Supporting Fifth-Grade ELLs' Argumentative Writing Development

Written Communication 2014, Vol. 31(3) 304–331 © 2014 SAGE Publications Reprints and permissions: sagepub.com/journalsPermissions.nav DOI: 10.1177/0741088314536524 wcx.sagepub.com



Catherine L. O'Hallaron¹

Abstract

This article reports instruction supporting the development of fifth grade English learners' argumentative writing in an English language arts setting. Arguments analyzed for the study were produced by the same students on two occasions, roughly 3 months apart. In the first instance, students discussed the source text in detail, but were given no genre-specific support for writing. Following professional development, the teacher introduced students to the stages, or structural elements, expected in argumentation, with genre-specific scaffolds. Classroom data illustrate how the teacher scaffolded students' argumentative writing. Analysis of writing data identifies the text- and stage-level features of students' responses, with particular attention paid to students' construction of the reason stage, in which writers must explain why textual evidence supports their overall position on a question about a character or theme. Findings describe the range of responses and point to characteristics of texts and prompt that may influence children's written argumentation.

Keywords

elementary, writing instruction, argumentation, English language learners (ELLs), Systemic Functional Linguistics (SFL), genre

Corresponding Author:

Catherine L. O'Hallaron, University of Michigan, Ann Arbor, MI 48109, USA.

Email: ohallcat@umich.edu

¹University of Michigan, Ann Arbor, MI, USA

The ability to understand and engage in academic forms of argumentation, always a critical component of school success for older students, is poised to become increasingly important for children across the grades. The Common Core State Standards (CCSS) emphasize the development of argument throughout the formal schooling years (National Governors Association Center for Best Practices & Council of Chief State School Officers [NGAC & CCSSO], 2010b). While narrative genres have traditionally been privileged in elementary classrooms, frequently to the detriment of expository genre development (Duke, 2000; Kamberelis, 1999), the implementation of these reforms means that even the youngest students will soon be asked to engage in a kind of reasoning and writing that has generally not been addressed until the advanced grades. The move to infuse argument across the K-12 curriculum represents a positive step toward increased support for the development of a difficult genre. This new emphasis, however, is likely to pose a significant challenge for students and teachers alike. Solid instructional support for argumentative writing will be essential for all developing writers, and especially so for English language learners (ELLs), whose academic outcomes depend on teachers' ability to provide explicit support for literacy development (Genesee, Lindholm-Leary, Saunders, & Christian, 2006).

There is ample evidence, from both national testing data (National Assessment of Educational Progress, 1999; Perie, Grigg, & Donahue, 2005) and research studies (e.g., Crowhurst, 1990; Knudson, 1992), showing that North American students across grade levels struggle to produce effective arguments in traditional instructional contexts. At the same time, research on interventions supporting argumentation has shown promising results (see Andrews, Torgerson, Low, & McGuinn, 2009, for a review). Much of this research, however, has been carried out with older students, and relatively few of the interventions reported on at the elementary level have focused on the evidence-based logical argumentation emphasized in the CCSS. Research on young English learners' argumentative writing is even more limited. This study describes how a class of fifth grade ELLs engaged in two incipient forms of written argument in the English language arts. The research questions addressed in this study are the following:

1. What are the text- and stage-level features of fifth grade ELLs' writing produced in response to an argumentative writing prompt in the absence of genre-specific support? What are the features of the same students' written arguments produced with argument-specific support for writing?

2. How are children's arguments shaped by instruction and other features of the instructional context?

Defining Argumentation

In research and practice, there is often ambiguity around the use of the labels argumentation, persuasion, and opinion. At times these labels are used interchangeably, but they also represent meaningful differences in what a piece of writing hopes to accomplish and how. The difference between persuasive and argumentative writing can be understood, respectively, as an attempt to change readers' point of view or incite them to act versus an act of inquiry in which logical conclusions are drawn based on a careful evaluation of evidence. The authors of the CCSS concur with these broad distinctions, as they make clear in an explanatory appendix. To help stakeholders understand the standards' emphasis on argument rather than persuasion, they write,

When writing to persuade, writers employ a variety of persuasive strategies. One common strategy is an appeal to the credibility, character, or authority of the writer. . . . Another is an appeal to the audience's self-interest, sense of identity, or emotions. . . . A logical argument, on the other hand, convinces the audience because of the perceived merit and reasonableness of the claims and proofs offered. (NGAC & CCSSO, 2010a, p. 24)

Research on argumentation often draws on a model elaborated by Toulmin (1958), the basic version of which consists of a claim, evidence (or data), and warrants. Claims are "conclusions whose merits we are seeking to establish" (p. 97). Evidence includes facts or examples supporting the claim. Warrants are general, law-like statements that act as bridges between evidence and claim. An elaborated version of this model also includes rebuttals, or responses to opposing viewpoints. Though it is not the only approach to conceptualizing argumentation, the influence of Toulmin's work is evident in the CCSS for argumentation, which reference these, or roughly analogous, elements (warrants become reasons, the term I will use hereafter; rebuttals are counterclaims). While the label opinion is used in the CCSS until sixth grade, the standards' authors indicate that this term implies a developmental form of argument, with a primary emphasis on developing control over the basic structural elements; not until middle school are students required to attend to whether their reasons are logical and their evidence relevant or include counterclaims, and only in high school are students expected to display a nuanced awareness of their audience (NGAC & CCSSO, 2010b). Given its focus on fifth grade students, this study uses the term argument.

Research on Children's Written Argumentation

A number of instructional interventions have been effective in supporting younger students' argumentation. These studies demonstrate the value of presenting explicit instruction on the structural elements of argumentation in conjunction with opportunities to read, discuss, and write arguments on different topics. Yeh (1998), for example, found improvements in argumentative writing for middle school students immersed in reading, debate, peer response, and writing activities, but saw larger gains for an experimental group also receiving instruction in the use of prewriting heuristics illustrating the logical relationships between structural elements. Other research suggests that upper elementary and early middle school students can benefit from explicit instruction combined with collaborative writing work and choice of topic (Hidi, Berndorff, & Ainley, 2002) and strategies for planning writing (e.g., Graham & Harris, 2003). Several high-quality studies on children's argumentation have resulted from investigation of the Collaborative Reasoning framework (Anderson et al., 2001), which has demonstrated success in integrating structural and social components of argumentation by giving fourth and fifth graders conversational practice in putting forth arguments, supporting them with evidence, and responding to counterarguments.

