Some Basic Notions About Reading Comprehension: Implications for Teachers

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Consider for a moment what is involved in reading comprehension. For example, consider what is involved in understanding the following passage:

Wagons Across the Nation

The journey was both exhausting and exhilarating. Some rode on horseback; others rode in wagons. The wagons wound their way across the mountains. They skirted the rivers, then they moved across the plains. We knew it would be a long time until we reached our destination.

From the title "Wagons Across the Nation," it is likely that an American reader would visualize a scenario of horsedrawn wagons traversing the United States sometime in the nineteenth century. The reader might visualize the wagons crossing mountains, then skirting rivers, and then traversing the plains. The reader might even visualize a dirty and sweaty traveler, an American pioneer, relating the tale. The direction of the journey might be assumed to be east to west, with the destination referred to being the Pacific Coast. In essence, the reader develops an interpretation that accounts for the text. Yet if the passage is reexamined, it would be noted that the text never explicitly stated that the wagons were horsedrawn, when or where the journey took place, or the components of the rich imagery that the scant descriptive details evoked. In fact, to consider just one equally valid interpretation of the story, the text could have been describing an event that was part of the recent Bicentennial celebration. In constructing an interpretation that seems plausible, it seems that a reader selects, inserts, substitutes, deletes, and connects ideas. In other words, in moving toward an interpretation that a reader deems reasonable, reading comprehension involves the simultaneous engagement of the reader's pre-existing ideas with the information presented in the text.

Two questions arise: What information is presented in the text? What information is engaged by the reader? In producing a text, an author does not merely transmit thoughts in words to the page; he also makes assumptions about knowledge the reader can be expected to share. The author may then take for granted that such information will be supplied by the reader and need not be explicit in the text. That is not to say that readers will supply only information that authors expect them to. The extent to which the reader's understanding represents the author's ideas will depend on the reader's background of experience, abilities, purposes, and

reading predispositions. It may be that the reader's purposes are at variance with the author's intended purposes. For example, the "Wagons Across the Nation" passage may have been written to instill a feeling for a characteristic episode of an historic era. However a reader concerned about an upcoming test may be more interested in isolating certain "testable" facts than imaginatively experiencing the dusty nature of the trail.

The point is that the relationship between author and reader in both text production and reading comprehension is not a simple one. Instead, both text production and reading comprehension involve complex interaction among author, text, and reader; it is as if the author makes a contract with the reader and the reader makes a contract with the author. But this contract does not mean that both agree to the same terms. There are two key points, then, that should be made about reading comprehension:

- A text is never fully explicit nor is reading comprehension exclusively textual.
- A number of factors influence both the extent to which an author's ideas are represented explicitly in text and the extent to which a reader's understanding will vary from both the author's intended message and the explicit textual information.

Reading comprehension can then be characterized as involving and being influenced by the interaction back and forth among (a) the text, (b) the reader, including the reader's background of experience, assumptions about the author's intentions, interest, etc.; and (c) the strategies the reader employs (consciously or not) to mediate between the other two components. As Kintsch (in press) aptly wrote, "meaning is something the reader creates in response to the text, not something directly given." The text is like a blueprint that guides the *construction* of understanding (see Spiro, in press). Thus, a number of factors influence reading comprehension, and what might be considered as the accuracy with which the reader addressed the author's ideas should be regarded as relative.

Pedagogical Implications

To extend this discussion to an examination of pedagogy in the light of the postulates presented, it is suggested that if teachers understand the nature of readers' understanding, then they have the basis for structuring learning environments to stimulate and to develop a given reader's understanding, i.e., they would have a basis for determining what might facilitate and what might impede comprehension.

