

Chapter 19

Reading and Writing Connections: A Commentary



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Abstract This commentary reviews the theoretical and empirical support for how reading and writing are connected and can support the development of each other and can be used in conjunction to accomplish learning goals. It then reviews studies on reading and writing presented in three chapters, detailing how they advance our knowledge and theory in this area. Finally, it provides recommendations for future research.

Keywords Reading · Writing · Reading and writing connections · Future research · Learning

Reading and writing are connected at the most basic level and in the most intimate ways. There is no reading without writing, and no purpose for writing without readers.

When readers write and writers read, they draw on many of the same cognitive resources. This is the case even though reading and writing are not identical skills (Fitzgerald and Shanahan 2000). Readers rely on their background knowledge to understand what they are reading; writers turn to this same source of information to obtain ideas for their writing. Readers and writers apply what they know about the functions and purposes of written language, as this helps them interpret an author's message and construct their own message for others to read. Readers make sense of what they read by using procedural knowledge about how to access information purposefully, set goals, question, predict, summarize, visualize, and analyze, whereas writers apply such knowledge when planning and crafting text. Readers and writers draw on their knowledge of the features of text, words, syntax, and usage to decode/encode words and comprehend/construct sentences or larger units of text.

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While readers often read text without doing any writing, writers commonly read the text they write to determine if it conveys their intended message. Even so, the purposes of reading and writing are to communicate. Effective communication when reading or writing involves specific processes that inform each other (Nelson 2008). For instance, readers acquire important insights into writing, as they think about why an author used a particular word, phrase, sentence, or rhetorical device to deliver an intended meaning. Likewise, writers gain insights about reading by creating text as they need to make their assumptions and premises clear as well as observe the rules of logic when composing text, making them more aware of these same issues in the material they read.

Not only do reading and writing draw on common cognitive resources and inform each other, they are frequently used in tandem to solve a specific problem or accomplish a particular task (Langer and Applebee 1987). For example, this includes using writing and reading together to acquire, understand, or study content material, using reading to gather information for writing, and writing about text to enhance comprehension of it.

These theoretical views on reading and writing connections are supported, at least in part, by empirical evidence collected with children and adolescents. Writing about material read improves their comprehension of it; teaching them how to write improves their reading comprehension, reading fluency, and word reading; and increasing how much they write enhances their reading comprehension (Graham and Hebert 2011; Graham and Santangelo 2014). Similarly, teaching children and adolescents how to read improves writing quality, output, and spelling, and increasing how frequently they read (and even observe others read) strengthens writing quality and spelling (Graham et al. 2018a, b). Teaching reading and writing together improves reading comprehension, writing quality, word decoding, spelling, reading vocabulary, and writing mechanics (Graham et al. 2018a, b).

While there is theoretical and empirical support for reading and writing connections, the available evidence supporting these connections are relatively thin. The three chapters in this section of the book provide new evidence about reading-writing connections and how one can influence the other.

The study presented in the chapter by Uppstad, Solheim, and Skaftun provides empirical evidence that is consistent with the theoretical proposition that engaging in the process of writing is beneficial to reading. In a correlational study with fifth grade students in Norway, they found that children who wrote directions that more successfully detailed how to get from one location to the other, taking into account both the writer's location and the reader's eventual destination, had stronger reading comprehension skills (after variance due to word reading and listening comprehension were first controlled). The findings from this study did not establish a causal link, demonstrating that engaging in writing informs reading, but they are consistent with the theoretical proposition that reading and writing inform each other (Nelson 2008). This theoretical viewpoint is under investigated, and this study provides a welcome addition to this literature.

The two investigations reported in the chapter by Elimelech, Aram, and Levin make an important contribution to the study of reading and writing connections by

examining if writing instruction delivered by parents at home enhanced the writing and reading skills of preschool and primary grade Israeli children. Parents are children's first literacy teachers, but most intervention studies that examine the impact of literacy instruction involve either teachers or researchers as instructors. The two studies presented here turn this typical narrative on its head by bringing school literacy instruction into the home, with parents acting as teachers. Such instruction had positive benefits in these two studies, as students who received writing instruction from their parents made greater writing and reading gains than students who did not receive parental instruction. These findings provide support for the theoretical proposition that students draw on the same sources of knowledge as they read and write (Fitzgerald and Shanahan 2000).