While these studies identify pedagogical features that can be supportive of learning for young students, several aspects of writing and instruction need to be made more visible. Most studies provide descriptions of the argument curricula used, but few provide fine-grained accounts of enactment in elementary classrooms (for a notable exception, see Jadallah et al., 2011; see also VanDerHeide & Newell, 2013, for a proposed method of studying instruction in argumentation). In addition, although effectiveness is typically measured in terms of writing gains, examples of student writing often remain hidden from view. This presents several challenges for understanding children's written arguments. First, argumentation is a complex construct for which there is no single agreed-upon definition or description, and standards for quality vary. Reported gains in some cases reflect quantitative differences, such as increases in unique argument-relevant propositions (e.g., Reznitskaya, Anderson, & Kuo, 2007). In others, they represent change in scores derived from holistic or analytic rubrics that are intended to measure qualitative differences, but which may unintentionally obscure variation in logic and writing quality within single arguments (O'Hallaron, 2014). This is further complicated by variation in the nature of responses elicited by writing tasks in elementary-level intervention studies, which are often more persuasive than argumentative. Thus, while research has shown that children are capable of engaging these related forms of reasoning, the features of their writing, the

instruction supporting arguments based on interpreting textual evidence, and how each of these can inform the other remain in need of elaboration.

Research on the argumentative writing of English learners is especially important for teachers in culturally and linguistically diverse classrooms (Harklau, 2002), but few such studies address this population specifically. Teachers of ELLs need to be able to identify the demands of the texts they assign (Lucas, Villegas, & Freedson-Gonzalez, 2008), which involves not only conceptual understanding the structure of a text and the language used to construct it but also knowledge of which features are likely to require extra support. While case study research provides rich description of the language features of individual ELLs' writing (e.g., Gebhard, Harman, & Seger, 2007), it leaves open the question of how a broader range of students might respond to instruction. One way to generate needed knowledge is to characterize how elementary-level students approach the writing of specific structural components, as did De La Paz, Ferretti, Wissinger, Yee, and MacArthur (2012) in their work characterizing late middle and high school students' use and interpretation of evidence in historical arguments. In particular, teachers need assistance in helping children articulate reasons, a crucial but often unstated component of sound arguments. Though children may gain practice in argumentation in a variety of formal and informal contexts—for example, through negotiating everyday issues with family members or peers, or through writing to persuade for school tasks—these arguments are unlikely to provide good models for the practice of formulating reasons that interpret evidence in support of a claim (Anderson, Chinn, Chang, Waggoner, & Yi, 1997). It falls to teachers, then, to support the development of this concept, and this study contributes to understanding of how best to do so.

Method

Research Context and Participants

The present study considers argumentative writing produced by students in the same fifth grade classroom on two separate occasions.² This study was carried out within the context of a larger study focused on the iterative development of a literacy approach for teachers of ELLs based on Functional Grammar (FG); the study was in its first of 3 years at the time data were collected. FG draws on Halliday's (1994) Systemic Functional Linguistics (SFL), a social theory of language and learning. The theory treats language not as a set of decontextualized rules, but as a meaning-making resource; genre is seen as an evolving but fairly consistent, culturally shaped pattern of expression or action. Considerable attention has been paid to building

functional descriptions of the school genres that children must master to gain entry into dominant forms of discourse (e.g., Martin, 1989). Functional pedagogy aims to democratize academic outcomes by making the demands of school genres explicit, and a number of studies have documented its effectiveness with both mainstream and underserved student populations, including language minorities, over the past several decades (for a review, see Christie & Unsworth, 2005). In our work with elementary teachers, we initially focused on familiarizing teachers with functional linguistic constructs that would serve as tools for exploring language and meaning in their English language arts curriculum and later, at the teachers' request, added structured support for writing.

Participants consisted of two teachers each from second to fifth grade. Over the course of the school year, participants attended six workshops aimed at developing their understanding of FG constructs and how they could be integrated into existing literacy curricula. The research was design-based (Brown, 1992; Collins, 1992), which meant that each successive round of professional development was informed by participants' direct feedback on prior units and by what we learned from classroom observations and student writing. In my role as a research assistant, I helped design and implement professional development, worked directly with teachers to plan lessons integrating FG constructs with the goals of their standard literacy curriculum, and observed (and sometimes assisted with) classroom instruction.

Participants all taught at the same school, which was particularly well suited to a study of ELL writing: Approximately 90% of incoming students have a first language other than English (primarily Arabic). The urban district of which the school is a part has the highest concentration of ELLs in its upper-Midwestern state. The school shares several key characteristics with other U.S. communities where there is a high concentration of ELLs, including a large number of students from low-SES backgrounds, frequent transfers into and out of the schools/district, and limited opportunities for some students to learn English outside of the classroom.

The school also provided an interesting context for the study of written argumentation, as in addition to being part of the literacy curriculum, persuasive writing was part of the school's improvement plan. All students participated in a monthly persuasive writing contest focused on issues of local relevance, such as whether the school's playground equipment should be updated. However, that writing was based on personal experience or common knowledge, which meant that learning to argue from academic content would involve engaging with a different set of goals for writing and a different view of what was valued in supporting a position.

The focal teacher, Mr. Berry, was selected due to the quality of implementation observed in his classroom over the year; he was also the teacher for whom the most complete set of writing and observational data were available. Mr. Berry was in his fifth year of teaching. He held a master's in school administration and was in the process of obtaining bilingual endorsement. Mr. Berry was bilingual; his first language was English, and he reported partial fluency in Arabic. All instruction observed for this study took place in English.

All 23 students in Mr. Berry's class were or had been classified as English learners. Of the 13 students classified as ELLs, 4 tested at the Advanced Proficient level on the state English proficiency exam, 7 tested at the Proficient level, 1 was classified as High Intermediate, and 1 as Low Intermediate. The remaining 10 students, all of whom had received ELL services in prior years, had exited the ELL program by fifth grade and were on "Monitored" status. Former ELLs, as they are sometimes called, are a group whose ongoing needs for language support are often overlooked (de Jong, 2004); ironically, these fifth graders' impending exit from official monitoring systems coincides with a point at which the language demands of school curricula become increasingly complex (Schleppegrell, 2004). Their presence in Mr. Berry's classroom added an additional dimension to this study by raising the question of how, or if, their writing differed from that of their current ELL peers.

Writing data for this study come from students' responses to two argumentative prompts based on stories in their English language arts curriculum, discussed in the Findings section below. On both occasions, data were collected for a subset of students who were present on writing days and produced complete drafts. Table 1 shows English proficiency levels for the class as a whole and for each set of writing.

Data Collection

Data for this study include students' final drafts, graphic organizers, classroom video and audio data for three lessons, and the texts upon which arguments were based. Instruction leading to the production of both sets of
writing was observed, videotaped, and audiotaped by at least one member of
the research group. I was present for the lesson observed for Occasion 1, and
for the second of two lessons observed for Occasion 2. An observation protocol was used to note what teachers and students said, and when multiple
researchers were present, video logs marking shifts in classroom activities
were also produced. Following instruction, Mr. Berry provided complete
class sets of graphic organizers, rough drafts, and final drafts. Final drafts
were transcribed, with misspellings and infelicities preserved, to facilitate
work with writing data.

Proficiency level	Class roster	Occasion I writers	Occasion 2 writers
Exited and Monitored	10	8	10
Advanced Proficient	4	2	3
Proficient	7	4	4
High Intermediate	1	1	_
Low Intermediate	1	_	_
Total number of students	23	15	17

Table 1. Fifth Graders' English Proficiency by Class and Data Set.