Along this line of reasoning, an examination of present teaching practices suggests that teachers implement a number of common practices which may be misguided. For example, teachers sometimes seem to ignore the notions that the text is never fully explicit and that reading comprehension is not exclusively textual by assuming that students should identify and regurgitate the author's ideas regardless of the text, the reader's background of experience, or the purposes for reading. Teachers sometimes disregard the notion that a number of factors influence the extent to which an author's ideas are represented explicitly and the extent to which a reader's understanding will vary, for example, by the

use of strategies that elicit the same rigid interpretation of the author's ideas or require the same type of answers to the same type of questions across different texts. For example, through the use of strategies such as cloze (especially cloze with an exact replacement), teachers may require a reader to address the author's exact wording across words of varying significance and text. Through the use of strategies such as the Informal Reading Inventory, teachers often assume that the same criteria applied to the same types of questions can address a reader's understanding across different texts read for different purposes.

The key point here is that teachers often fail to realize that what is considered an appropriate understanding is likely to vary from context to context, that "accuracy of understanding" is relative. That is, criteria for "accuracy" should be considered a function of reader and text characteristics, as well as purposes of reading. It seems, then, that teachers need to understand that a "word-perfect" rendition of a text is rarely required and seems difficult to justify for any reading situation. When readers interact with text, they will and should acquire some information that was stated in the text and some information that they generate. Certainly there are situations for which it may be reasonable to expect a reader's understanding to remain close to the text; for example, when following a set of directions to build something. Alternatively, there are other situations for which it may be appropriate to expect a more personal interpretation, for example, when reading literature or poetry. To this end, teachers might address the following questions:

- •To what extent was the reader's relevant background of experience activated during reading?
- •To what extent was the reader's understanding adequate for the text and purposes for reading?
- •When a reader's understanding diverges from some consensual author's intention, can the reader justify his or her idiosyncratic interpretation?

With these questions in mind, consider those situations when a reader's understanding may be inappropriate for either the text or purposes for reading, in particular, those situations for which readers develop an understanding which is "too text-based," "too reader-based," or "short circuited" by a lack of background experience to deal with the textual material. For example, consider the difficulties an American reader will incur when trying to understand the following passage.

Today's Cricket

The batsmen were merciless against the bowlers. The bowlers placed their men in slips and covers. But to no avail. The batsmen hit one four after another along with an occasional six. Not once did a ball look like it would hit their stumps or be caught.

What does a teacher do in these situations? A teacher in this situation seems to have just three choices. The include: dismissing the passage as culturally irrelevant; providing the students with the appropriate experience to address the text; or providing the students an analogous framework, for example an explanation of cricket by comparing it with baseball. A key point here is to realize that the old is required to understand the new. As Rumelhart and Ortony (1977) have emphasized, "In all cases, existing knowledge is utilized in and required for the acquisi-

tion of new knowledge" (p. 117). Or as Trench (no date) commented in reference to the parables of Christ:

He brought forth out of His treasure things new and old; by the help of the old He made intelligible the new; by the aid of the familiar He introduced that which was strange; from the known He passed more easily into the unknown. And in His own manner of teaching He has given us the secret of all effectual teaching. (p. 25)

This implies that in those text situations for which the reader lacks the background of experience, teachers need to build the reader's background or provide an analogy by which the readers can build such backgrounds for themselves.

At other times, the reader's prior knowledge is over-relied on, producing understandings that are too "loose" or "reader-based" for the text and its intended purpose. Particularly when a text deals with a familiar topic, the reader may think that he or she knows what is going to be written and therefore need not attend carefully to the text. For example, such a reader may fail to notice subtle text signals that indicate a topic is being satirized, or he or she may not detect that expectations about the text have not been confirmed. Quite often, students with an overly reader-based understanding have their difficulties compounded by the fact that "they don't know that they don't know." They presume that they know the material better than they actually do or need to. In these situations, a teacher has several options: to alert the students to the need to read the material carefully; to have the students read the material in conjunction with carrying out some activity, the successful performance of which is dependent on careful reading; to provide the students with strategies such as outlining and notetaking for carefully reading the text; to alert the students to their own level of understanding and maybe to ways to monitor that understanding; or to force the students to construct an understanding, for example, through questioning their ideas.

