

## THE CONNECTION BETWEEN READING AND WRITING: THEORETICAL FOUNDATIONS AND SOME TECHNIQUES

por Roseanne Rocha Tavares

(Laboratório Clínico de Leitura - UFSC)

In recent years many authorities have called for the necessity to introduce reading and writing in an integrated way, beginning from home instructions, going through elementary and secondary schools, up to college education (Shanahan, 1988; Rubin and Hansen, 1984; Spack, 1985; Tierney and Leys, 1984; Hayes, 1987). They claim that by using massively this interconnection, students will enhance their vocabulary, reading and writing skills, critical thinking and acquisition of content area. The purpose of this paper is to synthesize the basic assumptions underlying the connection between reading and writing as well as to point out their similarities and differences. Moreover, we will discuss some research undertaken based on this connection and the techniques used to apply it.

### BRIEF HISTORY OF READING AND WRITING STUDIES

#### Reading

Reading research has not been a continuous along the years. Instead, it has started and stopped for some years. Some ideas were strongly pursued and then abandoned being rediscovered later while others were totally disregarded (Venesky, in Pearson (ed.), 1984). Out of the innumerable

attempts to explain the reading process, four models sprouted supporting important ideas. The two first models, "Bottom up" and "Top down", appeared around the same period despite their opposed assumptions. In the bottom-up reading model, researchers claim that reading is a letter-by-letter process in which the reader starts with printed stimuli and works its way up to higher-level stages (syntactic and semantic meaning). Thus, the reader relies more on the graphic display and his grapho-phonemic knowledge, and proficient reading is decoding letter or words automatically (Gough, in Singer and Rudell (eds.), 1970). Conversely, the top-down model considers reading a "psycholinguistic guessing game" (Goodman, in Singer and Rudell (eds.), 1970) which involves an interaction between language and thought. The reader, then, starts with hypotheses and predictions and attempts to verify them by working down to the printed form. He relies more on his existing syntactic and semantic knowledge and tries to construct meaning with the least amount of time and effort. In the late 70's, Rumelhart proposes an interactive reading model which supports the view that reading "comprehension is the result of simultaneous interactions of the following knowledge sources for the reader: featural knowledge, letter-level knowledge, letter-cluster knowledge, lexical level knowledge, syntactic knowledge, semantic knowledge and pragmatic knowledge" (Rumelhart, in Dornick (ed.), 1977). In account of the relation between lower and higher levels of processing presented by Rumelhart, Stanovich (1980) develops a more accurate conceptualization of reading performance: the compensatory model. In this model Stanovich states that "a deficit in any knowledge source results in a heavier reliance on other knowledge sources, regardless of their level in the processing hierarchy" (Stanovich, in Anderson and Pearson (eds.), 1984). This last model stresses the necessity to build bridges between the new and the known for comprehension to occur (Pearson and Johnson in Wilson, 1983), that is, readers need to activate their schemata to relate the ideas of a text with their own knowledge. Only then can comprehension occur. We can observe through these models that the reading process was viewed as a mechanical skill up to the last conception which gives prominence to the interaction between the readers' knowledge and the text.

## Writing

The writing process followed a similar development to that of reading. Until the 60's, writing was considered "a one-way transmission from writers' minds to the working out of a graphic display" (Shanklin, 1981 in Rubin and Hansen, 1987:3). Students were supposed to write outlines before really carrying out the writing task; they had to write essays based on previous ones and there was a great emphasis on form. The attention was given to the product rather than to the process.

However, writing research changed the way to teach writing. It is not a linear process, since a writing task

requires one to go backward and forward. While writing one has to reflect upon what he has written and sometimes change and develop the ideas, taking into account his audience. It was a reflective process which fostered independence (Murray, 1968; Emig 1971; Pearl 1979 in Sadow and Spack, 1983).

Through the history of reading and writing we conclude that, currently, both skills value the social role played by readers and writers. This interchange influenced the connection between these skills.

