## Thinking: The Reading-Writing Connection

Karen Wixson Department of Curriculum and Instruction School of Education The University of Michigan

I now understand the despair felt by the English teacher who is suddenly told that she will have to double as the reading teacher. Only in my case, I am the "reading" person who has been asked to write about reading and writing for an audience of writing teachers. When I accepted the invitation to write for this issue of *fforum*, my first thought was: "I really don't know very much about writing." After talking to many of my colleagues, I found that I was not alone with this thought. Reading people often consider themselves to be uninformed about writing, and writing people often feel the same way about reading. Certainly we all recognize the intimate relationship which exists between reading and writing. So, why then isn't there more overlap between the work of reading and writing educators?

I am certain there are many reasons for this, but let me speculate about just one possible source of difficulty. Models for the development of language skills (see Figure 1) which have traditionally served as the basis for instructional practice have viewed reading and writing as part of a hierarchy of skills. One current text states: "For most human beings the acquisition of these skills follows a hierarchy of development: (1) listening, (2) speaking; (3) reading, and (4) writing," (Mackintosh, 1964); another states, "A firm

## FIGURE 1

REFINEMENT of language usage comes last.

WRITING follows as a means of self-expression. (Expressive written language)

READING comes next with the normal child. (receptive written language)

SPEAKING develops early in life. (expressive oral language)

LISTENING is the first step toward maturity. (receptive oral language)

EXPERIENCE is the foundation of our language development.

Development of the relationship of the elements of the language arts

From Ralph E. Kellogg. "Listening." in Pose Lamb (ed.) Guiding Children's Language Learning. Dubuque, Iowa: William C. Brown, 1971, p. 118.

foundation is required at each level before the next skill level can be effectively added or integrated," (Lerner, 1976). It is likely that models such as this one have played a significant role in establishing reading instruction as the major thrust of elementary education and as a subject of relatively minor importance in secondary and post-secondary education, and writing instruction as the major responsibility of secondary and post-secondary instruction with relatively minor importance in elementary education. This being the case, it is not difficult to understand why reading and writing educators do not have a longer history of collaboration. Those with an interest in investigating problems of reading instruction have been focusing their attention on elementary school students whereas those with an interest in studying problems of writing instruction have been concentrating on older students.

But this situation is changing. Along with the revitalization of the field of psycholinguistics which has occurred over the past 10-15 years, there has been an increasing tendency to view listening, speaking, reading, and writing within a cognitive-linguistic framework. The essence of this view, as put forward by Moffett and Wagner (1976), is that language is a medium of communication which is grounded in thinking. Within this context, emphasis is placed on the superstructure of language use which is formed by the set of relations among sender, receiver, and message, and the reciprocal relationships which exist between listening and speaking and reading and writing (see Figure 2).

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FIGURE 2			
	EN- CODING	DE- CODING	
VERBAL- IZATION (basic)	speaking —	— listening	ORAL
LITERACY (derived)	writing —	— reading	WRITTEN

Nowhere are the far reaching implications of this view of reading and writing so obvious as they are in the collection of articles presented in this issue of *fforum*. There are two premises at the heart of the authors' messages:

- 1. Thinking is the essence of both reading and writing; and
- 2. Students can be taught to become better readers and writers by teaching them about thinking.

The first premise has been stated in a variety of forms by the authors in this series of articles. For example, it can be found in Berthoff's references to "forming" or "making meaning" or Kintsch's characterization of comprehension as a "constructive, productive process." Similarly, Sosnoski talks about abandoning the notion that text is an object with determinate meaning — an idea, I might add, which appears to have relevance for White's thesis that writers' have little power to determine how their words will be given meaning.

The second premise, that we can teach students to become better readers and writers by teaching them about thinking, has been given a variety of forms by the authors. Berthoff suggests that if we make students conscious of what they are doing when they read and write, they will learn how to read and write more effectively. She also observes that consciousness in reading and writing is a method of thinking about thinking. Ryan, among others (e.g., Flavell, 1978), uses the term "metacognition" when referring to individuals knowledge about their own thinking activities and about how to regulate these activities. Ryan also discusses the types of metacognitive skills which appear to be related to successful learning and which therefore are likely candidates for instruction.

The topic of metacognition bears further elaboration because it can provide the common base which is needed in a discussion of reading and writing. Generally, metacognition encompasses three broad types of thinking variously referred to in the literature as: selection, adaptation, and monitoring (Ryan, this volume); predicting, planning, and checking (Brown, 1978); and evaluation, planning, and regulation (Paris and Lindauer, in press). Using Paris and Lindauer's terminology, a brief description of each type of thinking follows:

**Evaluation** refers to the analysis of the goals and purposes of a task and an assessment of the range of abilities one has available and which are required to complete the task successfully.

**Planning** refers to the deliberate selection of strategies to fulfill task goals.

**Regulation** refers to the continuous monitoring of porgress towards a goal and to the redirection of effort when failure is detected.

Graves provides a rich description of these metacognitive skills at work as children are guided in the process of selecting their own topics for writing. It is clear from the account that, with appropriate instruction, young children can learn to evaluate their choice of topics, plan appropriate writing strategies, monitor their progress and regulate their subsequent behaviors.

The interpretive framework provided by metacognition has been particularly useful to me as I worked to integrate the information presented by the experts in this issue of *fforum*. Several of the authors emphasize the need for writers to evaluate their task in an effort to plan more effectively: Bransford focuses on the necessity for writers to analyze what they know about various situations and to ensure that their readers are similarly informed; Redish stresses the need for writers to evaluate their task in terms of scope, audience, purpose, readers' task, and constraints; Meyer admonishes writers to be aware of the effect of different organizational plans on comprehension and to plan accordingly. While each of these authors choses to focus on the writer, the metacognitive framework permits us to see that comprehension is also enhanced if readers analyze what they know about a subject, determine the scope of the subject, the audience, and purpose for which a text was written, and are aware of different patterns of organization. Similarly, Stander observes that when readers are guided to make a careful analysis of the techniques authors use to achieve their purposes, they become conscious of the techniques available to them as writers.

The reciprocal relationship between reading and writing comes to the fore in the articles by Sosnoski and Torbe. Both authors illustrate quite dramatically how writing about the process of reading improves students' abilities to evaluate, plan, and regulate both their reading and their writing. As Berthoff notes, to strengthen one kind of meaning making is to strengthen the other — to see reading and writing as ways of making meaning, is to have no difficulty finding ways to keep them together.