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ABSTRACT

The study of reading-writing connections involves appreciating how reading and writing work together as tools for information storage and retrieval, discovery and logical thought, communication, and self-indulgence. There are numerous benefits that can be accrued from connecting reading and writing. Thus far, for example, the research data have substantiated that (1) depending upon the measures employed to assess overall reading and writing achievement and attitude, the general correlation between reading and writing is moderate and fluctuates by age, instructional history, and other factors; (2) selected reading experiences definitely contributed to writing performance, just as selected writing experiences contribute to reading performance; (3) writers acquire certain values and behaviors from reading, while readers acquire certain values and behaviors from writing; and (4) successful writers integrate reading into their writing experience, and successful readers integrate writing into their reading experience. Commentaries on this paper by Bonnie B. Alexander and Alan Purves accompany the document. (HOD)

CENTER FOR THE STUDY OF READING

Reading Education Report No. 55

WHAT IS THE VALUE OF CONNECTING READING AND WRITING?

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COMMENTARY

by Alan Purves

Reading this paper as a commentator forced me to write as I read. Since I am a self-conscious sort, I found myself at certain times wanting to edit, to revise and to plan my response. As I read, then, I was acting as a writer, but I was not writing as one normally thinks of writing; I was reading. That I put pen to paper does not make me a writer in the sense of an individual who purposively sets out to produce a text. I was, rather, using some acts that writers use in order to formulate my understanding of and response to the text. Similarly, as I write this commentary I do perform certain acts of reading, such as going to Tierney and Leys' text, looking at my notes or looking at my own drafts. Yet I am essentially composing a text not reading one. Neither reading nor writing as purposive activities with their own integrity should be confused although there may be individual acts in each that comes from the other. Reading and writing have parallels, true, but they are not identical.

It is this point of parallelism without identity, I believe, that accounts for the lack of high or consistent correlation between reading and writing; Tierney and Leys give a number of other plausible explanations, as well. Yet they omit one study, Godshalk, Swineford and Coffman (1966) which showed the high correlation of SAT-verbal and writing scores. The SAT-V also

correlates with other measures of reading (it is a reading test in part), but one inference might well be that vocabulary knowledge is a common predictor of both writing and reading performance (Takala, 1984).

I have, however, another criticism of this paper and one suggestion. The criticism is that nowhere in their paper do Tierney and Leys discuss the criterion problem. They do refer to writing of quality and to good readers, but what do these terms mean? Is quality of writing to be found in mechanics and usage, organization, content, style, or audience effectiveness? Is good reading to be equated with speed, literal comprehension, inferential comprehension, or the formulation of a response? I suspect the lack of definition plagues many of the studies cited as does the lack of adequate measures that Tierney and Leys mention. In order to sort out the broad question of relationships, the criterion issue must be met headon.

The suggestion I have for a study of this problem is one of sorting and defining. It is clear from some of the quotations that students transfer from their reading to their writing such textual aspects as words, structural pieces like dedications, whole structures, and content. But do they also transfer processes, and if so which ones? Do readers transfer similar properties and processes? Can we, in short, be more precise and can we distinguish these properties and processes that come from reading and writing from those that come from speaking and

viewing. Such an attempted classification would advance the field of study.

All of what I have written thus far is intended to deepen and strengthen the argument, for I find myself in sympathy with that argument. I do so primarily because my own work in the field of literary study suggests that reading a text is a composing activity--as Louise Rosenblatt (1978) has long suggested. It involves planning, drafting and revising. For me writing about a literary text forces me to read it more closely. Writing a test about a text has an even more forceful effect. But I would resist an attempt to confound writing and reading and so I think should pedagogy and research.

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COMMENTARY

By Bonnie B. Armbruster

This reaction to "What is the Value of Connecting Reading and Writing?" is written from the perspective of someone who reads a lot of content area textbooks and thinks a lot about instruction--in reading, in writing, and in the content areas. The Tierney and Leys article inspired in me both despair and hope--despair about the frightening implications of the research findings that what students read influences what they write and hope about the exciting instructional potential of making use of the reading/writing connection. I'll deal with the frightening implications first and end on a positive note.