Data Analysis

Classroom video went through two rounds of coding using a scheme developed and validated by the research team. In each case I was a secondary coder, using the coding scheme to review and elaborate initial identification of participation structures and content of the lessons. Participation structures most relevant for this study included teacher-led presentation and discussion and students reporting their work to the whole class. Content codes useful for this study indicated instances of metalanguage use by teachers or students; the use of FG constructs to evaluate or interpret text; and connections made between FG concepts and other classroom activities or the literacy curriculum. I used these codes to identify and transcribe key instructional moments showing how Mr. Berry framed the writing tasks and mediated students' understanding of how to approach them, and to draw parallels between a classroom discussion developing a focal student's reasoning and the argument she subsequently wrote.

To characterize the arguments students produced with different levels of support, I first rendered each argument into its component stages. I initially looked for *Claim, Evidence, Reason*, and *Restatement of Claim*,³ the stages presented in instruction preceding Occasion 2 writing (see below); though Reasons were not in focus for Occasion 1, I wanted to determine whether students would include this stage without being prompted. I used students' graphic organizers as a first level of analysis, as they provided information about the moves students were intending to make.

I further reviewed each stage to determine whether the language functioned in the way the student had intended. In the literature-based argument genre presented in this study, each stage serves a specific purpose building toward an overall, discipline-specific goal: Claims and Restatements of Claim provide and reiterate the writer's position on a question about a character or theme in the story, Evidence quotes or refers to text supporting that

position, and Reasons interpret the evidence selected to explain why or how it supports the Claim. Analyzing sentences in light of the function they served provided a more accurate rendering of the text. For example, one argument from Occasion 1 began, "I think Manuel will be in the talent show next year/because so many people loved his La Bamba performance." The slash here indicates a clause-level shift from the writer's Claim to the reference serving as her first piece of Evidence. Similarly, sentence-level differences in function helped to parse Evidence and Reason; in the occasional instance in which text represented as Reason (i.e., in the Reason box on the graphic organizer) was functionally an extension of text-based evidence, it was marked as Evidence. Finally, functional analysis surfaced an unexpected stage: a *Counterclaim* that anticipates and responds to an opposing position. After encountering one such example, I incorporated this category into my analysis.

Once stage analyses were complete, I developed descriptions of trends in each set of arguments: average word counts, positions taken, and general characteristics of the writing at the stage level. Analysis then shifted to an evaluation of how effective the writing was at key stages, an essential question for determining where additional support is likely to be needed. For Evidence, the relevant criterion for our curriculum was whether writers drew on the texts to support their position given different levels of instructional support, and this was established by verifying connections between Evidence tokens and source texts. In examining the Reason tokens, it became clear that there were substantive differences in Reasons, both between and within students' essays, that impacted the overall effectiveness of their arguments. To explore these differences, I used an inductive approach to review Reason tokens, first sorting them into broad groups representing effectiveness in achieving the goals of this stage, then classifying them according to the kinds of underlying reasoning they represented. After refining my initial classifications, four broad categories remained, related to the extent to which Reasons achieved their intended purpose relative to the prompt (see Findings for details). Another member of the research group, who helped plan professional development and observed instruction but was not otherwise involved with the present study, applied these categories to 30% of the Reason tokens in the sample; our agreement rate was 93.3%.

Collectively, these procedures enable description of the characteristics of students' arguments given different texts, prompts, and levels of support, as well as how classroom discussion helped shape the writing students produced.

Findings

Occasion 1

One potential step toward developing the logical argument under study here is to renegotiate what is valued as evidence. The first set of argumentative writing focused on just this: shifting standards of evidence from personal feelings or commonsense reasoning to the text itself. The writing was produced in November, before teachers received professional development on teaching argument. The November professional development session had introduced SFL constructs useful for exploring how writers construe experience through their language choices.⁴ Following this session, participants applied the constructs in lessons supportive of their regular literacy instruction, which generally included reading and discussing the selection, completing the exercises provided in the teacher's edition of the reading anthology, and assigning a writing task. On this occasion, writing in Mr. Berry's class was a culminating activity for the students' work with Gary Soto's La Bamba, a selection from their fifth grade reading anthology. La Bamba relates the experiences of the main character, Manuel, as he prepares for and ultimately performs in his school's talent show. The author conveys tension in the leadup to the big day by presenting Manuel's hopes and fears about his performance—lip-synching and dancing to "La Bamba"—which come to a head when the 45 record of the song gets stuck during the talent show. Manuel adapts his routine to match the skipping of the song, and his act is a hit. In the final scene, Manuel contemplates whether he would participate in the show the following year. He revels in the praise he received from his peers and family, but ends with the following lines:

He was relieved that the day was over. Next year, when they asked for volunteers for the talent show, he wouldn't raise his hand. Probably.

Given the importance of understanding Manuel's changing and sometimes conflicting feelings for comprehension of *La Bamba*, the FG lesson, given after the class had read and discussed the selection, explored the language used to describe Manuel's internal state at key moments in the story. Over the course of about 90 minutes, students worked in small groups to identify language providing important information about Manuel's feelings, then presented their findings to their classmates, with Mr. Berry mediating discussion to establish an emotional arc for Manuel.

After this discussion, Mr. Berry presented the argument prompt to which students were to write later that day. The prompt was written by the research team to capitalize on the story's inconclusive ending by asking writers to take

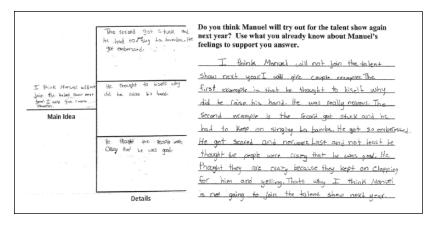


Figure 1. Ahmed's graphic organizer and final draft.

and support a position on the decision Manuel was likely to make in the future: "Do you think Manuel will try out for the talent show again next year? Use what you already know about Manuel's feelings to support your answer." Although the prompt required students to take a position and support it with evidence generated by their discussion of the text, no connection was made to the persuasive writing done elsewhere in the literacy curriculum, nor was there any genre-specific scaffolding. When students wrote their responses, Mr. Berry provided them with a generic graphic organizer with space for a main idea and three supporting details (see Figure 1). This graphic organizer was used frequently across the school to help students plan many different writing tasks, though its components provide no indication of how structure and content may vary by genre or task. This set of lessons, then, gave students practice with demonstrating their comprehension of a story by martialing text-based evidence in response to an argumentative prompt, but their writing was not explicitly framed or supported as argument.

Student Writing

In all, 15 final drafts were collected for the *La Bamba* prompt, written by students in three proficiency categories: 4 Proficient, 3 Advanced Proficient, and 8 Exited/Monitored. The average length for these samples was 89.8 words. Students were evenly split with respect to the positions they took: 8 wrote that Manuel would participate in next year's talent show, and 7 wrote that he would not.

