). English teachers can be expected to teach grammar, reading

and writing skills, critical theory, and classic and contemporary literature. As Christie notes, the English teacher has been spoken of as responsible for the "development of [the] individual, confident of opinion, capable of independence of action and of self expression" (1987, p. 22). Such aims are often addressed through the reading literature and discussing and writing about it.

Reading and responding to literary texts can pose significant linguistic challenges to students. Literature, even in the elementary grades, often presents complex and abstract ideas and is often written in equally complex and abstract language. In later grades, students are expected to respond to literature in analytical ways by writing arguments. However, the curriculum of primary grade students is not always in alignment with these challenging tasks. Instead, young students are more often asked to respond to literature in writing in the form of *personal responses* (how they *feel* about a story or character), or *reviews* (or "book reports") (Christie & Derewianka, 2008; Martin & Rose, 2008). This is a disservice to young students, a point well-articulated by Martin and Rose:

> "Although students are often encouraged in class to say and even write how they feel about a text, personal responses are actually the least valued response type in formal examinations, a cruel if unintentional duplicity that denies many students the keys to success in subject English" (2008, p. 93).

We chose to address this disparity between the expectations and instruction across grade levels by supporting primary grade ELLs to write analytical responses to grade-level literature. Specifically, we chose to support students to write in the *character analysis* genre (a member of the *literary response* genre family)

Purpose and structure

The purpose of the *character analysis* genre is to explain how a character changed and why, or to evaluate a character's words or actions for a particular purpose (Christie & Derewianka, 2008; Rothery, 1996). The structure of *character analysis* is likewise important.

Christie and Dreyfus (2007) found that effective reading responses (such as *character analysis*) "organize and marshal information about the texts to be responded to, in such a way that a clear focus is offered and pursued in an orderly manner" (p. 246). SFL genre theory offers specific structural guidance for it describes genre-specific stages that identify the various moves or functions that an effective argument needs to present. Christie and Derewianka describe three stages to *character analysis:*

> **Character Presentation**: the characters of interest are introduced, which would generally serve as an opening element (or introduction) that establishes a claim that assumes an authorial, evaluative stance and outlines "the broad overall directions to be followed" (p. 74).
> **Character Description**: provides description of the character, "where the skill is to do so by offering some interpretive details" and by making use of quotations from the text (p. 74)
> **Character Judgement**: concludes the piece by offering a final judgement about the character.

These functional stages could likewise be mapped onto Toulmin's model (Character presentation as claim; Character description as evidence; and Character Judgement as Warrant). However, the linguistic analysis of patterns in high school students' writing done by SFL researchers does not translate into a classroom-ready pedagogy for primary-grade ELLs. As a result, we modified the structure of the genre presented to students to match our curricular goals and the context in which we were working. These modifications are explained and justified in the Materials section.

Register features

The *character analysis* genre calls for a range of specific linguistic moves by the writer. First, students need to respond to literature in ways that align with the analytical nature of the genre, and do so in ways that present opinions and evaluations in an authoritative voice. Rothery and Stenglin (2000), who analyzed literary analyses written by high school students for a standardized exam in Australia, reported that the most successful writers of literary analyses

were able to evaluate texts and make judgments about characters and their actions, while struggling writers responded to texts in more personal, emotional ways. Christie and Derewianka (2008), using Appraisal analysis (Martin & White, 2005) describes highly-valued ways of reporting characters' attitudes in successful *character analyses,* noting that *Appreciation* (of a character's traits, for example) and *Judgement* (of a character) are particularly important. These evaluations are often realized by an evaluative lexis. In addition, students are often expected to evaluate a specific character, but also provide <u>elaboration</u> by relating their evaluations to a more general topic, which "by implication at least, often leads to reflection about life" (Christie & Derewianka, 2008, p. 71). As students evaluate characters in texts, successful students often utilize "showing" verbs (such as *This illustrates, This proves,* or *This shows*). In doing so, students present more impersonal evaluations of the characters while also discussing what the texts reveal about the characters. By beginning their evaluation with *This*, referring back to what they have presented as evidence for their claim, the writer's opinion is presented in a way that removes the writer from the equation. These "showing" verbs "represent strong propositions of a kind that do not admit qualification or challenge" (p. 74). As such, writers can present very "scaled up" opinions of characters and texts while seeming objective rather than emotional. Likewise, writers may employ verbs of thinking, feeling, and perceiving to convey their text-based inferences about a character's internal reaction to external events. These features guided the development of instructional materials described below as well as the register analysis of student writing reported in this paper.

Materials

We made modifications to the genre description offered by C&D in response to our own research context in ways that aligned with SFL theory. In the first year of the project,

administrators and teachers asked for additional support with persuasive writing. We provided teachers with a graphic organizer that drew on both Toulmin (1958) and Derewianka (1990), offering students general support for developing a claim and supporting it with relevant evidence and analysis. Students were relatively successful in providing claims and supporting evidence, but teachers struggled to explain "analysis" in a concrete way and students were successful at analyzing evidence to varying degrees (Chapter 4; O'Hallaron, 2012). Students also struggled to contextualize evidence from the text.

These findings, as well as the SFL research on the genre, informed the development of our approach the following year. For students, we defined *character analysis* as: "interpreting and evaluating what a character does, says, thinks and feels." We also provided a more general social purpose for the genre: "To learn more about the characters and ourselves." In an attempt to simplify the task, as well as provide detailed support, we opted to focus on teaching students to write one paragraph that did not include a proper introduction, but instead made a claim, presented evidence, and discussed the logical relation of the evidence to the claim. For each stage, we provided a description of its function or purpose, and also highlighted some common language features. Table 3.2 presents the stages, definitions and language features presented in classroom materials:

Stage label	Purpose/function	Language features
Claim	The overall answer to the prompt & overview of your reason(s)[6]	Often uses a being process Might use "because" to introduce your reasons
Orientation to evidence	gives information about what's going on in the story so the evidence will make sense to the reader	Circumstances of time and place Doing processes help to tell what was going on in the story.
Evidence	Uses words from the	Often uses a doing or saying process to

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[6] This definition was later deemed inadequate and was changed to "makes a careful judgement about the character and briefly gives a reason."

	story to prove your claim	show something about the character Has quotation marks around it At least one full sentence
Interpretation	TELLS what the author SHOWS in the story (especially feelings)	If your evidence uses *doing* or *saying* to show, you will choose a *being* or *sensing* process to help you tell your reader what it means.
Evaluation	judges the character based on prompt. This is your chance to explain the position you chose in the claim!	Often uses "This shows" to connect evidence to your claim Often uses a "because" word to help explain WHY it proves your claim.

Table 3.2. Stages of character analysis presented to students

These stages bear resemblance to both Toulmin's model of argumentation as well as some of the notions presented in the SFL literature. We maintained our use of Toulmin's *claim* and *evidence,* for they are functional in nature, and had supported students' writing in the previous year. In addition, we attempted to make *analysis* more concrete and specific in the terms *interpretation* and *evaluation*, both of which are functional moves central to the genre (although were not part of Christie & Derewianka's stages). Of course, we did not intend to represent these stages as static and linear; responses will undoubtedly vary by specific writing tasks (more complex claims might require multiple pieces of evidence, or a prompt may be more interpretive in nature, rather than evaluative). Instead, we provided students with a simplified task to give them an opportunity to engage with these challenging moves common to successful *character analyses*.

The texts and prompts

In the first unit of instruction, each class read the narrative text *George and The Cherry Tree,* a modified short story based on the (likely fictitious) legend about George Washington, the first U.S. president, cutting down a cherry tree as a young boy. In the story, George receives an ax as a present from his parents. To test his strength, he cuts down a cherry tree in his father's beloved garden. His father becomes angry upon discovering the tree and asks his son if he knows

what happened to it. George, faced with the dilemma to conceal or reveal his transgression, decides to tell the truth, and his father rewards him, saying that he was proud of him for the admission. Throughout the story, many of George's (and his father's) emotions are implied in their actions, leaving some ambiguity as to whether George felt genuinely remorseful. These implied attitudes became the focus of many of the classroom conversations aimed at evaluating the characters. The students ultimately wrote character analysis responses to the prompt: *Is George a good boy*? *Why or why not?* or *Is George's dad a good parent? Why or why not?*

In addition to this text, the 4th grade teacher implemented an additional unit of instruction with the story *Pepita Talks Twice* by Ofelia Dumas Lachtman. In the story, Pepita is a young bilingual girl who grows frustrated with having to translate for her family members and neighbors when she'd rather spend time with her dog, Lobo. After she discovers that her brother had taught Lobo a new trick (instead of her teaching him!), Pepita loses her temper and decides that she will only speak English from now on. She finds this change to be difficult and frustrating. One day, her decision is put to the test when Lobo chases a ball into the middle of the street, and is unresponsive to being called "Wolf." Pepita decides to speak Spanish, calls Lobo by his name, saving his life. After all, Pepita decides that being bilingual is a wonderful thing to be appreciated. With this text, students were supported to write multi-paragraph responses, with introductions and conclusions. They responded to the prompt: *How do Pepita's feelings about speaking two languages change throughout the story? Does she handle the situations well?*

The units of instruction

Our approach applied SFL concepts to support students in both reading- and writing-focused lessons. The primary goal of the reading-focused lessons was to engage students in activities and conversations that would help develop an understanding of the texts in ways that

would support their character analysis writing (Chapter 2). The units generally progressed as

follows:

- introduce the topic or theme via oral and written personal responses
- interactive, joint reading of text
- close analysis of text using SFL (appraisal and transitivity), often focusing on characters' attitudes and developing visual displays of evidence related to both positions to be argued
- more general discussion of the text, often addressing writing prompt
- presentation of the *character analysis* genre and deconstruction of sample text(s) co-construction of genre (optional)
- students independently plan draft and engage in feedback activities
- students independently draft a response

The initial unit focusing on *George and The Cherry Tree* spanned approximately five 60-

minute lessons, and was taught in 12 classrooms, including the 4th and 5th grade classes in focus

here. Students first engaged in informal writing and conversation about a time they had done

something wrong and whether (and why) they chose to confess or not. Then, the class read the

story aloud, stopping to discuss what had happened in the story, difficult vocabulary (such as

"anxious"), and what George or his dad might (or should) do next. Then, the teacher reviewed

SFL concepts that supported students' interpretation of attitudes and asked students to focus on

specific portions of the text in small groups before sharing their findings with the class.[7] These

ideas were referenced as students engaged in a more general conversation about the text, which

focused on evaluating George and his father, and served as an "oral rehearsal" for the writing

activity.

The teachers then introduced the *character analysis* genre and its purpose through slides

created by the research group. We attempted to actively engage students with the genre through a

"scramble" activity that provided students with slips of paper with portions of a model text

written. As each stage of the genre was introduced, students searched for the text that best served

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[7] Specific examples and analysis of the classroom artifacts, activities, and conversations from both units are presented in Chapter 2.

the function and had the linguistic features of that stage. Students were asked to justify their choice, discussing why it (and not other pieces of text) served the function of the stage and fit with the model text they were assembling. Students pasted the pieces together, creating a cohesive example of a character analysis model. Then, the teacher introduced a *character analysis* graphic organizer where students would write ideas and plan their writing (Appendix A). The students filled out the organizer, stopping after each stage to share what they had written and engage in feedback conversations with each other and the teacher. Students altered their ideas as they continued to fill out the organizer. After completing the organizer, they paired up with a classmate, who was instructed to take an opposing stance and debate the evidence and argument. Students considered those ideas before creating a final draft in paragraph form.

In the 4th grade classroom, students had participated in the unit described above, but the teacher volunteered to additionally teach the second unit, which focused on the text *Pepita Talks Twice.* The unit built in complexity because the language of the literary text was more abstract and the writing task was likewise more challenging, requiring students to write multiple body paragraphs as well as an introduction and conclusion. After reading the text as a class, and completing a reader response activity that prompted students to react personally to events of the story in writing, the close analysis activities focused on two portions of the text. The class first focused on the way Pepita's frustration with translating for neighbors was realized in the text through the abstract participant "the grumble" and its progressive amplification (the *grumble began/grew/exploded*). Students also focused on the ways in which Pepita's actions and speech presented her (implied) emotions at the end of the story, after having saved Lobo.

For the writing portion of the unit, the teacher briefly reviewed character analysis and its stages and presented the *character analysis* graphic organizer to the students. The handout had

been slightly modified with text-specific questions to support students' responses (Appendix B). The students filled out two graphic organizers, one developing a claim regarding Pepita's attitudes in the beginning of the story and one at the end of the story. After completing each stage, students shared their writing and engaged in a feedback session with peers and the teacher. In the final lesson, the teacher and students discussed how these two planning sheets would fit into an overall response to the prompt, before co-constructing an introduction students could copy or modify for their own papers. Students wrote brief conclusions after using the graphic organizers to guide the writing of a complete draft in paragraph form. Data from both of these two instructional units are the focus of the analysis described and presented below.

Methods

Overview

The data presented here are from the second of our three-year project, during which we worked with teachers and resource teachers from 12 classrooms across five schools, which are described in detail in Chapters 2 and 4. This Chapter analyzes the classroom implementation and written products from two classes, using appropriate data sources and analytic methods to pursue the two strands of inquiry outlined above.

Design-Based Research

Our design-based research approach (DBR) (Brown, 1992; Collins, 1992) is described in detail in Chapter 2, but it is important to note that it frames the data and analysis presented here in important ways. At this point in our work, the approach was still very much a work in progress (and is still evolving). This is a strength and limitation of the work: it enabled exploration of a kind of writing atypical to the primary level, but limits claims regarding student writing achievement.

Data selection

An initial analysis of all sets of writing across grades 2-5 (16 total sets) informed the selection of data reported here. The criteria for selection, informed by the dual aims of the research, were: 1. complete video data of the writing instruction lessons[8]; and 2. class sets of writing that were independently constructed.[9] This process narrowed the data down to three classrooms (one 2nd, one 4th, one 5th grade), mainly due to the limitation of only partial video records of the others. The 2nd grade classroom was ultimately excluded from this analysis because the developmental features of early primary students' arguments differ from those of older elementary students (Christie, 2010). This analysis, then, focuses on two classrooms at different schools. The 4th grade classroom is especially useful because the teacher volunteered to provide students with an additional opportunity to write in the *character analysis* genre, offering multiple sets of writing from the same students. This class's first set of papers (in response to the George Washington text) was excluded from this analysis because it was co-constructed. The second attempt (response to *Pepita Talks Twice*) was written independently and was included. All of the lessons from this second character analysis unit were observed and video recorded. In the 5th grade classroom, the implementation of the character analysis unit served as a pilot of the instructional materials, taught by a researcher (also the author of this paper).[10] The data for this class likewise offered student writing produced independently as well as compete video data.

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[8] The comprehensiveness of our video data for all 12 teachers was inconsistent for observations were sometimes limited due to overlapping instruction times, researcher availability, and availability of video equipment.

[9] Some of the teachers chose to co-construct the character analysis response with their students, thus limiting variation in students' responses

[10] Ethical and methodological considerations are addressed later in this section.

The relevant video and observation logs thus consisted of the 4th grade teacher's implementation of the *Pepita Talks Twice* unit (three 60-minute lessons) and the 5th grade teacher's implementation of lessons about *George & The Cherry Tree* (five 45-minute lessons). The data regarding student writing consisted of: a set of 4th grade papers written in response to the story *Pepita Talks Twice* (26 total). The 5th grade class set, responding to the *George and the Cherry Tree,* totaled 23. Any papers that were deemed incomplete or illegible were excluded from the analysis (4th: 4; 5th: 0). The total data set consisted of 45 student writing samples.

Research context:

The same schools and teachers participated in the work as those described in Chapter 2. However, as this analysis focuses on two specific classrooms, a description of each school, the classrooms, and the teachers is provided.

School 1 was host to the 4th grade classroom and also served as the pilot school during the previous school year. The school served a total of 279 students, with two classrooms per grade level from Kindergarten through grade 5. Approximately 70 percent of its students were identified as ELLs, and more than 90 percent of the children speak Arabic as a first language as many of the students' families immigrated from Yemen, Lebanon, Iraq, and other countries. Having lived in a community that speaks Arabic or immigrated recently, many students entered Kindergarten knowing very little English. In addition, 94 percent were considered economically disadvantaged. The school's racial makeup was 100 percent "White," a categorization that includes Arabic backgrounds. The school's student population was relatively stable—11 students moved in or out of the school's attendance area that year.

School 2, the locale for the 5th grade classroom studied here, was a bigger school (408 students) with a more diverse student body. It was a bit different from the other five participating

schools in our project, for the ELL population was a significant minority (18 percent) rather than the majority. It also served other ethnic minority students: six percent of students were "Hispanic" and seven percent were African American. The socio-economic status of its students was also more varied than our other participating schools: 44 percent of students were considered economically disadvantaged.

One might assume that School 2 had advantages over School 1 (fewer ELLs to serve, fewer economically disadvantaged students), but School 1 actually performed better on some of the state standardized tests. By the 5th grade, 90 percent of School 1's students were proficient on reading and 70 percent of its 4th graders passed the writing exam. At school 2, 61 percent of its 5th graders were proficient on the reading test and 55 percent were proficient at writing.

The teachers

The 4th grade teacher was entering her 4th year of teaching. She considered Arabic to be her first language, in which she was a fluent speaker, but self-reported partial proficiency in reading and writing Arabic. She also held a Master's degree in Bilingual/Bicultural Education and bilingual certification, and was pursuing a second Master's degree in educational leadership while teaching full-time.

As a guest teacher, I taught the 5th grade class in order to pilot the *character analysis* unit. I was a doctoral student on the research team serving as a lead curriculum designer. I have 12 years of teaching experience at the high school and university level, as well as less formal experiences teaching in the elementary grades. I am a native speaker of English with limited oral and written proficiency in Spanish, but no proficiency in Arabic. I hold a Master's degree in English Education and am pursuing a doctorate in education.

Data Sources and Analysis

Data were selected and analyzed in order to pursue to two related lines of inquiry. An overview of the data and analysis in relation to the RQs is presented in Table 3.3.

Research Questions	Data sources	Analysis
1. In what ways was the (SFL-informed, genre-based) approach supportive or limiting of students' classroom conversations about the target genre, its purposes, common stages, and language features?	a. Observation logs b. Video recordings c. Teaching artifacts (lesson plans, handouts)	1. Constant comparison analysis (Corbin & Strauss, 2008) identifying un/natural constraint & choice *Unit of analysis*: episode (Lemke, 1990) 2. Engagement analysis (Martin & Rose, 2003) of select, representative episodes
2. What are the features of *character analysis* responses written by primary grade L2 students who participated in the lessons?	a. Student writing: 2 sets, 2 classes (4th & 5th grades), 45 total responses	1. Genre stage analysis (Martin & Rose, 2003) 2. Constant comparison analysis 3. Register analysis (Martin & Rose, 2003) select representative texts (2 total) *Unit of analysis:* text (Halliday)

Table 3.3. RQs, data sources, and analysis

Observation Logs & Video of classroom implementation

The first goal of analysis was to identify *episodes* (Lemke, 1990) of classroom talk relevant to RQ1. Informed by Lemke's (1990) definition and Gibbons' application (2006), episodes are defined as "a unit of discourse with a unifying topic and purpose" (Gibbons, 2006, p. 95). As such, a lesson often consists of many episodes marked by changes in topic, participation structure, or purposes. Many of these episodes were identified and described in the observation logs by the initial observer (a graduate student researcher with the project). I first reviewed the observation logs for each lesson (8 total, varying in length from 35-75 minutes each) to identify potential episodes. The criteria for selection were: 1) the teacher or students explicitly discussed the target genre, its purposes, stages, and language features; 2) reading-focused lessons focused on particular parts of text that might narrow evidence or were addressing a skill relevant to the writing; or 3) classroom conversation focused on the target genre explicitly. This process yielded

54 episodes. Next, the video recordings were reviewed in order to identify additional relevant episodes perhaps not noted in the observation logs, and also to exclude any episodes not germane to the study. A total of 64 total episodes were identified.

I then coded each episode by classroom participation structure and the concepts related to *constraints* and *choice* outlined in Table 3.1. Instructional materials were referenced during this process to provide greater context regarding the instruction. During this process, I also generated elaborated, analytical notes for each episode, which were guided by the following questions:

- In what ways do the activities, materials, or discussion enable student choice in writing and/or constrain it?
    - In what ways do the activities, materials, and discussions highlight *natural constraints* and *choices* of the genre?
    - In what ways do the activities or conversations present *unnatural constraints* on the genre or unnaturally limit students' choices in their writing?
- In what ways were the students and/or the teacher making meaningful observations about the genre, its purposes, stages, and language features?
    - Did conversations reflect an explicit, but meaningful focus on the genre?

The elaborated analytical notes were then coded using Constant Comparative Analysis (CCA) (Corbin & Strauss, 2008) to identify emergent patterns, reported in the findings section below. For example, I noted that classroom discussions about the literary texts could both constrain and enable students' choice of evidence when writing. I then chose representative episodes for each code and transcribed them to serve as illustrative examples provided in the findings section of this paper. Those transcribed episodes were then analyzed using Martin & White's *engagement* framework (2005). It is a suitable tool for examining how the language of the classroom conversations might shape the target genre as either a pattern or set of choices or, conversely, as a set of rules to be followed. This is made possible through the theoretical concepts of *dialogic contraction* and *expansion.* An utterance that is *dialogically contractive* "acts to challenge, fend off, or restrict the scope of alternate positions," whereas an *expansive*

utterance "actively makes allowances for dialogically alternative positions and voices" (p. 102). For example, a teacher telling students that a claim "<u>often</u> uses a being process" to make a judgement of a character is dialogically expansive, whereas saying that their claim "<u>needs</u> a being process" is highly contractive. This fine-grained analysis adds to the discussion by highlighting ways in which the conversations and materials present the constraints and choices common to the genre.

Student writing

The papers were first analyzed by closely looking at the schematic structure of the texts produced, or a *genre stage analysis* (Martin & Rose, 2008). For this task, the stage labels that we had presented to the teachers and students were used to help determine the structure of the student writing and see how well those stages supported students to write in the target genre (claim ^ orientation to evidence ^ evidence ^ interpretation ^ evaluation)[11]. For the 4th grade responses to *Pepita Talks Twice,* this analysis was only applied to the body paragraphs, not the introductory or concluding paragraphs because they were co-constructed and are organized differently. After all writing had been labeled by schematic structure, I made analytic notes on each piece of writing, focusing on the function and features of the writing overall as well as the individual stages. This process generated notes about the perceived successes and struggles of students' writing to advance through these stages and write in the target genre. Likewise, it generated descriptions of different ways students were able to produce character analyses with varying degrees of success. To help identify patterns in the students' writing across the stages we presented, I applied constant comparison analysis (Corbin & Strauss, 2008) to the analytic notes I had generated for all writing samples in the schematic structure analysis, generating codes to

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[11] The symbol ^ indicates sequence.

describe patterns that emerged. For example, analysis of students' evaluations identified different ways students successfully elaborated on those evaluations (such as making connections to abstract concepts like what it means to be a "good kid"). The distributions of the data across these categories were tabulated and are reported in the findings as a means of representing the variety and similarities in student writing.

To provide more fine-tuned linguistic analysis, I selected one text from each class set that exhibited the most common patterns in the writing uncovered by the constant comparison analysis just described. I then applied aspects of *register analysis* (Martin & Rose, 2003). This was particularly helpful in determining whether the students' responses were aligned with the common linguistic features of the target genre, as presented in Christie and Derewianka's findings described above. Of central importance were the ways in which attitudes were presented in the student writing: were students making judgments of characters or were they responding emotionally? For this task, I analyzed the *appraisal* resources students used, categorizing the types of attitudes presented (appreciation, judgment, or affect) and also the *force* of those attitudes (amplified or softened). I also examined the sentence structure using a theme/rheme analysis (a resource for looking at textual cohesion, how writers connect ideas from one sentence to another) (Christie' & Derewianka, 2008). Lastly, I conducted a transitivity analysis, looking at how the *participants* and *processes* of the texts conveyed the writer's ideas as they progressed through the stages we presented. The overall purpose of this close analysis was to illustrate whether and how students in primary grades were able to write in the appropriate register of the genre, and relate those ideas to the features of *character analysis* described earlier.

Methods for minimizing bias

Having served as both a teacher and researcher for this study, I employed methodological approaches to minimize problems of bias and to build validity (or trustworthiness) of the analysis. First, the initial analyses of my classroom teaching were conducted by one of the project's co-principal investigators, serving as a form of "investigator triangulation" of the videotaped observations. Similarly, another graduate student working on the project also participated in the initial analysis of the student writing. An additional approach was to collect data from the 4th grade classroom. Applying the constant comparative method to data from both classrooms enabled me to "test provisional hypotheses against at least one other case" (p. 298). In other words, generalizations about the data (particularly the classroom implementation) were supported by instances that surfaced in both settings. Throughout the analysis, I was careful to present evidence from both classrooms when illustrating findings. In addition, I searched for "deviant cases" and included examples in the body of the findings. For example, the construct of "unnatural constraint" enabled me to systematically identify ways in which our implementation of the lessons deviated from our intentions by unnaturally prescribing student writing. Such findings were given prominence in the reporting of findings (see subheading "Pedagogical supports and classroom conversations sometimes presented the genre in unnaturally rigid ways"). All of these efforts, as well as my attempt to be explicit and transparent in the analytic methods applied, build the trustworthiness of this work.

Findings

The first section will report findings pertaining to RQ1, focusing on the implementation of the lessons. The second portion will describe patterns and features of the students' writing that emerged in the stage-based analysis of all papers, as well as close register analysis of one representative text from each class (2 total).

Classroom implementation

This section reports on some of the patterns that emerged in the writing lessons. The primary purpose of this analysis was to explore whether the classroom instruction treated the genre in the ways we intended (highlighting natural constraints and choices inherent to the genre via conversations and activities that actively engage students) or if they were prescriptive and rigid in their presentation of the genre. Overall, analysis of the lessons found that many of the classroom conversations highlighted natural constraints and choices common to the character analysis genre. However, the teachers and materials also imposed some unnaturally rigid constraints on students as they wrote. These are discussed in detail below.

Reading-focused lessons supported conversations that aligned with constraints and purpose of genre, while also generating opportunities for explicit choices by students

The SFL reading activities (also the focus of Chapter 2) place an explicit focus on select portions of text that directly and indirectly developed characters. For example, the 5th grade unit actively engaged students with portions of the text that presented implied attitudes of George and his father, which were central to arguing the evaluative prompts (e.g., he "turned as red as a cherry," "nodded and looked up," "grinning and swinging his ax"). The same occurred in the 4th grade's engagement with *Pepita Talks Twice.* SFL appraisal tools were narrowly and purposefully applied to analyze Pepita's growing frustration, realized in the various forms of the abstract participant "the grumble" in the early parts of the story, as well as in the construal of Pepita's relief at the end of the story. In each activity, multiple examples of relevant, potential evidence were highlighted. The activities therefore constrained the evidence that students considered, but also offered students multiple choices for selecting evidence to support their claims.