For many students, what they read in school is what they read period, and what they read in school is mostly textbooks. So, what's so bad about reading textbooks? you may be wondering. Probably nothing--if textbooks were models of good writing. Unfortunately, as I have argued elsewhere (Anderson & Armbruster, 1984; Armbruster, 1984), many textbooks (at least at the elementary level) are "inconsiderate," that is, inconsiderate of the reader because they are poorly written. Many textbooks, or at least parts of many textbooks, lack structure, coherence, and unity; that is, they are confusing, rambling, disjointed, and choppy. In addition, textbooks deal too often in trivial facts; they may not be written at a level appropriate for the audience;

and sometimes they contain errors, contradictions, and inconsistencies. I am dismayed in the realization that students are expected to read, understand, and learn from such inconsiderate textbooks. I am distraught in the knowledge that such textbooks may influence the students' own writing! The specter of a whole generation of inconsiderate writers looms menacingly on the horizon.

Since I am by nature optimistic and pragmatic, I tried to overcome my despair by thinking about how reading inconsiderate textbooks might be transformed from a negative into a positive influence on students' writing. Specifically, I pondered how the reading-writing connection could be exploited to help alleviate some of the problems of inconsiderate textbooks as well as provide valuable writing, and reading, experiences for students. Here are some possibilities that I think might be beneficial with at least content area textbooks:

1. Students could be encouraged to "edit" their textbooks. For example, students could (a) impose structure on text that lacks it or cast the text in a different, more appropriate structure, (b) add connectives and transitional devices to make the text more coherent, (c) add or change headings and topic sentences to capture the "main ideas" and/or the organization of selections, and (d) add or delete materials to make the text more audience appropriate.

2. Students could compare different treatments of the same topic. For example, they could compare the textbook version with tradebooks, encyclopedias, magazine articles, original source documents (e.g., letters and diaries), and even works of literature. Then students could discuss differences in authors' purposes, styles, choices of vocabulary, discourse and syntactical structures, and so on, and what effect these differences have on readers.

These suggestions might benefit both reading and writing. For example,

1. Students might learn some valuable comprehension and metacomprehension skills and strategies. For instance, they'll learn to ask themselves questions such as "What did the author intend for me to learn from this text?" "Why don't I understand this section?" "Is there something 'inconsiderate' about the text?" "What could be done to make the text 'considerate'?" "How are these ideas <u>really</u> related?" "What should the title <u>really</u> be?" "Why didn't the author define that word?" and so on.

2. Students would have the opportunity to learn editing skills on text other than their own. Therefore, the editing is likely to be more objective than it would be with their own writing, since students are not ego-involved with a textbook.

3. Students might learn some critical thinking and reading skills. They might learn that textbooks are not sacred, that

authors make mistakes, and that it's a good idea to read all text, even a textbook, with a critical eye.

4. Some affective and motivational advantages might even accrue for students. They might realize that if they don't understand what they're reading, it's not necessarily their fault; it may be that the author simply hasn't been considerate. Also they might realize that although good writing is hard work (yes, even for adults), it's worth the effort if you really want to get your message across.

So far I've talked about some possible advantages for students of making use of the reading/writing connection with classroom textbooks. The obvious converse is that there are also rich instructional opportunities for teachers. By using content area textbooks, teachers can integrate instruction in reading, writing, and subject matter. In other words, at the same time teachers are imparting content, they can teach reading skills such as finding main ideas and identifying structure; and writing skills such as using main ideas for topic sentences and titles, using connectives and signaling words that are appropriate for the structure, and editing.

In conclusion, the Tierney and Leys article has convinced me that even something so seemingly disastrous as an inconsiderate textbook can have some potential benefits, after all. I think an inconsiderate textbook can be used to help students develop important reading and writing skills. If nothing else, it

provides an example of text which badly needs editing and rewriting. Please, publishers, don't get me wrong. I am NOT recommending that textbooks be made inconsiderate in order to provide a golden teaching opportunity! However, as long as we're stuck with inconsiderate textbooks in the classroom, we might as well use them to advantage.

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Abstract

This paper discusses the benefits or learning outcomes which accrue from interrelating reading and writing. Specifically, two questions are addressed: (a) Do gains in overall reading performance contribute to gains in overall writing performance and vice versa? and (b) How does writing influence reading and how does reading influence writing? Commentaries by Bonnie B. Armbruster and Alan Purves are included.

What Is the Value of Connecting Reading and Writing?