Figure 1 shows the graphic organizer and final draft of Ahmed, whose writing is representative of responses to this task; his final draft is transcribed

Table 2. Transcription of Ahmed's final draft.

Stage	Transcription
Claim	I think Manuel will not join the talent show next year. I will give couple examples.
Evidence I	The first example is that he thought to himself why did he raise his hand. He was really nervous.
Evidence 2	The second example is the record got stuck and he had to keep on singing La bamba. He got so embarrassed. He got scared and nervous.
Evidence 3	Last and not least he thought the people were crazy that he was good. He thought they are crazy because they kept on clapping for him and yelling.
Restatement of Claim	That's why I think Manuel is not going to join the talent show next year.

in Table 2. All students were able to clearly state their claims, either in a distinct sentence, as Ahmed had, or fused with their first piece of evidence using a *because* clause. Ten writers clearly signaled transitions between pieces of evidence (as in Ahmed's "The first example. . . . The second example. . . . Last and not least. . . ."). All but three restated their claims without being prompted to do so, suggesting that the inclusion of a concluding move was an established writing practice.

Almost all students included three pieces of Evidence in their writing, for a total of 44 Evidence tokens. Every student used at least one piece of Evidence that drew on the story and/or the classroom discussion either indirectly (assuming shared knowledge of the text and task, as Ahmed did) or directly (e.g., "In the story when it was almost his turn on the stage it said Manual remained behind shuddering with fear"). These references to the text accounted for 82% (36 tokens) of the Evidence in Occasion 1 arguments. A third of the writers in this sample also included Evidence based on their own feelings or interpretations, or predictions not grounded in the story (e.g., "Manuel will sing a different song maybe, to show the whole school"), more appropriate for the way students were accustomed to supporting their positions in persuasive. Of the five students who did not draw their evidence from the text, three were Exited/Monitored and two were Proficient-level ELLs.

A notable feature of this set of texts is the universal absence of Reasons. Ahmed's argument is typical in this respect as well. He has drawn on the class discussion about Manuel's feelings to elaborate his Evidence (see Table 2), making more reference to these feelings than a number of his peers, but treats these straightforward reports on Manuel's feelings as sufficiently supportive

of his reasoning and makes no additional move to explain how they support his Claim. The implicit reasoning for the first and second pieces of Evidence would presumably have to do with Manuel not wanting to repeat an experience that provoked negative feelings (*nervous*, *embarrassed*, *scared*). The thinking behind the third piece of Evidence—that Manuel thought that people were crazy (to think) that he was good—is less clear, but seems to speak to Manuel's perceived lack of self-confidence.

Whereas Reasons were absent from Occasion 1 arguments, three students did include counterclaims without being prompted to do so (e.g., "Lastly about why I think he is going to be in the talent show is because even though all the times he got nervous, it is ok to mess up"). Where responses to alternate positions occur, they are more fully explained than any evidence presented in support of students' arguments, sometimes continuing for several sentences. This may suggest an orientation, at least on the part of some students, toward treating one's own position as standard, and therefore less in need of detailed explanation; this would be consistent with the findings of Anderson et al. (1997) regarding students' tendency to provide less information about argument elements for which they presumed a shared understanding by others in their classroom context. What became clear in reviewing Occasion 1 writing was that, while rich discussion of language and meaning appeared to support the selection of textual evidence for most writers, Mr. Berry's students had not elaborated on their reasoning of their own accord and would likely need additional support for doing so.

Occasion 2

The second set of writing samples was produced approximately two and a half months after the first set, following Mr. Berry's participation in professional development on argument writing. Informed in part by analysis of Occasion 1 writing, the research team designed a workshop on the purposes, structure, and language features of argumentative writing. We drew on other SFL descriptions of persuasive and argumentative texts (Christie & Derewianka, 2008; Martin & Rose, 2008) and Toulmin's (1958) model of argument and ultimately presented a basic argument genre consisting of Claim, Evidence, Reason, and Restatement of Claim.⁶ Because supporting the formulation of Reasons was seen as a significant pedagogical challenge in itself, a Counterclaim stage was discussed with teachers but not included in the support materials for students. Having observed that the school's generic graphic organizers were a particular weakness in the writing curriculum, we designed an argument-specific organizer with each stage and its function labeled.

Teachers were asked to choose for themselves a text that provided an opportunity for authentic argument (i.e., an issue that allowed students to take

either side without there being a clear "right answer"), to identify a learning goal for working with that text, and to craft a prompt that addressed that learning goal and elicited our target genre. Mr. Berry and another fifth grade teacher chose a selection from their reading anthology with which they were already planning to work, an excerpt of Beverly Cleary's *Dear Mr. Henshaw*. The excerpt, which has no clear beginning or end, is a collection of diary entries written by a boy named Leigh. Leigh wants to be a writer, and has a long-standing correspondence with the titular Mr. Henshaw, a famous author. He writes about his feelings about his parents' divorce and his father's absence; having a friend over for dinner; and, perhaps most important, a contest in which the winner would be included in his school's Young Writers' Yearbook. Leigh initially receives a disappointing honorable mention but rises in the rankings when one of the winners is found to have cheated; this gets him invited to a special lunch with a famous author, who gives him some much-appreciated encouragement about his writing.

The prompt designed by the teachers asked students to think about the larger implications of writing for Leigh: "Do you think Leigh's writing helped him or hurt him? Take a stand and support your examples with answers from the story." Direct evidence for the position that writing helped Leigh was somewhat difficult to come by, but arguments could be built around Leigh using his writing to work through painful experiences or learning lessons about honesty and perseverance. Supporting the position that writing hurt Leigh was even more difficult: Students would need to build a rather sophisticated argument around pain being reinforced by Leigh's writing his negative thoughts about his parents' divorce or missing his father in his diary, or the disappointment Leigh felt when he did not initially win the writing contest.

The two FG lessons Mr. Berry and his colleague developed for *Dear Mr. Henshaw* again took place after typical reading instruction. The first lasted approximately an hour. As with the *La Bamba* lesson, it focused students on the language used to convey Leigh's feelings at different points in the story, with practice and discussion in whole-class as well as small-group contexts. Mr. Berry introduced the prompt at the end of this lesson, telling students they would be writing a persuasive essay in the next class. Teachers at this school decided to refer to argument as persuasive writing because this was a term with which students were familiar, and though Mr. Berry applied this inaccurate label to the *Mr. Henshaw* writing, he differentiated the task by clearly articulating that students should turn to the text to support and explain their positions. For homework, he asked them to decide whether they felt writing helped more or hurt more, and to underline evidence in the story to support that position: "Where in the story can you prove to me, and back up what you think?"