In addition, the ways the classes talked about the texts often aligned with the purpose of the genre. The teachers solicited multiple interpretations of the text and asked students to elaborate with justification. For example, during the conversation about Pepita's "grumble," the teacher engaged students in a conversation about the quote "She did it without a grumble," asking them to interpret Pepita's feelings. The teacher used the "attitude line" (see Chapter 2) to guide the conversation, asking them where this portion of text would go (e.g., identifying it as a positive, negative, or neutral attitude).

1. T: Ok, in the negative part, but closer to neutral. Ok, why would we, why would you put "without a grumble" here (pointing to the mid-point of the line)?
2. Zaineb: Because, uh, she's feeling uncomfortable, but not like THAT uncomfortable.
3. T: So why do you think she's uncomfortable when it says "without a grumble"?
4. Z: 'Cause when people asked her to do things for them she didn't mind, but she was starting to get a little, like, she was okay with it.
   The teacher asks where "okay" would go on the connotation line, another student responds "neutral" and another student argues that it could go a little to the positive. The teacher marks each point on the line.
5. T: Can we all agree it's more neutral?
6. Sts: Yeah.

This conversation aligns with both the natural choices and constraints of the genre. The teacher's line of questioning supports student choice by allowing for multiple interpretations, but also reinforces a constraint of the genre by prompting students to support interpretations with text-specific rationale. And while there is room for multiple interpretations, the teacher pushes for some general consensus ("Can we all agree it's more neutral?"). Literary interpretations are not wholly subjective, for they need to be substantiated with the text and rationale. At the same time, interpretations are not rigid, but open for disagreement, something reflected in the classroom conversation.

And while the teacher was front-and-center as the facilitator of the previous conversation, the students were the participants actively generating the interpretation. At the conclusion of the

following conversational episode (discussing "the grumble grew") students actually corrected the teacher's placement of the text on the attitude line, arguing that it should be placed closer to the negative pole because the word *grew* "turned [her frustration] up" (made it more extreme). These features of the conversation transferred over to the small group conversations about the latter portions of the text, which were less directed by the teacher. One small group had a discussion about the meaning of "Pepita shut the gate firmly behind Lobo and hugged him." During the activity, they were asked to generate ideas about what Pepita was feeling, and also determine whether those emotions were implicitly "shown" or explicitly "told" in the text.

1. S1: "[S]hut the gate firmly." Like, worried?
2. S2: Yeah, like, she was probably worried.
3. S1: She was worried he was going to come out. . She was worried he was going to get out of the gate. What else do you think she feels?
4. S2: I think she feels like happy because he didn't get hit by the car.
5. S1: No, that's in that one (pointing to another piece of text).
6. S2: Yeah! She hugged him!
   S1 disagrees and they go to the text to investigate. S1 concedes that happy is a relevant interpretation.
7. S1: What else do we think he felt besides happy? I mean SHE felt besides happy? . . . Maybe ... maybe she felt grateful?
8. S2: Yeah.

The students provided multiple interpretations—and in fact were disagreeing quite vehemently before returning to the text to review the evidence in context. They justified their interpretations and made explicit reference to the text. As the discussion progressed, they generated multiple and refined interpretations of the text ("worried," "happy," "grateful"). Their interpretations were constrained by the text at hand, but they generated different choices of evidence from which to select, depending on the stance. These conversations often culminated in students providing extended interpretations of Pepita's attitude in the full class setting (see Chapter 3 for examples of similar extended discourse based on such discussions).

Text-based conversations in the 5th Grade *George and The Cherry Tree* unit likewise supported students to generate multiple interpretations and rationales, tied directly to the different evaluative stances students took. During a reading-focused lesson, the teacher drew students' attention to the final line of the story, "George left the room and walked toward the garden, grinning and swinging his ax." One student said that it showed that George was a bad kid, and the teacher asked him why:

1. S: He's "grinning and swinging his ax" so he doesn't care about it anymore. He thinks that if he tells the truth again, nothing is going to happen.
2. T: Okay, so you think maybe he thinks that he got away with it and that's why he's grinning. Does anyone think differently, that he has another reason to be happy? Maybe he did learn his lesson but he still has a reason to be happy. Okay, um, Lauren. Lauren, what do you think?
3. S: Maybe because his father was proud of him for telling the truth and not lying?
4. T: GOOD, so maybe he's happy about his dad being proud of him. That's another way of thinking about it.

In this exchange, the teacher is able to solicit different interpretations of George's attitudes and actions that are dependent on their evaluative stance. In this example, the interpretation and evaluative stances are mutually dependent, a natural constraint of the genre. But the conversation also highlights choices inherent in the genre: one can have differing, but defensible interpretations of textual evidence in support of varied evaluative stances.

The presentation and discussion of functional stages often addressed natural constraints of the genre

Classroom conversations, particularly during feedback sessions as students filled out the graphic organizer, emphasized the inter-dependence of the stages, highlighting their function in the overall purpose of the genre. This was perhaps most evident as students iteratively developed claims and identified evidence, the first steps to planning their responses on the graphic

organizer. For example, the 4th grade teacher provided different claims and prompted students to choose portions of the text that would support them:

1. T: So if I said she felt OKAY in the beginning of the story, she didn't mind helping people, which one of these do you think I would use (holding up pieces of text discussed earlier)? If I said she was feeling OKAY.
2. S: "Without a grumble."
3. T: Oh! "Without a grumble!" Very good! ... What if I said she was REALLY mad? In the beginning Pepita was REALLY mad, because she was helping everybody. Which one do you think I would choose?
4. S: The very last one (referencing the example where Pepita's "grumble grew so big it exploded").

The exchange highlights a natural constraint of the genre: the evidence must "match" the claim. At times, perhaps this natural relationship is presented in unnatural ways, for the teacher suggests "which one" piece of text would support the first example, when in fact there may be several quotations that could support the same claim. As students wrote, the teacher emphasized this point again, in a less rigid way, though. After individually conferencing with a student, she shared with the rest of the class how one student changed his claim in response to his evidence. Initially, after drafting his claim, he had selected evidence that did not quite align with it. This same type of revision occurred in the 5th grade class. These revisions to text after writing claim and evidence suggests that some students were carefully considering evidence and the impact it had on their claims. Not only does this reflect the constraints of the genre (claim-evidence connection), but it also supported an iterative development and recasting of text-supported claims, as sometimes students changed their claim in light of thinking about the meaning of the evidence.

The classroom conversation also highlighted the way selection of different evidence influenced the shape of the stage preceding the evidence (the *orientation to evidence* that would contextualize the evidence). In the 5th grade classroom, the teacher engaged

students in a "pre-writing" task aimed at supporting students to contextualize their evidence. He asked students to generate lists of important events that had occurred prior to the evidence they selected. Many students generated more events than would be necessary to include. The teacher put one such list on the overhead and asked the student to share her evidence, which was "'I can't tell a lie,' he cried out. 'I cut it with my ax.'" The teacher commended the student on the list but said, "she has to make this into one or two sentences." He prompted students to narrow it down together:

1. T: So if you needed that quote to make sense to someone who hadn't read the story, what would you tell them? What is some really important information? Siena and then Sari. What do you need to know before [the evidence]?
2. Siena: Um, you need to tell them that George cut down the cherry tree.
3. T: Okay, George cut down the cherry tree? Good. What else, Sari?
4. Sari: Uh, George's dad talked to him?
5. T: Good, and what did he ask him?
6. Sari: Uh, did he cut down the cherry tree.
7. T: Good. Those are two things that you could say. George got an ax for his birthday, he cut down a cherry tree, and his dad asked him what happened. That's all you need for that quote to make sense. Who has ANOTHER piece of evidence, that's different from "I cannot tell a lie"?

In this exchange, the conversation highlights the fact that the *orientation to evidence* will be directly shaped by the evidence selected: evidence from the end of the story will require the writer to include additional information but do so briefly. The teacher helped students identify relevant events by asking text-specific questions. Such questions constrained student choice, but students were also introduced to the idea that different evidence required different contextualized information. Their choice of evidence would necessarily constrain what they chose to include to contextualize it. Likewise, both teachers referenced the implied audience, a natural constraint, when supporting students with this task. However, the notion of audience was not fully addressed, and could be an area of improvement in future iterations.

Of course, the teacher perhaps imposed an unnatural constraint by suggesting a specific length of the *orientation* be accomplished in "one or two sentences." This advice, which is likely an attempt to make "brief summary of background information" more concrete, is unnaturally constraining. Even so, the nature of the conversation is focused on the function of the stage. It's also important to note that such rigid (word, sentence, or page) limits are commonplace in academic and professional genres, for they provide some clarity regarding the expected depth and breadth of the writing task. Of course, perhaps the teachers could have modified their language to make the parameter less rigid, a point more developed more fully later in this section.

SFL metalanguage also supported students to make purposeful, specific linguistic choices in presenting their own evaluative stances

As students planned their own writing, SFL terms supported some of them to make specific choices in language they used in order to reflect their stance regarding George. For example, the terms "turn up" and "turn down" (which were central to the reading lessons) also supported students to make specific linguistic choices as they wrote their claims. In the following conversation, the 5th grade teacher reminds students of the attitude-related metalanguage (positive/negative/neutral; turn up/down) and explicitly connects it to the claim, which students were about to generate independently. He made the connection explicit:

> "Now do you remember when we were doing *turn it up* and *turn it down* when we talked about that? Like if you're somewhere in-between? Some of you said he's more good than bad, what's ONE way you could turn down 'good' to make it good but not quite as good? Could you add any words to turn it down?"

This and subsequent follow-up questions elicited many varied responses from students, including: "Not the best (kid)," "George is a good kid, " "he's a sort of a good kid," "He's a super kid," "He's an awesome kid," and "He's a great kid." These responses provided students with an opportunity to experiment with and expand the evaluative lexis they would use in their

own claims. The teacher then prompted students to apply it to their own writing: "I want you to decide where he falls on that good and bad line and *turn it up* and *turn it down*, depending."

After writing, students then shared their claims and evidence. Students provided widely different examples of evaluative stances (described in detail in the writing analysis), indicative that the previous conversations as well as the application of the SFL terms (positive/negative; turn up/down) supported students to adjust their language to represent their opinions of George. The examples reflect much more nuanced evaluative lexis than if students had simply rephrased the writing prompt ("He is a good boy"). SFL metalanguage in the context of writing CA stages supported students to experiment with their language, giving them an opportunity and the tools to make purposeful linguistic choices that matched their intended meaning and rhetorical purpose.

The 4th grade teacher likewise attempted to support such experimentation, but the conversation constrained student choices in an unnatural way. After reviewing the *claim,* she reminded students: "Remember in your claim you can use those *turned up* words." While the teacher's use of the verb "can" presents it as a choice, the exclusion of "turning down" (or softening) their evaluations unnaturally contracts linguistic choices available. As a result, the application of the SFL metalanguage may have influenced students to take more extreme (negative or positive) interpretive and evaluative stances regarding Pepita in their writing.

Pedagogical supports and classroom conversations sometimes presented the genre in unnaturally rigid ways

Several aspects of the instructional units and their implementation constrained the target genre in unnatural ways, some of which were intentional and others not. The first, and perhaps most defining decision regarding the presentation of the genre was to simplify the overall representation of the stages and the sequence in a rather static form (presented linearly in slides,

and as immovable, inflexible stages on the one-page graphic organizer). While these functional stages are generally presented this way in the argument scaffolds we have seen in research and pedagogy (claim ^ evidence ^ analysis), as is the general progression through them, they are not as linear or static as was presented. For example, a writer arguing a nuanced claim may need to provide multiple pieces of evidence (each of which would need to be contextualized, interpreted and evaluated in order to argue the overarching claim). Such a situation arose in the 5th grade class when one bilingual student suggested she argue that George is neither good nor bad; he's good overall, but makes mistakes. The teacher highlighted the implications of such a decision, noting that "Alia could write two paragraphs." However, the teacher later repeated the original constraint, telling students to pick the best, single piece of evidence to prove their claim. This simplified the instruction, but also constrained student writing. The research team made these decisions (somewhat reluctantly) to simplify the instructional challenges the unit already posed to teachers and also to make the task more accessible for elementary students. In subsequent units (such as *Pepita Talks Twice*), we aimed to highlight ways in which more complex tasks might elicit more complex claims, supported by multiple pieces of evidence.

While the research group was careful to present most linguistic features of the genre as patterns rather than requirements, this was not always the case. For example, the majority of the language features highlighted in the classroom materials were presented in language that utilized modal locutions that left room for exceptions. For example, the *evaluation* stage was presented as: "often uses 'this shows'" and "Often uses 'because' to help explain WHY it proves your claim." Some of the features were presented more rigidly, such as: *evidence* "has quotation marks around it" and is "at least one full sentence." Of course, these are not absolute features of literary analyses, but we wanted to simplify the task, helping students to avoid only presenting

incomplete ideas. The decision to ask students to quote the text directly was in service of our goal to help students interpret attitudes implied in the author's word choice and to use textual evidence in supporting their claims.

The linguistic features presented for *orientation to evidence*, however, were inadvertently presented as rule-like and ran counter to the pedagogical goals. The language features of the stage were: "circumstances of time and place" and "Doing processes help to tell what was going on in the story." It was no surprise, then, when the language the teachers used to describe the stage was equally rigid. For example, as the 4th grade teacher prepared students to write their orientations to evidence, she said, "You need time and place and a doing process." This was also the case in the 5th grade classroom. After students correctly identified the *orientation to evidence* during the "scramble" activity (where they pieced together a model text), the students offered their justification as "It has a time and place." The teacher quickly accepted this answer and moved on, not engaging in any meaningful discussion of the features in relation to functional purpose of the stage. Classroom conversations and the supporting materials left little room for student choice in this particular stage. This was unfortunate, as these features are not only unnecessarily rigid, they are inaccurate. In fact, writers might contextualize evidence without an explicit mentioning of time or place, and processes of all kinds (sensing, saying, being) might be necessary to explain important happenings prior to the evidence.

There was also evidence of the teachers' oral language presenting language features and advice about writing more rigidly than they were presented in the support materials. As previously noted, the evaluation stage was presented in the slides as "often" using "this shows" to help relate the evidence to the claim. However, both teachers emphasized students' use of this phrase. The 5th grade teacher suggested, "You can just start with 'this shows'." While his use of

can suggests some choice here, it is nonetheless a relatively strong suggestion. The 4th grade teacher provided even more dialogically contractive expressions when trying to support students to evaluate Pepita. The teacher wrote two specific sentence starters on the graphic organizer that was projected on the overhead and instructed students: "Start with 'Pepita handled the situation well or not well. Then 'this shows.'" This was clearly a prescriptive formulation, a modification that limited student choice in order to provide more explicit support. The 5th grade teacher also gave commands that were non-meaning related, suggesting "Really write as much as possible here." While well-intentioned, the suggestion is nonetheless not rhetorical—writing "a lot" is not purpose-driven or rhetorical.

Overall, the classroom conversations provided evidence that SFL-supported discussions about text often aligned with the purpose of the *character analysis* genre. Also, conversations about the target genre often highlighted the natural constraints of the genre, and how the stages naturally fit together and to what end. Likewise, SFL offered students with tools for making their own linguistic choices as they wrote, particularly in establishing evaluative claims. Both teachers imposed some unnatural constraints—some perhaps overly formulaic, others might be considered productive ways to provide explicit support for this difficult task.

Student Writing

This section reports on the student writing in two ways. For each class set, a *stage analysis* of all samples provides a broad perspective of the writing, and a *register analysis* of a representative sample for each class set provides a fine-grained analysis. The stage analysis describes the ways in which students' writing progressed through the stages we presented. As this line of inquiry was also interested in variation in the students' writing, it also examined the functional similarities and differences that emerged in *how* students wrote in the genre and its

stages. The *register analysis* examines one representative sample from each class to consider specific language features of the writing, and whether they are consistent with expectations of the genre and supportive of the purpose of the specific writing task. As detailed in the methods section, the analysis will address the attitudes presented (interpersonal meanings), the content of the responses (ideational meanings), and the flow of information (textual meanings). The findings are reported by grade level, first providing a register analysis of one writing sample deemed representative of the class set, followed by the stage analysis that describes patterns across the writing samples. This organization may seem counter to logic but by providing complete student writing examples in the *register analysis* makes the *genre stage analysis* more comprehensible to the reader.

4th grade

Register analysis (key to analytic notations provided below[12]):

The following response was written by Malik (see Figure 3.1 below), a bilingual student who spoke Arabic as his first language. His scores on other literacy measures indicate he was an average reader and writer in relation to his classmates. On the district's fall writing assessment (a narrative task), he scored a 3 (out of a possible 6) on the 6+1 writing trait scale.

> **In the story "Pepita Talks Twice," Pepita** was a girl who spoke two languages; English and spanish. pepita would translate for people.
>
> **In the begging Pepita** was really tired of speaking two languages because she wants to teach Lobo a new trick. People kept asking her to help them but when she went

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[12] Key to analytic notations: **Marked themes** (non-subject beginnings to sentences) displayed in **bold**; Appraisal values: Affect (feelings) displayed with row of dots below words; Judgement (to do with assessments of people) with a wavy line below; Appreciation (valuing things and events) with double underlining. *Italics* indicate implied attitudes.

into her own yard and saw Juan teaching Lobo to return a ball, "*the grumble grew so big it exploded."* Pepita was furious inside because Juan was teaching Lobo to return a ball. Pepita didn't handle the situation the right way. This shows Pepita is an unresponsible person because should of just said I have alot of things to do.

Towards the end of the story Pepita was relived about speaking two languages because two languages is better than one. The ball rolled down the street Lobo ran after it dashed into the street a car was coming, Lobo was about to get ran over by a car but Pepita called him in Spanish. **Just as he heard her in a flash he** came back, "Pepita shut the gate *firmly behind Lobo* and *hugged him*." Pepita was relived because her dog Lobo was about to get ran over by a car but suddenly Pepita calls him in Spanish, she was relived that Lobo never got hurt. This shows that Pepita did handle the situation the right way because if she didn't call Lobo in Spanish he would of been a gonner.

In conclusion Pepita realizes that speaking two languages is great.

Figure 3.1. Malik's response to *Pepita Talks Twice* (4th grade).

Interpersonal meanings: attitudes in text

As noted previously, certain types of attitudes (judgment and appreciation) in literary responses are more highly valued than others, such as affective reactions. Overall, the student employs appraisal resources in a manner that aligns with this expectation while also supporting him to answer the particular prompt. In the first body paragraph, for example, Malik provided negative judgments of Pepita based on the evidence he provided. He said she "is an unresponsible person" (sic) and also offered elaboration in the form of a potential alternative action ("should of just said I have alot of things to do"). Malik's evaluation in the second paragraph is more positive (did handle the situation the right way), and he provided successful

elaboration of this evaluation by offering a negative outcome if she hadn't spoken in Spanish ("he would of been a gonner").

However, Malik also utilized affective attitudes in ways that were supportive of his completing the task at hand. The prompt was two-pronged: the first and most prominent aspect of the question was more interpretive in nature, highlighting Pepita's feelings regarding bilingualism. As such, the student employs explicit affective attitudes to provide an interpretive stance, appropriately responding to the prompt in both body paragraphs. In addition, the student amplifies the negative attitude in first paragraph's claim ("was really tired of") in accordance with the evidence and subsequent argument. In the claim of the second paragraph, the writer utilizes nuanced interpretive lexis ("relived" (sic)) to bring focus to Pepita's feelings, again aligned with the rest of the paragraph. In addition, the writer also provides evidence that presents implied attitudes through behavior ("shut the gate firmly behind him" and "hugged him"), and then turns to explicitly interpret those attitudes (although the effectiveness of the elaboration is a bit diminished due to the repetition of "relived." As noted by Christie and Derewianka (2008), the use of internal processes (like sensing processes) can shed light on characters' internal reactions to external events, or their view of the world, something Malik uses to his advantage in his response.

Ideational meanings: presentation of ideas

The ideational meanings are conveyed largely through the participants (noun phrases) and the "happenings" (predicate). Malik uses these resources in ways consistent with the genre. In his response, characters are the predominant participants, a feature of the genre. However, he did not always adequately introduce the participants to the reader—the first mention of Lobo, for example, assumes the reader knows he is Pepita's dog. In a literary essay, a brief introduction is

expected to orient the reader. For example, the writer could have introduced characters briefly via more developed participants: such as *her dog Lobo* and *her brother Juan*. In this unit of instruction, the teacher had co-constructed an introduction to the response and established that they needed to introduce the character, Pepita, but there wasn't any discussion of introducing minor characters when needed. This aspect of the writing speaks to the fact that instruction lacked in its attention paid to audience awareness, a point also made in the analysis of classroom instruction.

Malik employs various process types that are suited to the different functions of the text. In this regard, it's important to note that he used predominantly doing and saying processes to effectively contextualize the evidence with important and relevant events (not constrained by the relatively rigid description of language features of *orientation to evidence* described earlier). In addition, Malik uses the semiotic process "shows" to definitively argue what Pepita's actions illustrate about her emotions and character. The student also employs the causal connector "because" (as was also supported) in order to connect the argument to his rationale. In the elaboration, which made a hypothesis about an alternative outcome (previously described) Malik modifies the statement with a high-certainty modal phrase "would've been a gonner" in order to make a confident prediction that effectively develops his argument.

Textual meanings: structuring a text

The instruction and materials provided explicit support for the overall structure of the responses (and is the focus of the stage analysis), so this section focuses on organization at the clause level. It describes the resources the writer used (or not) to texture his response to bring cohesion and clarity. One way to analyze clause-level organization is by looking at the point of departure for each sentence (theme-rheme analysis). Many of Malik's sentences begin with the

story's characters as the simple subject (consistent with the genre and age of the writer), and perhaps too many begin with Pepita's name. But Malik also employs some marked themes, two of which are at the start of the body paragraphs ("At the end/beginning"). The teacher prompted students to begin their claims with these phrases, which provide explicit support for the writer in moving through time in the text in response to the time-related aspect of the prompt (reporting feelings at different parts of the story). While relatively prescriptive, these formulations helped with the textual cohesion of the response while also allowing students to provide varied claims later in the sentence. In addition, Malik utilizes another marked theme that brings together *time* and *manner* to recount they key event that resolved the story's complication ("**Just as he heard her in a flash** he came back"). In this clause, the writer is able to condense quite a bit of information prior to setting up his evidentiary quote: Lobo heard Pepita's call, he came back, and also some colorful description of how he did so ("in a flash"). Overall, the sentence-level texturing of Malik's response is consistent with the task at hand, and the flow of information progresses in a logical manner. In general, the student's simultaneous use of ideational, interpersonal, and textual resources aligned with the overarching purpose of the character analysis genre and the specific task at hand.

Stage analysis

While the register analysis provides a close analysis of the language features of one piece of writing, the stage analysis examines the class set as a whole, focusing on the functional stages the students progressed through as they wrote. The analysis comments on each stage in turn, discussing some of the patterns that emerged across the papers.

Claim

The vast majority of the students in this 4th grade class successfully established an interpretive stance regarding Pepita's attitude and briefly provided a reason for that stance in the body paragraphs they wrote (35 of the 41 paragraphs). [13] This is in accord with the task set forth by the prompt, which foregrounded the interpretation of Pepita's feelings over evaluations of her. While there were similarities among those interpretive stances, there was variety as well. This is perhaps best illustrated through the fact that approximately half of the claims either modified the force of the attitudes (10) presented ("furious," "was really tired of," "feeling really mad") or brought more precise focus (8) to them (such as "relieved" to describe her attitudes in the end of the story). It should be noted that nine (of 10) of those examples modifying force were "turning up" Pepita's attitudes. This could be attributed to the fact that the teacher had placed an undue emphasis on "turned up" (or extreme) attitudes, however, the context of use was generally appropriate as Pepita's feelings were rather "turned up" in the text.

Orientation to Evidence

Students' overall ability to adequately contextualize their evidence was mixed: 21 paragraphs did an apt job of situating the evidence in context, 12 were partially successful, 10 attempted but were not successful due to providing too many details, and three did not attempt it. A closer look at the partially successful papers provides valuable insight, for they were successful (and not) in different ways. Nine of the papers were successful in providing details regarding the specific situation (for coding purposes, "situational context"). For example, students often used the example of Pepita hugging Lobo at the end of the story to prove she was relieved to have spoken Spanish to save him. Situational context might include explaining that

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[13] Since students wrote multiple claim-driven paragraphs for this response, each paragraph was coded separately. The numbers presented in parentheses reflect the paragraph count, while the language of the text generally refers to students (placing agency on student rather than on the "paragraph").

Lobo had run into the street and that Pepita had called for him. However, additional context that specifically relates the evidence to the main issue or problem might be needed as well. For the previously noted example, one needs to include the fact that Pepita had called Lobo *in Spanish,* thus connecting to the primary problem driving the response. Likewise, in a text such as this (with multiple characters) students might also need to introduce characters mentioned for the first time ("character context" in the coding), a point made in the close analysis of Malik's response. Perhaps providing students with opportunities to discover these different, but important ways of setting up evidence might have better supported them in this difficult task.

Evidence

All but two students provided specific textual evidence that supported their claims. Tables 3.4 and 3.5 present the specific quotations provided and the frequency:

Textual evidence	# of occurrences
And she did what they asked without a grumble.	1
But deep inside of her a grumble began.	1
But deep inside of her the grumble grew.	5
But deep inside of her the grumble grew larger.	4
... [T]he grumble grew so big that it exploded.	10

Table 3.4. Evidence for paragraph #1 (Grade 4)

Textual evidence	# of occurrences
Pepita shut the gate firmly behind Lobo and hugged him.	13
"I'm glad I talked twice!"	6
"It's great to speak two languages!"	6

Table 3.5. Evidence for paragraph #2 (Grade 4)

These findings suggest that students' selection of evidence was apparently constrained by the activities that focused on these particular portions of the text, but a limited variety of evidence was presented. As all of these examples are relevant pieces of evidence, support for the assertion that the teacher's implementation productively highlighted student choice within the natural constraints of the texts, the genre, and the prompt.

Interpretation

Almost all of the students (41) explicitly provided an appropriate and supported interpretation of Pepita's attitudes. As in their *claims,* many students (15) modified their lexis in order to amplify their interpretation of the attitudes presented. It's interesting to note that four paragraphs did not attempt to provide interpretation of attitudes, and in two of those examples it was not necessary, for the attitudes were explicitly stated in the evidence (such as "It's great to speak two languages!). Considering the evidence, it was perhaps unnaturally constraining to require students to provide an interpretation of attitudes, since 12 students provided evidence where Pepita's attitude was explicitly stated. This is a limitation of the way in which we presented the stage, which was a conscious decision. The responses may have been stronger if students were positioned to be able to make a decision about when an interpretation was needed and when it wasn't.

