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W. John Harker
University of Victoria, B.C.

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IMPLICATIONS FROM PSYCHOLINGUISTICS FOR SECONDARY READING

W. John Harker

UNIVERSITY OF VICTORIA, B.C.

Over the past decade, increasing interest has been shown in the implications of psycholinguistics for understanding the reading process. Mainly through the work of Goodman (1969; 1970) and Smith (1971; 1975), linguistic and psychological knowledge have been combined to describe the reading process of mature readers and the process through which children learn to read. The educational implications of this psycholinguistic model have been largely concerned with the learning-to-read process of elementary school children. But significant implications for secondary developmental reading instruction are suggested as well. It is the purpose of this paper to identify and explore some of these implications from the point of view of classroom instruction.

The Psycholinguistic Model

A full understanding of the psycholinguistic model demands a careful reading of the writings of both Goodman and Smith. However, the following brief overview of the model can provide the basis for a discussion of its implications for secondary reading instruction.

Central to the psycholinguistic model is the notion that fluent reading results from the cognitive processing of linguistic information. Goodman (1970) characterizes this process as a "psycholinguistic guessing game," while Smith (1971, p. 185) describes it as "the reduction of uncertainty." Both Goodman and Smith denounce the idea that reading results from the application to the reading task of a collection of specific skills of the kind conventionally taught to elementary grade pupils through basal reading programs, and to secondary students through "skills-building" programs. Rather, the reading process is conceived as a hypothesis-testing enterprise where readers use their prior knowledge of language and the reality which language represents (the nonvisual information they bring to the reading task) to test their predictions about the meaning they expect to find in the printed message (the visual information before them). Fluent readers, therefore, are seen as active, purposive participants in the reading process rather than as passive receivers of visual information. They are constantly trying to bring meaning to the printed page as they actively seek to "make sense" (Smith, 1975, p. 12) of the visual information before them.

Implications for Secondary Reading

Although Smith and Goodman (1971) have been unwilling to prescribe specific teaching methods for reading instruction, direct implications can

be drawn from their model for secondary reading. The remainder of this paper will be concerned with examining these implications under the following four headings: Clarifying the Learning Task, Avoiding Information Overload, Encouraging Risk Taking, and The Nature of Feedback.

Clarifying the Learning Task

Given the increasing range and depth of reading tasks encountered in the secondary content areas, many students experience difficulty in understanding the nature of these tasks. They do not understand what is expected of them and, as a direct result, often appear unmotivated and even hostile to learning.

The first responsibility of the teacher is to determine what prior knowledge or nonvisual information students need to bring to the learning task in order for it to make sense to them. The next step is to organize instruction so that students can learn this information. It is only in this way that students will perceive reading tasks as rational undertakings at which they may expect to experience success.

For example, many students have difficulty with outlining because they do not recognize that printed language can represent a coherent expression of a succession of ideas which may be summarized in outline form. These students' previous experience with reading has convinced them that printed language represents ideas and a reality which are unknown and unknowable. The teacher's job is to demonstrate through examples using transparencies, diagrams, and other instructional aids, that reading passages can be rendered into outline form since they do contain coherent, comprehensible messages. In this way, the teacher can build in students' minds the prior knowledge or nonvisual information that they need to bring to the outlining task in order to perform it successfully. Otherwise, students will be faced with an array of visual information on the printed page which makes no sense to them.

Avoiding Information Overload

One danger in developing students' store of nonvisual information is the possibility of information overload. Teachers, in their eagerness to facilitate students' learning, may forget that the amount of information which students can process at one time is limited. Miller's (1956) classic article on the processing limitations of the short term memory is frequently cited by the psycholinguists to illustrate this point.

The teacher's task becomes one of not only providing for the development of students' nonvisual information, but also of ensuring that the input of this information is governed so as not to interfere with learning. For example, in learning how to outline, students will depend on the concept of main idea and supporting details to identify the internal organization of the reading material before them. This is part of the nonvisual information or prior knowledge which students must bring to the outlining task. But they also have to learn how to express their understanding of internal organization in outline form. It follows that if students do not understand either how to identify internal organization or

how to express this identification in outline form, teaching them outlining without first teaching them to identify internal organization will result in information overload. Students will be confronted by too much visual information in terms of their store of nonvisual information. For them, the reduction of the uncertainty presented by the reading task will be impossible; they will become confused, resentful, and unmotivated - typical "retarded readers."