Finally, consider the situation when a reader's understanding is too "text based" for the text and purposes for reading. As Spiro (1977) suggests, certain conditions of schooling may predispose a reader to ascribe to text an autonomy which sponsors the separation of textual information from related knowledge which would inform its understanding. For example, a reader may minimize the interaction of his or her background of experience with a text to cope with the task of answering a series of factual questions. Here the task of the teacher is to facilitate a more integrated understanding. This facilitation might be accomplished by encouraging reader-text interaction either through discussion or through appropriate vicarious experience prior to, during, or after reading. For example, the reader might be asked to discuss his or her knowledge about a topic prior to reading a text, or would be given the opportunity to relate what is being read to his or her own experience.

The major thrust of all three of these situations, then, is that teachers should be aware that an integrated understanding requires being able to bring appropriate knowledge to bear on the text as well as to glean appropriate information from the text. It implies that there is a band of permissable understanding in terms of text and reader characteristics. Of necessity, it suggests that teachers will need to be aware of the intended purposes of both author and reader in providing strategies

that facilitate an appropriate balance between reader-based and text-based processes.

In summary, some of the key points teachers should recognize are:

- Texts are never totally explicit nor should a reader's understanding be exclusively textual.
- 2. Texts are not autonomous nor should it be assumed that each has a single interpretation.
- 3. A reader's selection, insertion, substitution, omission, and binding of ideas are not necessarily a sign of reader error.
- 4. "Accuracy of understanding" is misleading unless defined in terms of the author's intentions and the reader's purposes.
- A variable balance is required between reader-based and text-based processes to cope with different texts and purposes of reading.

Finally, implicit within our discussions of the nature of reader-text interactions are two additional ideas that may have an important bearing on instructional practices and observations of readers. First, implicit within our discussion has been the suggestion that inference and interpretation are as essential to acquiring an understanding as they may be to extending understanding after reading. This idea suggests that the widely espoused notion of a continuum from literal to inferred to interpretative processes, implicit within many curriculum guides, lacks validity. Not only does it lack validity as a statement about reading comprehension, it also has questionable utility as an instructional paradigm. For example, good readers may skip literal understandings where appropriate (e.g., going directly to the nonliteral sense of "Can you tell me what time it is?"), or they may use some inferential understanding of one part of a text to facilitate the literal understanding of another part of a text. Second, implicit in our discussion has been a notion of flexibility. There are many roads to understanding and, at times, different permissable understandings. Instructional techniques that impose rigid procedures on students (e.g., study guides, structured overviews, selected questioning strategies) may interfere with approaches a reader might more naturally and effectively bring to bear, given the exigencies of text, task, and reader knowledge. Furthermore, for the same individual, the most appropriate procedures may change from situation to situation.

In summary, then, if reading teachers are to be sensitive to ways to develop a reader's understanding, they should measure the appropriateness of pedagogical principles against the desired nature of a reader's understanding. As we have suggested, doing so will require recognition of the following points:

- 1. A text is never fully explicit nor is reading comprehension exclusively textual.
- A number of factors influence the extent to which an author's ideas are represented explicitly and the extent to which a reader's understanding will vary from the author's intended message and the explicit textual information.

- 3. A reader's selection, insertion, substitution, omissions and bindings of ideas are not necessarily a sign of reader error.
- Texts are not autonomous nor should it be assumed that each text has a single interpretation.
- 5. "Accuracy of understanding" is a misleading notion unless defined in terms of the author's intentions and the reader's purposes.
- A variable balance is required between reader-based and text-based processes to cope with different texts and purposes for reading.
- 7. There is not a uni-directional continuum from literal to inferred to interpretative comprehension.
- Rigid prescriptions for how to process text disregard the fact that text, task, and reader characteristics combine to produce a variety of satisfactory approaches to comprehension in a given context.

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