The second lesson took place the next day and lasted about an hour and 15 minutes. Mr. Berry opened by reviewing the prompt and asking students to

share the evidence they found to support their positions. This discussion offered volunteers an opportunity to rehearse elements of their own arguments, and modeled for the rest of the class the thought process behind connecting Evidence to Claim. Students had not yet been exposed to the stage labels, but the teacher made effective use of questions and revoicing to scaffold the construction of Reasons, as in the following interaction (explicit scaffolding in bold):

Mariam: [at front, reading her underlined evidence] "My story about the ten-foot wax man went into the wastebasket. Next, I tried to start a story called *The Great Lunchbox Mystery*, but I couldn't seem to turn my lunchbox experience into a story because I didn't know who the thief (thieves) was (were), and I didn't want to know."

Teacher: So how did this help him?

M: 'Cause he at least tried to write, and. . . . Even though it went into the wastebasket he still wrote something, and it at least showed him that he has to write something better.

T: Okay. [Rereads evidence] So I'm trying to see how that's helping him.

M: See, the ten-foot wax man, it helped him because if he doesn't like it he can still try another story, and it shows that he has to think about what the people would like and how can he, he make it into a [inaudible]

T: Okay, so you're saying that here he's still what?

M: Trying.

T: He's trying. Even though he didn't know, he started with the ten-foot wax man and he didn't know how to finish it, so what did he do? He tried another story, and this one he can't complete it, right? So what's he going to eventually do?

M: Try again.

T: Try again. So, yes, I'm going to give you that—that could be evidence. But when she puts that as Evidence, she has to say, this shows that he's actually still trying, and that his writing in his diary is actually helping him.

M: He's learning from his mistakes.

This exchange is illustrative of moves made by Mr. Berry to focus students' attention on the most challenging part of the writing task. Because this was a text-based argument, the selection of evidence itself was relatively circumscribed, in that it was drawn directly from the story. The effectiveness of the argument, then, depended greatly on the student's ability to formulate Reasons explaining *why* they chose certain passages for evidence, and the teacher played a crucial role in helping students identify and make explicit

their own reasoning. Mariam had clearly been thoughtful about her selection of evidence, and provided her initial justification without hesitation. The teacher's role at this stage was to draw out students' explanations and help them understand how they would be used in making their arguments.

After about 20 minutes of discussion related to the available evidence, Mr. Berry transitioned into presentation of the genre and its stages. The students' familiarity with persuasive writing or "taking a stand" set the context for their understanding of the purpose of the genre. Mr. Berry combined presentation of the stages with co-construction of concrete examples, which he filled in on a blank copy of the graphic organizer. Discussion of the Claim and Evidence went quickly, per the teacher's understanding of the low level of challenge they presented ("The Evidence is very simple: it's basically you going into the story and finding proof, facts"). The presentation of Reason was more detailed. Mr. Berry used the graphic organizer to mediate his instruction, focusing on the relationships between the different stages of the argument:⁷

Now here is the hardest part, here is the part that most students have trouble with, and we really have to concentrate on this part, Reason. Okay? So I already found my evidence, right? Now you have to look at your Reason—and take a look at what it says here in parentheses, "How does the Evidence support your Claim?" So, how does this right here [pointing to Evidence] support this [pointing to Claim], "I think his writing helped him"? [A student volunteers her Reason; Mr. Berry interacts with her briefly, then returns to the point he wants to make] One thing that I found that's easier for the Reason is that you need to think about what your claim is first. [Returns to the student from the prior interaction, asks her to supply her claim as an example] Whenever you do your Reason, try to include [your claim] in there as something to be helpful, for you. When I do my Reason, I'm going to say "This proves"—because my Evidence is what? It's proof, right? [Begins to fill out first Reason box on graphic organizer] "This proves that writing helped Leigh because. . . ."

While this may seem to be a relatively long turn of talk, Mr. Berry was, in fact, providing dynamic support for the concept of Reason. At multiple points in the conversation, he invited students to share their claims and ideas about Reasons, building his explanation around their contributions. The *This proves* [Claim] because formulation was Mr. Berry's addition to the material presented in the professional development workshop, in recognition of his students' need for additional conceptual and linguistic support around the Reason stage. The class went on to modify the graphic organizer, drawing lines and arrows to indicate additional relationships between ideas (see Figure 2, hand-drawn arrows on the right side). Students began to write approximately 45 minutes into the second lesson; editing and writing of final drafts took place on a later date.

Student Writing

A total of 17 complete final drafts were collected for the *Dear Mr. Henshaw* prompt. In contrast to the *La Bamba* writing, and despite Mr. Berry's support of both positions, responses to this prompt were heavily weighted toward one answer: 15 students wrote that writing helped Leigh, while only 2 argued that it hurt him. Responses ranged from 120 to 274 words, with an average length of 177 words, double the average word count for *La Bamba*.

All arguments on Occasion 2 included at least three pieces of Evidence, and 100% of the 53 Evidence tokens were references to the text. Construction of Reasons was attempted by all students except one. (That student, whose other writing samples place her work at the low end of the range relative to her classmates, simply listed five pieces of evidence.) Two additional students included Reasons for only one or two of their pieces of Evidence. In total, students produced 45 Evidence-Reason pairs.

Although this was the first time this group of students had received instruction on including Reasons in their arguments, nearly all of their attempts were substantive. It was clear, however, that some Reasons were more effective than others. To further explore why this was so, I developed categories describing the extent to which Reasons achieved their intended purpose relative to the prompt and categorized each token as one of four major types: Reasons that were (a) treated as self-evident, (b) mismatched to the evidence or prompt, (c) evaluated the importance of an event or piece of evidence with missing or incomplete connection to prompt, or (d) fully addressed the prompt by evaluating how the act of writing helped Leigh. Table 3 presents the four types of Reasons observed, along with the frequency of occurrence for each (number and percentage out of 45 Reason attempts) and the number of students who produced this type of Reason at least once (number and percentage out of 17 students).

Only three students (8.89% of Reasons), all former ELLs, produced Type 1 Reasons, treating one or more of their pieces of Evidence as self-explanatory, using variations of the phrase "This proves [claim]" without elaborating on why. Similarly, there were just five tokens (11.11%), written by four students, of Type 2: Reasons logically mismatched to the assigned prompt and/or the evidence they were intended to analyze. These examples are far enough off the mark to suggest that the writers struggled to understand the task. Two writers of Type 2 Reasons were former ELLs; the other two were Advanced Proficient— and Proficient-level ELLs.

The majority of both current and former ELLs' Reasons were either partially (Type 3) or completely (Type 4) successful at addressing the prompt (44.44% and 35.56%, respectively). Type 3 Reasons involved some evaluation of importance of the selected evidence, but was not framed in terms of

Table 3. Types of Reason Tokens in Dear Mr. Henshaw Arguments.