In recent years there has been an upsurge in the number of journal articles and conference presentations discussing the relationships between reading and writing. In general, these articles and papers have stressed the theoretical links between reading and writing processes. But a central question remains unaddressed: What are the benefits or learning outcomes which arise from interrelating or connecting reading and writing? In the past when researchers considered reading-writing relationships they often focussed upon the correlation between reading and writing or the improvements in reading due to writing instruction and vice versa. More recently, the research in reading-writing relationships has expanded and so too has our view of the learning outcomes which arise from their interconnections. For example, recent studies of readers' past writing experiences--that is overall achievement, attitude, genre preferences, or sense of audience--show that such experiences can contribute to the reader's selection of books, attitude, and sense and appreciation of authorship. We are beginning to see how reading influences revision, how readers use writing during studying, and how writers use reading during the preparation of a critical essay.

In this paper we explore some of the learning outcomes we have noted from past research and those in our own observations of elementary-grade students.[1] Specifically, we address:

(1) Do gains in overall reading performance contribute to gains in overall writing performance and vice versa, do gains in overall writing performance contribute to gains in overall reading performance?

(2) How does writing influence reading and how does reading influence writing?

In What Ways Do Gains in Overall Reading Improvement Contribute to Gains in Overall Writing Improvement and Vice-Versa?

Can we expect students who are successful readers to be successful writers, or students who are successful writers to be successful readers? When we read studies which show that good readers are also good writers we are not surprised for it seems intuitively correct that reading and writing skills develop together or are so entangled that they appear inseparable. In contrast, if we read research suggesting that good readers are not necessarily good writers, we might initially question such a finding. For example, we might ask: What definition of reading and writing had been used? Or, what instrument was used to measure reading and writing performance? On further reflection, we can all recall individuals who were good readers, but poor writers (sure, I know some people who are good readers, even good

editors, but are just fair writers). Alternatively, we have greater difficulty accepting that there are good writers who are poor readers (surely good writing demands a fair amount of reading ability). One way to reconcile this apparent contradiction is to adopt a more pragmatic point of view based upon what we know about how separated reading and writing instruction are in schools. They are commonly taught as individual subjects and in quite different ways. The way they are tes ed is usually quite different. Reading performance is often scored with multiple choice test items as either right or wrong; writing performance is often scored using qualitative comparisons.

Having considered the possible relationships between reading and writing performance, it should not be surprising to learn that most correlational studies of reading and writing suggest a modest general correlation between overall reading performance and writing achievement. They have also shown that there are fluctuations in the magnitude of this correlation due to factors such as age, and the measures employed. Thorough examination by Shanahan (1980) of the reading-writing relationships of children in grades 2 and 5 suggested that, as students moved through the grades, the correlation between reading and writing varied erratically depending upon the measures which were employed. Similarly, an extensive study by Loban (1976) found that the relationship between reading achievement and ratings of writing

increased across grades 4, 6, and 9. In terms of students for whom there were marked differences in reading and writing achievement, Loban reported that approximately 40% of the students were either good readers and poor writers or good writers and poor readers. In our own research, with three third grade classrooms in three different schools, we found that students ranked as good readers were not necessarily the same students ranked as good writers and vice versa. In particular, approximately 20% of the students ranked in the first quartile for reading or writing were given a rank much lower (usually toward the bottom of the second or in the third quartile) for writing or reading respectively.

Studies of the overall impact of reading upon writing and writing upon reading are not necessarily restricted to achievement. In our work with third graders, we have looked at the extent to which attitudes to reading and writing correlate. Our analyses of attitudes parallel our findings for achievement. There are some students who maintain a high or low value for both reading and writing; others vary from reading to writing.

Can we reach any conclusions, then, about the extent to which reading and writing achievement are related? If we take these data on face value, we might conclude that reading and writing appear to be either strongly or weakly related for some individuals depending upon the measures which are employed to assess reading and writing performance. Changes in the strength

of this relationship by individuals suggest that other factors may intrude--such as a reader or a writer's instructional history, the extent to which students receive opportunities to read and write, or the extent to which reading and writing opportunities are coordinated.

Conclusions such as these are not without their limitations. For example, there is the problem of determining what should be measured; that is, which of the different reading and writing experiences to which an individual is exposed should be sampled? Or, perhaps we need to examine the correlations more differentially within genre and by task. Unfortunately, coming to grips with specific reading and writing tasks as well as measurement issues is not a straightforward matter. For what is not generally addressed in examinations of reading and writing is that the two processes are confounded. When an individual writes he also reads, and when an individual reads he often writes. Certainly, the impossibility of avoiding the intrusion of reading upon writing and sometimes writing upon reading suggests we need to consider a more detailed examination of when and how reading and writing interface with each other. That is, we should address how does writing influence reading and how does reading influence writing?