Evaluation

The vast majority (42) of paragraphs evaluated Pepita in a way that was relevant to their claims. However, attempts to elaborate on this evaluation were less consistent: in about half of the paragraphs (22) students provided successful elaboration and in another significant group (17), their attempts were less successful. A closer analysis of both provided insight into *how* students were either successful or not. Table 3.6 presents the different ways students successfully elaborated:

Function of evaluative elaboration	# of occurrences
Addresses broader, relevant concept (what does it mean to be a "nice person"	1
Discusses what kind of person the character is ("nice, kind," etc.)	12
Connects character's emotions to the evaluation	3
Discusses additional internal processes of character (such as motivations)	4

Provides a hypothetical counter outcome ("if-then" statement) and relates to evaluation	12
Makes explicit reference back to text in evidence and relates it to evaluation	1

Table 3.6. Ways students successfully elaborated on their evaluations of characters (4th grade)

These findings suggest that the genre approach and instruction supported students to elaborate on their reasons, but in a way that still gave students room for achieving the function of the stage in their own ways. However, students' less successful attempts highlight one of the potential pitfalls; less successful elaborations retold events of the story without connecting them to their evaluation of the character. It should also be noted that many responses (26) copied the specific sentence starters the teacher had suggested students use for this stage (such as "Pepita did/did not handle it well" and "This shows"). As was noted in the register analysis of Malik's response, these sentence beginnings did not preclude students from elaborating in varied ways.

In sum, both the register analysis and stage analysis provide evidence that the 4th grade students, the vast majority of whom are native Arabic speakers, produced *character analysis* responses that were logically-organized, demonstrated some important language features central to the genre, and aligned with the overall purpose of the genre.

5th grade

The following response (Figure 3.2) was written by Lana, a native speaker of English. Like Malik, her scores on other literacy measures indicate she was an average reader and writer in relation to her classmates. On the district's fall writing assessment (a narrative task), she scored a 3 out of 6 on the 6+1 writing trait scale.

I think George is not such an amazing kid because I think he's going to cut down the cherry tree. George got his ax for his 6th birthday. George cut down the cherry tree.

George left the room and walked toward the garden again *grinning and swinging his ax*. George feels like he got away with somthing. **I think** he should've got punished. **This** shows he is a bad kid because when you get in truble you shouldn't do it agian. **So George** did not learn his lesson because "he was grinnin and walking ward the garden."

Figure 3.2. Lana's response to *George and The Cherry Tree* (5th grade)

Interpersonal meanings: attitudes in text

Overall, Lana deploys attitudinal resources in ways that serve her overall purpose well and that align with expectations of the genre, although her point made in her claim lacks some clarity initially. She appropriately makes a *judgement* about George and supports it with a valid reason and elaborated rationale. The particular phrasing of her evaluation of George ("not such an amazing kid"), however, somewhat clouds her overall negative stance more clearly established by the rest of the response. She develops this evaluative stance by providing effective evidence that presents implied attitudes, which are in turn made explicit through the interpretation ("feels like he got away with somthing"). This interpretation offered a more precise discussion of George's feelings than the sometimes formulaic *interpretations* that surfaced in some of the other responses (such as "George was happy"). Likewise, she offers an elaborated *evaluation* by providing additional (but not redundant) judgement in her *evaluation*. She notes that "he should've got punished" (a judgement of both George and his father's parenting) and "is a bad kid" and "did not learn his lesson," which attempts to connect the interpretation of his attitudes with her evaluation. Overall, Lana presents and develops relevant evaluations of Pepita in ways valued and expected in the genre.

Ideational Meanings: Presentation of ideas

Lana presented ideas in appropriate ways as she progressed through the stages, but not without some difficulties. In the *orientation to evidence,* she primarily relied upon *doing processes* to recount important events from the story necessary to understanding her evidence, which had been explicitly supported by the materials. However, the stage did not completely satisfy its function for it was missing a few important events, most notably that, when confronted by his father, he told the truth and thus, avoided punishment. In her claim and evaluations, Lana used a variety of processes to successfully evaluate George and provide elaboration. She uses a being process (is) to identify him as a "bad kid," and the mental process "did not learn his lesson" to make interpretive comments on George's thought process, both of which were supported by the instruction. However, the student provides successful elaboration by deviating from those features as well. She employs the universal "you" to talk more generally about humanity, suggesting people who have been in trouble "shouldn't do it again." As Christie and Derewianka (2008) noted, this more general discussion is a feature expected in the genre. One of the distinctive features of this text, compared to the other writing samples, is the inclusion of the author as a linguistic participant paired with a mental process (in the form of "I think," which surfaces twice in the paper). While "thinks" generally aligns with the overall analytical stance expected in the genre (as opposed to reacting emotionally), the use of the personal pronoun fails to distance the author from the opinions presented.

Textual features: structuring a text

True to the student's age and genre, most of the sentences begin with character names. It's understandable the student did not introduce George more formally (as "George Washington, our first president," for example), considering the nature of the task, which did not ask students to write a more general introductory paragraph (*Character Presentation*) at the outset of the

response. As the student attempts to provide context for her evidence, the repetition of the unmarked theme *George* has the effect of reading a bit like a list of events rather than a natural contextualization (although this aspect was not representative of the whole class). One marked theme ("**So** George did not learn his lesson") offered a causal connector, successfully linking the student's evidence and interpretation.

Again, something needed to make a point about this analysis.

Stage analysis: 5th grade

As with the 4th grade set of papers, this analysis comments on each stage in turn, discussing some of the patterns that emerged. Some commentary across the grades will also be noted briefly here.

Claim

All 23 students successfully established a clear evaluative stance in their claim, and more than half (14) provided a brief, clearly-stated and supportable reason. A couple of differences from the 4th grade papers emerged: 1. the stances were evaluative in nature as opposed to interpretive, as this expectation was clearly established in the prompt. Likewise, the students adopted varied claims, almost equally split between positive (13) and negative (10) judgments of George. This could be a function of both ambiguity of the text, which was written in a way to allow for multiple "readings" of George, as well as the nature of the classroom conversations about the text. Several students (14) "turned up" ("is the worst kid ever") and "turned down" ("a pretty good kid") their evaluations of George. These aspects suggest that the instruction supported students to make choices in their writing to suit their opinion of George while also meeting the expectations of the genre.

Orientation to Evidence

Similar patterns emerged in the 5th graders' attempts to contextualize evidence as to those reported regarding the 4th grade set. While 11 students were able to provide important text details to adequately present the evidence to a reader unfamiliar with the story, many (7) provided some of the details, but not enough for the quote to make sense. As was the case with the 4th grade set, those students were split between not providing enough details regarding the specific situation ("situational context") and also not relating the evidence to the overarching topic or problem ("problem/issue context"). A few (3) students failed to contextualize evidence because they provided unrelated details about the story whereas one student did not attempt to set up the evidence.

Evidence

All of the students provided relevant events from the story as evidence for their claims, with three students attempting (unsuccessfully) to provide multiple pieces of evidence. As was the case with the Pepita responses, students' selection of evidence varied, presented in Table 3.7.

Textual evidence	# of occurrences
One day, he wanted to test his strength so he chopped down a cherry tree in the garden.	3
But he didn't feel strong. He felt anxious.	3
He bowed his head and looked at his shoes.	1
"I can't tell a lie," he cried out. "I cut it with my ax!"	8
George left the room and walked toward the garden, grinning and swinging his ax.	10

Table 3.7. Textual evidence provided in 5th grade responses.

The variety of evidence presented suggests that the text-based conversations enabled student choice, but all of these were addressed explicitly in the reading activity, also suggesting constraint. The distribution of the evidence selected also demonstrates that students are, in general, able to determine the relative strength of potential evidence (it could be argued that both

George's telling the truth and also walking toward the garden are the two most central portions of the text relevant to answering the prompt).

Interpretation

An interesting pattern emerged with regard to students' interpretations of George's attitudes: about half (11) provided a supportable interpretation and about half (9) made no attempt at doing so. For many of those responses, it did not necessarily diminish the overall success of the response, highlighting the fact that the need for interpretation of character attitudes depends on whether attitudes are shown in the evidence (not all evidence does what?). For example, a student who provides "he cut down the tree" as evidence need not interpret feelings (that aren't there). We had considered making interpretation of attitudes more explicitly optional, but chose not to in order to simplify instruction. However, it's important to note that not all students offered an interpretation, evidence that the stages were not presented as entirely prescriptive.

Evaluation

While most of the students (20) attempted to provide an elaborated evaluation of George and his actions, about half of those (9) students provided successful and elaborated reasoning that developed their argument. The others (10) attempted to elaborate using similar strategies, but were not as successful. Many of the successful attempts echoed the strategies deployed by the 4th graders. The functions of those elaborations are presented in Table 3.8.

Function of elaborated evaluations	# of occurrences
Addresses broader relevant concept (defines "good boy," relates to core values of school	1
Relates attitudes discussed in interpretation to the evaluation (good kids feel bad)	4
Provides discussion of a hypothetical counter-example (if, then)	3
Makes a prediction based on evidence and evaluation (he'll probably do it again)	4

Makes explicit reference to language of text ("grinning")	3

Table 3.8. Overview of successful elaborations of character *evaluations* (5th grade)

Patterns also emerged among students who were less successful in their attempts to elaborate on

their judgments of George, shown in Table 3.9.

Function of less successful elaborated evaluations	# of occurrences
Repeats same point, or repeats events of story	4
attempts to connect evaluation to internal aspect (such as emotions) but is not fully explained	1
Makes contradictory statements about the evidence	2
Attempts prediction but is inaccurate or not fully explained (he learned to never do anything bad ever again)	3
attempts to relate to bigger concept but not fully explained	2

Table 3.9. Overview of less successful elaborations of character *evaluations* (5th grade)

Even the less successful attempts bear some resemblance to the more successful attempts.

Perhaps by examining models with different ways of elaborating on evaluations, we might better

support students to accomplish this rather difficult aspect of the genre, which as Christie (2012)

notes, is sometimes a more implicit expectation. Nonetheless, the data suggest that the stage

labels and attention to function as well as form supported students to generally successfully

evaluate the characters—while providing students with the flexibility to elaborate in different

ways suitable to the genre.

Discussion

Perhaps the most important implication of these findings is that young students who

speak English as a second language *can* write successful arguments if given explicit and

meaningful support. Students in both grades were able to avoid one of the biggest pitfalls that

less successful students in later grades often fall into when writing in the *character analysis*

genre: responding in emotional ways rather than analytical ones. Most students clearly stated an

evaluative (and thus "analytical") claim, presented relevant evidence (in the form of a textual

quotation, also highly valued in this genre), and, to varying degrees of success, provided a well-

reasoned and elaborated interpretation and evaluation of the character (the valued type of "warrant").

The analysis of their writing likewise demonstrated that, despite the highly-structured, genre-based instructional support, students produced writing that demonstrated variation from each other's. This suggests that the activities, materials, and classroom conversations provided them with a structure that within which they could exercise choice. One of the most powerful examples of this was in the ways students used appraisal resources ("turning up/down") their language to provide nuanced attitudinal phrases to represent their claims. In addition, the students' attempts at *evaluations* of characters and the ways they elaborated them were highly varied. Across the classes, approximately half of the students were successful in elaborating on their evaluations. And among those, they demonstrated several different *ways* they could successfully accomplish this rather difficult task. They didn't simply re-state their claims—they made relevant predictions about the characters, they discussed how their actions and feelings related to a more general and abstract ideas (what it means to be a "good boy"), or they offered alternative outcomes among others. The other half of the students often attempted these same moves but with less success. However, future iterations of this work might include the discussion of (and deconstruction of) multiple examples of student writing, opening students' eyes to see a broader range of choices within the constraints of the genre.

At the same time, the students' writing exhibited features that suggest the need for modifying our genre-based approach. For example, the ability to contextualize evidence adequately was something students struggled with. However, the text analysis presented here could inform more fruitful approaches. The categorization of types of context (situational, problem, character) could serve as productive, functional ways of talking about information to

include in an *orientation to evidence*. For example, the teacher might ask students to talk about the details of the specific situation and what their reader might need to know, but also discuss how the situation relates to the overall problem, or talk about ways to introduce characters for the first time for their reader (such as "*her dog* Lobo"). These might be productive ways to explicitly teach students to use language to make their responses more reader-friendly. Also, it's important to be careful to be highlighting patterns rather than prescribing specific language features, such as "circumstances of time/place" and "doing processes" to help tell important events. Another aspect of the student writing that suggested needed revision was in regard to the *interpretation* stage, which was unnaturally limited to interpreting character emotions and was presented as a required stage. As noted earlier, neither of these aspects are absolute requirements of the genre. For example, not all evidence taken from a text will necessarily imply attitudes of the character, but that point was not highlighted in the instruction. These constraints were knowingly imposed to simplify instruction, but they sometimes limited students' writing.

Despite some of these limitations, the evidence presented here also demonstrates that genre-based pedagogy can highlight choices available to students as they write. The classroom conversations often allowed for active engagement with the genre, rather than the teacher simply telling students what to do and write. The discussions about the literary texts certainly constrained students' writing by focusing on particular pieces of text (especially characters' actions that showed attitudes), narrowing the types of evidence from which students might choose. We justified this constraint because it focuses on an important and challenging linguistic feature of the text. But it also engaged students in closely examining relevant quotes from stories. In addition, the conversations about the genre stages highlighted ways in which the different

stages of the genre relate, which prompted some students' iterative revision as they completed their graphic organizers.

At the same time, there were elements of the materials and instruction that could be considered prescriptive and unnaturally constraining of the genre. This is especially the case with regard to the explicit focus on language features, which produced mixed results in both the pedagogy and the writing. Even though the classroom materials generally represented the specific language features of the genre as patterns rather than rules (using low- and mid-modals such as "often"), the language of the teachers sometimes presented features as requirements. Likewise, the stages were presented in a rather linear fashion on the slides presented to students, and the handout made the stage relationships seem more static than they are in naturally-occurring examples of the genre. These decisions were made in order to simplify the task for students. We also aimed to simplify the pedagogical approach by putting all of the stages on one handout. This made the lesson easier to teach from a practical sense, but presented the genre in a relatively static form. In subsequent units on persuasive writing (scientific argument), the research team provided stages on separate sheets of paper, allowing for more flexible arrangement depending on the writer's purpose. Given the students' uptake of "movable stages" in that unit (the same 4th grade students participated), it seems reasonable to assume that the simplified presentation did no harm, but gave students an easier task before a more complicated one.

In the discussions of literary texts, the teachers were also able to engage students in discussions that often reflected the "argument schema" of the character analysis genre. Students (with the prompting of the teachers) stated claims about the characters, provided evidence, and often elaborated on their rationale. However, the nature of those tasks required students

accomplish those tasks in subject-specific ways. The evidence presented here suggests that "argument schema" presented in the classroom conversations were genre-specific, and required students to use registers appropriate to it. For example, they were explicitly supported to make *evaluative* and *interpretive* claims regarding characters, which would not be suitable to claims regarding a scientific claim (which might argue for a particular social action, such as reducing greenhouse gases). And with evidence, the students often quoted the language of the text in those conversations and discussed the connotations of particular words (such as Pepita's "grumble" or the fact that George was "grinning"). In a scientific argument, providing direct quotes from a text or making inferences about attitudes would likely be unnecessary.

Upon closer inspection, our functional metalanguage as presented here obscured the line between general and genre-specific moves, which could be problematic as students attempt to transfer their understanding of argument to other contexts. Some of our functional stage labels were based on Toulmin's more general model (*claim* and *evidence*) and others were based on findings from our own fine-grained SFL analyses (*orientation to evidence*, *interpretation*, and *evaluation*). SFL scholars would likely deem the choice of including elements of Toulmin's model counter to their theoretical stance, generally arguing for genre-specific descriptions. Likewise, our team presented functional stages at a finer grain size (they might be more appropriately labeled "phases"). However, our reasons for both changes can nonetheless be justified. Our earlier efforts (O'Hallaron, 2012; Chapter 4) uncovered that students were generally successful at establishing claims and providing evidence in the context of responding to literary texts. We saw that they needed additional, more detailed support in accomplishing some of the more difficult tasks of the genre: contextualizing evidence, and they needed more concrete notions of what "analysis" or "warrant" was, exactly, in that type of response.

While this hybrid terminology helped us to support our particular students in our research context, it is not necessarily advisable for other contexts and projects. This is an area of fruitful future research. Research that provides greater clarity between the general argumentation model, in connection with genre-specific approaches, could be a very promising way to develop greater genre awareness, a point particularly emphasized by rhetorical genrist Amy Devitt (2004).

If SFL genre theory is to support students' ability to develop different ways of writing argumentatively, it needs to make the disciplinary differences salient for students, as realized in the varied argumentative genres. This might be accomplished by first introducing "argument" as an umbrella concept (a meta-genre) and discuss the general moves with students. But SFL could offer concrete ways of helping students see the ways this general notion of argument and its moves are realized in disciplinary genres, which fall under the larger argument umbrella. For example, SFL genre theory could help students compare the ways evidence is presented in a *character analysis* (which typically? requires a writer to orient a reader to a quotation that presents a characters' action, dialogue and/or attitude) versus evidence in a more scientific argument (which might be a scientific finding that takes shape as a statistic--that requires neither a lengthy "setup" or direct quotations but rather attribution). Such conversations would not only provide students with meaningful opportunities to focus closely on the language of genre-specific texts, but it could more clearly situate genre-based writing instruction within the larger landscape of argument.

This chapter provides robust evidence demonstrating SFL's potential to serve as a tool for providing explicit *and* meaningful support for young students as they learn to write arguments in the Language Arts classroom. This potential should not be dismissed; perhaps by finding ways to integrate what SFL has to offer with other beneficial approaches to writing

instruction, we might better prepare our underprivileged students to make powerful arguments for themselves as they make their way in school and beyond.

APPENDIX A: GENERAL GRAPHIC ORGANIZER FOR CHARACTER ANALYSIS

DIGGING INTO CHARACTER ANALYSIS

Claim: Your overall answer to the prompt + overview of your reasons

Hint: You'll probably use a *being process* + *"because"*

Orientation to evidence:
Background information the reader needs to know for the evidence to make sense.

Hint: You'll probably use *circumstances of time and place + doing processes* to tell what was going on.

Evidence: Language from the story that proves your claim

Hint: Remember to put quotation marks around language from the story.

Analysis: *Why* the evidence proves the claim

Interpretation: **telling** what the author **shows** about the character

Hint: Use being or sensing processes!

Evaluation: explaining how the evidence you chose helps you judge the character, judges the character based on the prompt

Hint: "This shows ... because ... "

APPENDIX B: TEXT-SPECIFIC CHARACTER ANALYSIS GRAPHIC ORGANIZER

DIGGING INTO CHARACTER ANALYSIS

Claim: How does Pepita feel about speaking two languages & overview of reason

Hint: You'll probably use a *being process* + *"because"*

Orientation to evidence:
Background information: What is happening in the story before your evidence?

Hint: You'll probably use *circumstances of time and place* + *doing processes* to tell what was going on.

Evidence: What language in the story proves how Pepita feels about speaking two languages?

Hint: Remember to put quotation marks around language from the story.

Analysis: *Why* the evidence proves the claim

Interpretation: telling what the author **shows** about how Pepita feels. How do you know?

Hint: Use being or sensing processes!

....

Evaluation: Does she handle the situation well? What does her reaction (or feelings) tell you about what kind of person she is?

Hint: "This shows ... because ... "

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CHAPTER 4: LINKS IN DEVELOPING INSTRUCTION AND THEORY: AN ANALYSIS OF A DESIGN-BASED RESEARCH PROJECT SUPPORTING ELLS' LITERACY IN LANGUAGE ARTS

Introduction

Since the 1990s, Design-based Research (DBR) in education has garnered interest from researchers for its potential to connect research, theory and practice. Its dual commitment is to improving instructional practice in real-world classrooms while also developing educational theory that would be usable by practitioners. DBR uses both qualitative and quantitative methods in an effort to enhance educational innovations through iterative cycles of development, evaluation, and refinement. Its focus on developing educational theory offers the potential to inform instruction in other settings. The approach, however, is still nascent. In the early 2000s, top research journals (*Educational Researcher*, *32(1),* 2003; *The Journal of Learning Sciences, 13(1)* 2004; *Educational Psychology, 39(4),* 2004) dedicated special issues to DBR, bringing some theoretical focus and practical consensus, while also highlighting paths for future research. Nearly a decade later, Anderson & Shattuck (2012) reported an increase in DBR use, but found evidence for only "guarded optimism that the methodology is meeting its promised benefits" (p. 16). In short, there is more work to be done: the methods and criteria for standards of DBR still need to be clarified and crystallized through applications to the complex problems in education that are in no short supply. More specifically, additional robust examples of such research are needed, particularly illustrating how DBR practices can facilitate the interplay and development of both theory and practice.

This chapter provides one such example in a three-year DBR project, *Language and Meaning,* that addressed a particularly complex and significant issue: improving literacy instruction and performance for non-native speakers of English. In the U.S., students classified as English Language Learners (ELL) were more likely to achieve "adequate" performance on word-level reading and decoding than on measures of vocabulary and comprehension (August & Shanahan, 2006, p. 633). They were "reading" (decoding), but not understanding. Teachers have insufficient tools for supporting their reading comprehension, and ELLs are often in classrooms in which they are experiencing individual seatwork and teacher-directed whole-class presentations that address low-level skills (need citation). Researchers and practitioners alike have called for opportunities for explicit focus on language itself in the context of meaningful interactions about curricular topics (August & Shanahan, 2006; Genesee et al., 2006; Moore et al., 2009). Developing instructional approaches that support explicit attention to language while also supporting significant meaning-making and student engagement is no small feat.

Our potential "solution" was as complex as the problem at hand. We looked to a linguistic theory, systemic functional linguistics (SFL), for tools for supporting ELLs' reading and writing because it was developed specifically for describing the ways language contributes to meaning making. SFL conceives of grammar as a network of language choices made by writers or speakers in context to make meaning, rather than a set of rules to be followed. Much research has demonstrated SFL's power for text analysis, particularly in the hands of trained linguists (Christie & Derewianka, 2008; Fang & Schleppegrell, 2008; Martin & Rose, 2003). However, it is as complex as it is powerful. While it has informed the development of genre-based curricula in Australia and is the subject of some research projects in the U.S. (Brisk, 2012; Fang & Wei, 2010; Gebhard et al., 2007), SFL has yet to be developed into a set of widely-

disseminated educational tools used by teachers and students, especially in K-12 U.S. settings. Our primary goal was to identify ways in which the tools of SFL could support ELLs in primary grades to read and respond to texts in ways that are valued in school.

By examining our collaborative work with 30+ teachers and literacy coaches across six urban elementary schools, I provide analysis of how the cyclical, iterative DBR processes supported development of and interaction between instructional practice and theory. The chapter will also report instructional theories that hold potential for using SFL to support literacy instruction for ELLs.

Conceptual Framework

Designed-Based Research

Design-based research (Brown, 1992; Collins, 1992) is a still-emerging approach distinguished from other pragmatic forms of education research (such as action research) by its commitment to the development of educational theory, a commitment designed to promote generalizability to other settings. It does not seek to find "what works" while holding contextual variables constant, as is often the case with experimental and quasi-experimental research. Instead, it aims to design, evaluate and improve an intervention as it interacts with the contextual variables that are integral to the enactment. Reinking and Bradley (2008) compare DBR with experimental and naturalistic research by suggesting that while naturalistic research asks: *What is?,* experimental research asks: *What is best most of the time?*. DBR sets its sights on improving practice by asking: *What could be?*

That question has been turned on DBR itself, for the approach begs further development, particularly in its contributions to advancing instructional theory (Anderson & Shattuck, 2012; Dede, 2004; Fishman et al., 2004; Ormel et al., 2012). Yet, there is an emerging consensus

regarding some of the cross-cutting features for such research, many of which have already been noted (McKenney & Reeves, 2012; Reinking & Bradley, 2008; The Design-Based Research Collective, 2003). This chapter will focus on two of these features: the cyclical, iterative development, and the interplay and development of theory and practice, imperative to the findings or practical and theoretical products of the work reported here.

Cyclical, iterative development

One of the key features of DBR is that it engages in multiple cycles of development, often over the course of several years. Researchers conducting DBR and their collaborators have many complex tasks at hand: systematically exploring educational problems, designing potential solutions, enacting and evaluating them, and making conjectures as to why and how the intervention worked (or not). DBR can be carried out at different levels and time frames: individual lessons, units of instruction, school years, and multiple years of research projects. Several frameworks describe this multi-leveled, iterative process (Gravemeijer & Cobb, 2006; van den Akker, 1999). For this chapter, McKenney and Reeves' (2012) "General model for design research" is productive, presented in Figure 4.1.
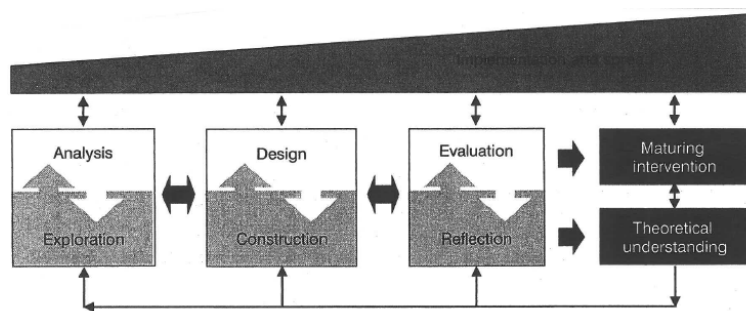
Figure 4.1. General model for conducting DBR (McKenney & Reeves, 2012, p. 77)

This model represents the two primary outcomes of DBR: the intervention itself and theoretical understandings, both of which inform each other as they take shape as work continues. The model identifies three main stages of DBR: 1. *analysis and exploration* (typically of a problem

and potential solutions); 2. *design and construction* of an intervention; and 3. *evaluation of and reflection on* the intervention. These stages, which may represent a general progression as a project develops, are not linear. Instead, they inform one another as a project progresses through many cycles of development. As Reinking and Bradley note, "the vagaries of instructional practice often mean that these cycles are fluid and overlapping" (2008, p. 50). To tease out some of these processes across our multi-year project, we also find utility in the different levels of development described by McKenney and Reeves' framework: micro-, meso-, and macro-cycles. This is how Figure 4.2, below, represents our work. For example, we engaged in micro-cycles of the three stages to develop specific lessons and instructional units. A full school year, consisting of multiple micro-cycles, served as a meso-cycle of development, for the summer break afforded us the opportunity to more closely examine the series of micro-cycles (the lessons and units) and further develop the intervention for the following school year. The macro-cycle of development could best be described as the combination of and analysis of multiple years, or meso-cycles, of the project.