Encouraging Risk Taking

Risk taking is an important element in successful reading. Readers are constantly taking risks by generating hypotheses, making predictions, or, to use Goodman's (1970) expression, making psycholinguistic guesses, about the meaning they expect to find in the message before them. Goodman (1970) and Smith (1971) have both illustrated that even highly efficient readers move their eyes back over the material they are reading in order to correct errors in interpretation when incongruity between what they expect to find in the visual information and what they do find are detected. All of this involves risk a calculated possibility of being wrong in order to be right.

It follows that students' reading development depends upon a classroom atmosphere which permits and encourages risk taking. Students who are inhibited from taking risks for fear of being wrong will not become fluent readers. Often being wrong is the most efficient way of learning how to be right since by making errors students will unconsciously learn the limits of their information processing capability.

It is a grim irony that students who are not reading successfully are reluctant to take risks. These students are overly dependent upon the visual information on the page. They read slowly and deliberately hoping to find meaning in individual words and word parts rather than reading more quickly and developing hypotheses about the meaning they expect to find. This slow and deliberate reading, because it inhibits the comprehension of meaning, produces further failure and further anxiety which in turn reinforces the failure-producing behavior. Often these students become anxious and compulsive, reading in a totally undisciplined fashion as they recklessly seek to cover reading assignments solely to be rid of them with little attempt to read for meaning. For these students, rather than nothing succeeding like success, nothing fails like failure.

The Nature of Feedback

Success is the best antidote to anxiety and reading failure, and success is largely determined by the kind of feedback students receive from their risk taking. Obviously, the most immediate and powerful source of feedback comes from students' own perceptions of reading success. They know when they are wrong; their problem is what to do about it.

Since reading is a process of hypothesis testing, students need to be given time to test their hypotheses fully. The kinds of comprehension exercises characteristic of directed reading activities are often little more than litanies of one-word responses to teachers' highly predictable, simplistic

questions (Guszak, 1967). Students need more than that. They need time to teach themselves how to perform the reading tasks before them once the nature of these tasks has been clarified by the teacher. In other words, they need time to take risks and to find out whether their risk taking has paid off whether it has led to success. Simply feeding back to students the immediate information that they are wrong is futile. They need to be given time to find that out for themselves and to make corrections so that they can be right in the future.

Returning to example of teaching outlining, students must be provided with the nonvisual information they need to understand the task. But they must also be provided with the opportunity to bring this information to the performance of the task on their own terms. They must be permitted to read the passage to be outlined, to make predictions about how it will be organized, to test these predictions against the internal organization they identify within the passage, and then to express this information in outline form. But, equally important, they must be allowed time to find out if they are going wrong. They must learn to detect when their outline is becoming disorganized through not following the internal organization of the passage. They must then be allowed to make corrections within the privacy of their own minds. It is only in this way that this self-generated feedback can be put to work and that students can come to experience success and the consequent reduction of both uncertainty and anxiety.

The teacher's task is to encourage this process by providing positive feedback to reinforce success, and by providing non-threatening correction of errors when they go beyond the students' ability to correct. But this cannot be done by rapid-fire declarations of rightness or wrongness before the student has had an opportunity to find this out for himself. Risk taking will inevitably result in students being wrong some of the time. They must learn to expect this and be given the opportunity to detect and correct their own errors since it is only in this way that they will learn how to be right most of the time.

Conclusion

The fundamental implication of the psycholinguistic model is that learning to read is essentially a self-directed activity. Students cannot be taught to read more effectively by submitting them to a barrage of external stimuli in the form of skills-building exercises and similar activities. This only produces an overemphasis on visual information which interferes with the use of the nonvisual information upon which students depend for successful reading.

Rather than attempting to teach reading directly, the teacher's task is to give aid and comfort to students as they learn to read on their own. For this reason, instead of providing a panacea for teaching reading, the psycholinguistic model makes the teachers' task more difficult. The teacher's task is clearly one of teaching students how to learn, not directly, but by creating learning environments wherein the natural learning processes of students are encouraged and stimulated. This can be achieved

in the first instance by teachers developing clear insights into the nature of the reading tasks which they assign to students. Equally necessary is that teachers develop clear understandings of students themselves, their needs, aspirations, interests, and motivation, in order to encourage what is in the final analysis the very personal process of reading to learn.

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