How Does Writing Influence Reading

As far back as 1908, Edmond Huey reported the use of the sentence method which used students' writing as the basis for

reading instruction. Since that time, various educators have advocated numerous practices in which writing is incorporated into the reading lesson. We would like to review some of these suggestions as well as discuss some of the benefits purported to come from such involvements.

C. Chomsky (1979), who together with Charles Read (1971), introduced us to the notion of "invented spellings" makes a strong case for early writing prior to learning to read. As she stated:

> . . . children who have been writing for months are in a very favorable position when they undertake learning to read. They have at their command considerable phonetic information about English, practice in phonemic segmentation, and experience with alphabetic representation. These are some of the technical skills that they need to get started. They have, in addition, an expectation of going ahead on their own. They are prepared to make sense, and their purpose is to derive a message from the print, not just to pronounce the words. (pp. 51-52)

More recent analyses of the attitudes, strategies and understandings of children during their first five years, by Ferriero and Teberosky (1982) and Harste, Woodward, and Burke (1984) have substantiated and extended this argument. Through writing samples collected from children aged four to six, they show how varied writing experiences (e.g., notes, stories,

picture captions, etc.) provide children with the opportunities to develop, test, reinforce, and extend their understandings about text. As Harste, Woodward, and Burke (1984) stated, writing allows children the opportunity to test their "growing understanding of storiness, of wordness, of how one keeps ideas apart in writing, how the sounds of language are mapped onto written letters, of how one uses writing to mean and more" p. 218).

Such notions are not novel. The suggestion that children might actually learn to read by writing is consistent with the basic tenets underlying the language experience approach as well as selected "creative" writing approaches (e.g., Allen, 1976; Ashton-Warner, 1963; Clay, 1976; Montessori, 1964; Stauffer, 1970; Fader & Shaevitz, 1966). There appear to be ample affidavits and research evidence as to the effectiveness of these approaches to warrant accepting them as credible at least some of the time for some children. For example, such approaches have been shown to contribute substantially to improved concept development, word recognition, vocabulary and comprehension development as well as to heighten the students' awareness of the author's role and craft. One of the third grade students in our study recounted how early opportunities to write contributed to his learning to read.

> I learned to write before I could read. I just wrote and then I started reading books because my mother taught me letters and how to spell and showed me all kinds of words. I started making words and I started making them spelled right, and then I decided to read books because I knew I could read right with the words all spelled right. So I started reading books and I could understand books more because I wrote first.

The claim that writing contributes to a reader's sense of the author's craft is consistent with the findings offered by Boutwell (1983), Calkins (1983), Giaccobe (1983), and Graves and Hansen (1983). They suggest that students involved in a rich writing curriculum develop a keen sense of why something they are reading was written, as well as its strengths and weaknesses. Furthermore, unlike students who receive little time to write, the students who write frequently and discuss their writing will approach reading with what might be termed the "eye of a writer." Questions and comments from children who have received extensive opportunities to write provide evidence for these claims. Calkins (1983) recorded questions such as "[I wonder] why the author chose the lead he did?" and "I wonder if these characters come from the author's life?" during discussions about various texts in a classroom where children write extensively. A quote from a young author illustrates his change in understanding the writing process:

> Before I ever wrote a book, I used to think there was a big machine, and they typed a title and then the machine went until the book was done. Now I look at a book and I know a guy wrote it and it's been his project for a long time.
>
> After the guy writes it, he probably thinks of questions people will ask him and revises it like I do. (p. 157)

Some educators suggest that we should take even greater advantage of how writers make meaning and revamp our approach to teaching reading in such a way as to treat our readers as if they were writers (Smith, 1983; Tierney & Pearson, 1983). That is, readers should be encouraged to approach reading with the same planfulness and some of the same strategies that writers use when they research a topic, develop a draft, reread and redevelop their text, and revise and distance themselves from their own thinking. But as Tierney and Pearson (1983) have suggested, these suggestions are not part of current instructional practices or student behavior. As they stated:

> It seems that students rarely pause to reflect on their ideas or to judge the quality of their developing interpretations. Nor do they often reread a text either from the same or different perspective. In fact, to suggest that a reader should approach text as a writer who crafts an understanding across several drafts--who pauses, rethinks, and revises--is almost contrary to the well established

goals readers proclaim for themselves (e.g., that efficient reading is equivalent to maximum recall based upon a single fast reading). (p. 577)