			Example	
Reason tokens (n, %)	Students using Reason type $(n, \%)$	Reason type	Evidence	Reason
4 (8.89%)	3 (17.65%)	Treated as self-evident	My last piece of evidence is that Leigh said "Today turned out to be exciting."	I support the evidence by him being very excited and this proves his writing helped him.
5 (11.11%)	4 (23.53%)	Mismatched to evidence or prompt	Leigh is glad it wasn't Mr. Henshaw as the mysterious famous author then he would really be disappointed.	Leigh is glad that it isn't Mr. Henshaw as the mysterious author or he
20 (44.44%)	13 (76.47%)	Evaluates importance of event with missing or incomplete connection to prompt	I think his writing helped him because in the story he and his friend Barry felt good about making something that worked even if they couldn't use it.	I think it helped him feel better because he and Barry connected.
16 (35.56%)	9 (52.94%)	Addresses prompt by evaluating how the act of writing helped Leigh	My second reason is in another part of the story, Leigh is talking his mother on why didn't his mom and dad get married again and then Leigh got mad and disgusted about something. Then Leigh wrote in his diary on what is going to happen the next day.	I think this is helping Leigh because when he was mad, he started to change the subject because he wanted to think about something else instead of something that hurts him.

what the prompt asked. For example, Saleh wrote, "On the other hand, Leigh keeps thinking about Dad how lonely he sounded. He didn't want his Dad to be all alone." This explanation falls short of articulating how the evidence connects to the claim that writing hurt Leigh. In contrast, Hadi's Type 4 Reason makes explicit the idea that the act of writing helped Leigh by allowing him to take his mind off of something that is bothering him:

My second reason is in another part of the story, Leigh is talking his mother on why didn't his mom and dad get married again and then Leigh got mad and disgusted about something. Then Leigh wrote in his diary on what is going to happen the next day. I think this is helping Leigh because when he was mad, he started to change the subject because he wanted to think about something else instead of something that hurts him.

Also of note in these excerpts is the fact that although Mr. Berry had provided the students with language to frame their Reasons (*This proves [claim] because*), only a small minority of students used these words exactly; most used the general structure but modified the language (e.g., *This means [claim] because; I used this for proof because;* see Table 2 for other examples). This is consistent with other research (e.g., Lunsford, 2002; Yeh, 1998) showing that students applied explicitly taught structures in a flexible, rather than rote, manner.

The abstract nature of the prompt made the Reason move particularly challenging, and indeed, while most students were able to engage in reasoning regarding how Leigh's experiences helped or hurt him, explaining how this was mediated by writing proved more difficult. Some confusion about what the prompt was asking was apparent. Moreover, some pieces of evidence all but ensured difficulty in writing the corresponding Reason. For example, the class discussion sanctioned as admissible as evidence a passage in which Leigh writes about a visit from his friend Barry. Leigh and Barry work on a makeshift burglar alarm, and later Barry says how much he likes coming to Leigh's house. Leigh writes, "That made me happy. It helps to have a friend." Based on Leigh's positive feelings, the class concluded that this would be good evidence to support the claim that writing helped Leigh. The problem, however, is that the passage demonstrates only that having a friend helps Leigh—in other words, it provides only enough direct support to formulate a Type 3 Reason. To adequately address the prompt, students would need to shift the focus of the evidence to the fact that Leigh wrote about this moment in his journal, and further extrapolate that writing about happy moments was therapeutic, allowing Leigh to concentrate on positive aspects of his life. In the absence of classroom discussion supporting these additional steps, only one student came close (explicit connection to writing in bold; original punctuation preserved):

Table 4. Transcription of Mariam's Final Draft.

Stage	Transcription
Claim	In the story, Leigh writes about his emotions in a diary. Sometimes Leigh feels sad when he is thinking about his dad and sometimes he feels happy. Most times, writing helps Leigh. But sometimes writing hurts him. I think writing helps him. Here are 3 reasons why I think writing helps him.
Evidence I	The first reason why writing helps Leigh is because the story that went in the wastebasket and the story with no characters showed that he tried.
Reason I (Type 4)	Even though he couldn't think of anything to write about, he still tried. Leigh tried and learned from his mistakes so he can write better. That is one reason why I think writing helps Leigh.
Evidence 2	Another reason why I think Leigh's writing helps him is because he got honorable mention. Honorable mention is important. An author actually read Leigh's story.
Reason 2 (Type 3)	This proves it was interesting and made the reader feel like they were inside and saw what had happened. That is the second reason why I think Leigh's writing helped him.
Evidence 3	One last reason why I think Leigh's writing helped him is because he was asked if he wanted to have lunch with the famous Author.
Reason 3 (Type 3)	Honorable mention did take him to meeting Angela Badger. That is the last reason why I think Leigh's writing helped him.
Restatement of Claim	Even though writing hurt Leigh, it also helped him alot too. That is why I think writing helped Leigh.

When Barry said "he liked eating at our house that made Leigh happy. Leigh said "it helps to have a friend. Leigh says that he likes Barry to come over because he cheers him up and when he writes about it. It makes him feel satisfied.

While discussion of the Barry example perhaps did not go far enough, it is clear that students benefitted from the opportunities they were given to hear the beginnings of others' arguments and think through their own. Table 4 and Figures 2a and 2b show the work of former ELL Mariam, the student from the transcript presented above. Her first Evidence-Reason pair deals with the example she explained to the class. Her initial reasoning had been, in essence, that throwing the story about the 10-foot wax man away helped Leigh because

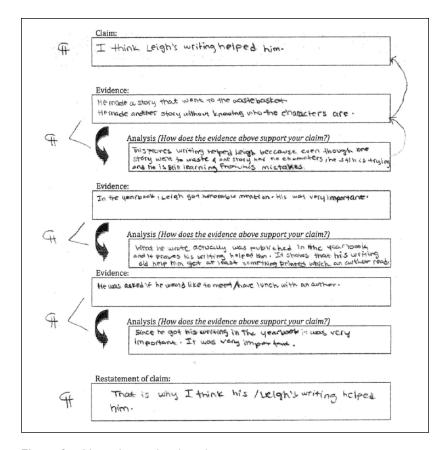


Figure 2a. Mariam's completed graphic organizer.

he was trying. In her writing, she has expanded this argument into a broader lesson for Leigh about perseverance and improving by learning from his mistakes. It is unlikely that she would have explained her reasoning in this way had she been asked to write without the oral rehearsal. This is supported by the quality of her other Evidence-Reason pairs.

Mariam's writing exemplifies what is perhaps the most interesting characteristic of the *Dear Mr. Henshaw* samples: Almost none of the students produced three Reasons of the same type. In Mariam's case, while Reason 1—the example discussed in class—adequately addressed the prompt, she was less able to match evidence to claim in her subsequent attempts. Her Reason 2 simply evaluates the quality of Leigh's writing, while Reason 3 affirms the

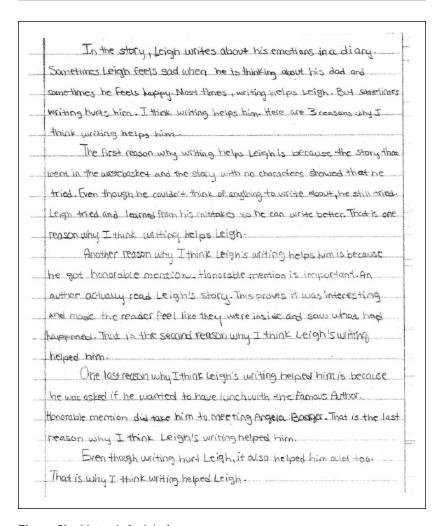


Figure 2b. Mariam's final draft.

value of receiving honorable mention and the desirability of having lunch with Angela Badger without explicitly commenting on how either of these things are connected to Leigh's writing or why they would be helpful to him. Similar variation in performance was observed for all but two students; most students had a mix of Reasons falling in different contiguous categories (there were not, for example, instances of individual students treating their reasoning as self-evident in one case (Type 1) and completely addressing the prompt (Type 4) in another).