The model offered in Figure 4.2 represents the aforementioned stages and cycles of the DBR research process as realized in the Language and Meaning project. The details will be explicated in later sections of the chapter.

Language & Meaning: Cycles of Development

Macro

Explore & Investigate
Problem & Solution

Design & Construct
Develop Design Principles
Curriculum Development

Meso 1 (Year 1)

Explore & Investigate: School curricula, SFL resources
Design & Construct: Develop curriculum applying SFL

Micro 1 (Unit 1): Explore, Design, Evaluate Unit
Micro 2 (Unit 2): Explore, Design, Evaluate Unit
Micro 3 (Unit 3): Explore, Design, Evaluate Unit

Evaluate & Reflect:
Units, Curriculum framework, Design principles

Meso 2 (Year 2): Same structure as Meso 1

Meso 3 (Year 3): Same structure as Meso 1

Evaluate & Reflect
Curriculum, DBR process, develop "humble" theories
Other formal reports: Schleppegrell, 2013, Moore &
Schleppegrell 2013; O'Hallaron 2012

Figure 4.2. Language & Meaning project: Stages and cycles of DBR research

The role of theory

Different types of theory can serve different functions in DBR research, depending upon

the stage of the inquiry (Cobb et al., 2003a; Confrey, 2006; diSessa & Cobb, 2004). First, I

adopted the following definition of theory more generally as "explanations of real world

phenomena substantiated by scientific evidence," which "... provide models or schemes for

understanding the nature and causes of certain phenomena" (McKenney & Reeves, 2012, p. 31).

In a broad sense, theory can serve as both an input and an output in DBR work. As an input,

prior theory and research inform the development of the intervention. But DBR should also

produce theory, in the form of instructional theories that illuminate specific disciplinary content

and suggest ways to teach it in specific contexts. Such theory is developed iteratively by studying the intervention and its development. This general mechanism is also represented in Figure 4.1 above.

However, this complex interplay of theory and research is difficult to capture and articulate. Prominent DBR researchers, such as diSessa and Cobb (2004), argued that the theoretical aspect of DBR has often been underplayed and that a more precise language for talking about theory and its role in DBR work is necessary. I will first describe some general terms for the various functions of theory and at what level it is operating (McKenney & Reeves, 2012), and then I will address some specific types and uses of theory common to DBR (diSessa & Cobb, 2004).

McKenney and Reeves' (2012) general framework provides a vocabulary for describing the different functions and levels of theory relevant to DBR. First, theory can: *describe* real world phenomena derived from empirical observation; *explain* how or why certain phenomena exist; *predict* effects based on descriptions of phenomena and the explanations of how and why things work; and lastly, *prescribe* certain activities to produce certain effects. These "working" verbs will help clarify how different types of theory are operating in our work. It is also important to specify at what level DBR produces theory, which is dependent upon the range and number of contexts from which theory is derived (local, mid-, and high-level; see below). However, as the *Language & Meaning Project* was implemented in six elementary schools which were ecologically similar in many ways, we are careful to note that instructional theories presented here are best considered local.

diSessa and Cobb (2004) distinguish specific types of theory relevant to DBR, also of significant utility for this analysis. The first are "grand theories" of education (such as Skinner's

behaviorist theory of learning). "Orienting frameworks" are another form of high-level theory that serve to present general perspectives on learning and teaching by naming "widespread thrusts into thinking about and carrying out instruction" (p. 81). Examples include "social constructivist theory" and "sociolinguistic theory," both of which informed our intervention. However, these general perspectives, which are "often appealed to as the basis for instructional design," rarely provide the kinds of specificity needed for developing lessons. In this sense, they serve to describe or explain phenomena, as opposed to prescribe effective instructional methods. Rather, they are "presumed general constraints" (p. 81) for the development of more specific theoretical constructs.

One of the primary aims of design research is to advance theory that helps practitioners address common instructional problems, in the form of *domain specific instructional theories* (diSessa & Cobb, 2004). Confrey (2006) uses *conjectures* in a similar way and this term will be used synonymously. Theories of this type involve the analysis of a specific disciplinary idea (in our case, *character analysis*) and speculation about the types of thinking involved and ways to "engineer" this kind of thinking through instruction. Such conjectures are a work-in-progress, developed iteratively in response to data collected. These instructional theories are typically developed at the local level, but can operate at higher levels as they are implemented and evaluated in additional, differing contexts. Likewise, such instructional theories can then also inform the creation of learning trajectories within disciplines (Cobb et al., 2003b), *conceptual corridors (*Confrey, 2006) that can be refined through iterative cycles of development.

The aforementioned framework and theoretical concepts help to define the theories relevant to our project and also describe the various functions they served in the course of the case study narrative. We also include *design principles* as a form of prescriptive theory aimed to

articulate the goals of the project, thereby operationalizing the theory and research that informed

and motivated the project. Table 4.1 specifies the theoretical concepts central to this report.

Type	Level	Function in L&M project
Grand, orienting	High	*Describes* or *explains* complex learning processes or tools
Design principles	Local	*Prescribes* goals of intervention by synthesizing and operationalizing high-level theories and past research; used to inform design and evaluate implementation
Domain specific instructional theory or conjectures	Local to mid	*Explains* why and/or how specific instructional practices "work" or not *Prescribes* how SFL can be used to support ELLs' disciplinary literacy

Table 4.1. Theories of *Language & Meaning* project: Types & functions

These notions will be elaborated more fully through examples of interaction between practice

and theory.

Literature Review

To argue that DBR is delivering on its potential to bridge the gap between research and

practice is untenable. Instead, this review will provide some telling examples to argue that DBR

has contributed to both educational practice and theory. It will then underscore some of its well-

warranted critiques, suggest some ways in which DBR could be strengthened to better serve its

overarching goal, and show how the work presented here aims to contribute to that end.

Practical contributions

Dating back to its origins more than 20 years ago (Brown, 1992; Collins, 1992), DBR has

contributed to educational practice in various forms and contexts. van den Akker (1999) outlined

four fields in which educational design research[14] had been commonly applied: curriculum;

media and technology; learning and instruction; and teacher education (p. 3-4). Educational

design interventions have also produced a variety of practical artifacts, outlined by McKenney

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[14] Van den Akker's description preceded the emergence of Design-Based Research as a defining term for such development work, which had been labeled differently by scholars from different fields or geographic regions. He outlines the features of such research that was included in his review.

and Reeves: products, processes, programs, or policies (2012, p. 40). Likewise, DBR has been applied to a host of disciplinary subjects, particularly science (Ketelhut, 2007; Dede et al., 2004; Barab et al., 2007; Linn et al., 2004), math (Confrey & Lachance, 2000; Confrey, 2006; Cobb, 2000; Cobb et al, 2003; diSessa, 1995;), and literacy (Bradley & Reinking, 2011; Palincsar & Magnusson, 2001). The following brief descriptions of some recent, prominent examples of DBR are provided to illustrate a variety of practical applications, not as a comprehensive representation of the field.

Many practical contributions have taken the shape of educational products that utilize technology. Perhaps the quintessential example is the Cognition and Technology Group at Vanderbilt (CTGV), which has engaged in design research for nearly two decades, producing the widely adopted and commercially viable *Jasper Woodbury Series,* a series of 12 videos that engaged students in mathematical problem solving. More recently, several DBR projects have taken advantage of technological advances, creating educational computer software that has shown promising results in supporting students' learning of science concepts through an inquiry. For example, the Harvard-based *River City* project (Nelson et al., 2005) which was implemented in geographically diverse urban areas with more than 2,000 students, uses video game technology to engage students in a problem-based, student-centered project that requires them to gather data in a "virtual" world in order to research the outbreak of a disease. Ketelhut (2007) studied 100 participating middle-school students, focusing on their levels of self-efficacy and scientific data-gathering behavior. The study found that prior to the intervention, students with low self-efficacy engaged in fewer data gathering behaviors than those with high self-efficacy. However, at the end of the intervention, there was no difference in the data-gathering behaviors of students with low- or high-self efficacy. Ketelhut's findings suggest that the intervention

could "act as a catalyst for change in students' self-efficacy and learning processes" (p. 99). Subsequent research from the same project (Ketelhut et. al, 2010) also reported significant gains in biological knowledge for students who participated in the River City experimental treatments in contrast with students who took part in a similar paper-based control curriculum. Other projects, such as the *Quest Atlantis* software (Barab et. al, 2005) and the *Biology Guided Inquiry Learning Environments (BGuiLE)* project (Reiser et al., 2001; Sandoval & Reiser, 2004) similarly developed software to support student engagement with science content, making notable practical and theoretical contributions.

DBR has been particularly attractive to software developers, but DBR projects have also produced more traditional forms of educational materials, such as the *Seeds of Science/Roots to Reading (Seeds/Roots)* science literacy series. A collaborative effort between Lawrence Hall of Science (LHS) and the University of California, Berkeley produced an "out-of-the-box" science curriculum designed to support teachers to teach literacy skills while also teaching content. The now commercially published texts have been adopted in more than 40 states and have become part of systematic, large-scale implementation in several urban areas. A mixed-methods efficacy study of the *Seeds/Roots* program reported statistically and substantively higher student performance in science content, vocabulary, and writing (Goldschmidt & Jung, 2010). Likewise, qualitative results indicated that teachers found the texts "usable, effective, and engaging" (p. 1). Thus, DBR projects have demonstrated potential for not only producing effective educational materials for various contexts, but they can do so in ways that are engaging and fun for students.

These examples also underscore a more general trend in the DBR literature: a prominent focus on science. Anderson and Shattuck's review of recent DBR literature reported that the majority of DBR studies focused on science, with mathematics (9 percent) and teacher training

(9 percent) a distant second and third. Despite DBR's roots in literacy research (Brown, 1992; Palincsar & Brown, 1986), literacy has not often been the focus of recent research, represented in 4 percent of the DBR examples. Even some of the most prominent examples of literacy-focused DBR, such as the *Seeds/Roots* project and the work of Palincsar, Magnusson and colleagues (2001), relate to supporting students' literacy in the context of science. This work brings a much-needed disciplinary-specific focus on literacy, but more work is needed in supporting students' reading and writing in other disciplines, targeted to tackling complex issues of literacy. Bradley and Reinking (2011) provide a strong example of DBR's contribution to supporting the oral language of pre-school-aged children, but there is certainly a need for more oral language support for children as they progress through school, particularly for non-native speakers of English. This is one area where our work, in the context of ELA, contributes to the field.

Theoretical contributions

Despite many articles espousing the potential for and importance of theory development in DBR, Anderson and Shattuck's (2012) review reported only 33 percent of studies yielded "new understandings about educational phenomena" (p. 23). Even proponents of DBR have admitted that the potential for theory-generation has been left largely unrealized (diSessa & Cobb, 2004; Dede, 2004). Instead, diSessa and Cobb argued, design experiments have been "underdeveloped as contexts for the development of theory," for "investigators tend to follow their noses, doing the work of science as they understand it, without expended rationale or public explication" (p. 78). Dede, of the aforementioned *River City* project, likewise provided some "tough love" for DBR, describing it as "underconceptualized and overmethodologized," (p. 107). He argued that the "elephantine effort" of much DBR to collect and analyze massive amounts of data often led to "mouse-like insights" (p. 107). Even so, exemplary forms of DBR have

contributed to both local and high-level theory, some of which will be described forthwith, prior to a discussion of why such examples are perhaps anomalous rather than the norm.

The most common form of theory produced by DBR is domain specific instructional theory, which makes conjectures about content and how it might best be taught (Cobb et al., 2003b). Confrey and Lachance's work (2000) in the context of primary-grade mathematics illustrates how conjectures about mathematical ideas can drive inquiry that re-conceptualizes both content and pedagogy. Inspired by a belief and previous research illustrating that mathematics curricula tended to emphasize addition almost exclusively, Confrey and Lachance presented the conjecture that the notion of "splitting" could serve as a productive way to introduce students to multiplication, division, and ratio earlier in the primary grades. Preliminary analysis of data informed the researchers' implementation and understanding of the conjecture. Informed by the findings, researchers made recommendations regarding specific classroom activities for engaging students with the content. Their final analysis produced a refined conjecture in the form of a more developed curricular map that specified the relationships of relevant concepts as well as activities that supported students' understanding.

Cobb and colleagues' (2003b) work in the context of an 8th grade math classroom provides a hallmark example of the ways DBR scholars can make significant contributions to discipline-specific learning trajectories while also generating specific pedagogical recommendations. Prior to the 14-week intervention aimed to teach students statistical concepts, the researchers had developed a hypothetical learning trajectory that sequenced the content and outlined potential instructional activities. As lessons were implemented, researchers developed more specific lessons responsive to the context, the culmination of which constituted an actual learning trajectory. The divergence between the actual and hypothesized trajectories "with the

justifications for changes provided a record of the research team's learning ..." (p. 3). The retrospective analysis of the intervention produced a learning pathway for middle school students' learning of statistics founded on empirical data, as well as some specific ideas regarding which pedagogical methods or artifacts were most supportive of learning. To provide one example of many, the researchers identified the crucial role of shape in engaging students with statistical data representations. For example, they noted that presenting "hill-like data sets" (normal distributions) could serve as an initial point of reference as they engaged with irregular distributions. In subsequent work, Cobb and colleagues have likewise generated new domain-specific scientific concepts ("ontological investigations"), a valuable theoretical contribution.

Although much less common, DBR has also served to refine existing and generate new grand theories of learning. Research from the *Quest Atlantis (QA)* project provides such an example (Barab et al., 2007). QA aimed to use video game technology to support students aged 9-16 to learn standards-based science content. In the program, students (via their virtual persona, or avatar) explored a virtual world to collect data to investigate and potentially solve an environmental problem (Barab et al., 2005). Students also participated in related classroom activities outside of the computer experiences, such as mini-lessons addressing relevant scientific concepts. Central to QA's approach was the notion of *situationally-embodied curriculum,* defined as: "a curriculum involving at its very core a perceptually and narratively rich context that does academic work" (2007, p. 753). This perspective contrasts with views that purport students need to be taught scientific formalisms out of context so that they can be easily applied to multiple settings (p. 753). In Barab and colleague's proposed curriculum, learners engage with scientific "formalisms" in a variety of ways, encountering concepts in multiple, specific virtual contexts that would ultimately support the transfer of those ideas to other contexts.

Prior to the first implementation, the group developed an ontological framework to conceptualize the different ways students engaged with the scientific ideas. However, their initial implementation found that scientific concepts were too tied to the context—students were engaging with the problems posed by the game's narrative, but they were rarely applying abstract science concepts. In turn, the researchers made changes to both the intervention and their ontological framework. Among them, they embedded the teaching of scientific concepts within the narrative instead of via decontextualized mini-lessons taught by the teacher. Likewise, they adjusted their ontological framework to highlight important tensions in their design work. The framework represented a tension between the specificity of context and the explicitness of formalisms. Barab and colleagues argue that striking a balance on this framework is crucial: "Having too much explicit formalism runs the risk of the experience being overly school-like, while too much focus on context can be inefficient, especially given the current focus on facilitating students in accumulating standards" (p. 775). This is a particularly powerful theoretical contribution to educational design work across contexts.

If it's possible for DBR to generate new understandings that hold potential to inform practice, why isn't it more common? Scholars have argued that DBR requires its own argumentative grammar (Kelly, 2003) as well as more formalized standards of rigor (Dede, 2004; Confrey & Lachance, 1999). Others (McKenney & Reeves, 2013) argue that perhaps such an evaluation of DBR at this point is premature. Nonetheless, some of the more recent examples presented here, as well as the texts focusing on approaches to DBR (McKenney & Reeves, 2012; Reinking & Bradley, 2008; Kelly, Lesh, & Baek, 2008; van den Akker, 2006) hold potential to move work forward, but it's clear that there is more work to be done. Ormel and colleagues' (2012) review of current DBR literature reported that little attention is given to how (re-)designs

are informed by research. They view such work as crucial to the development of DBR and contend that additional research, "driven by different methodological choices, is needed to explore the connections between empirical warrants and both design decisions and theory-building" (p. 20). This article provides such an example, making explicit our design choices and underscoring the various ways practice generated new understandings and vice versa.

Methods

Overview

This report tracks the development of our three-year DBR project exploring the affordances of SFL constructs in supporting the academic language development of ELLs in grades 2-5. The project's primary goal was to offer concrete tools to teachers for supporting meaningful talk about text that would help ELLs develop both knowledge about language and content. In collaboration with teachers and literacy coaches, we developed curricular materials that use SFL concepts to engage students in talk, reading, and writing about grade-appropriate, disciplinary texts. Each year, most teachers attended an initial orientation to SFL in the weeks prior to the start of school, and then five day-long workshops throughout the school year, one approximately every six weeks. Workshops generally consisted of researchers describing SFL concepts and modeling lessons and units of instruction in which SFL is used to engage students in talking about meaning in curricular texts or to support writing about texts students have read. Between workshops, teachers implemented these lessons with their students (these were videotaped and observed), collected student work, and completed teacher logs in which they reflected on their experience.

Data presented here focus on the first two years of the project when many of the key design decisions were made. The research presented here was guided by the following question(s):

> 1. How and why was SFL initially applied in the context of reading and responding to narrative texts, and how and why did that application change in the first two years of the project?
> 2. In what ways do theory and practice interact in our DBR project? In what ways does this interaction support the development of our approach?
> 3. What theoretical contributions has our DBR process yielded for understanding how SFL constructs can support students' reading and writing in the ELA?

Context

Research was conducted in collaboration with six elementary schools in one urban school district in the midwestern U.S. In these six schools, more than 90 percent of students qualify for free or reduced lunch, a proxy for socio-economic status. In the majority of the schools, more than 90 percent of the children speak Arabic as a first language, but there is great variety in the dialects spoken, as students have immigrated from Yemen, Lebanon, Iraq, and other countries. In five of the six schools, the vast majority of students were non-native speakers of English; the other school served a significant minority of non-native speakers of English.

Participants

In the first year of the project, we worked in one pilot school, engaging with eight classroom teachers (two at each grade level) and two instructional coaches. Approximately 200 students received instruction informed by SFL. In the second year, we recruited teachers and coaches from four additional schools for a total of 21 participants, working in a total of 12 classrooms (serving a total of approximately 300 students). In the final year of research, a total of 20 classroom teachers and 13 coaches implemented the intervention in 20 classrooms across five schools (serving a total of approximately 500 students). Each year, the teacher group was

comprised of teachers with varied experience with and knowledge of functional grammar concepts. There was similar variation in knowledge of SFL among the students as well.

Data sources

The data selection process for this analysis was informed by the overarching research questions and the conceptual framework, particularly the three stages/functions of DBR research (*explore and investigate*; *design and construct*; and *evaluate and reflect*). A summary of relevant data types and research function are presented in Table 4.2.

Research stage	Data type
Explore & Investigate	*analytical artifacts* such as researchers' analyses of curricular texts; notes about published research or SFL tools
Design & Construct	*curricular materials* such as lesson plans, graphic organizers, and other classroom materials *professional development materials* such as presentation slides, handouts or activities for teachers
Evaluate & Reflect	*observation logs* *video of classroom lessons & transcripts* *student writing & analysis of student writing* *researchers' reflective memos*

Table 4.2. Primary data sources corresponding to research stage

In DBR, the role of teachers as research collaborators is of central importance and is a significant strength of the approach. For this reason, it is important to address the role of data collected from teachers in this analysis. Throughout our research process, we provided teachers with opportunities to reflect upon and evaluate the curricular materials, such as in *teaching logs* and *focus group interviews*. This feedback was incredibly valuable for it often produced practical suggestions for ways to improve the approach. For example, after the first unit of our second year, many teachers recommended using shorter (but not simpler) narrative texts when applying SFL constructs to texts for the first time. This was a simple but very important recommendation informing a productive revision of our materials (and is noted in the narrative below). However, the focus of this analysis is primarily concerned with the complex interaction of practice and

theory as the project progressed, an aspect that was not of central concern in the teacher logs and interviews. Teachers' comments often identified the same problems or successes noted in the observation logs. However, discussions of underlying reasons *why* did not relate to theoretical underpinnings of the work. For this reason, data collected from teachers, in this analysis, served a secondary role: providing confirming or disconfirming evidence to the claims and evidence presented in the data forms listed in Table 4.2.

A specific example is in order. At the conclusion of the first year of the project, we conducted focus group interviews with grade-level teams of teachers. One third grade teacher provided feedback regarding the persuasive writing activity where her students were asked to write about characters in a narrative text. The teacher commented on the difficulty of doing persuasive writing in response to the particular story: "I don't think we picked a good story for persuasive writing." The teacher commented on the fact that the story did not offer enough evidence for opposing viewpoints. The teacher recommended picking texts better suited to such persuasive writing. However, the insight offered by a visiting consultant (and documented in project meeting notes), Beverly Derewianka, identified the same issue, but made a different suggestion that was based on the underlying theory. She noted that it was the way that we were conceiving of persuasive writing (and the subsequent prompts) that was the underlying issue to be addressed. In short, arguments in response to literature need not be taking a dichotomous stance (such as a student might in an argument persuading the principal for more recess time). This insight prompted us to re-consider the persuasive writing tasks, paying more careful attention to subject matter and genre differences. While the two forms of data identified the same issue, the insights offered by participants with theoretical understandings were better equipped to speak to that level, the focus of this paper.

Data analysis

  With multiple DBR research cycles operating simultaneously (Figure 4.2), multiple forms of analysis were also needed. The data were analyzed in three stages: 1. an initial analysis and cataloguing of all relevant data noted in Table 4.2; 2. the construction of a chronological *case-description* to expand analytical notes (Yin, 2009); and 3. a fine-grained analysis of the case description using constructs from *narrative inquiry* to narrow evidence and refine analysis (Webster & Mertova, 2007).

  The purpose of the initial analysis stage was to systematically examine the full data set and to flag the most relevant data for further analysis. This process was guided by the first research question, aiming to identify aspects of the data that would best illustrate how the curriculum developed and the supporting rationale. To conduct this initial analysis, I created an index of the data outlined above in Table 4.2. [15] Of course, my own understanding of the current form of the curriculum played a central role in this sifting of data. For example, I considered a lesson from our first year that focused students' attention of the conjunction "but" as a means for authors to signal unexpected events in texts. While the lesson demonstrated a meaningful focus on language, it was excluded because such a focus did not become central to later iterations of the ELA curriculum. I coded these documents using very general categories, depending on whether they warranted further exploration, exclusion, or clarification.

  Lastly, these preliminary analyses were taken to the research team for review. The co-principal investigators read this initial analysis, making revisions to the notes and providing

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[15] The table briefly described the data, where it could be located on our server, and provided notes regarding whether it was relevant and important to the development of the curriculum, as well as my rationale for that evaluation. I excluded video recordings and transcripts at this stage of the analysis, for the observation logs provided similar data and were more suited for this stage of the analysis. This same rationale informed my decision to focus on the research group's analysis of student writing as opposed to the writing itself.

clarifying comments, or providing insight regarding tensions or patterns they saw in the data. Final decisions on data inclusion were made in follow-up conversations. This practice serves as a way to allow for alternative interpretations of the data, even at this early point in the process. Likewise, the index builds reliability of the data by providing an initial assessment of the data and a transparent "roadmap" to how these early conclusions were formed.

The second stage of analysis entailed writing a *case description* (Yin, 2009) of the ELA curriculum development. This general analytic strategy was chosen for its utility in enabling a holistic approach, bringing coherence to vast amounts of varying types of data. This case description, which took the form of a chronological narrative, told the story of the curriculum development by using the various forms of data identified in the first phase of analysis. The first step of crafting this narrative was to re-visit the data that were identified as worthy of further exploration. For some of the data, such as researchers' reflective memos, I expanded my original analytical notes to address RQs 2 & 3 more directly. With less synthesized forms of data (such as video logs of lessons), I began by identifying *episodes*[16] (Gibbons, 2006; Lemke, 1990) of classroom talk that were flagged in the observation logs as being either particularly productive or unproductive. It was important to focus on forms of implementation deemed *both* successful and unsuccessful to appropriately capture the formative evaluations that informed major changes made to the curriculum. The classroom observer's indication that something was going well or poorly identified issues that often became topics of discussion in the research group that led to changes in the project approach.

I analyzed these episodes to focus on themes or tensions that surfaced at different points of the curriculum development. Evidence used to identify themes or tensions surfaced in

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[16] Informed by Lemke's (1990) definition and Gibbons' application (2006), *episodes* are "a unit of discourse with a unifying topic and purpose" (Gibbons, 2006, p. 95). As such, a lesson often consists of many episodes marked by changes in topic, participation structure, or purposes.

classroom talk that was transcribed for closer analysis of the particular teacher and student moves that relate to each theme. I then crafted a chronological case description, highlighting the themes and tensions uncovered in this analysis. This 60+ page narrative was redundant by design, often including multiple examples of the same themes or tensions. This narrative was directly relevant to exploring how and why the curriculum developed as it did (RQ1).

The narrative was also critical to generating theoretical propositions for RQs 2 & 3. First, the narrative often commented on the most productive applications of SFL for supporting students' disciplinary reading and writing, which informed the development of theoretical propositions in relation to RQ3 (such as *evaluation* serving as a productive description of "analysis" in written responses to literature). The narrative also sometimes described the ways theory played into the development process (RQ2). For example, the narrative noted that our formative evaluations of the instruction ultimately led to the development of an additional, overarching Design Principle. This observation became a theoretical proposition speaking to the ways in which theory and practice informed one another. These theoretical propositions guided closer analysis described below and were refined during that process.

The third stage of inquiry aimed to narrow the amount of relevant evidence and also deepen the analysis. To further explore the narrative developed in the second stage of the analysis, tools from narrative inquiry (Webster & Mertova, 2009) supported a focus on events and management of the large amounts of data in this study. Over the past two decades, narrative inquiry has gained momentum in educational research because it is "well suited to addressing the complexities and subtleties of human experience in teaching and learning" (p. 1). *Critical event analysis* was used to develop closer analysis. *Critical events* are "critical" because "of their impact and profound effect on whoever experiences such an event. They often bring about

radical change in the person" (p. 77). However, this narrative is not a traditional personal narrative, so critical events in this case pertain to the events that bring about radical change in the researchers' thinking, as evidenced in the curriculum and evaluations of it. As such, critical events can be both positive and negative so long as they "reveal a change of understanding or worldview by the storyteller" (p. 73).

The approach uses three categories to label events in a narrative: *critical, like,* or *other,* defined in Table 4.3 below.