Occasionally, students apply strategies from their writing for their reading and they do this quite spontaneously. For example, one of the good readers and writers in our study occasionally referred to procedures he used in his writing that he had found useful in reading. For example, when discussing what he did when he got "stuck" on a word he suggested: "What I do is I just think of what I do when I'm writing . . . I remember that mistakes aren't everything." This is an extension of an earlier commentary he made about mistakes, "if you thought making mistakes was everything, like say they were dumb, so you would get more bored with the book. . . . I have learned to make another draft and correct them [mistakes] and then go on to a final [draft] after I have corrected them."

There are a variety of other ways in which writing has been shown to contribute to a reader's experience. Taylor and Beach (1984) were able to improve students' reading of expository text by involving them in writing paragraphs with the same structures. Petrosky (1982) found that having students write essay responses to stories they had read enhanced the quality of their reading. In a similar vein, N. Atwell (1984) and Staton (1982) attribute the development of a sense of the communicative purposes of

writing to the use of dialogue journals (i.e., the opportunity to have a written dialogue with a teacher through a journal).

At times writing will be used primarily as an adjunct to reading and studying. For example, often a reader will respond to a reading assignment with a marginal notation, summary, or some other form of reflective comment which is intended as an aid to staying on task or as a critical reaction to someone's ideas. Indeed, there are a number of different notetaking strategies and other procedures which incorporate the use of this type of writing as an aid to studying (Eanet, 1978; Eanet & Manzo, 1976; Palmatier, 1971, 1973; Robinson, 1961). Not surprising, if students are capable notetakers or summary writers and if the purpose for reading the text warrants this type of response, research supports the worth of such activities (Anderson, 1980; Arnold, 1942; Bretzing & Kulhavy, 1979, 1981; Doctorow, Wittrock, & Marks, 1978; Germaine, 1921; Howe & Singer, 1975; Kulhavy, Dyer, & Silver, 1975; Schultz & DiVesta, 1972; Shimmerlik & Nolan, 1976; Taylor, 1982; Taylor & Berkowitz, 1980; Todd & Kessler, 1971).

While there are numerous writing activities which may contribute to reading, there are some which do not. For example, the research on sentence combining has yielded quite mixed results in terms of carry-overs to reading (Combs, 1975; Crews, 1971; Howie, 1979; Machie, 1982; Ney, 1976; Obenchain, 1971; Straw & Schreiner, 1982). This should not be surprising as

sentence combining, especially if it does not extend beyond exercises which require combining sentence pairs, can be viewed either as an end unto itself or a skill with rather limited transfer value to reading. Those studies in which benefits for reading have been accrued might be, as Combs (1979) and Stotsky (1975) have suggested, due to indirect influences, for example, the extent to which a student is forced to attend to text.

In summary, while there may be writing activities which may not contribute to reading (e.g., some sentence combining exercises), there are many writing activities which do contribute to reading. But even this is a limited view, for there are other sides to this issue. In particular, we need to consider: how reading can influence writing, and moreover, how reading and writing might work together.

How Does Reading Influence Writing?

Reading may contribute to writing in a variety of ways. You may speculate that the type and amount of reading material to which writers are exposed may influence their choice of topic, genre, writing style, and vocabulary. It may also affect their values about writing and heighten their understanding of the author's craft. Or from a slightly different perspective, we might consider when reading is tied more directly to writing, as, for example, when writers research a topic prior to writing, review their notes during writing, compare their style or format with that of another author, revise their work or rethink and

evaluate their thoughts and arguments. Writers often put reading to a number of different uses as they develop drafts or take part in everyday exchanges of information. As will become apparent in our forthcoming discussion, research offers quite a good deal of support for such speculations.

Selected experimental studies that have looked at the influence of selected reading experiences upon writing suggest that, for better or worse, what students read does indeed influence what they write. Studies by Dixon (1978) and Eckhoff (1983) have provided evidence of the negative impact of being exposed to the stilted language and format often found in first grade readers. For example, Eckhoff (1983) found that what you read may have a negative impact on what you write. She looked at two second grade classes using two different basal series. She found that children who used a series that had stilted language and format tended to produce writing that was also stilted in language and format.