Discussion

This research presents an illustration of teaching and learning to write logical arguments in a fifth grade classroom. Mr. Berry and his students moved toward the practice of selecting and interpreting text-based evidence to support a claim, a process quite distinct from the persuasive writing prompts to which students were accustomed to responding. While a detailed discussion of a story focused most students on the text as source material for their responses to the Occasion 1 argumentative prompt, in the context of typical writing instruction this discussion was insufficiently supportive of either teacher's or students' elaboration on their reasoning.

The instruction and writing from Occasion 2, however, provide insight into how students can be supported in developing their arguments—and how issues of text and prompt may unintentionally hinder their progress. Writing was supported by the considerable amount of talk built into the lessons in the lead-up to writing. Observational data show that Mr. Berry and his students took time to engage in extended discussion of the text itself, the characteristics of the genre to be produced, and the details of students' evidence and reasons on both sides of the issue. This emphasis on supporting argument through classroom discussion is consistent both with dialogic approaches that have been used successfully at the elementary level (e.g., Anderson et al., 2001; Kuhn, Shaw, & Felton, 1997) and with research demonstrating the importance of oral language in literacy instruction for ELLs (Francis, Rivera, Lesaux, Kieffer, & Rivera, 2006). Analysis of students' arguments shows that the influence of class discussion on writing was supportive, but did not appear to constrain students' expression of their ideas. Mariam's written response to the prompt was her own, just as many students took Mr. Berry's suggested structure for writing Reasons and modified it in a number of ways. Such observations run counter to the notion that explicit approaches result in students appropriating a rigid model.

Detailed writing analysis both shows where students were successful and surfaces potential challenges. While building claims and evidence can be a complicated process for older students building more sophisticated arguments (Lunsford, 2002), this was not the case for the fifth graders in this study. For both argumentative tasks, students wrote straightforward Claims and selected evidence framed by supportive discussion. It is clear from students' initial attempts at writing Reasons, however, that learning to do so is an ongoing process, influenced by a number of factors. Almost none of the children in this study consistently produced reasons of the same quality, low or high. Some of this was attributable to variation in the quality of available evidence: the less directly related evidence is to a claim, the more work the writer has to do to connect them. This is especially true when the prompt

itself poses a question that is abstract in nature, as did the *Dear Mr. Henshaw* prompt. Evaluating events through the lens of writing added a layer of complication that was not ideal for students' first encounter with the challenging task of formulating reasons. Though the use of such an abstract prompt should not be ruled out for students already well-versed in argumentation, teachers who want to introduce the genre for the first time would do well to select a text that lends itself naturally to argument (rather than, as in the case of *Dear Mr. Henshaw*, attempting to craft an argumentative prompt for which the text may not offer strong support).

This study's findings suggest that an individual's facility with writing reasons is not static, and conversely, that formulating reasons may draw on different skills depending on the claim and evidence they are attempting to coordinate. Much existing research evaluates argumentative writing using rubrics that collapse the elements of argumentation into single categories (i.e., holistic evaluations of the quality of claim, evidence, and reasons taken together); other studies have used separate scales for each element, but evaluate, for example, the quality of all evidence as a whole. Both approaches obscure potentially informative data. The four types of reason that emerged from this examination of student writing draw out more specific information about how individual reasons function within an argument, but should be seen at this point as a tentative proposal. It remains to be seen whether the proposed types hold for students at other grade levels, for students who are more experienced with logical arguments, or for other prompts. This analysis does, however, suggest that specifying the logical work students need to do to adequately address a given prompt—in this case, by evaluating how the act of writing helped Leigh—may help researchers and practitioners to more accurately assess students' progress. Once a prompt drawing on a particular text has been written, articulating a range of possible answers can help surface levels of abstraction or other potential challenges that may not have initially been evident, thus also serving as a check on prompt difficulty. This level of familiarity can help teachers provide support targeted to the specific demands of an argumentative writing task, to the likely benefit ELLs and mainstream students alike.

This study has several limitations that should be addressed. Chief among them is the *Dear Mr. Henshaw* prompt, the abstract nature of which made constructing an argument considerably more difficult than in the case of *La Bamba*. Student performance was likely affected by a challenging prompt and a text that did not lend itself well to supporting a text-based argument, and reasons may have been of better quality under more favorable conditions. In addition, the sample size was small on both writing occasions (15 and 17 final drafts, respectively), and the classroom population consisted almost entirely of students who were bilingual to one degree or another, most with a

first language other than English. Although findings indicate that the arguments of current and former ELLs in this study had similar strengths and weaknesses, results for larger samples and for students writing in their first language may reveal a greater range of responses that would be useful in designing and studying argument pedagogy. As curricula nationwide increasingly call for younger students to produce argumentative writing, further research is planned to address these points through analysis of additional sets of arguments from a variety of contexts and written in response to different argumentative prompts.

Acknowledgments

The author wishes to thank Mary Schleppegrell, Annemarie Palincsar, Jason Moore, and other members of the *Language and Meaning* project for their contributions to this work.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The research reported here was supported by the Institute of Education Sciences, U.S. Department of Education, through Grant R305A100482 to the University of Michigan. The opinions expressed are those of the author and do not represent views of the institute or the U.S. Department of Education.

Notes

- The much larger body of research on argumentation in secondary and postsecondary contexts is not in focus here; for a more comprehensive review, see Newell, Beach, Smith, and VanDerHeide (2011).
- The research reported here has met with the requirements of the University of Michigan Institutional Review Board. In addition, parents/guardians have provided permission for the participation of the child participants, and teachers have provided consent for the inclusion of their data.
- 3. Following Systemic Functional Linguistics conventions, stage names are capitalized.
- 4. The construct in focus at this session was the notion of *processes*, which include a verb and are presented in verb phrases. Teachers were introduced to the idea that there are four types of processes and practiced analyzing texts from their anthologies with the goal of generating discussion in the classroom about how authors represent experiences of doing, being, sensing/feeling, and saying in stories.

- 5. The research team was not present for this writing session.
- 6. We initially labeled Reason as "Analysis" in reference to the analytic work students would do at this stage in connecting Evidence to Claim; in subsequent iterations of this unit, this label was changed to Reason to help clarify the ways in which the FG curriculum aligns with other perspectives.
- "Reason" has been substituted for "Analysis" in this transcript for continuity in the present text.