Category	Definition
Critical event	An event selected because of its unique, illustrative and confirmatory nature
Like event	Same sequence level as the critical event, further illustrates and confirms and repeats the experience of the critical event
Other event	Further event that takes place at the same time as critical and like events

Table 4.3. Definition of critical event analysis terms: *critical, like,* and *other*

The identification of *like events* can serve to confirm or broaden ideas that surface in critical events. A *like event* "repeats the context, method and resources used in the critical event but with different people" (p. 78). For example, a lesson that utilizes concepts from SFL in the same way and with similar results as another lesson would be classified as a *like event.* Any events that are considered "anecdotal and incidental" are labeled *other events.* They occur at the same place and time as critical and like events, but perhaps describe events that were more tangential or interesting but were not ultimately deemed critical to the development of the curriculum.

During this stage of the analysis, I first categorized all of the events described in the design narrative, providing some rationale for each placement. I then engaged in a finer grained analysis of the critical events using the analytic technique of *explanation building* (Yin, 2009, p. 141). The explanation building process is iterative, engaging in the following activities: generating an explanatory theoretical statement, comparing it with the evidence presented in the design narrative (the "critical events") and then revising the original explanatory statement. This

process is repeated as many times as needed. For this stage of analysis, I generated theoretical

statements in response to RQs 2 & 3, looked at each of the "critical events" of the case through

the lens of those statements, making analytical notes and revisions to the explanatory statements.

An important part of this process was to consider alternative interpretations, for which I made

notes throughout this iterative process. Table 4.4 summarizes the three-stage analysis described

above:

Stage 1	Stage 2	Stage 3
Created an index of relevant events & data sources	Developed an expanded case narrative	Critical event analysis to narrow evidence
Identified relevant episodes	Analyzed narrative, developing theoretical propositions	Explanation building process

Table 4.4. Summary of data analysis

Findings: A Design Narrative

Overview

The following narrative recounts our progression through the broad phases of the cycles

of research at the macro level, as reflected in Figure 4.2. I first present our more general

exploration and *investigation* of the problem and potential solutions that motivated our work,

then I describe the *design* and *construct phase,* describing the events that were most critical in

the shaping of our approach over two years, while providing analysis of those events as they

relate to the overarching research questions. The narrative places a particular emphasis on the

development of the curricular approach, providing detailed descriptions of the critical events that

shaped the approach and our understandings of it. Lastly, in the Discussion section, the paper

evaluates and *reflects* on the two years of data by summarizing the findings of the analysis and

discussing implications for future research. Table 4.5 provides an overview of the narrative:

Macro stage	Specific issues addressed
Explore & investigate	1. The overarching problem

	2. The solutions (SFL & socio-cultural approaches to teaching & learning)
Design & Construct	1. Development of Design Principles
2. Development of curricular approach
a. Evaluating Year 1 (3 units)
b. Evaluating Year 2 (2 units)
Evaluate & Reflect	Report findings from *narrative analysis* pertaining to RQ2 & RQ3
Discuss implications for future research

Table 4.5. Overview of design narrative structure.

Exploration & Investigation

The initial exploration and investigation of the problem and our proposed solutions began prior to the official start of the project. The ideas presented in this first section represent the problem and theory of change that motivated the project.

Exploring the problem: Supporting English Language Learners' literacy

In the U.S., students classified as ELLs are more likely to achieve "adequate" performance on word-level reading and decoding than on measures of vocabulary and comprehension (August & Shanahan, 2006, p. 633). Research suggests that ELLs, who do not have an implicit understanding of the English language, need opportunities for explicit focus on language itself in the context of meaningful interaction about curricular topics (August & Shanahan, 2006; Genesee et al., 2006). Likewise, ELLs also need additional opportunities to develop their oral language in language-rich discussions about text. According to the National Literacy Panel report on Language-minority Children and Youth, the major impediment to English Language Learners' success with reading comprehension is their limited oral English proficiency (August & Shanahan, 2006). Unfortunately, there is evidence suggesting that many English language learners are in classrooms in which they are experiencing individual seatwork and teacher-directed whole-class presentations that address low-level skills, and are provided too few opportunities to use language to explore interesting ideas, generate their own questions, and

attain important personal and academic goals (Arrega-Mayer & Perdomo-Rivera, 1996; Assaf, 2006; Gersten, 1996).

Exploring the solutions: Theories of Language & Learning

Systemic Functional Linguistics

Systemic functional linguistics (SFL) is a theory of language that was developed specifically for connecting language form to meaning in social context (Halliday, 1985). It provides systematic ways of recognizing grammatical choices at varying levels of text: word-, sentence-, and text-level. A functional approach puts meaning first and *then* considers form, a focus on grammar being a "means to an end, rather than as an end in themselves" (Halliday, 1985, p. xiv). In contrast with traditional grammar, SFL provides a *functional grammar,* terms that reflect language's function in a sentence. It can enable a reader to "show how, and why, the text means what it does" while also enabling her to "say why the text is, or is not, an effective text for its own purposes" (p. xv). As such, it is well-suited for understanding and evaluating academic texts. Linguistic scholars have demonstrated its power to deconstruct the language of schooling (Christie & Derewianka, 2008; Fang & Schleppegrell, 2008; Martin & Rose, 2008). And while Australian scholars made great headway in developing genre-based curricula, they have published few examples of SFL being used in classrooms by teachers and students. There are even fewer such examples of SFL being applied in the U.S. context. Some researchers (Brisk, 2012; Brown, 2008; Gebhard et al., 2007; Schleppegrell, 2004;) have attempted to put SFL terms into teachers' and students' hands. However, it has yet to become a pedagogical tool that is narrowed and refined for discipline-specific contexts and challenges.

Socio-cultural approach to teaching & learning

Vygotsky's (1978) sociocultural theory of development greatly influenced the structure of the learning opportunities our team developed. In particular, a couple of salient features of the learning theory informed our instructional approach for both teachers and students. First, we assumed an interdependence of social and individual processes in the co-construction of knowledge as the children try out and refine the use of the tools to which they are being introduced (John-Steiner & Mahn, 1996; Vygotsky, 1978). Hence, each of our lessons provides opportunities for students to interact with one another; in these interactions, the children are encouraged to explain their thinking to one another, a move that socioculturalists assume leads to deeper cognitive processing (Scardamalia & Bereiter, 1991). We also aimed to design lessons that oriented toward students' "Zone of Proximal Development" (ZPD). We hoped to design lessons that were developmentally-appropriate, challenging and interesting. Also central to Vygotsky's ZPD is the role of the "knowledgeable other," who is most often the teacher. We wanted to support student opportunities for talk without denying them opportunities to engage with the teacher. Thus, the activities and forms of participation, as well as the teacher's role in facilitating student talk, varied with instructional goals.

Design & Construct

Development of guiding Design Principles informed by theory and research

The first step in the design process was to create Design Principles to guide our work, which were presented as our theory of change in our original grant proposal. The purpose of these principles was to operationalize the orienting frameworks and relevant insights from the relevant research informing our work. Doing this provided local theory that described *what* the curriculum was to accomplish, thereby establishing evaluative criteria for development and implementation of materials. These principles were made explicit in the proposal and were

evaluated and refined as the work progressed through design cycles. At the start of the project, they were:

- **Principle 1: Support explicit, meaningful attention to language.**
- **Principle 2: Provide teachers with explicit knowledge about language.**
- **Principle 3: Support meaningful interaction between students and teachers.**

Curriculum Development

The Year 1 Approach: SFL as content & tool

Professional development in the initial year took a "language-based" approach, for the project was initially organized around SFL theory. More specifically, the project aimed to introduce SFL terms to focus teachers and students on the three different types of meanings realized by spoken or written texts in context: the content (ideational), the relationships of those participating (interpersonal), and the structure (textual). One initial intention of the workshops was to introduce teachers to these ideas and how they applied to texts of different genres. At the outset of the project, the primary goal was to develop a cohesive set of materials that would support teachers' purposeful use of SFL terms in service of their students' reading and writing. Table 4.6 outlines the sequence of the original modules and the intended goals.

Module #	Title	Purpose
1	*Text structure*	Illustrate how common text types in school are structured and how language supports the purposeful unfolding of meanings
2	*Sentence analysis*	Close analytical tool to see how language at the clause and sentence level can contribute to meaning
3	*Voices in texts*	Identify ways language can engage the reader for specific purposes or present attitudes in text
4	*Tracking participants*	Close attention to how a concept or character is introduced into a text and then further tracked and developed by the author
5	*Independent analysis*	Support teachers to apply analytic tools independently to texts and plan lessons

Table 4.6. Year 1 Framework: A Language-based approach

An appeal of this approach was that it enabled a systematic way of exploring the vast analytical offerings of SFL across school genres. Likewise, it then aimed to support teachers to ultimately independently apply the tools in practical ways. The workshops and units of instruction focused on different text types throughout the school year, starting with narrative and shifting the focus to informational (scientific) texts in the latter part of the school year.

In the first year of implementation, eight teachers from the same school spanning grades 2-5 attended full-day professional development workshops three times per semester. Typically, during the first half of the day the school-based members of the team were introduced to new SFL concepts and examples of how those constructs could be used to talk about the ways meaning unfolds in a text and then later worked collaboratively with the university-based members to apply those terms to create lesson plans for teaching selections they would be teaching from their anthologies. Informed by those analyses, researchers and teachers collaboratively planned lessons that asked students to use SFL terms to engage with grade-level texts.

Using Design Principles for formative evaluations: Identifying problems and potential

Violating Principle 1: Too much grammar, too little meaning in Unit 1

Teachers were first introduced to the idea that sentences and clauses can be broken into meaningful constituents (or "chunks" as referred to with teachers), which is SFL's equivalent of "sentence diagramming," but is more connected to the meanings and functions of language. In particular, the activities focused on applying the notion of *processes* (the "happenings" in a text presented through verbs or verb groups). In professional development work preceding this project, teachers reported that looking at the *processes* sometimes paid dividends for students as

they read and discussed narratives, for they were supported in discussing many of the significant events in a story and how they affected characters. As such, the notion of *processes* played a prominent role in the teachers' orientations to SFL, as well as the four types: *doing* processes describe actions (He *ran*); *being* processes describe or define (He *is tall*); *sensing* processes express feelings or thoughts (I *felt happy*); and *saying* processes signal speech (He *said*).

During one workshop, for example, researchers and teachers analyzed a 5th grade narrative text, *La Bamba* by Gary Soto (2000), which tells the story of a young boy who volunteers to perform a dance at his school's talent show contest. Teachers were asked to identify the processes (and the types) that presented the main character's litany of feelings throughout the story. Their analysis revealed that the vast majority of the boy's feelings were represented in *sensing processes,* such as "He yearned for the limelight." As a result, researchers and teachers planned a lesson that asked students to label the *sensing processes* that describe Manuel's feelings at important parts of the story. They believed it would help students to answer the following writing prompt that they co-constructed during the workshop: *At the end of the story, Manuel thinks that he probably won't volunteer for next year's talent show. Do you believe him? Use what you've read about Manuel's feelings to say why or why not?*

The research team intended the design of the lesson to situate the application of *process types* in the classroom in a way that would draw attention to form and meaning (Principle #1). Likewise, the lesson was designed to provide opportunities to talk with each other and the teacher about the text (Principle #3). Teachers in other grades planned and implemented lessons similar in purpose and application of SFL as the *LaBamba* lesson, based on stories from their own classroom reading anthologies. Prior to engaging in the SFL-based activities, students and teachers typically read the text interactively at least once, often focusing on vocabulary or

building important prior knowledge. The SFL-inspired lessons typically progressed as follows: the teacher provided directions and established a purpose for the activity (often by modeling the task), students worked in collaborative groups while using SFL terms to deconstruct a portion of text, and students shared back their findings, leading to a whole-class conversation about the text as a whole.

Despite the best intentions of both teachers and researchers, however, the student interactions did not adequately align with our design principles, and the 5th grade lesson serves as a representative example. Many of the conversations explicitly focused on language but were not always supportive of meaning-making. Notes made in the researcher's observation log captured many of the evaluative comments elaborated upon below.

First, the teacher introduced the pragmatic details of the activity, instructing students that each small group would be assigned one page in the text and they were to identify the sensing processes. He then instructed students to write down the sentences that included the sensing process on a sentence strip to be displayed at the front of the room—where major events of the story had been listed. These pieces of text would later serve as evidence for answering the writing prompt. In the following conversation, a small group of students engaged in this task. In the following exchange, students consider the first page of the text where Manuel decides to participate in the talent show. They discuss the sentence that explicitly states his motivation: *He yearned for the limelight* in the following conversation:

1. S: Should I write *yearned?* Should I write *yearned* in here?
2. S: I don't think *yearned* is one.
3. S: He was worried that ... a feeling? Yeah, worried!
4. S: Where is it?
5. S: Yeah, yeah, *yearned,* is a sensing. He felt surprised. Yeah, he was surprised about something.
6. T: That's [worried is] a good sensing word, isn't it?
7. S: Oh, yeah. What is that? What is *yearned?*

8. ...
9. T: Oh, are you talking about the word *yearned?*
10. S: Yeah.
11. T: That's a good sensing word too. Do you know, what's another word for *yearned?*
12. S: Amazed.
13. S: Flabbergasted.
14. T: Ah, no. Not quite. To *yearn* for something is to want something badly.
15. S: Wanted.
16. T: He *yearned.* He really, really hoped. He wanted.

The activity's *process* focus prompted students to pay particular attention to "yearned." While they were correct in identifying it as a *sensing process,* the discussion illuminated their misunderstanding of the word (turns 3 and 5). As such, it provided an opportunity for the teacher to explain the word's meaning. However, what is conspicuously absent in this exchange is conversation about what Manuel was yearning *for* (the limelight), and its greater implications as it related to whether he would participate in the show the following year. They could have discussed what the phrase means, making more explicit Manuel's motivations, while also addressing what that shows about him as a person. Instead, the singular focus on the *sensing processes* did not focus students on the ways *yearning for the limelight* relates to Manuel's feelings at this point in the story.

The observer's notes identify this issue, and her comments suggested that the lesson, quite rightly, was explicit, but at times, at the cost of meaning. Observation logs for other lessons in this cycle of development made similar evaluations. We took this as an indication that this series of lessons was unable to meet the demands of our Principle #1 as intended. In this way the Design Principles served as a basis for evaluation, helping to identify the specific ways that our applications of SFL—in practice—met or did not meet our expectations. But while we were able to identify such disharmonies with unit-level (micro-cycle) evaluations, the demands of

preparing for the subsequent workshop rarely afforded us with the opportunities to fully understand them, let alone address them in any sort of satisfactory way during the school year.

The series of lessons, however, developed our understanding of the context and content that informed our subsequent work in productive ways. The activities highlighted that examining the attitudes of characters as they progress through stories provided a relevant focus for discussing narratives. Looking closely at characters, how they feel and how they change is central to the ELA and was a productive structure for exploring how SFL might better support students to find success with those analytical tasks. In order to make this purpose more apparent, we decided to provide such prompts earlier in the lessons to help frame the activities.

Still violating Principle 1: Unit 2 lacked explicitness about "analysis" in writing

The subsequent unit of study presented SFL concepts related to *text structure* in the context of a persuasive writing task. Several aspects motivated this particular focus. During the first unit of instruction (for which we did not provide any explicit writing support), teachers provided students with a graphic organizer widely used around the school district to support their written responses to the prompts. The organizer provided boxes to write the "Topic" and then three boxes to write "Details"—not particularly well-suited for the prompts that asked students to write persuasively about a character in a story. We determined that providing teachers and students with more genre-specific support for writing instruction could be beneficial. This decision was also a response to the needs of our context, for the administrators and teachers requested additional support for persuasive writing.

Prior to providing specific support for persuasive writing, we introduced teachers to four common school text types, their social purposes, and some of the common ways those texts are organized (Martin & Rose, 2008). Our notion of persuasive writing was particularly informed by

Derewianka's work (1990), which defined the purpose as: "To take a position on some issue and justify it" (p. 75), and established the stages as: position, argument, and summing up" (p. 77). We attempted to develop these general stages of persuasive writing, and were influenced by Toulmin's model (1958). We defined the stages as: *position or claim*, *evidence*, and *analysis*. We provided teachers with a graphic organizer that would support students in developing a persuasive stance about a character in a narrative text, similar to the prompt provided in the *LaBamba* lesson.

Researchers and teachers developed prompts and lessons aimed at supporting students to write persuasive, thesis-driven responses. Each of the groups planned reading-focused lessons not too dissimilar from the *La Bamba* lesson described above. Not surprisingly, the observation logs for these lessons echoed many of the same limitations reported above regarding the *La Bamba* lesson, but did confirm that the activities supported students in gathering relevant evidence from a text for their persuasive writing responses.

The subsequent, writing-focused lessons highlighted some productive ways that a focus on genre stages could support meaningful talk about text. Specifically, several observation logs noted that the terms *claim* and *evidence* stimulated meaningful classroom conversations that directly focused students on the language of the text. For example, a group of fourth grade students looked closely at San Souci's (1998) story *Cendrillon: A Caribbean Cinderella* (a retelling of the traditional French Cinderella story) in order to identify suitable evidence for answering a writing prompt. They had been asked whether the main character should have or should have not changed her appearance in order to escape her difficult situation with her stepmother. In the observation log, the researcher noted that: "The lesson is notable for an excellent text-based discussion scaffolding the students' connection of evidence with analysis."

Likewise, the observer had flagged the following exchange between students in small group format as substantive. The students in this group had approximately six pieces of text written on large sentence strips, which they addressed individually (text portions in quotes):

1. S1: (reading): "But I am strong." If she is really strong, she doesn't care whether Paul likes her or not. Just go and find somebody else.
2. S2: (reading) "She worked all day."
3. S3: And she never says no to anything.
4. S1: Give her a break for God's sake!
5. S2: (reading) "Her hands were blistered and red."
6. S1: Give her a break, she needs some rest. This one, she should change.
7. S3: She obeys Nan[?].
8. S1: So, this one (pointing to another slip), she shouldn't change.
9. S2: Cinderella didn't like the way her stepmother treated her. All she did was work all day.
10. S1: Yeah, I mean give her a break. She needs some time for herself.

The students were able to evaluate the relevance of the text presented and determine whether it was suitable as evidence for specific claims. Likewise, they talked about the character in an evaluative way: "I mean give her a break." The student was able to see why Cendrillon had legitimate reasons to escape her current living situation. At the same time, they were critical of Cendrillon's need for a prince charming to rescue her. In reference to the line "She was strong," the female student said: "If she is really strong, she doesn't care whether Paul likes her or not. Just go and find somebody else." The students were making meaning of the text, but the task did not encourage students to make comments that provided elaborated rationale.

The primary difficulty raised by this round of lessons was with the term *analysis*. While the lessons sometimes enabled students to analyze characters, it was done implicitly. Teachers were not sufficiently supported to explicitly articulate what analysis *was,* exactly. They relied on our "Persuasive writing" handout and the supporting graphic organizer. On the handout, *Analysis* was defined as: "Point(s) supporting position or claim," with some further explanation: "Analysis tying reason/evidence to position/claim." On the graphic organizer, the supporting

question for analysis was "So what?" These scaffolds failed to adequately support teachers. Without a clear definition, teachers provided their own elaborations and examples. From the same lesson (about *Cendrillon*), the instructional coach attempted to explain analysis after the students had written claims and evidence on the graphic organizer:

> T: After that (providing evidence), you are going to analyze. What does that mean? Let's say [Cendrillon] ate flour and she ate fish. What does that mean? You know, what situation was she in? You have to analyze it in your head. What does that mean to you?

Without explicit support about the specific function of analysis, the coach makes a distinction that analysis is "in your head" or the rather vague "what does that mean to you." Other teachers had similar difficulties. Some teachers addressed the issue by providing examples of analysis, which was at times helpful, but nonetheless treated analysis implicitly. Ultimately, our support for teachers failed to make *analysis* explicit and meaningful. Analysis, in the context of this particular task, might have been better explained by telling students that they need to evaluate the character and the specific actions presented in the evidence by discussing whether her actions were reasonable or not, and why. However, the contexts of persuasive writing across our classrooms varied (some students had already been writing on literature-based topics, others only on more general persuasive topics), so teachers had not all had experience supporting this subject-specific way of arguing. Ultimately, our observation logs identified the notion of analysis as an important focus of future work, prompting a question that would guide future exploration and iterations of the work: *How could we provide definitions and tools that would make analysis less abstract and more accessible?* This difficult question would not be adequately addressed until the end of the school year (meso-cycles of evaluation).

During the school year, however, we were able to formatively evaluate the students' writing, which corroborated many of the insights informed by the observations. That is, students

often provided relevant evidence for a clearly-stated claim, but they generally had much more difficulty providing on-point, elaborated analysis. The mid-year break allowed for opportunities to evaluate the writing in more depth than the previous micro-cycle. In our initial analysis, each class set of responses was assigned to a research team member. For each response, we noted if a student included an adequate claim, how many pieces of evidence they provided, how many instances of analysis, and also if students were able to link evidence to the claim. At this point, we were not trying to prove student gains or even evaluate their performance, but instead learn more about the tasks and curricular approach at hand.

We then looked more closely at selected samples of student writing from each class set, selecting four pieces of writing representative of both "strong" and "weak" examples. The format of these summaries was not standardized, but all paid particular attention to the students' attempts at writing analysis of textual evidence. Focusing more closely on the analysis stage, we were able to identify examples that were more or less successful. One example of student writing from a 5th grade class helps to illustrate some of our findings from this micro-evaluation. After reading and discussing a selection of the chapter book *Dear Mr. Henshaw,* Beverly Cleary's (1983) story of a boy, Leigh, who writes a journal while dealing with his parents' divorce, the students were asked to respond to the prompt: *Does writing help or hurt Leigh? Provide evidence and explain your reasons why.*

I describe one particular response, identified as weaker than average, for it made multiple attempts at analysis that varied in success. In the response, Mustafa (names are pseudonyms), made the claim that Leigh's writing in his journal had helped him because it was a way to express his feelings. His strongest bit of analysis was in response to Leigh's journal entry that described a landscape on a sunny day. Mustafa *indicate what his claim was?* wrote:

> My first reason is when Leigh wrote the grove was quit and peaceful and because the sun was shining, I stood there a long time. It hellps him because he fells happy and kepps his mind off his dad. When he thinks about his dad it makes him sad.

The reader will need some context here. Mustafa was able to interpret how Leigh was feeling in this instance, but he also elaborated on why it supported his claim that writing was a productive activity because it was a welcome distraction from his dad's absence. His later attempts at analyzing evidence were not as successful, but nonetheless helpful to the researchers and also indicative of many students' struggles. He provided additional details from the story: "My second reason is [Berry] said that he liked to eat at Leighs house." He attempted to analyze it: "That made him real happy. It was also something nice he said." This attempt at analysis was deemed less successful because it did not explicitly relate the evidence to the claim; it doesn't address why writing helped Leigh. Nor was it elaborated in the same fashion as the first example. Mustafa's difficulty here could be attributed to a rather challenging prompt: it's a more abstract task to evaluate the *act of writing* rather than evaluating a character. Nonetheless, there was evidence that students' struggle with analysis was not solely a result of a challenging prompt; students across the grades and classes often presented details from the story as self-evident support of their claims—as opposed to explicitly linking the evidence to analysis in an elaborated way.

Aligning with Principle 1 / A balance between meaningful and explicit in Unit 3

The subsequent workshop addressed "Voices in the text" across different genres and school subjects, with a particular focus on expository (mainly science) texts. There are multiple ways that authors can include different "voices" in texts. Among them: point of view, modality (the area of meaning between yes and no) and explicit engagement with readers (asking questions, directly addressing the reader). The workshop also addressed the ways authors can

infuse attitudes in texts. This focus seemed particularly relevant to narrative texts and the kinds of conversations about characters' feelings that seemed so important to the ELA classroom that we wanted to better support.

Teachers were introduced to concepts modified from SFL's *Appraisal* system (citation), which provides analytic tools developed specifically for making sense of attitudes in text. In an effort to situate the concepts within the elementary ELA curriculum, the topic was presented as "Word Choice." More specifically, from this framework, teachers discussed the *polarity* of characters' attitudes (using the terms *positive, negative* and *neutral*) as well as the *force* of those attitudes (using *turned up* or *down*). The following sentences, which were the focus of part of an activity with teachers, can illustrate the concepts:

*The girl laughed when her father tickled her.*

Teachers identified the girl's positive response to being tickled as realized in "laughed." We then examined a modified, but similar sentence.

Every evening, the bubbly baby cackled when her daddy tickled her.

The events remain the same, but the attitudinal meanings are changed. The teachers first discussed how the baby's positive attitude in the second sentence is more extreme, or *turned up* through the *doing process* "cackled." Likewise, we discussed how a word like "cackled" can vary in meaning depending on context (in contrast with "The evil villain cackled..."). We examined how other types of "meaningful chunks" likewise expressed the characters' attitudes, identifying the *participants* "bubbly baby" and "her daddy" expressing a close, affectionate relationship between the two (in contrast with the relatively neutral "the girl" and "her father" of the first sentence). The notion of *softening,* or *turning down* the intensity of attitudes was not adequately addressed in the workshop. However, an example of *turning down* the girl's positive

response would be to say that she "only laughed a little" when tickled. The SFL terms from the *sentence analysis* workshop (*processes, participants, circumstances)* earlier in the year helped us highlight the different linguistic resources authors have at their disposal for conveying attitudes.

Researchers also provided a visual scaffold in an effort to make these concepts more accessible, which at this point we called the "Connotation Line." [17] Extreme attitudes would be at the extreme ends of the continuum (left for negative, right for positive), and more neutral attitudes would be represented closer the mid-point. Figure 4.3 presents how variations of the sentence "I like soccer" might be represented.
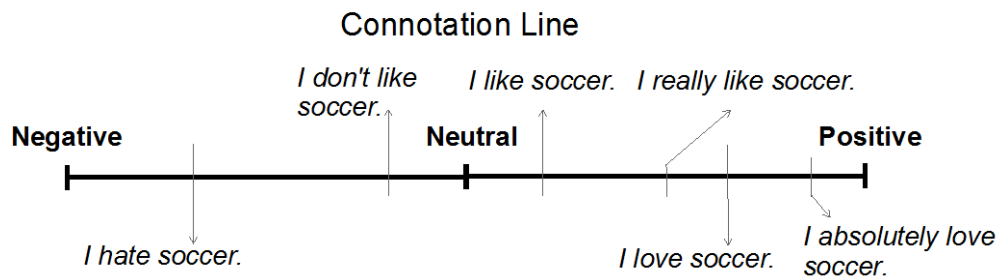
Figure 4.3. Sample "Connotation line."

Of course, it's important to note that we developed this visual simply as a means to stimulate student conversation around characters' attitudes, not as a receptacle for "right answers." Attitudes, and interpretations of them, are subjective. There are no definitively correct placements on a connotation line, but there are ones that are more or less defensible based on the text, the reader and the situational context.