#### THE INTERRELATION BETWEEN READING AND WRITING

Reading and writing rather than being private acts are social events. We usually perceive reading as a way of obtaining information with friends. In writing we also have the role of "dispensers of information" (Rupert and Brueggeman, 1986: 26) when we transmit our ideas. In classroom teaching, students should have the opportunity to make use of this kind of sharing. By connecting reading and writing they can incorporate the idea of real communication in which readers and writers interact. Moreover these two skills involve some analogous aspects in two levels: the surface and deep levels.

The surface level involves the mechanical skills which students are required to master. In reading they focus attention on decoding and subskills, while in writing they have to master punctuation, spelling, grammar, etc., these mechanical similarities, however, do not go beyond the importance of deeper similarities which involve the transaction between reader and writer. Both skills entail composing: we have to reflect, reread, make the message meaningful.

Recent research suggests that readers and writers share five kinds of knowledge when they compose: 1) Information knowledge, which includes world knowledge and concepts that a reader needs from the texts and from their own background of experience to comprehend the texts; and the information that the writer has and uses the text to convey it. The information gained in reading benefits writing and, at the same time, writing gives and clarifies this information. 2) Structural knowledge which has been traditionally taught through writing programs and comprises knowledge of structure of discourse and writing formulas (problem-solution frames, cohesion and coherence devices, etc.). Writers usually produce texts with structure and readers use this structure when they convey meaning. In this knowledge, however, it is difficult to assess the reading and writing effects as separate processes. 3) Transactional knowledge which involves the conceptualization of a text as a medium of communication between author and reader and makes people consider the audience which also influences the writer's topic choice and revision. On the other hand, readers make use of it by investigating and questioning the author's purpose and style. 4) Aesthetic knowledge which



implies certain alliterate styles, interjections, length which echo in the readers and writers ears and affect their choices. 5) Process knowledge which makes readers and writers aware of their writing/reading process which helps them to make conscious decisions about revising and the strategy to use in rereading (Rubin and Hansen, 1984).

By uncovering these deeper similarities, many teachers and curriculum designers have posed a question: since reading and writing are so closely related, why don't students receive instruction only in one or the other skill? The answer is that these two skills do not overlap each other and they are "at least as different as they are similar" (Shanahan, 1988:637). If these skills were identical there should not exist good readers who are poor writers and vice-versa. This apparent contradiction relies on the fact that reading and writing are commonly taught in schools, when they are taught, as separate subjects and in different ways. Teachers do not take for granted that the combination of these two skills - one influencing the other-, gives a positive outcome in terms of overall improvement and content area acquisition (Shanahan, 1988, Tierney and Leys, 1987; Thelen, 1982).

The next section of this paper deals particularly with the contribution that reading and writing give to each other and to content area learning. The theoretical assumptions will be followed by the description of some studies and techniques applied in the area. It is worth adding that in spite of these techniques being described separately, they can be used in combination in classroom teaching.

#### THE INFLUENCE OF READING IN WRITING AND CONTENT AREA ACQUISITION

It is not an easy task to separate the effects that reading or writing bring separately when we deal with a connected reading-writing program. However, by orienting the students to read in search of meaning, the type and amount of reading material to which they are exposed will influence their choice of topic, writing style and vocabulary while writing. Writers make use of reading in a number of different ways: as they develop drafts, as they review their notes during writing, as they compare their style with that of other authors, as they work and evaluate their arguments (Tierney and Leys, 1984). The following discussion of some studies will offer support for such suppositions.

Geva and Tierney (1984, in Tierney and Leys 1984) had high school students read different types of compare and contrast texts and then write summaries or recalls of the information in the texts. They found that the format of the students' writing were influenced by the format of the text read. In a similar way, studies by Spivey (1983); Gordon and Braun (1982) and Birnbaum, (1981, 1982 in Tierney and Leys, 1984) found that the students' writing improved when the

structural characteristics of stories were highlighted and that the quality of writing produced by fourth and seventh graders was directly related to their quality of reading. The more able comprehenders were better organized and more connected in their writings.