Geva and Tierney (1984) and Bereiter and Scardamalia (1984) have demonstrated the influence of selected formats of text and rhetorical features upon the writing of students at various levels. Geva and Tierney had high school students read different types of compare/contrast texts and then either write summaries or recalls. They found that the format of the text read by the students influenced the format of the students' writing. Bereiter and Scardamalia had a range of students, from grade 3 to

graduate school, read single examples of literary types and then write in the same form. They found that students of all ages exhibited evidence of acquiring rhetorical knowledge from their reading. Although, it should be noted that this knowledge was biased at all ages toward discrete elements of language and content.

In a similar vein, Gordon and Braun (1982) found that students' writing improved if the structural characteristics of stories were highlighted. They taught one group of fifth graders about the structural characteristics of stories while another group just read and discussed the stories. They found that the instruction helped the students' comprehension for stories as well as their writing of stories.

In our work with third graders, we have received similar confirmations of the effects of reading upon writing. We have observed that students will initiate writing in a certain genre, or write a certain report, or use an alternative format based upon what they have read. In addition, we have found, as have other investigators, that with encouragement to do so, students will compare their own writing with the plot or character development present in what they are reading. Students will begin using their reading as a rich resource for considering possible topics, ideas, and stylistic options. Let us illustrate. One boy in our study was particularly fond of the Encyclopedia Brown books by Donald Sobol. When the student was

asked how he had started writing his piece called, "The Mini-Sub" he replied,

> I got that chapter out of an Encyclopedia Brown book--I was reading a chapter called, "The Flying Submarine." And it's a little bit similar to the chapter I am writing right now. That's how I got the name of the chapter, it's very similar, but I got this topic because I made up a character named Brad Wilson and he's supposed to be a detective. . . . I wanted to copy down things (from "The Flying Submarine") but I decided that that's like stealing, so I made different characters, sentences and all that, and I think mine is better than the book I just read.

The children also told us that they learned about the author's craft and about new words from their reading, for example:

(1) Interviewer: I noticed . . . at the beginning of Chapter 5 (you wrote) "meanwhile, at home" . . . how did you know how to do that?

Child: I have seen it in other books.

Interviewer: What are some of the other things that you use?

Child: Words and dedications, dialogue, ways to show people that you are going back to something else.

(2) (A good book has) showy words, action, dialogue . . . things like that.

(3) I think my reading helps my writing because when I read I get new words for my writing and when I read I also get new ideas like I dedicate now and I put feelings and details and better titles and that's how I think reading helps writing.

The influence of reading upon writing may also extend to strategies. Studies by Spivey (1983) and Birnbaum (1981, 1982) have dealt in part with this question. Spivey had college students read three articles on the same topic and then write an essay. She found that the essays written by the more able comprehenders were better organized, more connected, and of higher content quality than those written by the less able comprehenders. Birnbaum (1981, 1982) found with fourth and seventh graders that more proficient readers tended to know how to think and what to think about while they were reading and writing. She also found that the quality of writing produced by these students was related to the quality of their reading during writing. That is, the more proficient writers were less-localized or sentence-bound, they tended to reread larger chunks of text than the less-proficient writers. Apart from Spivey and Birnbaum's work, we have very little research which has explored other transfer possibilities. For example, will readers who can self-question, focus their reading, and relate what they are reading to other materials they have read, prove able to transfer their strategies to their writing? Similarly, will readers who

are critical of the author's craft and have a sense of audience prove to be writers who have a rich sense of their readers? While this area is only just starting to be explored, these questions point toward an important, overlooked area for reading and writing instruction.

Our discussion to this point might suggest that we believe reading and writing are largely linear operations which follow from one to the other. On the contrary, we hold that writers use reading in a more integrated fashion. For as writers write, they are constantly involved in reading their own writing, reading other material, and using understandings they have acquired from past readings. Consider the following statements taken from third-graders as they discussed how they approached the stories and reports they had written.

(1) Sometimes I imagine that I am the one who is going to read it, and I think about what other people would think.

(2) I read my work as another person, I like to have a hint of what the other people may say about it.

(3) If something doesn't make sense [I can always tell] because . . . this little person in my head tells me.

(4) I wrote it down and then I read it over, and the parts that I didn't think were right or where I needed more information, I crossed it out and put it on the side, this is a second draft and first draft put together.

(5) Well, some people don't know what elliptical means, so [on my second draft] I just decided to put that there [a definition] so that they wouldn't get mixed up.

(6) Interviewer: How did you think of the ideas [for your book Natasha's Run Away Imagination]?