Sentence needed here about the point of the example that is going to be discussed. One 4th grade teacher planned a lesson utilizing the SFL concept of "turning up" (*amplified*) attitudes.

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[17] In later iterations of our work (and other chapters of this dissertation) it is referred to as the "Attitude Line," since language can represent attitudes presented through both denotations and connotations of words.

She applied the terms in the context of a writing activity spanning three lessons. In the first lesson, students wrote essays about their personal heroes without any explicit support. In the second, the teacher presented the notion of "turning up" attitudes and then engaged students in a text deconstruction activity with a model text. Students then revised their own essays in the third lesson. The observation log for the second lesson flagged it for closer analysis. The following evaluation was provided in the observation summary:

> There is some lovely mediated instruction in this lesson as children read sample texts (typically by sentence) and propose ways to "turn up" particular words. The lesson provides the context for the teacher to distinguish between synonyms and turned up words. An additional point of confusion that is not adequately addressed in the lesson is the difference between adding descriptive detail and turning up words.

The observer's evaluation of the lesson makes connections to the principles. First, the observer noted that the lesson supported productive student and teacher talk (principle #3) around ways that specific language choices might change meanings of the sentence-level examples (principle #1). However, there were points of confusion relating the SFL terms to curricular goals, which raised questions regarding the linguistic knowledge of the teacher (principle #2).

The teacher framed the second lesson as one that was directed at improving students' word choice, making explicit reference to the "6 + 1 Traits" (Culham, 2003) writing rubric adopted across the school district. [18] The lesson progressed as follows: the teacher opted to focus on only teaching the concept of "turning up" words, and did so inductively by providing a list of words that presented different degrees of positive attitudes (good, better, best, exceptional). In the first 30 minutes, the teacher engaged students in practicing "turning up" words. Their experimenting with the sample sentence about the laughing baby inspired some meaningful

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[18] The 6+1 Trait Writing Rubric is a tool for evaluating writing in K-12 settings. The six traits described by the rubric include: Ideas, Organization, Voice, Word Choice, Sentence Fluency, and Conventions. The trait represented by the +1 is Presentation.

conversations about how language form was important to shaping the meanings in the sentence. The students demonstrated an understanding of "turned up" by playing with the example sentence about the girl subject to her dad's tickling. They generated substitutes for *laugh,* including "fell on the floor laughing" and "cracked up." They were able to manipulate language to slightly alter meanings. One particularly interesting bit of student conversation was in response to why the *participants,* "The girl" and "her father," would be "better" if changed to "the bubbly baby" and "the doting daddy." Here's the exchange:

1. T: Why do you think, daddy, is a better word choice than father in this sentence? ... Batul?
2. S: Because in the sentence "the bubbly baby cackled". ... "Baby" sounds much better with "daddy." "Bubbly baby" and "daddy," like match.
3. S: The "bubbly baby" and "daddy" actually match together. It would be weird if you said "father."
4. T: "Daddy" and "bubbly baby" match together. Why?
5. S: 'Cause, usually, a baby calls her dad daddy. It would be weird if she called him father.

The teacher and students were able to make connections between specific word choices and how they affected the meaning of the sentences. The discussion of this particular sentence helped them see how the author's choice of *participants* in a sentence could actually convey quite a bit about their relationship. The students were able to stay focused on attitudinal meaning, addressing some of the ways those attitudes could be presented by language. This pointed us toward developing curriculum more in tune with principle #1, tools that were explicit *and* meaningful. While this was a rather decontextualized example looking at one sentence, we were intrigued by its potential, and for that reason, we identified the appraisal resources as accessible and relevant for talking about attitudes, particularly those presented in narrative texts. We had identified that perhaps "attitude" would be the primary focus—and discussion of *processes* and

participants in that context could uncover the different and complex ways language can realize character's and author's attitudes.

A challenge in implementing Principle 2: Language patterns described as rules in Unit 3

However, another portion of the lesson proved critical to our understanding of the nature of a teacher's linguistic knowledge, the focus of principle #2. Later in the lesson, the teacher erroneously equated highly-emotional ("turned up") writing (regardless of genre or purpose), as good writing. This became problematic as the students engaged with a model text, an essay in which a girl not in the class explained why her dad was her hero. In the last portion of this lesson, students were asked to "turn up" some of the attitudes in the response. The essay described that sometimes the dad's face turns red when he gets mad. In the small group, the students had decided to turn up that phrase to: "when my dad gets furious, his face turns red as fire." But the teacher, who was listening to the small group conversation, intervened and pointed students to the author's purpose:

1. T: I have a question. What is this paper about?
2. S: it's about, like, when you have a dad,
3. T: No, no. What was this essay about?
4. S: Turning up words.
5. T: No. Ok, who, wrote about their hero?
6. S: Amanda.
7. T: Amanda is a girl who wrote about her hero.
8. Ss: Yeah.
9. T: Do people usually, love their hero?
10. Ss: Yes.
11. S: No?
12. T: No, they don't love their hero?
13. S: Of course they love their hero! Because {indistinct, multiple responses}
14. T: Do they think their hero is a great person? Or do they think that their hero is a bad person?
15. ...

16. T: If a girl is talking about her hero, who happens to be her dad, do you think she would describe him as sometimes getting FURIOUS, or sometimes just getting ANGRY?
17. Ss: Angry.
18. T: Why? Why would they rather ... Hamad.
19. S: She's describing her dad, who's her hero. If it's her hero, why would he be furious? You can't]
20. T: [you mean, if someone is your hero, you don't think they become, FURIOUS, because is furious a good characteristic to have? I mean, you could, I mean sometimes I get furious, it doesn't mean I'm a bad person, but I just want you guys to keep in MIND this girl is writing about her dad who happens to be her hero. And that is very important to keep in mind when you are thinking about word choice.

Instead of being an activity primarily focused on arbitrary "turning up," the teacher rightfully re-orients the students to the author's purpose. This exchange helps them to distinguish that perhaps "turning up" the dad's anger was counter to the author's overall purpose. It would have been productive to talk about why the students might want to "turn down," or make less extreme, the dad's anger in this piece. It was the writing task—its genre, and its purpose—that should dictate the features, working in service of effectively achieving a specific goal. In this way, the teacher's enactment helped us to better understand that it isn't just the linguistic knowledge, or the understanding of SFL concepts, that is important for principle #2. Instead, it's important for teachers to know how and why this linguistic knowledge is applied to texts of different genres, and how to teach it so that it can best support students to achieve specific curricular goals.

In sum, this unit helped us to identify an approach to addressing character attitudes that showed potential for its ability to find a productive balance between explicit *and* meaningful attention to language. However, as the last example demonstrated, simply finding a good match between a linguistic tool and a text type is not enough. Instead, our work also needed to support a deeper understanding of how and why those linguistic tools are applied, and to what end. Of

course, at this point in the development of the curriculum, we did not have good answers to *how* to accomplish this.

Summary of Unit Evaluations: Finding problems to address later

Across the three units of instruction presented above, the theory- and research-based Design Principles offered us with concrete criteria for evaluating the applications of SFL. In the first two units, especially, the formative evaluations provided us with empirical evidence of significant issues with our work. However, because these observations were made during the school year and our research team was often under pressure to develop the next set of lessons exploring other texts and SFL tools, any substantive attempts at better understanding *why* those issues arose—or how to address those issues—were postponed until the end of the first complete school year.

Stepping Back: Formal Evaluations of Year 1 Data, Re-visiting Design Principles & Theory

The summer break offered the research team with time to further delve into issues identified in the formative evaluations and address them prior to the start of the second year of the project. We explored the aforementioned concerns by training our attention on classroom conversations as well as the students' writing in more formal, systematic ways that culminated in manuscript drafts, conference presentations, and more importantly, a revised instructional approach for the next year.

Project consultant offers evaluation and insight: Situating argument (and "analysis") in school subjects and genres

Our initial analyses of the student writing were further informed by a visit from Beverly Derewianka, upon whose work (1990) much of the persuasive writing unit had been based. She made some key evaluative observations, which were documented in our research meeting notes.

More specifically, she raised important points regarding the way we presented persuasive writing. She noted that the prompts we had presented to students were better categorized as literary response genres (Christie & Derewianka, 2008). The writing tasks we had assigned were not a general "persuasive" genre, but were instead a type of argument (a "character analysis") quite specific to English Language Arts classrooms[19]. Derewianka underscored the importance of this distinction, arguing that the source of the evidence base has important implications to the type of writing and analysis students would produce. In a sense, she offered us with a theory as to why our efforts to support "analysis" were less than effective: we needed to address arguments in the contexts of specific school subjects. These observations were particularly important in shaping our thinking, evident in our future iterations.

Formal evaluation of student writing: Looking closer at students' analysis

The formative evaluations of the student writing also served as the foundation of a more thorough analysis conducted after the conclusion of the first year of the project (thus serving as a meso-level evaluation). O'Hallaron (2012), a graduate student on the research team, focused her analysis on two sets of persuasive writing produced by the 5th grade class addressed above: the responses to *Dear Mr. Henshaw* and *LaBamba.* O'Hallaron reported that the responses to the *LaBamba* text, which were supported by a generic expository graphic organizer (offering boxes for "Topic" and "Details"), demonstrated a universal absence of analysis. The second set of papers responding to *Dear Mr. Henshaw*, however, which were supported by a scaffold that identified specific stages of an *argument* (claim, evidence, analysis), did include attempts at providing analysis (18 of 19). The report also categorized the examples of student analysis, describing their degrees of success (p. 29): 1) no analysis provided: evidence was treated as self-

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[19] Refer back to Chapter 3 for a more complete discussion of argument and character analysis genres.

evident; 2) was mismatched to evidence or the claim; 3) evaluated importance of the event with missing or incomplete connections to the prompt/claim; and 4) evaluated the evidence with explicit connections made to the claim. This analysis provided us with a more nuanced understanding of students' writing of analysis, guiding our future work.

The different levels of evaluation at the micro- (observation logs, initial writing analysis) and meso-cycles (O'Hallaron, 2012) served different purposes, each contributing to our future work in important ways. The micro-level analyses provided by the observations of the writing lessons and the initial writing analyses helped us to identify an important mismatch between our approach and our design principles. The struggle to remain true to principle #1 seemed the most difficult to attain, as the lessons were able to support some *meaningful* talk, but were lacking in *explicitness* (the opposite of what we observed in the first unit). It was evident in both the classroom discussions and in student writing that teachers needed clearer ways to explain *analysis*; likewise, students needed tools that make this skill more accessible. In the unit, some students successfully analyzed the text, but others didn't. O'Hallaron's more in-depth meso-level analysis not only helped us to better understand this issue, but perhaps more importantly, provided evidence that the general direction the work was taking was leading to fruitful outcomes. In the second unit supported by the SFL-informed stages, students often attempted analysis, while in the earlier unit, (supported by the generic "Topic-Detail" graphic organizer) students made no such attempts to connect details from the story to their overall argument.

Summarizing formative evaluations related to Principle: Balancing explicitness and meaning

Immediately following the school year, the research group held a week-long retreat to reflect on the past year's work and plan for future work. In preparation for this meeting, each

research group member wrote a reflective memo addressing several aspects of the work, including identifying features of the approach that were particularly productive or promising, ones that were not, and also ideas for future work. We identified many of the issues raised in this report: The application of *processes* in Unit 1 supported isolated incidents of meaningful talk, but sometimes led to decontextualized labeling where the meaning or overall purpose was obscured. The second set of lessons focused on persuasive writing brought some clarity to the overall purpose of the lessons, but highlighted a need for providing more concrete ways of supporting students to analyze literary texts. The last round illustrated that the metalanguage of *appraisal* suited the task of discussing attitudes in text very well. However, it highlighted the need to specify *how* and *why* teachers and students apply this linguistic knowledge.

Developing an additional Design Principle: Positioning SFL as a tool, not as content

In an effort to address these issues, and in particular, the method for making the context and purpose of using SFL more explicit, we revisited the overall framework and our guiding Design Principles. A particularly important insight that was generated from this conversation was the way in which the framework was organized around language features. Organized in this way, the SFL became the driving force—or the content—of the approach. Instead, we wanted to present SFL as a powerful *tool* for helping to achieve curricular goals. We proposed a change to the structure of our approach. In order to clarify and specify curricular goals, we decided to aim all lessons toward supporting students to write in highly-valued genres. In part, we focused our attention on the types of writing valued in ELA (Christie & Derewianka, 2008), how *analysis* was realized in those genres, and ways we could apply SFL to make those skills more concrete.

In light of our cumulative formative evaluations and the revisions to the overall framework, the research group also evaluated and revised the overarching Design Principles.

Ultimately, we determined that the original three Design Principles still held true and were useful in evaluating our work as it was designed and implemented. However, we also decided to add a principle that would prompt us to explicitly consider *how* and *why* SFL would be applied to specific content and learning goals. We didn't want to lose sight of our overall purpose: to help students to read and write, not demonstrate knowledge of SFL. In response, we developed the following principle:

> **Principle #4: The application of SFL terms should always be in the service of specific disciplinary goals that have been made explicit to teachers and students.**

This decision was a key turning point in the development of our work, and it was supported by the iterative nature of the DBR process. The time afforded by the summer break gave us an opportunity to look for patterns across the units of instruction. Likewise, it enabled the data-driven revision of our overall framework as well as our guiding Principles. Of course, this is only a fragment of the meso-level evaluations we continued over this summer (development of coding scheme for observation logs, identifying more specific and formal RQs for future analysis), but this was a pivotal moment in the development of the application of SFL to supporting literacy in ELA.

A New Approach: Year 2 Development

Over the summer, the research team then engaged in a very focused stage of *exploration* and *investigation* that would inform the structure and trajectory of the ELA approach the following year. More specifically, we explored the features of *literary response genres* of writing common to the ELA classroom. Of particular importance to this process was the work of Christie & Derewianka (2008), who utilized SFL tools to describe the common writing genres of schooling and also the features of more and less successful responses. We narrowed our focus to

the *character analysis* genre, which often asks students to explain how a character changed and why, or to evaluate a character's words or actions for a particular purpose. Christie and Derewianka's analysis keys in on some important features of the genre. For example, when students have to discuss the evidence they provide in a response, using verbs such as "shows" and "demonstrates" enables students to evaluate how a character's actions or speech reveal aspects of the character's personality. Making this move is a crucial component to evaluating a character's development when writing in the *character analysis* genre. Likewise, writers may employ verbs of thinking, feeling, and perceiving to convey their text-based inferences about a character's internal reaction to external events. Members of the research team wrote potential *character analysis* responses, and analyzed our own responses to texts to uncover some of the language features upon which to focus teachers and students. These analytic activities shaped the design of the second-year ELA curriculum.

In addition, we investigated the ways in which the tools of close analysis we used in the preceding year might better complement each other in the service of supporting students to engage with characters' attitudes presented in text. More specifically, we analyzed multiple narrative texts, applying terms from *appraisal* (positive/negative; turned up/down) and *sentence analysis* (processes, participants) to identify patterns. Ultimately, this investigation led us to believe that concepts of *appraisal* would be best taught first, as they were directly supportive of talking about attitudes in text in a systematic way. We would then teach the "meaningful chunks" of *sentence analysis* (processes, participants, etc.) to demonstrate how those attitudes can be represented in language in different ways. These conclusions shaped our work in year 2.

While the method of training teachers in our professional development workshops is not the central focus of this report, changes in this respect had a significant impact on the shape of

our support materials, related to Principle #2. As described above, the preponderance of professional development in Year 1 assumed the form of co-planning, a collaboration of researchers and teachers. There is no question that one of our goals for the work is for teachers to be able to flexibly and purposefully apply linguistic knowledge to their teaching. However, we felt an important part of achieving that goal was for them to experience lessons in which SFL was used in productive ways (which we were still identifying and exploring). Thus, in preparation for Year 2, the research team drafted units of instruction and piloted them in classrooms. The lessons provided to teachers were not intended to serve as scripts, but as a guide that could then be modified by teachers for their particular contexts.

To address specific goals of ELA, the reading activities focused on the subtle ways character attitudes are presented, while the writing lessons supported students to write *character analysis* responses. While this type of response is more typically assigned in secondary ELA classrooms (Christie & Derewianka, 2008), we were encouraged by students' prior engagement with prompts that asked them to evaluate literary characters, their actions and attitudes, and we were confident that elementary level students could be introduced to this type of writing. We designed units that drew on three different grade-level narratives for the purpose of building up students' linguistic knowledge and understanding of the *character analysis* genre incrementally. The units unfolded by introducing and engaging students in applying and experimenting with linguistic concepts in mini-lessons and then proceeding to the main lessons, which applied the SFL to narrative texts. Table 4.7 presents the framework for these units.

Unit #	Reading Goal	SFL concepts applied	Writing goal	SFL concepts applied
1	Identify characters attitudes, feelings, how they change by paying attention to connotation of words and phrases in story	*polarity* (positive, negative, neutral); *force* (turn up/down)	Write a purposeful summary of important events in the story ("recount")	*recount & stages*
2	Make inferences about	*processes (doing,*	Write a one-paragraph	*character*

	character attitudes implied in actions and speech.	*saying, sensing, saying)*	*character analysis* response	*analysis & stages*
3	Make inferences about character attitudes presented in abstract language	*participants*	Write a one-paragraph character analysis response (grades 2, 3) Write a multi-paragraph *character analysis* (grades 4, 5)	*character analysis & stages*

Table 4.7. Framework for ELA approach in year 2.

Better alignment with Design Principles: Meaningful and explicit talk about character

attitudes in Unit 1

The structure of the first instructional unit in Year 2 reflects a major shift in the type and

application of SFL that we supported. Students were first introduced to the terms for talking

about attitudes in text and then applied the concepts to narratives in their curriculum. In the 4th

grade, students read *Tomàs and The Library Lady,* Pat Mora's story of a young boy who travels

with his migrant farm family from his home in Texas to Iowa. The following lesson progressed

as follows: the teacher reviewed the SFL terms and the text and oriented students to the purpose

for the activity. Students then analyzed specific portions of the text in small groups before

sharing back their findings to the class. One important difference from the previous year's work

was that the teacher shared the writing prompt at the outset of this lesson: *In the story Tomàs and*

the Library Lady, Tomàs becomes the newest storyteller in his family. Re-tell some of the most

important events in the story, how Tomás felt, and how it relates to his becoming a storyteller.[20]

Observation logs from this round of lessons identified that the revised application of SFL

provided opportunities for students to engage in meaningful and relevant close analysis of text.

For each "event" relevant to the prompt, the teacher had printed a section of text in large font.

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[20] While the writing activities are outside the scope of this paper, it should be noted that this prompt does not necessarily elicit a traditional *character analysis* response. Instead, it might be considered a purposeful summary (we called it *recount*)—a form of writing we thought would develop students' interpretation of characters with a more accessible, chronological organizational structure. In later iterations of the work, we opted to exclude this type of writing.

The students were to mark with a highlighter any words that were presenting Tomás's feelings and also determine the *polarity* (positive or negative, with + or -) and the *force* of those feelings ('turned up/down' with arrows). The teacher first modeled the activity, engaging students in a collective analysis of one event. Then, the students worked in small groups with one piece of text prior to sharing their findings with the class. In the following excerpt, the students report out on their analysis of the portion of text where *Tomàs* takes books home from the library to read to his family. The conversation focuses on one particular sentence: *He ran home, eager to show the new stories to his family.* The students read their passage and reported that Tomás's feelings were "positive" and "turned up." The teacher pushed them to explain.

1. T: Why is that <u>positive</u> and <u>turned up</u>?
2. S: Because he is happy that he has new books to read to his family.
3. T: Because he is happy that he has new books to read to his family. And did they say that he walked home? Or *ran home*?
4. S: *Ran home.*
5. T: So, that is not only <u>positive</u>; it was <u>positive</u> and
6. S: <u>Turned up</u>
7. T: <u>Turning up</u>…that's because if he was just walking home…but he was *running home* and what other word shows us that it was <u>turned up</u>?
8. S: He was *eager to*…
9. T: Tell me what the feelings were
10. S: He is feeling cheerful, he is feeling excited to read the new story to his family.
11. T: Great job!

Of course, the teacher might simply have provided an evaluative "good job" after the students reported their accurate answers to the task ('positive' and 'turned up'). Instead, she pushed their thinking in several ways. First, she prompted students to provide their rationale for those answers (turn 1). In response, the students explained *why* Tomás's feelings are positive, as opposed to discussing the language that represents the positivity. The teacher then directly focused students'

attention on the language of the text (turns 3 & 7). In turn, students honed in on *how* the language "turned up" those positive attitudes up through "ran home" and "eager" (turns 6 & 8). Ultimately, the teacher's sequence of questions, using SFL concepts, supported a student's more developed interpretation of feelings that were not explicitly stated in the text in turn 10.

The final activity and conversation supported sense-making at the text-level. As was the case with the *LaBamba* lesson, portions of the text were displayed at the front of the room in chronological order. However, the meaning of Tomás's attitudes were made more prominent, represented by the students' markings noting the polarity and force of those attitudes (+ or -; ↑or↓). After each group had presented their analyses, the teacher revisited each of the major events and asked if Tomás's feelings were positive or negative, turned up or down. The teacher was able to make generalizations about Tomás and his evolving feelings across the events: "It goes from negative, negative, negative...to positive, positive, positive." The marking of polarity and force of feelings enabled the teacher to be specific in her generalization regarding Tomás's attitudinal evolution.

While we were pleased that the redesigned features appeared to be working as intended, there were still obvious facets of the curriculum and instruction that called for improvement. For example, although the class collectively reviewed the events and the relevant feelings, it was the teacher (and not the students) who made the final and important observation linking the relationship between changes in Tomás's feelings and his movement toward becoming the family's storyteller. *Implication?* With regard to design, we considered ways to foreground these important macro-level conversations while streamlining the "close analysis" phase. That is, were there any general language features that could help us (and teachers) purposefully narrow the

sentence-level analyses? Overall, the positive evaluations suggested that the application of SFL in this case was generally in strong alignment with our overarching design principles.

Additional challenges for Principle 1: A vocabulary for interpreting attitudes

Such was not the case with all of the implementations from this unit. As an illustration of one of the most common issues that arose, a 2nd grade class engaged in an activity similar to the one described above. During the conversation, the students struggled to describe how the character was feeling, often providing overly simplistic and sometimes inaccurate interpretations of feelings (such as "happy" or "sad"). Such interactions served as a strong reminder that the application of SFL was not working in isolation, but was very much dependent upon other aspects important to reading. In this case, prior knowledge in the form of an emotional vocabulary was essential to making meaning. If we expected students to make inferences about how a character might be feeling, they needed the necessary language. We saw this as an opportunity for better connecting SFL applications with other pedagogical approaches--and also, it informed our understanding of what *vocabulary instruction* is, as being not necessarily limited to the words in the text, but also inclusive of concepts necessary for making inferences.

Also of importance was the way in which the subsequent writing activity (and the prompt) framed the purpose of the classroom discussions. We had initially included a *recount* writing task in response to this first text, which required students to summarize the story and provide some evaluative statement about the text. Our rationale for this decision was that it would provide students with some valuable skills for writing *character analyses* (identifying important events and quickly summarizing them). However, the purpose of this genre was not clearly established, and this had an impact on how teachers understood the goal of the final written product, making it more difficult to teach the reading-focused lessons with a clear sense

of purpose. Close analysis of student writing from this unit is not included in this analysis (because it was not deemed critical to the development of the ELA approach), but more formal findings about the *recount* writing were made in Schleppegrell et al., (in press).

Continued alignment with Principle 1: Process types for supporting inferences about character attitudes

Some of the evaluations made in the previous unit informed the development of the next round of lessons. The first design-based decision was to utilize a significantly shorter text that still presented some of the challenging language features of narratives. The text, which was used at all grade levels, was a short story based on a legend about George Washington cutting down a cherry tree as a young boy. The lessons engaged students in conversations and writing about George's actions and his father's reaction to them that would ultimately help them respond to the prompts: *Is George a good boy*? *Why or why not?* or *Is George's dad a good parent? Why or why not?*

In the context of the reading-focused lessons, the SFL helped students pay close attention to how the language of the text was implicitly *showing* and explicitly *telling* attitudes of the two primary characters, George and his father. Consider the following examples. At the start of the story, George takes his ax to a cherry tree in the garden, testing his strength, and succeeds in it cutting it down. The text then says:

> *But he didn't feel strong. He felt anxious.*

The author explicitly *tells* us how George felt after cutting down the tree. However, the attitudes of his father in the following sentence are presented in a less direct manner. After discovering the felled tree:

> *He stormed into the house looking for George.*

The text doesn't tell us that George's father is furious, but his actions certainly *show* it. To understand this sentence, students need to recognize that he is angry, and that this is shown in the fact that he *stormed* into the house. We might also argue that the author is showing us that the father already knows *who* cut down the tree because he was "looking for George." Recognizing these points is an interpretive step that readers need to be able to make.

The metalanguage of process types helped us to better distinguish between attitudes that are told explicitly or implied, or shown, in the text. Characters' attitudes are often *told* through *being processes* (He *was angry and disappointed*) and *sensing processes* (He *felt anxious*). Typically, the reader need not do much work to make meaning here. However, *doing* and *saying processes* often *show* how the characters feel (He *stormed into the house*). In such examples, the attitudes need to be interpreted. During the reading lesson, students identified language that presented characters' attitudes, but also noted if the language was *showing* or *telling,* and also labeled the *process type*. Students also made note of what emotion they thought the character was feeling. As teachers and students talked about these examples, the teacher often used SFL terms — positive/negative and turn up/down—as the basis for follow-up questions.

The integration of these terms led to some interesting forms of text-based, meaningful interactions that were not evident in earlier lessons. First, the attitudes that were *shown* through *doing processes* in the text often garnered extra attention of teachers and students, a welcome and purposeful narrowing of SFL use. Likewise, the "doing" label often prompted teachers to ask students to perform the actions described in the text. In this way, the functional labels helped identify places for extra conversation, but also suggested different ways of engaging with it. The terms introduced in the previous round of lessons continued to support the development of

interpretation. Changes to the curriculum also supported more global conversations about the text and story genres (additional examples of these interactions are provided in Chapter 2).

Violating Principle 2: Too much of a good thing

While many of the classroom interactions presented above provided evidence that suggested our approach was better aligned with our guiding principles than in past iterations, there was evidence from other classrooms that suggested the need for further refinement. The observation logs identified one 3rd grade teacher's implementation as worthy of further analysis because it was representative of some challenges encountered when implementing the unit. The teacher, who was an active and enthusiastic participant in our training, taught the reading-focused lesson about George Washington (intended to be one 45-60-minute lesson) over the course of three one-hour lessons. Ultimately, the students had closely analyzed *every sentence* in the text, clearly overkill to the observer and counter to principles 1 and 4. The role of SFL in service of disciplinary goals may have been clear to the developers (as outlined in principle #4), but the workshop and materials did not always succeed at making those goals explicit for *all* teachers or students. This became a central concern when we more closely evaluated the materials during the following summer.

