visualize and think through an idea with an author. The producers of some developmental materials have devised elaborate word attack cues, comprehension questions, work sheets and other instructional aids for material that is poorly written and/or not relevant to the experiences and interests of the students for whom it is intended. Attractive packaging sometimes hides dull, meaningless material that students can do little more with than repeat or answer simple questions about. The development of higher level comprehension skills begins with good narrative or expository writing.

2. Are teachers asking questions that require higher level thinking?

A number of classroom interaction studies have shown a striking avoidance of the kinds of questions that elicit thinking above the memory level. Questions asked before and after reading can direct students to make applications, see relationships and read beyond the lines of print. Sanders' (1966) book, Classroom Questions: What Kinds? has been useful in helping teachers construct questions at the higher cognitive levels.

One indication that a teacher is infrequently asking questions that require higher level thinking are students with their hands raised before the teacher is finishing asking the question. Students who "jump the gun" have apparently learned to expect questions that can be answered without much thinking.

3. Are teachers providing the thinking time necessary for students to answer questions above the cognitive level of memory?

The classroom is a busy place with schedules to be maintained and work to be done. It is not uncommon to observe a teacher ask a thought provoking question, become increasingly uncomfortable as precious seconds are filled with silence, interrupt the thinking going on with more cues to the desired response, and just as students are beginning to put things together in their minds answer the question for them. Teachers have been urged to encourage verbalization and overt activity in their classrooms. But the kind of thinking necessary for

developing higher level comprehension skills often demands quiet reflection which should not be perceived as wasteful.

4. What kinds of activities are teachers involving students in relative to their reading?

Teachers can teach students to look for relationships, evaluate ideas, create new ideas or products and engage in other mature reading behaviors by getting them involved in activities relative to reading selections. A good story might give rise to a simulated author meets the critics interview, a mock trial of the main character or the creation of a new character or bit of dialogue to interject at some point in the story. An account of some historical happening read in a textbook might lead to a debate, writing a newspaper account of the same event, or designing posters advertising for soldiers for the Continental Army. Choral reading of certain poems or writing plays to dramatize a particular period in the life of a great scientist who was discussed in a reading selection are other ways of helping students see the possibilities for stretching their minds while reading. Teachers who cannot or who do not take the time and expend the energy to get students responding to reading in interesting, meaningful activities are missing opportunities to teach higher level comprehension skills.

5. Are teachers providing the experiential background necessary for gaining a full understanding of reading selections?

What a reader takes away from a reading selection depends to a large extent upon what he brings to it. Seeing implications, detecting subtleties, irony, or cynicism in a reading selection all require some experiential commonalities between the author and the reader. A major cause of poor comprehension is that the author and the reader are playing in different ballparks. As Professor Harold Hill proved in The Music Man, "You gotta know the territory."

program. Unless school time is provided, the students who need reading practice most will get the least. Practice reading is essential for interpretative, critical, creative and other higher level thinking behaviors to become an integral part of a student's reading performance. Opportunities to converse about reading experiences with other students in small groups without a lot of structure or focus is also important. During these informal discussions students learn what other students get from their reading and by verbalizing their own reactions to a reading selection become more keenly aware of the mental processes one employs while reading. One student remarked, "It's when I talk about it that I really understand it."

9. Are students using reading to satisfy their informational and recreational needs?

Students who are not learning to use higher level comprehension skills are likely to find severe limitations in the power of reading to satisfy their personal needs. Students who cannot comprehend beyond the level of literal interpretation will probably turn to sources other than reading to solve their problems. Signs of a well balanced reading program include students reading books, magazines and newspapers, students asking for books, students using the library and students talking about what they are reading. Students who like reading (meaning reading instruction) but who don't read are indications of a reading program going nowhere.

References

Gans, Roma. "Meeting the Challenges of the Middle Grades." In What Is Reading Doing to the Child? Highlights from the Sixteenth Annual Reading Conference of Lehigh University. Danville, Ill.: Interstate Printers and Publishers, 1967.

Johnson, Wendell. Your Most Enchanted Listener. New York: Harper & Row, 1956.

Moffett, James. Teaching the Universe of Discourse. Boston: Houghton Mifflin, 1968.

Sanders, Norris M. Classroom Questions: What Kinds? New York: Harper and Row, 1966.