Child: Well, I read this other book, and it was about this girl's imagination but I just thought about that book and I thought it would be a good title for Natasha Koren to have a runaway imagination . . . it [the other book] wasn't the same . . . she looks at pictures and stuff and she imagines they are moving and stuff like that.

(7) Journal Entry: Today I was doing my health book. I'm doing blood . . . Can I go to the library on Monday to get some more information on blood?

(8) I did a report on owls, and this chapter right here [in his detective novel] is based on owls and [the mystery] is a question about owls.

The first five statements give an indication of the type of reading which occurs in conjunction with reading one's own writing--either for revision purposes or to discover, understand, or enjoy one's own text. Our data, as do studies by Atwell (1980), Birnbaum (1981, 1982), Perl (1979), and Sommers (1980), suggest that the quality of writing produced is related to the quality of reading during writing. Specifically, successful

writers have a better sense of the needs of their audience and tend to be less localized or sentence-bound in their approach as they read their own writing. The first five writers refer to reading their own writing and hint at their sense of audience. What is particularly noteworthy is how the fourth writer exhibits an understanding of her text as a whole and that she is reading it as her own audience. Whereas the fifth writer is concerned with a specific feature of his text (the use of one particular word), he is also thinking about an external audience, in this case, his classmates. Statements six, seven, and eight represent examples of how writers use texts other than their own or ones they have written previously for purposes of acquiring additional ideas to include in a text and for possible stylistic devices. They refer to the type of reading which often must be do as reports, critical essays, or scholarly articles are written.

These influences of reading upon writing upon reading extend beyond information, behavior, and style to attitude. As Scribner and Cole (1981) and Schmandt-Besserat (1978) have noted, attitudes to reading and writing change as societies explore new uses of written literacy. Just as societies' attitudes to writing changes with changes in uses of reading and writing, so do students' attitudes. For example, students will exhibit a change in attitude to writing as a result of recognizing a new use for writing. One of our students, Diane, was quite recalcitrant

about writing until she began a story, "Do You Like Me?", which was based in part upon her reading of Judy Blume's "Blubber," and in part upon her own experiences of being rejected by her peers. Most of her writing prior to this time had been simple narratives, usually based on things that she had experienced (e.g., family trips to the mountains and picking apples); after this time she began to use her writing to explore her feelings (e.g., anger and loneliness associated with making new friends). Until she began writing on topics such as these, she could see little value in writing and complained, "There's nothing new to write about." In fact, during the interviews she talked about her transition from being a poor writer to becoming a good writer during the writing of her story, "Do You Like Me?" In a similar fashion, students will develop an appreciation of the author's craft as they are exposed simultaneously to alternatives in their reading and consider, as well as explore, these various possibilities in their writing. In our study, a number of the students began to include a foreword and/or a dedication in their books. This was based upon the positive response another student had received for using these in her books. She, in turn, had decided to include it after noticing that "published" books contained forewords and dedications.

Conclusion

The goal of this paper has been to address the question: What are the benefits or learning outcomes which arise from

interrelating or connecting reading and writing? As we leave our present search we are convinced that there are numerous benefits which can be accrued from connecting reading and writing. The research to date has substantiated that:

(1) Depending upon the measures which are employed to assess overall reading and writing achievement and attitude, the general correlation between reading and writing is moderate and fluctuates by age, instructional history, and other factors.

(2) Selected reading experiences definitely contribute to writing performance; likewise, selected writing experiences contribute to reading performance.

(3) Writers acquire certain values and behaviors from reading and readers acquire certain values and behaviors from writing.

(4) Successful writers integrate reading into their writing experience and successful readers integrate writing into their reading experience.

In the past, what seems to have limited our appreciation of reading-writing relationships has been our perspective. In particular, a sentiment that there exists a general single correlational answer to the question of how reading and writing are related has pervaded much of our thinking. We are convinced that the study of reading-writing connections involves appreciating how reading and writing work together as tools for

information storage and retrieval, discovery and logical thought, communication, and self-indulgence. Literacy is at a premium when an individual uses reading and writing in concert for such purposes. Indeed, having to justify the integration of reading and writing is tantamount to having to validate the nature and role of literacy in society.

In closing, we would like to pose a question that we think needs to be considered--in our reading and writing instruction, are we preparing students to do the various types of reading and writing that have been discussed in this paper? In particular, are we preparing our students to be proficient readers of their own writing?

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Footnote

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