Keybroeck, Cumbo, and Gosse in the study presented in their chapter approach reading and writing connections from the opposite direction: providing reading instruction to determine if it enhanced both reading and writing. They set themselves a challenging task, as their investigation involved secondary students with a long history of difficulties learning to read. Reading growth for these students often plateaus after the elementary grades, possibly because reading is no longer taught (Biancarosa and Snow 2006). Fortunately, they found that Belgian students who practiced recoding words with similar orthographic patterns evidenced greater gains in word reading and reading comprehension as well as spelling than students who did not receive any special reading instruction. Like the studies by Elimelech, Aram, and Levin, these findings provide additional support for the theoretical proposition that students draw on the same sources of knowledge as they read and write (Fitzgerald and Shanahan 2000).

Not only do these studies provide empirical support for reading and writing connections, they also provided directions for future research. The most obvious limitation of these studies, at least in terms of examining reading and writing connections, is that they were unidirectional in focus. More specifically, they examined the relation from writing to reading or from reading to writing, but not the reciprocal interaction between these two related skills. I do not mean this as a criticism (as the reciprocal effects of these two skills was not the focus of these researchers), but use this omission to identify a direction for future research.

To provide some indication as to why I think that the reciprocal interactions between reading and writing connections needs to be the subject of additional research, I draw on a recent meta-analysis I conducted with my colleagues (Graham et al. 2018a, b). In this review, we identified published and unpublished true-and quasi-experiments where reading and writing were both taught. No more than 60% of the instructional time could be focused on either reading or writing in the studies reviewed. We were only able to identify 47 experiments that involved such instruction and assessed students' growth as readers, writers, or both. While a variety of different combined reading and writing programs were tested in the identified studies (e.g., cooperative learning, strategy instruction oriented, whole language, literature-based, content-based), no single approach was tested in more than eight experiments. Further, some of the approaches (e.g., cooperative learning, and whole language) did not produce statistically significant effects for both reading and

writing. Thus, we need to know much more about how to take advantage of reading and writing connections when providing combined literacy instruction if we are to maximize students' reading and writing growth. It is particularly important to better determine how much emphasis to place on each skill, as we found that treatments that placed an equal emphasis on reading and writing yielded greater effects than studies that placed a greater emphasis on reading or writing. Moreover, the long-term effects of combined reading and writing instruction are unknown.

The call for additional research that tests the effectiveness of combined reading and writing instruction should not mean that additional research testing the unidimensional effects of reading instruction on writing or vice versa is no longer needed. For example, in another meta-analysis conducted by my colleagues and I (Graham et al. 2018a, b), we were only able to identify 91 published and unpublished papers that assessed the impact of reading or reading instruction on students' writing via a true- or quasi-experiment. While phonological awareness, phonics, and reading comprehension instruction had a positive impact on one or more aspects of writing performance immediately following instruction and beyond, research investigating the impact of vocabulary and fluency instruction on writing is almost non-existent. Likewise, increasing students' interaction with words and text through reading improved writing performance, but such effects were not maintained over time. As a result, we need to explore new avenues for how reading and reading instruction can lead to better writing. In the case of interventions that provide more interaction with words and text, we also need to determine how obtained effects can be maintained over time.

The need for more research looking at the causal relationships between reading and writing also applies to writing and writing interventions effects on reading. In other meta-analysis (Graham and Hebert 2011; Graham and Santangelo 2014), we found a relatively small number of studies that tested if increasing how much students wrote improved reading comprehension; providing spelling instruction improved word reading, reading fluency, and reading comprehension; and teaching sentence skills or text structure improved one or more aspects of students' writing. More research is needed (and some of it is found in this book) that tests these relationships as well as examines the impact of other approaches to teaching writing on reading growth. For example, teaching students strategies for planning and revising text has a strong impact on writing quality (Graham and Perin 2007), but we do not know if such instruction enhances students' reading.

It is important to note that in one of our meta-analyses (Graham and Hebert 2011), over 50 studies examined if writing about text read increased students' comprehension of said material (it did). Many of these investigations involved writing without composing (e.g., short answers, notetaking), so it is important that future research examines if more extended writing tasks like constructing a written narrative about material read, describing how to apply information in the text, or defending in writing a position relevant to the material read are each effective in improving students' understanding of the read text (when considered collectively they are effective at doing this). In addition, there is a need for studies that test the impact of

reading source text in advance of composing as well as testing the effectiveness of combining different reading and writing activities to enhance content learning.

I conclude my commentary by encouraging reading and writing intervention researchers to commonly collect both reading and writing measures in their studies. It is particularly important that a more diverse array of measures in each area be applied. For instance, reading researchers are fond of spelling measures, but rarely assess other aspects of writing. Similarly, it is important that writing researchers assess a broad array of reading skills including word reading, fluency, and reading comprehension.

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