Principle 4 supports alignment with Principle 1: Making analysis more explicit

Following the conversations about the story, lessons aimed at supporting students to write *character analyses* in response to the prompt about George. In short, there were two main changes to the SFL-based stages we provided in the materials and scaffolds for this second unit in year two. First, we wanted to support students in presenting evidence from text in a way that was contextualized and considerate to the reader. This was presented as a stage we called *Orientation to Evidence*. Second, we generated new terms to make "analysis" more concrete and

specific. Based on our analyses of model responses, we generated descriptions of two stages that point students to what successful *character analyses* often do when analyzing textual evidence: *interpretation* and *evaluation.* The purpose of *interpretation* was presented as "telling what the author shows in the story" and referenced the process types they might use (sensing, being) to "tell" the feelings that were "shown." The purpose of *evaluation* was to "judge the character based on the prompt" and "explain your reasons." A more detailed account of this development and the rationale is presented in Chapter 3.

Our initial evaluations of these lessons, as reflected in the observation logs, were more positive than our evaluations of the previous year's approach. Classroom observers noted that teachers were generally better able to articulate their expectations for *analysis* through the more detailed and genre-specific stages of *interpretation* and *evaluation*. Responses from teachers were also positive, as teachers from three of our schools even requested help in generating prompts and similar activities so their students could write additional character analysis responses to other stories. Likewise, our initial analyses of the student writing were promising, particularly of the writing produced by students who had opportunities to write in the genre more than once. While time did not allow for systematic analysis of the writing during the school year, our initial impressions were that students were typically providing simple *interpretations* and *evaluations,* but those who had multiple opportunities to work through the genre made more nuanced claims and more elaborated analysis. A more detailed description of the pedagogy and a close analysis of the student writing are presented in Chapter 4 of this dissertation.

Stepping Back: Formal Evaluations of Year 2 data: Re-visiting Design Principles & Theory

At the end of the second year of our work, we were again able to examine the units of instruction and evaluate the intervention in more formal ways. For example, we identified

affordances in the ways the SFL metalanguage was functioning to support meaning making (Schleppegrell, 2013; Moore & Schleppegrell, forthcoming). Likewise, we more fully explored some of the pitfalls of our work, prompting us to revisit the high-level theory informing our project (Moore & Palincsar, 2012). These reports enabled us to make some theoretical and research contributions while also generating ideas for improving the practical aspects of our work.

Schleppegrell's (2013) analysis focused on the ways metalanguage can support ELLs' academic language development. This analysis presented data from multiple years of our project, thus serving as a form of macro-level evaluation of our data. Schleppegrell provided empirical data to support the argument that, as a metalanguage, SFL can support comprehension by "providing learners with tools for parsing language into meaningful constituents and recognizing what goes together to make meaning" (p. 165). Her analysis provides evidence of three different applications, one of which was the George Washington unit described above. Namely, she provided closer analysis of the ways in which the *process types* supported students to *interpret* character feelings, deepening our understanding. However, her analysis also broadened our understanding, as she also examined some powerful applications that were not deemed central to our later iterations (and thus not reported here). For example, she presented an example in which students applied notions of *mood* and *speech function* to discuss the ways characters in stories might alter the way they phrase a command in the form of a question (Do you mind closing the door?). In addition, the students discussed the rhetorical effect of doing so (for politeness, etc...). By bringing this theoretical lens of *metalanguage* to our data, Schleppegrell at once broadened and deepened our understanding of not only what was "working," but how, why and to what effect.

Serving as meso-level evaluation of Year 2 data, Moore and Schleppegrell (forthcoming; Chapter 3) developed our understanding of how SFL was taken up in classroom discourse and the supporting classroom artifacts in the context of particular activities. Wells's (1994; 1999) framework, based on his landmark synthesis of Vygotsky's and Halliday's contributions to a language-based theory of learning, was a useful and appropriate lens for our analytic purposes. According to Wells, it is in dialogue in the context of purposeful activity that children co-construct new knowledge, and both more expert others and mediating tools and materials (artifacts) play important roles in supporting this. Informed by this perspective, we provided evidence that academic language development and the development of understanding of literary analysis are supported through dialogue about language and literature mediated by artifacts that include SFL and literary metalanguage. More specifically, SFL served as a mediating tool for supporting elaboration and enactment of meaning, as well as exploration of patterns and author's purpose in the texts students read. Mediation through use of meaningful metalanguage resulted in extended discourse by students in which they also connected text meaning to their personal experiences. One particularly important point that had not been previously raised in our more formative analyses was the discovery that SFL metalanguage connected to, complemented, and clarified literary metalanguage (such as *indirect characterization*). While the analysis demonstrated the power of such connections, it also called for further exploration; for example, of the ways in which traditional grammar might be used in similar, complementary ways with SFL to better support students' literacy development.

Moore & Palincsar (2012) examined the development of our approach in the first two years of our work through an analysis of a "telling case" of two upper elementary classrooms in the pilot school. In our Discussion, we noted the significant variations in enactment of the SFL-

based lessons (such as analyzing every sentence of a text) that could not be explained by student demographics, classroom or school contextual features, or professional development opportunities. This led us to wonder how the "conceptual frame teachers can bring to comprehension contributes to shaping their practice" (p. 21). Ultimately, it led to our realization that our own theory of text comprehension, heavily influenced by the theoretical perspective of Kintsch and colleagues (Kintsch, 1998; Kintsch & Kintsch, 2005), was not explicitly articulated or represented in our design principles or our approach. We proposed this as a potential explanation for why our materials and supports failed to make explicit the purpose of the language analysis activities.

Seeking additional high-level theory / A Theory of Reading Comprehension

During the summer after our second full school year of research, we explored Kintsch's (1998) *construction-integration theory* of reading comprehension in an effort to improve our approach and understanding. From this cognitive perspective, there are three levels of comprehension processes working in tandem as we read. Decoding, according to Kintsch, characterizes the perceptual and conceptual processes by which printed words yield word and sentence meanings that are referred to as *propositions* that result in a mental representation of the text in the mind of the reader. The second level is the *construction* of the *textbase*, the "mental representation that the reader constructs of the text," which might be described as a basic or literal understanding of the text's content. However, Kintsch (2005) proposes that in order to "really understand a text, it is usually necessary that the reader integrate it with his or her prior knowledge or experience" (p. 73). This third level of comprehension, the construction of a *situation model,* is a mental representation of the text that may require different types of

inferences that integrate textual information with the reader's prior knowledge, personal experiences, or emotions.

Through this lens we re-evaluated our approach and our design principles. Ultimately, we determined that the lessons aimed at supporting students' reading were only partially successful in supporting students to construct the situation model we expected. We expected students to make careful judgments about characters (Is George a good boy?), but this was not explicitly supported in the reading-focused lessons. Instead, the characters' feelings and the SFL process types were foregrounded. This was understandable, because attitudes implied through character's actions is a difficult language feature common in narratives. The activities had shown potential for success, for students were supported in paying close attention to language while also calling upon their personal experiences to make inferences (Moore & Schleppegrell, 2013). However, if the overall purpose—to carefully judge the character—is not explicitly supported, the purpose of the activities could easily be changed into simply a focus on all of the characters' feelings; something we saw in some of our project classrooms.

These observations did not change the articulation of our overarching design principles, but they certainly changed our understanding of them. For example, we developed a more nuanced understanding of principle #1, as we could be much more specific about what *types of meanings* we wanted to explicitly support with SFL. Likewise, our new understanding pushed us to remember the *location* of *meaning* as well. When approaching texts with a linguistic orientation, it is possible to forget that meaning is made in interaction of reader and the text in a particular context. We needed to more explicitly support students to make judgments of characters by paying careful attention to language, but in a way that allowed them to access their personal experiences and rationale for evaluations. This point was underscored by the fact that

students' first attempts at writing *character analyses* often did not include well-developed evaluations (see Chapter 4). This led us to propose that it was the way we designed the supporting pedagogy (and failed to articulate the overall reading purpose and connect with student experiences), rather than the stage-based approach itself, that needed revision in light of these observations. Our exploration of Kintsch's theory of reading comprehension inspired some important modifications to the approach as we entered our third and final year of the project. However, these data are currently still being collected and have not been subject to formal evaluation.

Discussion: Evaluation & Reflection on Years 1 & 2

The primary aim of this report has been to describe how and why our application of SFL in the context of ELA changed as we engaged in the stages and cycles of our design project. The analysis provides data for observing the relationship of theory and practice and how the interaction of the two contributed to their mutual development (RQ#2). In addition, the report offers evidence of some instructional theories pertaining to potential applications of SFL in the ELA classroom worthy of further exploration (RQ#3). The following discussion highlights some of the ways in which different levels and types of theory informed and were, in turn, influenced by the implementation of the intervention. It concludes by summarizing some of the instructional theories as to how SFL was best used in ELA.

Varied, complementary high-level theories were operationalized as Design Principles.

The importance of the varied yet complementary nature of the grand theory and orienting frameworks informing our Design Principles cannot be overstated. The Design Principles made the prior research and grand theories more usable—they provided our team with specific goals and criteria for evaluating our approach in both formative and more formal ways. They were

important for determining whether the materials and enactment of lessons coincided with our goals and perspectives on teaching and learning. For example, principle #1 was informed by both our primary problem and solution. ELLs need tools for explicitly learning how language works, but it needs to be done in meaningful and powerful ways. SFL is a linguistic theory oriented toward the meaning-form connection in language use. Even so, applications of SFL don't guarantee meaningfulness or student engagement. As researchers apply SFL theory to practice, it is not always applied in ways that focus on meaning (even in our own applications). Thus, this design principle kept us squarely focused on the central tension in our work, and like all of the principles, served as a concrete basis for evaluation of our materials and their implementation. These were central to the micro-evaluations such as those provided in the observation logs. In a sense, the principle allowed us, as diSessa and Cobb (2004, p. 78) said, "follow [our] noses, doing the work of science as we understand it," while also providing a rationale that allowed us to evaluate our work in a way that flagged emerging concerns for closer analysis (such as meso-evaluations in the summer, or macro-evaluations of formal papers).

Records of practice informed the development of local, explanatory theories about (mis)alignment with our design principles.

More often than not, explanatory theories were aimed at understanding why the approach and supporting materials did *not* work as intended, and they were made during year-end, meso-cycles of evaluation. Observation logs often presented formative evaluations of implementations but rarely were able to provide well-articulated speculations as to *why* the lessons (mis)aligned with our principles. Analysis of data conducted between school years (meso-evaluations), sometimes taking the form of researchers' reflective memos or grey papers, were better oriented toward this purpose. They were often an important, driving force in making data-driven

decisions when the exigencies of the ongoing data collection work left us with little time for extensive analyses. Perhaps the most telling example of this was at the end of the first year of our work, when the research team had revisited evaluations made in the observation logs. One of the primary concerns was that SFL applications sometimes became decontextualized labeling exercises, such as the search for characters' sensing processes, rather than pointed, relevant discussions of characters' feelings and the implications. The SFL was often seen as both the *tool* as well as the *content* to be taught. The team hypothesized that the overall "language-based" framework—organized around the SFL tools—may have been creating an overall context that contributed to this phenomenon. In turn, this insight prompted us to organize the intervention in a way that foregrounded curricular goals, and data collected in subsequent years helped us to see the value of this approach.

Analysis of practice informed the revision of theory informing our work.

First, meso-evaluations of the project were not limited to evaluations of the intervention, but also included evaluation of our design principles. As noted above, the initial three principles seemed to be productive tools for evaluating the implementation. In particular, principles 1 & 2 seemed to underscore important tensions in our work, which kept us focused on making data-driven, principled decisions in attempts to improve the intervention. However, after our first year of work, when we determined that an additional principle was necessary, we added a principle (#4) that foregrounded the importance of discipline-specific curricular goals, positioning SFL as a tool rather than the content or ultimate goal of our intervention.

In addition, our meso-evaluations were likewise aimed at the high-level theory and orienting frameworks that informed our work. Following our second year of implementation, a conference paper (Moore & Palincsar, 2012) noted that the restructuring of the project that

occurred for Year 2 and the revised applications of SFL generally led to implementation that was better-aligned with our principles than the previous year. However, it also noted that the purpose of the lessons and SFL's role was still obscured at times. The paper suggested that there was perhaps a gap in the high-level theory informing our work; specifically, that it was lacking an explicit theory of reading comprehension. Kintsch's cognitive perspective, and particularly his concept of a *situation model,* deepened our understanding of our design principles in important ways. Perhaps the most important was a more careful consideration of what we meant by "meaningful" attention to language in principle #1. Kintsch's theory highlighted the need to pay close attention to the different types of meanings that could be made, as well as the types of thinking it required. In addition, the theory reminded us of the fact that meaning was not situated in the text alone, requiring integration of text understanding, the reader's knowledge and experiences, and particular goals in the context in which the text was read. This understanding helped us to better consider the different types of inferences required to make meaning of narrative texts and how we might support students in that task. These discoveries, in turn, influenced important changes in the ways the lessons took shape in our approach, and the ways SFL concepts were connected to disciplinary ideas in our third and final year of work.

Patterns of successful implementations in multiple contexts informed new domain specific instructional theories.

One of the central questions surrounding the pedagogical application of SFL often revolves around its complexity. Namely, *how much SFL is enough?* and *which technical/grammatical terms are most useful?* Prior to this project, and indeed at the start of it, we often took a broad approach to introducing teachers to SFL and in our own application of it. If teachers had a broad repertoire of linguistic knowledge (reflected in principle #2), we reasoned,

they could apply it flexibly to texts that have different challenging language features. We certainly still aim to help teachers apply SFL in flexible, purposeful, and powerful ways without the benefit of having specific pre-designed lessons or researcher support. But we have a clearer (and more realistic) expectation about how teachers might be able to learn to use SFL as they teach students to read and respond to narrative texts. Our DBR process has unearthed evidence of some high-leverage practices for applying SFL in service of commonly taught and highly valued skills relevant to ELA. The design narrative presented in this chapter provides partial evidence of these theories, but more substantial evidence is provided in subsequent chapters of this dissertation and other formal analyses (Chapter 3/Moore & Schleppegrell, 2013; Chapter 4; Schleppegrell, 2013). These *domain specific instructional theories* are:

1. SFL concepts of *polarity* (positive/negative) and *force* (turn up/down) can support ELLs in primary grades to engage with grade-appropriate narratives by giving them language for examining how and to what effect language realizes characters' attitudes. This finding holds potential for application across narrative texts and contexts, for attitudes of characters in narratives seem to be a common and important feature of the genre. In addition, considering those attitudes is an important aspect of the types of responses to literature that are typically highly valued in school (evaluations of characters) (See Chapters 3 & 4).

2. The notion of *processes* and *process types* can help ELLs to identify and make inferences about character attitudes as they are implied in actions or speech in grade-appropriate narratives. The process types can help teachers be concrete about what they mean when an author is "showing," instead of "telling." Authors can show attitudes through *doing* and *saying processes* (He smiled.) or they can tell attitudes with *being* and *sensing processes* (He was

happy.). While there are other sophisticated ways authors can present attitudes, the evidence suggests that this may be a good starting point (See Chapter 3).

3. The SFL genre of *character analysis* and stages informed by SFL demonstrated potential for providing students with explicit support for writing that provides careful judgments of characters, supports those claims with evidence, and elaborates on their rationale. In addition, the stages of *interpret* and *evaluate* can help make the skill of *analysis* concrete and accessible to ELLs in the primary grades as they read and respond to characters in literature. It is possible to provide students with explicit, stage-based support in ways that highlight the natural constraints and choices inherent in the genre (see Chapter 4).

Conclusion

This analysis contributes to the still-developing field of Design-based Research. First, it offers a detailed account of our research team's specific strategies that facilitated the development of new knowledge. As noted earlier, there are many essays and position pieces arguing for DBR or underscoring its potential, and there is some research that reports promising findings as a result of DBR. But there are limited examples available that make clear how conduct design research in ways that harness its potential to generate new interventions *and* develop instructional theory. This chapter provides one such example. In addition, this analysis calls upon the overall framework offered by McKenney and Reeves (2012), as well as the theoretical clarity offered by diSessa and Cobb's (2004) discussion of types and levels of theory. The use of these frameworks was of particular utility in uncovering the complex interplay of practice and theory that proved so crucial to the development. The work presented here is far from a template for DBR, and such a thing is not likely possible. DBR's greatest strength is also its greatest weakness: its necessary flexibility in responding to particular contexts, the problems

addressed, and the particular features and challenges of the proposed solution. But that does not mean we cannot establish general guidelines and principles for doing this challenging work, perhaps generated by studying multiple, explicit examples of DBR. This chapter only provides one such example, but one that demonstrates that DBR can facilitate the development of instructional interventions and knowledge that is more readily taken up by classroom teachers and is supportive of students most in need.

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CHAPTER 5: CONCLUSION

The guiding mission of this dissertation was to seek a better balance between explicitness and meaning in literacy instruction in the English classroom. The work presented here pursued this somewhat abstract goal in the context of a very real problem in education. English Language Learners, a significant and growing population in U.S. schools, have struggled to demonstrate the text-level literacy skills (such as reading comprehension and writing). In response, researchers and teachers alike have called for explicit *and* meaningful approaches to language instruction so as to offer them access to academic language and the subject-area content it construes. However, teachers have few tools at their disposal for this purpose. For the past 30 years, SFL has proven a powerful analytical tool for trained linguists, producing a vast body of research that has advanced knowledge about the linguistic challenges students read in school, and has brought clarity to the types of writing students are often expected to produce there. However, there are few examples of research in which classroom teachers and students use SFL to make meaning of curricular texts. This is understandable, for SFL is not only highly complex, but it offers a new way of thinking about language and grammar.

This dissertation contributes to existing research by exploring the ways in which SFL metalanguage might be used to support primary-grade ELLs to read grade-appropriate literature and write analytical responses to it. The research presented here offers evidence that SFL can be modified in response to learning contexts and applied in targeted ways to support specific curricular goals. More specifically, analysis of classroom conversations and student writing offered here serves as evidence that SFL constructs can be used by teachers and students alike in

the primary grades to engage with literature in analytical ways more common to secondary ELA. Each of the three manuscripts presented here offers additional support to the overarching claim that with these lessons, students engaged in conversations and writing practices that align with those highly valued in the secondary ELA. Individually, these manuscripts also make contributions to literacy research and practice, as well as research methodology. I will discuss the contributions and limitations of each manuscript in turn, prior to a discussion of the collective dissertation and its broader implications for practice, research and my own scholarly agenda.

Chapter 2 offers substantial evidence of SFL functioning as a mediating tool for meaning-making in students' verbal contributions to classroom conversations about literary texts. One of the major contributions is in the way SFL is treated—as one mediating artifact working in interaction with the overarching classroom activities and discourse. One of the project's greatest insights about SFL's role in the ELA classroom was generated from this analysis: SFL is one powerful tool for supporting an explicit and meaningful focus on language, but it is not working in isolation. Instead, it is a powerful tool that can work in harmony with other mediating tools of the classroom in service of specific learning goals.

The *character analysis* writing task (the focus of Chapter 3) helped shape the application of SFL in these reading-based lessons. It also shaped the ways SFL might relate to specific relevant curricular concepts. In a *character analysis* response, students are often asked to evaluate a character. Central to this task is the notion of characterization, or how an author presents a character through actions, dialogue and attitudes. One particularly challenging form of characterization is *indirect*, where character attributes or attitudes are implied in the author's word choice ("shown") rather than explicitly stated ("told"). The chapter offered evidence that the SFL terms related to *process types* helped to clarify the rather vague concepts of indirect and

direct characterization by bringing to light meaningful patterns in the language authors use to show and tell. Likewise, the curricular goals and literary terms offered SFL a clear purpose for application—without such purpose, a focus on process types can devolve into decontextualized labeling. The chapter also highlights ways that SFL can be incorporated into reading-focused lessons that were developed specifically to support students' interpretations and evaluations of characters that would align with the purpose of the final writing task.

Highlighting connections between SFL and literary terms also illuminates one of the limitations of our work, namely the lack of attention paid to traditional grammar, a metalanguage central to language instruction in primary and secondary school alike. Many teachers in our project expressed concern regarding functional grammar muddling students' understandings of traditional grammar, which was assessed on local and state assessments. While our materials aimed to make some reference to traditional grammar in the third year of our project (and thus the issue is not addressed here), the connection was not fully explored. Research and practice concerning explicit language instruction could benefit from exploring the ways that traditional grammar and the functional grammar of SFL might inform and complement one another. These ideas are discussed more fully in this chapter.

The second manuscript (Chapter 3) contributes to writing research in its exploration of an SFL-informed genre-based approach to teaching primary-grade students to write in the *character analysis* genre. It adds to existing SFL genre research by going beyond analysis of student texts—it also examined the context of instruction in which the writing was produced. By doing so, the analysis of both the classroom instruction and student written products was able to explore some common concerns about SFL-based approaches to writing instruction. The chapter first analyzed the ways in which the target genre was characterized in classroom conversations.

The analysis found that classroom conversations highlighted constraints and choices that are common and aligned with the genre's purpose. However, at times, the supporting materials and the teachers' language sometimes imposed unnatural constraints on the genre. The analysis also aimed to describe the writing students produced, for some scholars have expressed concern about genre-based instruction stifling students' creativity in writing. The analysis of the student writing demonstrated that the students produced character analysis responses that used registers appropriate to the genre and task—and they did so in varied ways, suggesting that despite the explicit support provided to them, they were still making several choices in their writing. In addition, our principled modification of SFL genres and stages in response to our research context serves as evidence that SFL notions of genres are not rigid, but can be modified to the learning context and instructional goals.

A significant limitation of this paper is related to the nature of Design-based Research. Data collected for this paper were collected in the second year of the project, and the approach (and expectations of students) were still very much a work in progress. As a result, we were unable to develop and administer pre-tests and post-tests on students' performance on the genre. While student writing products we collected for this analysis were generated independently by the students, and are thus a reasonable assessment of their writing and understanding of the story they had read, future research should explore if and how the approach presented here supports students' ability to read an unfamiliar story without the benefit of classroom conversations and write a character analysis response independently. Such work could bolster stronger claims regarding the efficacy of genre-based writing instruction.

Chapter 4 examined the *Language and Meaning's* DBR research practices and the evolution of our project, advancing SFL research and DBR research methodology more

generally. First, the narrative provided by this paper made explicit how DBR practices can systematically support researchers to improve instructional interventions aimed at addressing complex problems in education. Of particular importance to this aspect is that DBR processes supported our research group to pull from and integrate multiple forms of theory as we engaged in iterative cycles of development and evaluation. This was accomplished through the development of theoretically- and research-based design principles. In addition, the systematic evaluation of our work, particularly during meso-evaluations (during summers), enabled us to make significant and theoretically-grounded changes to our instructional approach.

The chapter likewise contributes to DBR research, for it provides another much-needed explicit example of how such research can be conducted in ways that generate new instructional practice and theory. The example presented here cannot be considered a blueprint for other projects, but it does provide an explicit example of how the DBR process facilitated the development of both the intervention and local instructional theories. Perhaps most importantly, the chapter makes explicit how different types of theory interacted with instructional practice, and how that interaction developed each. Of course, this would have been impossible without the theoretical framework provided by diSessa and Cobb (2003) as well as McKenney and Reeves (2012). Chapter 4 builds upon the broader DBR research base in an important way by providing contextualized examples of these theoretical concepts being used to draw theoretical and practical insights about our project.

Many of the positive applications of SFL presented in chapter four are elaborated in earlier chapters. What chapter four adds is evidence that highlighted the challenges of applying SFL in real-world classrooms, presented primarily in the chapter's examination of our first year of research. For example, the paper presented an excerpt from a classroom where the students

identified all of the *sensing processes* <u>in a story</u> as a means of engaging in a conversation about the characters' feelings. The formative evaluations noted that this application of SFL not only failed to support the intended focus on textual meanings, it precluded conversations about more relevant and linguistically challenging parts of the story. This illustrates that even though SFL concepts are based on a *meaning-based metalanguage*, use of the metalanguage in itself does not necessarily mean those terms will be applied meaningfully. Such examples are significant and valuable because they highlight some of the very real challenges SFL scholars and teachers alike will face when trying to translate theory into practice.

The most significant limitation of chapter four is necessarily linked to the nature of DBR itself, which is committed to developing instructional theories *locally* not yet generalizable to other contexts. Our lessons were implemented by more than 30 teachers in six different schools, and were thus taught to more than 500 students in the last year of implementation. However, many of those contexts were similar: the vast majority of students spoke Arabic as a first language and had teachers who were also fluent in it. In order for the local instructional theories presented in the Discussion section of Chapter 4 to become more than local theories very much tied to this specific research context, it's imperative that our approach be implemented with other teachers and students in need of additional language support (such as with Spanish-speaking students, or in areas where ELLs are a minority or migrant population). Regardless, Chapter 4 not only presented evidence of SFL's potential to serve as a meaning-making tool, but also described the research processes that supported systematic discoveries.

Collective contributions & future research

I began this dissertation by offering an anecdote from my time as a high school English teacher in Colorado. As I noted there, I was happy in that role, and by most accounts, I was quite

successful at it. At the same time, I knew that I was not successful in the ways I valued most. I wanted *all* of my students to learn, and that was not the case. This is perhaps an unreasonable expectation, for success in high school depends on many things beyond my own control. But if students were willing to put in the extra work, I believed they deserved to succeed at the highest level. This was not the case with my students who spoke Spanish as a first language. Many of these students would visit me regularly in the after-school writing lab to work on their essays and read the assigned literature. But despite our many hours of work, I was unable to provide them with clear, specific ways to analyze the texts—a key skill for writing literary essays. They often summarized what the quotes from the stories said or reacted to the stories in ways I deemed inappropriate for reasons I couldn't quite articulate.

As Chapter 1 discussed, among the issues contributing to this outcome is the lack of tools available to English teachers for supporting students to access meanings in literature that lie beneath the surface. As Lukin (2008) noted, identifying symbols, metaphors and the like can only take teachers and students of English so far, and only represents a very small aspect of how authors craft their texts. In fact, she suggested that an approach to talking about literature that relies on identifying such constructs might actually give students the wrong idea that these features are what define good literature. Likewise, it could give students an impression that literary analysis is the process of identifying these features–promoting a sort of 'hunt and peck' approach to reading literature, straying from the purposes for reading literature that are valued and expected in the secondary grades.