Most reading techniques involve a prereading activity. This activity helps the students to activate their existing schemata related to their current reading assignments. Moreover, it is a good way of assessing the students' knowledge of the topic. The teacher can use this device to add some background information and vocabulary that will be needed for successful comprehension of the text. Among others, the forthcoming reading techniques include prereading activities as well as highlight the structure of the text which will help the students' later writing and learning of the subject.

#### 1. The P.O.S.S.E. System (Adelstein and Pivel, 1978)

This technique is divided in three parts: Pre-reading, Analytical reading and reflecting. In the pre-reading parts, the student has to skim over the text to help him construct a context for what he reads. One can understand better what he reads when he knows what to expect. The analytical reading is characterized by a constant reflection upon the text. The student should keep in mind basic concepts such as audience, purpose, context, voice, tone, etc. The last part includes questions to be asked after: organization (problem - solution, cause - effect, etc.), support (examples, reasons, etc.) of the text and proceeds by asking questions related to synthesis and evaluation.

#### 2. The self-questioning study technique (Anderson, 1978)

It is useful to learn factual content and to write a paper. The reader has to make up questions about what he is reading, to write them down and then quizz himself on them. This technique forces the reader to concentrate on what he is reading besides demanding from him the ability to choose main ideas from the text.

#### 3. PR e P technique (Langer, 1981 in Sanacore, 1983)

It involves a three-step assesement procedure designed for use before reading a textbook. The teacher encourages associations with a key word, phrase or picture concerning a major concept in the text, then the students reflect on their associations and, finally, they reformulate their knowledge of the material to be read. By using this technique the teacher is able to assess the students' knowledge about the area and to assign appropriate material to them.

#### 4. PQ4R (Thomas and Robinson, 1977 in Sanacore, 1983)



This strategy stimulates students' prior knowledge by using six steps: preview (activates prior knowledge), question, read, reflect, recite and review. These latter steps confirm the knowledge activated in the preview and establish a bridge with the new knowledge.

5. Relating prereading and prewriting (Oberlin and Shugarman, 1988)

The activity shows the importance of relating these two skills. Students are guided to view prereading as similar to prewriting by going through the steps an author goes through before writing a text. The students, then, ask questions about the topic, the audience and the organization of the text and make a list including these aspects.

#### THE INFLUENCE OF WRITING IN READING AND CONTENT AREA ACQUISITION

In a similar vein, writing improves reading and content area acquisition. It occurs mainly by using writing techniques before, during and after reading a text. According to Thelen (1982), the primary responsibility of teachers is to help students understand the concepts of subjects that they will learn. Many educators suggest that by incorporating writing activities into reading lessons, students are encouraged to approach reading in the same way writers do it, when they research a topic, develop a draft, research and develop their text. Thus, when students perceive the structure of a text, they comprehend better what they are reading as well as learn the subject easily.

Some studies in writing programs have proved the contribution that writing gives to a reader. Taylor and Beach (1984, in Tierney and Leys, 1984) improved students' reading of expository texts by involving them in writing paragraphs with the same structures, while Petrosky (1982, in Tierney and Leys, 1984) found that the quality of reading of his students was enhanced by having them write essay responses to stories they had read. Another suggested writing program emphasizing the integration of writing and reading can be found in Raphael, Kirschner and Englert (1988). This project showed that good and poor readers learned more about the processes underlying reading and writing and improved in their ability to compose and comprehend informational texts. The following activities are only some of the practices that can be used before, during and after reading a text:

##### 1. Writing techniques used before reading a text:

These techniques prepare students to meet unfamiliar words and texts which may impede their full comprehension of the text. Among others we cite the dictation method

(Stotsky, 1982) in which the teacher reads a selected passage of the text to be read and unfamiliar terms are displayed and discussed. Then students write a passage similar to the one they listened to and finally compare them and edit their writing. They are ready, then to read the text. Brewer (1980, in Sanacore, 1983) proposes that one way of preventing negative outcomes in reading is to understand written discourse: description, narration, and exposition and their discourse forces: to inform, to entertain, to persuade, and to provide reader with literary-aesthetic knowledge. Teachers should present models of these discourse types and forces, so that students can identify them while reading and comprehend the text better. Moreover, while reading, students can use the notetaking technique which helps them in selecting the relevant points in the text.