References

- Anderson, R. C., Chinn, C., Chang, J., Waggoner, M., & Yi, H. (1997). On the logical integrity of children's arguments. *Cognition and Instruction*, 15, 135-167.
- Anderson, R. C., Nguyen-Jahiel, K., McNurlen, B., Archodidou, A., Kim, S.-Y., Reznitskaya, A., . . . Gilbert, L. (2001). The snowball phenomenon: Spread of ways of talking and thinking across groups of children. *Cognition and Instruction*, 19, 1-46.
- Andrews, R., Torgerson, C., Low, G., & McGuinn, N. (2009). Teaching argumentative non-fiction writing to 7-14 year olds: An international review of the evidence of successful practice. *Cambridge Journal of Education*, *39*, 291-310.
- Brown, A. L. (1992). Design experiments: Theoretical and methodological challenges in creating complex interventions in classroom settings. *Journal of the Learning Sciences*, 2, 141-178.
- Christie, F., & Derewianka, B. (2008). School discourse: Learning to write across the years of schooling. London, UK: Continuum.
- Christie, F., & Unsworth, L. (2005). Developing dimensions of an educational linguistics. In R. Hasan, C. M. I. M. Matthiessen, & J. Webster (Eds.), *Continuing discourse on language: A functional perspective* (pp. 217-250). London, UK: Equinox.
- Collins, A. (1992). Toward a design science of education. In E. Scanlon & T. O'Shea (Eds.), *New directions in educational technology* (pp. 15-22). New York, NY: Springer-Verlag.
- Crowhurst, M. (1990). Teaching and learning the writing of persuasive/argumentative discourse. *Canadian Journal of Education*, 15, 348-359.
- de Jong, E. (2004). After exit: Academic achievement patterns of former English language learners. *Education Policy Analysis Archives*, 12, 1-18.
- De La Paz, S., Ferretti, R., Wissinger, D., Yee, L., & MacArthur, C. (2012). Adolescents' disciplinary use of evidence, argumentative strategies, and organizational structures in writing about historical controversies. Written Communication, 29, 412-454.
- Duke, N. K. (2000). 3.6 minutes per day: The scarcity of informational texts in first grade. *Reading Research Quarterly*, 35, 202-224.
- Francis, D. J., Rivera, M., Lesaux, N., Kieffer, M., & Rivera, H. (2006). Practical guidelines for the education of English language learners: Research-based recommendations for serving adolescent newcomers. Houston, TX: University of Houston, Center on Instruction.

- Gebhard, M., Harman, R., & Seger, W. (2010). Reclaiming recess: Learning the language of persuasion. *Language Arts*, 84, 419-430.
- Genesee, F., Lindholm-Leary, K. J., Saunders, W., & Christian, D. (2006). *Educating English language learners*. New York, NY: Cambridge University Press.
- Graham, S., & Harris, K. R. (2003). Students with learning disabilities and the process of writing: A meta-analysis of SRSD studies. In L. Swanson, K. Harris, & S. Graham (Eds.), *Handbook of learning disabilities* (pp. 323-344). New York, NY: Guilford.
- Halliday, M. A. K. (1994). Introduction to functional grammar (2nd ed.). London, UK: Edward Arnold.
- Harklau, L. (2002). The role of writing in classroom second language acquisition. *Journal of Second Language Writing*, 11, 329-350.
- Hidi, S., Berndorff, D., & Ainley, M. (2002). Children's argument writing, interest, and self-efficacy: An intervention study. *Learning and Instruction*, 12, 429-446.
- Jadallah, M., Anderson, R. C., Nguyen-Jahiel, K., Miller, B. W., Kim, I.-H., Kuo, L.-J., . . . Wu, X. (2011). Influence of a teacher's scaffolding moves during child-led small-group discussions. *American Educational Research Journal*, 48, 194-230.
- Kamberelis, G. (1999). Genre development and learning: Children writing stories, science reports, and poems. *Research in the Teaching of English*, *33*, 403-460.
- Knudson, R. E. (1991). The development of written argumentation: An analysis and comparison of argumentative writing at four grade levels. *Child Study Journal*, 22, 167-184.
- Kuhn, D., Shaw, V., & Felton, M. (1997). Effects of dyadic interaction on argumentive reasoning. *Cognition and Instruction*, 15, 287-315.
- Lucas, T., Villegas, A. M., & Freedson-Gonzalez, M. (2008). Linguistically responsive teacher education: Preparing classroom teachers to teach English language learners. *Journal of Teacher Education*, 59, 361-337.
- Lunsford, K. J. (2002). Contextualizing Toulmin's model in the writing classroom: A case study. Written Communication, 19, 109-174.
- Martin, J. R. (1989). Factual writing. Oxford, UK: Oxford University Press.
- Martin, J. R., & Rose, D. (2008). *Genre relations: Mapping culture*. London, UK: Equinox.
- National Assessment of Educational Progress. (1999). *National Assessment of Educational Progress writing report card for the nation and the states*. Retrieved from http://nces.ed.gov/nationsreportcard/pdf/main1998/1999462.pdf
- National Governors Association Center for Best Practices & Council of Chief State School Officers. (2010a). *Common Core State Standards. Appendix A: Research supporting key elements of the standards*. Washington, DC: Authors. Retrieved from http://www.corestandards.org/assests/Appendix_A.pdf
- National Governors Association Center for Best Practices & Council of Chief State School Officers. (2010b). English language arts standards. Washington, DC: Authors.

Newell, G. E., Beach, R., Smith, J., & VanDerHeide, J. (2011). Teaching and learning argumentative reading and writing: A review of research. *Reading Research Quarterly*, 46, 273-304.

- O'Hallaron, C. L. (2014). Supporting elementary English language learners' argumentative writing through a Functional Grammar approach (Doctoral dissertation). Available from ProQuest Dissertations and Theses database.
- Perie, M., Grigg, W., & Donahue, P. (2005). The nation's report card: Reading 2005.
 Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.
- Reznitskaya, A., Anderson, R. C., & Kuo, L.-J. (2007). Teaching and learning argumentation. *Elementary School Journal*, 107, 449-472.
- Schleppegrell, M. (2004). *The language of schooling*. Mahwah, NJ: Lawrence Erlbaum.
- Toulmin, S. E. (1958). *The uses of argument*. New York, NY: Cambridge University Press.
- VanDerHeide, J., & Newell, G. E. (2013). Instructional chains as a method for examining the teaching and learning of argumentative writing in classrooms. *Written Communication*, 30, 300-329.
- Yeh, S. (1998). Empowering education: Teaching argumentative writing to cultural minority middle-school students. *Research in the Teaching of English*, 33, 49-83.

Author Biography

Catherine L. O'Hallaron is a postdoctoral research fellow at the University of Michigan, Ann Arbor. Her research interests include linguistic approaches to studying English learners' writing development and the use of functional linguistic pedagogy in enhancing teachers' reading and writing instruction.