In addition, researchers analyzing student writing have found that students in primary grades are not asked to respond to literature in writing in the ways they will be expected to in secondary English. This also contributes to poor outcomes for secondary students. In the

elementary grades, relatively little instructional time is spent on writing in general, but when students are asked to write, they are typically writing personal narratives. In the case that they are asked to respond to literature, they generally write personal responses (Christie & Derewianka, 2008). When they arrive in high school, they are expected to analyze literature for the first time. This curricular disconnect is a disservice to young students because many of the features of the personal responses they have been asked to write so often may actually hinder their success on analytical genres. The emotional reactions valued in personal responses to literature are actually a language feature of literary essays deemed less successful (Christie & Derewianka, 2008; Rothery & Stenglin, 2000). Teachers not only need greater awareness of these features, but they need ways of talking about literature and supporting the gradual development of students' analytical writing skills.

These issues framed the goals of this dissertation: to explore the ways in which linguistic metalanguage might support primary-grade ELLs to participate in conversations and writing that enabled them to analyze literature. The data and analysis presented here offer significant evidence and warrants demonstrating that young ELLs *can* engage in conversations and writing about literature in which they interpret and evaluate characters. Data from the classroom–primarily in the form of students' writing and transcripts of classroom conversations—offer powerful examples of students successfully accomplishing these tasks with support from the linguistic metalanguage. In the following sections, I will relate this overarching claim and some of the supporting evidence to specific issues in the field of English Education more generally, and discuss potential implications for teaching and research.

What is English, and why does literature matter?

The secondary English Language Arts (ELA) classroom is a place where language development is expected and explicitly in focus; however, the goals of the subject are contested and shifting, (Christie & Macken-Horarik, 2011). The subject's focus is sometimes conceived of as basic skills or personal growth and more recently, as multiliteracies and new literacies (Christie & Humphrey 2008). Often, these conceptions of ELA, which imply different pedagogical foci and present different linguistic challenges, co-exist and sometimes compete with one another. English teachers are often expected to teach grammar, reading and writing skills, critical theory, and classic and contemporary literature. Despite the various emphases and shifts in goals over time, the reading of literature in English class remains a primary emphasis.

But *why* should students read literature in the ELA classroom? It seems appropriate to address this issue through literature I mentioned at the outset of this dissertation, *To Kill A Mockingbird* (Lee, 1960/1988). The story is narrated by Scout, a young white girl living in the southern U.S. in the 1940s. In the story, an African American man is wrongfully convicted of raping a white woman. Throughout the book, Scout's father, Atticus, offers his daughter ethical guidance for trying to make sense of a world that fails to make much logical sense to her. He tells her: "You never really understand a person until you consider his point of view—until you climb into his skin and walk around in it" (p. 30). This quotation speaks directly to why we should read literature in English class. Literature offers us opportunities to learn about the world beyond the limits of our own personal experience; and it offers new lenses for understanding our own experiences as well. We read about literature to learn more about ourselves, personally and as a society, with the hopes of perhaps making it a more just place.

The unit of instruction analyzed in this dissertation, in which students read and responded to "George and the Cherry Tree," engaged young ELLs in conversations that required them to

think in ways that are often considered higher-order thinking. The goals of the unit were to interpret and evaluate George and his father based on their actions, speech and attitudes. Making such interpretations and evaluations holds potential for engaging students in important conversations about dilemmas we face in life. For example, students considered what it meant to be a "good kid." In the class where I piloted the materials, I was impressed with the students' ability to take rather sophisticated stances on the topic. They didn't simply state that George was good or bad. As students were selecting evidence to support their evaluations of George, they instead argued more nuanced claims. One student said that George was not perfect, but he was overall, a good kid because she genuinely thought that George felt guilty and remorseful for his actions. Other students made similarly complex arguments about George, while supporting a more negative appraisal of his actions and attitudes about his transgressions. The activities supported students to make their own interpretations of the literature, and take reasoned stances toward it that they supported with details from the text. The goal of such conversations in ELA is not to arrive to some agreed consensus about what is "right," but is instead to engage in discussions in which students carefully consider and question the values of society, and make informed, thoughtful decisions about their own lives. We don't live in a black-and-white world, but all too often, superficial judgments are made—without having considered other people's perspectives. Literature offers all of us opportunities to transcend ourselves and try on someone else's "skin and walk around in it," and ultimately, to engage in critical conversations about ethical dilemmas in literature that prepare students to better read the real world more critically.

Many students, however, do not have opportunities to engage with literature in these ways. For many ELLs, research has demonstrated that they are often in classes that assign independent seat-work and offer predominantly teacher-led lectures. Perhaps the greatest

contribution of the work presented in this dissertation is the evidence that ELLs *can* engage with literature in these highly-valued ways—while also learning more about how language helps to shape those subtle meanings in literature. The explicit focus on language was not only offered in a meaningful context, but it specifically supported students to respond to literature in ways they will be expected to in ELA in middle and high school. In this way, the application of SFL in support of ELLs' meaning-making provided an example of how close attention to language can be integrated into the teaching of literature, rather than teaching language and literature separately.

A functional approach to language instruction is not only suited for integration into teaching literature, but this integration can bring to both a mutual clarity of purpose. This exact point was argued by Christie and Macken-Horarik (2011): "Teaching knowledge about language in this way enables teachers to make visible the requirements and possibilities of each model of English and to build cumulative learning in students" (p. 184). One salient example of this was presented in Chapter 2, where the metalanguage from transitivity and appraisal systems (process types and terms related to attitudes) could make explicit some of the language features of *indirect characterization*. In turn, the notion of *characterization* offered a meaningful context for learning the SFL metalanguage. The research presented here offers powerful examples of SFL offering tools that are quite accessible to teachers and students, and support their *explicit, meaningful* attention to language in challenging and relevant literature.

However, we need many more powerful examples of integrating language and literature instruction in the ways reported here. In my future research, I aim to more fully develop an approach that supports a developmental trajectory for students' learning from the late elementary grades through high school English.

Teaching language and literature in ELA: toward a coherent approach across the grades

A singular ELA curriculum across the grades is not possible or even desirable, but it is possible to bring more coherence to the various skills, content, and purposes involved in successful participation in ELA. SFL genre theory, socio-cultural approaches to literacy instruction, and approaches that support the development of disciplinary literacy can all help the field move toward more coherent instructional approaches that are supportive of the kind of reading and writing valued in ELA. Of course the goals of the secondary English curricula should not supplant the current primary curricula. However, young students should have opportunities to engage with texts in the ways that are valued later in school—ways that are informed by specific and challenging curricular goals in the subject areas. The following discussion will develop these ideas by: 1. proposing a "spiral" curriculum that teaches and re-visits genres common to ELA; 2. addressing how socio-cultural and disciplinary literacy theory can inform instructional approaches; and 3. discussing the purposes of traditional and functional grammars in the ELA curriculum.

A spiral curriculum based on functional notions of genre

The notions of *genre* and *register* hold great potential for helping to construct a coherent approach across the grades in the ELA. The ELA curriculum is somewhat unique compared to other subject areas, as it's sometimes described as having a "horizontal knowledge structure" compared to a "hierarchical" structure such as science, where a sequence of instruction may be more apparent (Christie & Macken-Horarik, 2011). As such, developing a clear trajectory in ELA faces additional challenges other subject areas may not. However, that does not mean order cannot be brought to ELA. Christie and Macken-Horarik (2011) call upon Bruner's notion of a

"spiral curriculum" in useful ways, pushing the conversation regarding subject English curriculum forward.

Christie and Macken-Horarik (2011) propose a curriculum that offers students multiple opportunities to write in the many genres of ELA as they progress through the grades. This is a key concept in the ways we need to think about structuring approaches to teaching ELA. A brief description of the genres of ELA they identified is valuable for making this point concrete. They suggest that, based on their functional analyses of students' writing in the ELA across the grades, student responses can be categorized into two main families of genres: narrative and literary response. In the narrative family, students are often asked to write *traditional narratives* and also *personal recounts* of personal experiences. With regard to literary responses, student responses can be divided into two types. The first type asks students to respond in rather personal ways, in the form of *personal responses* (feelings about the character or story; or personal reactions); and *reviews* (similar to "book reports" with summarize the major events prior to making a general evaluation of the story). The other type of literary response they describe consists of analytical genres: *character analysis* and *thematic interpretation* (an abstract reflection on text(s) and their values).

Christie and Macken-Horarik (2011) suggest that these genres can be developed over the years of schooling by presenting these genres in different situational contexts and by gradually introducing challenging linguistic text features common to those genres. I believe this approach holds great promise, and my dissertation makes a specific argument regarding the shape of this spiral curriculum: young students need opportunities to respond to literature in analytical ways—as early as the second grade. The work presented here demonstrated that students can engage in analytic writing when the tasks are presented to them in developmentally-appropriate ways and

within a pedagogy that offers significant scaffolding for their successful writing. In the case of the *George and The Cherry Tree,* we presented the character analysis task in way that enabled students to write a rather simplistic variation of the genre. The way the prompt and task were presented, students needed only to write one paragraph that incorporated one piece of evidence. In many of the second grade classes, the teachers and students co-constructed a response to the prompt rather than writing independently. This was a reasonable place to start, but it is obviously not the end goal.

While we were not able to build these skills in all the classrooms where we worked, we were able to pilot a subsequent *character analysis* writing unit with one 4th grade teacher. This unit, reported on in the chapter 3 discussion about the story *Pepita Talks Twice*, demonstrated the potential of offering students multiple opportunities to write in the *character analysis* genre. The task added a couple of aspects that increased the complexity of the responses. First, the language of the story presented the characters' attitudes in new, complex ways. In addition to presenting implied attitudes through Pepita's actions and dialogue, her frustration was also represented in an abstract grammatical participant (a "grumble"). So our engagement with narrative texts maintained the same type of purpose and focus as when we addressed the George text, but we were able to build upon students' knowledge about language in a way that supported their reading and writing in response to the text. Secondly, the prompt was more complex than the one offered in the first unit; it asked students to write about the ways in which Pepita's attitude about being bilingual changed in the story, and to evaluate Pepita based on those attitudes. The prompt required students to offer multiple claims, evidence and analysis (about different feelings) embedded into an overarching claim about how she changed. I cannot draw specific comparisons across the students' two attempts at writing *character analysis* responses, for it was not the focus

of the writing analysis presented in chapter 4. I can say that the students' responses to the George Washington text did not vary much, as much of those responses were co-constructed with their teacher (the reason why that set of writing was excluded from the chapter 4 analysis). The implementation of the Pepita unit was heavily scaffolded with the use of graphic organizers and very pointed discussions about the text (that would support their writing), but students' responses nonetheless aligned with the purpose of the genre and were organized in ways that suited the prompt.

One of the main benefits of repeated opportunities for modeling and practice in writing character analysis is that it gives students the opportunities to see the different *instantiations* of a genre, which of course vary in the parameters of the task and the context. Different specific instances and situations for writing the genre offer students the opportunity to see how and why the particular structures of the responses might vary based on the way the prompt is constructed, or other aspects of the context, such as the literary text itself, even while they recognize that the social purposes of the task are similar. Having such conversations about different instantiations of the genre can prepare students to be more aware as they make choices about how to structure their responses. At the same time, the metalanguage that we offered students (such as the functional stages) offers students access to some of the moves that are often helpful in structuring those texts. In this way, the metalanguage is able to provide students with some explicit support about types of moves that will help them successfully engage in the genre, but will also prepare them with the awareness of the genre that will enable them to adapt to the particular demands of situations.

This research also suggests how students' exposure to and writing of analytical forms of response to literature could be made increasingly complex across the grades, starting in the

elementary grades and through middle and high school. A key area to be explored for doing this work is in identifying the ways in which the *literary response* genres can be made more and less complex. Some potential areas of exploration in this area include varying the: 1. text complexity of the literature students are responding to; 2. level of abstraction (or concreteness) presented in the prompt; and 3. number of characters to be interpreted and evaluated (for example, eventually incorporating comparison of characters). In the first realm, there is significant work to be done. I believe the work presented in this dissertation offers a helpful start regarding addressing relevant text features in primary-grade literature (attitudes are often implied in characters' attitudes through their actions or *how* they say dialogue). With a character analysis at any level, students will likely need to pay attention to characters' attitudes, but those attitudes are likely to be presented in increasingly complex ways. For example, the 4th grade text presented attitudes in increasingly abstract ways—through a grammatical participant (the "grumble"). Examining the language features of more challenging literature—particularly in identifying some patterns in how those texts present character attitudes in increasingly complex ways—will be an important and fruitful research path.

Likewise, the level of abstraction in *literary response* tasks is important and should inform a systematic presentation of prompts that increases in abstraction as students continue to engage in such analytical writing. The prompt for the *George and the Cherry Tree* text was fairly concrete in that it focused on one main character and asked students to evaluate him in a relatively simply fashion ("Is he a good kid?"). However, the prompt could have been presented in a more complex way. For example, a *thematic interpretation* often requires students to interpret and evaluate characters in ways similar a *character analysis*, but is often presented in less concrete terms. A prompt for the George Washington text could have focused on a particular

abstract concept, such as honesty, perhaps requiring students to define the concept of *responsibility*, and developing a stance regarding it by discussing George's situation. While the social purpose, structures, and language features in a *thematic interpretation* will share some similarities with *character analysis,* they are not identical. Close analysis of these aspects of the genre could inform instruction in this more abstract form of analysis, as it did with the character analysis units presented here.

While the previous discussion describes the potential of systematically scaffolding students' movement through the *literary response* genres, it's also important to note the value in utilizing, examining and discussing other genres common to ELA, their social purposes, and some language features. In addition, we can utilize these different genres to support students' learning more generally. Both units of instruction presented in Chapters 2 and 3 of this dissertation were ultimately aimed at supporting students' writing of character analysis responses. However, each of them incorporated other genres common to the ELA curriculum in ways to support that overarching goal and also to capture students' attention and interest. At the outset of the *George and The Cherry Tree* unit, students were asked to respond (in conversation and/or writing) to the following prompt: *When did you do something wrong and get away with it? Did you confess what you did or keep it a secret? Why?* According SFL genre theory, this would be considered a *personal recount*, a form of narrative text. Its purpose in this context was to engage students with the type of dilemma we would be discussing with the text, while also allowing them to pull from their own personal experiences. In the *Pepita Talks Twice* unit, students were asked to write *personal responses* to the text at different parts of the story. The purpose of this task was to engage students in less formal opportunities to evaluate the character or connect personally with Pepita's situation. As such, it is not dissimilar to reader response approaches to

teaching literature commonly used in secondary ELA instruction. The 4th grade teacher who implemented this unit did an excellent job of making explicit connections between this written genre and their character analysis responses. She explicitly prompted students to revisit some of those ideas as they were writing their *evaluations* of Pepita. My central point here is that the genres of the ELA curriculum can serve different purposes and can be used in complementary ways—all shaped by the overarching curricular goal. In these examples, the various genres were utilized flexibly and purposely to suit our particular goals and our students. But it's important to note that the goal of the curriculum *need not always* be *character analysis;* instead, seeing the purpose of genres can help us to sequence units of instruction that consciously scaffold the types of thinking and skills necessary for success.

By examining varied genres of ELA, we might also support students' genre awareness, and also apply metalanguage in different contexts for different purposes. Two particularly telling examples from the dissertation data come to mind, both of which relate to applications of metalanguage from the SFL system of *appraisal.* In the fourth grade class studied in Chapter 3, the teacher engaged students in a conversation about author's purpose using the functional metalanguage. She asked them *why* the author had "turned up" the emotions in the story, which elicited students' to discuss the fact that he probably wanted us to feel what the characters feel— or to make it more interesting for the readers. In this case, the teacher pushed the students to consider the rhetorical reasons for those linguistic choices in that story. The teacher is helping her students to understand the purpose of the genre, and the talk about the language features helps them to understand how the author uses language to accomplish those purposes.

Examining and discussing multiple, varied genres of ELA can also provide opportunities for students to apply metalanguage in different contexts for different purposes. A particularly

interesting example occurred during my piloting of the *George and The Cherry Tree* unit. The metalanguage of appraisal (positive, negative, turn up/down) unexpectedly transferred from discussion of the narrative genre the students were reading to the character analysis genre they were asked to write in a productive way. In the context of the narratives, the appraisal constructs helped the students to systematically discuss the characters' attitudes (especially their feelings). But when it was time to write *claims* for their *character analysis* responses, those same appraisal terms helped students to generate nuanced analytical opinions of George as well (discussed in more detail in Chapter 3). This not only supported students' writing in the character analysis genre, but it also enabled them to see that the metalanguage can be applied in different contexts (with different types of texts) and for different types of purposes.

In sum, I argue that a few general principles could help organize an approach to teaching ELA that could bring more coherence in the simultaneous teaching of language *and* literature. First, I think students of all grades should have opportunities to engage with the varied types of genres common to ELA. Likewise, teachers and students should be aware of what those genres are called, what their social purposes are, how they are typically structured, and what language features can support their function. It's particularly important to introduce literary response genres to students earlier in school, and offer them scaffolding to help them write in those genres in developmentally appropriate ways.

Informing implementation: calling upon socio-cultural and disciplinary literacy theory

To this point, this discussion has focused on how genre theory might inform teachers to make systematic, informed decisions about *what* to teach in ELA. *How* to teach students to read and respond to literature can also be informed by other theories of learning and literacy that are commensurate with SFL theory. First, a socio-cultural orientation to learning has proven

important to the work presented here. This is addressed explicitly in Chapter 2, where socio-cultural theory from Wells (1994; 1999) and Vygostky (1978) enabled analysis of the ways in which SFL-based metalanguage served as a mediating artifact in conversations about literary text, and in Chapter 3, where the units of instruction that were analyzed were informed by and aligned with a socio-cultural theory of learning. First, the sequence of lessons aimed to move from a highly-supportive and collaborative engagement with the target genres toward independent construction. At each stage, students were positioned to construct knowledge, not be passive recipients of knowledge. For example, the writing instruction began by introducing students to the purpose of the target genre as well as some of the stages. During this process, students deconstructed an example text, engaging in a "scramble" activity where they identified a piece of text and determined its function. Even at this early stage, students were collaboratively determining and discussing which pieces of text were achieving the function of the genre. In a subsequent lesson, the teachers and students co-constructed a response to a character analysis prompt, offering them models and support for learning how this genre is structured and developed. Lastly, the students were supported—through a graphic organizer tailored to the genre and task—to write a *character analysis* response. As was reported in Chapter 3, the students often revised what they wrote on the organizer—seeing how the different stages of their responses relate to one another as well as the purpose of the genre.

In this overall process, the SFL-based metalanguage served as one type of scaffold among many. In addition to offering the purpose and some stages of the genre, it offered scaffolding that supported students to accomplish some of the challenging tasks of the genre. For example, with knowledge of process types and how they relate to expressing attitudes, students had specific linguistic resources for offering interpretations of characters (using being or sensing

processes to explicitly tell what a character is thinking or feeling). Their *evaluations* of the characters were likewise supported by the formulation of "This shows ... because ..." Of course, these explicit features are only to be considered scaffolds for helping students write in interpretive and evaluative ways. Like all scaffolds, the intention is for these specific features to eventually disappear as students find other ways to accomplish the same purposes. And it should be noted that even with these rather prescriptive formulations, students offered very different (but successful) interpretations and evaluations, as reported in Chapter 3.

The notion of disciplinary literacy instruction could likewise be helpful in bringing clarity to the ways students can successfully participate in the practices ELA. As previously noted, discussing ELA as a "discipline" is not easy for it has many "gazes" regarding its purpose, and there is disagreement over whether English is a "discipline" (Christie & Macken-Horarik, 2011). But the point of disciplinary literacy theory is that the norms of practice differ across disciplines and subjects, and this general notion is useful in thinking about the focus of the ELA classroom. One particularly interesting aspect is the notion of "habits of mind" that are common to a field of study. For example, "[t]o read a history text requires particular metacognitive and cognitive processes to come into play, processes that are demanded by the social and cultural practices, or the discourse of the discipline itself" (Moje, 2008, p. 100). In other words, the ways students might be expected to read a text in history class will vary from the ways they'll be expected to read literature in English class.

One of the ways in which we might inform the debate about whether English is a subject/discipline and if so, what its various perspectives are, is by applying the disciplinary literacy lens to the genres students are often expected to write, as well as the genres they're expected to read. By looking at these genres, we can also consider what types of metacognitive

and cognitive processes might be required to successfully write in those genres. One way to think about the "habits of mind" that are required for participating in the genres is by considering what types of questions we need to ask ourselves as we read in order to write analytically. In the data and materials presented here, we can already uncover some of these questions in the context of reading narratives in ways that support the writing of *character analysis* responses. Some of these questions might include: *What does the character feel? Does the character's actions show what they think or feel? How do I know? What does this show about what kind of person the character is? Why do I think that?* While this was not an analytical focus of the work presented here, our lessons often built in similar sequences of questions to help teachers guide conversations about literature that would support students' interpretive reading and analytical writing. A more formal analysis of this aspect of the materials and classroom conversations could offer insights that make contributions to disciplinary literacy approaches to teaching ELA—as well as inform the ways in which SFL metalanguage might offer more students access to those literacy practices.

Teaching grammar(s) in ELA

Among both teachers and researchers of ELA, perhaps no topic is more controversial and divisive than the issue of teaching traditional grammar. The debate generally concerns a very different type of grammar than is presented in this work. Traditional grammar is often conceived as a prescriptive approach to teaching rules of language use for the purpose of correcting grammatical errors in student writing. Some of the most common instructional activities include diagramming sentences or labeling parts of speech in sentences removed from meaningful context. Multiple meta-analyses (Hillocks, 1986; Graham & Perin, 2007) have reported that such grammar instruction does not improve student writing. In light of such findings, teaching

students knowledge about language fell altogether out of fashion. In discussing this issue, Locke (2010, p. 7) wrote: "You could say that the baby had been thrown out with the bath water (that is, sterile routines of teaching formal grammar for the purpose of error correction)." In other words, the sterile teaching *methods* long-associated with grammar led to teachers and researchers to avoid teaching about language altogether. Perhaps the debate around grammar instruction has focused on the wrong question: should traditional grammar be taught? The more pertinent questions may be:

> *Why* should we teach students about language?
> *How* can we teach it in ways that will serve those goals?
> And, *which* grammars are well-suited to those goals and contexts?

These questions, in relation to the research presented here, can serve as a launching point into the discussion of how SFL-based grammar may connect with the metalanguage of traditional grammar.

The overarching purpose of teaching students metalanguage from SFL was in order to address the two main goals outlined at the start of the dissertation: supporting students to "read between the lines" when faced with challenging, grade-level literature, and in turn, write analytical essays. The grammatical metalanguage offered by SFL was particularly well-suited to those tasks. The appraisal system afforded our students a systematic way of talking about character attitudes, and the process types made making inferences about implied character attitudes more concrete. Likewise, the notion of genre (purpose, stages) and register offered helpful tools for supporting students to respond to stories in analytical ways. In addition, a socio-cultural theory of learning informed our general approach to *how* our instruction would be implemented so as to engage students and position them as active meaning-makers. In very general terms, we offered students as many opportunities to talk with each other and the teacher

in *meaningful* conversations about literature. Thinking of this kind of work as *grammar teaching* offers new ways of making grammar instruction meaningful and useful.

Traditional grammar—despite its long history of being used in prescriptive, decontextualized ways—can likewise be used to support students' meaning making when used in in connection with rhetorical effects (*rhetorical grammar*). In fact, there is evidence that instruction of traditional grammar that is embedded within students' writing and explicitly connected with rhetorical meaning can not only improve students' writing, but also improve their metalinguistic understanding (Myhill, 2003; Myhill et al., 2011). This work is an indication that teaching grammar (regardless of *which*) seems to be most powerful when used in the service of meaning making.

It's also important to note that the instruction presented here was not concerned with surface-level errors in student writing. That is not to say that this is not an important issue, for the inability to write in ways appropriate to formal settings such as school and work can have serious negative consequences. It's important to teach the features of the Standard American English (SAE) to support students in editing their written products. However, it's also important to teach it in ways that do not marginalize or demean students, but instead position them to question the rules and assumptions underlying the SAE dialect (Curzan, 2009; Delpit, 1995; Wheeler & Swords, 2004). Perhaps a descriptive approach to language rules—using traditional grammar terms—might be best suited for addressing these errors in meaningful contexts. However, the focus on form should come at the editing stage and not be the key focus of teachers' response to their students' writing (Schleppegrell & Go, 2007).

All students, particularly ELLs, need explicit and meaningful instruction about language that supports their reading and writing of subject-specific academic language. The data presented

in this dissertation offered evidence that SFL offers powerful tools in that regard, particularly in helping students to interpret and evaluate characters as they respond analytically to stories in both conversation and writing. Traditional grammatical metalanguage was not a central focus of this research, but other research suggests that it is most powerful when taught in service of students' meaning making, and efforts for editing student writing should come after they have been supported to generate and develop their ideas.

Closing thoughts

My understanding of how classroom teachers could benefit from the knowledge offered by SFL theory has evolved significantly over the two years in which I was engaged in this inquiry. Prior to this research, I assumed that teachers would benefit most from access to a broad SFL toolkit that would enable them to delve into different texts with a wide range of tools. This viewpoint is certainly theoretically defensible, for texts can present unique challenges and SFL offers many powerful tools for addressing difficult language. My research indicates that this is not a practical way of thinking about how this powerful linguistic theory can be best implemented to inform teaching and learning. As was noted in Chapters 2 and 3, SFL theory is highly complex and can be an unfamiliar way of thinking about language, and its system of tools for describing language is, by necessity, equally complex. In addition, adapting these tools into pedagogical approaches that support meaning-making in support of specific curricular goals is no simple task. The difficulties were evidenced in Chapter 2's description of our first year's application of process types, and my first-hand experiences teaching 9th grade English at an urban charter school in Detroit also pushed me to understand this important point. Even though I had a deep knowledge of SFL, as well as strong grasp of the curricular content, I found it nearly impossible to fuse the two while also dealing with the challenges of teaching (planning, grading,

etc.). The SFL toolkit was too broad. What I wanted was a few powerful SFL tools that I could use on most curricular texts in service of specific and central goals of the ELA. Such an approach enables the principled narrowing of relevant SFL tools while also foregrounding the purpose for applying them. This dissertation contributes to our understanding of which tools can be applied in the discussion and analysis of literary texts at different grade levels, and suggests how those tools interact with and support the goals of the ELA teacher. This provides a way of thinking about how this theory of language can be adapted to other contexts as well.

This dissertation has also indicated how a trajectory from the early grades into the secondary years can be described that prepares students for the challenging work of analyzing literary texts and drawing interpretations from them. It has shown that even young ELLs can be supported to read "between the lines" of challenging grade-appropriate literature—by interpreting characters' implied attitudes and making evaluations of characters grounded in textual evidence. The dissertation also offered evidence that such analysis itself can be supported in explicit and helpful ways. Future research can undoubtedly continue to show how other genres valued in secondary English can be introduced in the early grades and teachers can be provided with tools for talking about their purposes and structures. This is important work in the context of the increasing expectations for students to read complex texts and write arguments across subject areas.

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