## 2. Writing techniques used after reading

There are a great number of post-reading techniques. Most of them are notetaking procedures which force students to condense and summarize what they read in an organized and sometimes in hierarchical ways. Stotsky (1982) suggests some of these activities, specially those that require conscious attention to different aspects of the written language of others. They are: dictation (mentioned before); the reproduction exercise which is done without the text in view and develops comprehension, memory and power of expression; paraphrase writing which assesses how well the student understands the lexical and syntactic units in the original passage; sentence combining which enhance syntactic fluency in writing; sentence pattern exercises and précis writing, which is "a paraphrase or abstract that condenses an original composition but retains its information,, essence and point of view" (Ebbitt and Ebbitt, 1978 in Bromley and McKevery, 1986). A detailed description of these techniques can be found in Stotsky (1982).

Mapping and graphic organizers are also two exercises which serve as vehicles for making meaning since they pull together thoughts either for reading or writing" (Miccinati, 1988). These exercises require identification of main ideas and supporting details in a passage.

It is possible that all these activities will develop students' consciousness of the reading and writing abilities both in the first and second language learning. However, according to Eskey (1986) people read for intellectual profit or pleasure. Teachers, then, "have to create, or find, a body of material that his particular students might find interesting to read, and then do everything in his power to relate that material to their real concerns and to make it as comprehensible to them as he can" (p.4). The same has to be done in writing, people are always interested in the content of what they are writing and reading, they need some motivation to use these two skills meaningfully.



There is no sure-fire formula to teach these two skills, but anyone can learn how to use them through some guidance, real opportunities and non-threatening contexts. The use of journals in the classroom can also provide this learning. They emphasize the reading and writing interaction, give students opportunities to express their ideas and help them use their reading materials as well as to see the value of their own responses to what they read. Teachers, on the other hand, can use journals not only as instructional tools but also as diagnostic tools which call the teachers' attention to their students' difficulties. This activity also emphasizes the interaction between teacher/student through texts. (Rupert and Brueggeman, 1986; Frager and Malena, 1986; Browning, 1986; Simpson, 1986).

### CONCLUSION

All these studies and techniques discussed above support the idea of connecting reading and writing. This connection rather than hampering the students instruction, aids their development throughout their school years. Shanahan (1988) proposes seven instructional principles which explain how reading and writing can be combined to best enhance students' learning. They include: 1) The teaching of both reading and writing; this idea has been discussed before in the sense that it highlights the learners' instruction when they have the knowledge of both skills to share; 2) The introduction of reading and writing from earliest grades; research has demonstrated that the delay in introducing either reading or writing constrains the possibility of using one to understand the other; 3) The reflection of the developmental nature of the reading relationship in instruction ; at each level the relationship has to be exploited in different ways; 4) the making of the reading-writing connection explicit; students improve their ability to transfer the reading/writing knowledge by reorganizing the similitaries of these two skills; 5) The focusing on content and process relations; 6) The emphasis on communications; texts are created individually in order to have an effect on others; 7) The teaching of reading and writing in meaningful contents.

In closing, it seems that by following the theoretical links between reading and writing and by using the techniques discussed above teachers can improve their classes as well as the student's achievement. Moreover, we are certain that those teachers who consider these ideas more readily will have better responses to their classroom problems. By integrating reading and writing we provide tools for the learners to comprehend better what they are learning. Finally we conclude this paper by asking whether teachers and curriculum designers are aware of the importance of this interconnection and to what extent they have been using it.



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