

## SEARCHES<sup>1</sup>

This talk grew out of a personal search for aspects of learning and teaching that have been meaningful to me during the years that I have been a member of NRC. What I found were several varieties of searching for meaning which have existed in NRC presentations over this entire time span. In this talk, I will touch briefly on three of these searches: language, learning style, and study skills.

### LANGUAGE: THE UNIVERSAL SEARCH FOR MEANING

Reading (and writing) may be a new subject for a pupil, but searching for meaning is not! Meaning is what makes sense of the sounds and sights of language. So much so that children, whose parents prematurely attend to form (articulation and/or grammar) rather than to meaning, stutter or turn mute. And children, whose teachers prematurely attend to form (surface structures of various sorts) rather than to meaning, turn into non-readers and non-writers.

The learning of a language only truly occurs in a setting where the language is being used to communicate: where the learner focuses on meaning rather than on the language itself. This is seen blatantly in second language settings where grammar and vocabulary drills often produce "educated illiterates," or at best sesquilinguals. The search for meaning is just as critical in reading and writing one's mother tongue, even if not always as clearly seen or felt.

Earlier I used the phrase "prematurely attend" in reference to careful attention to the mechanics of reading and writing. It is necessary to ensure that language users develop both accuracy and speed in managing the mechanics of language so that they can develop independence and fluency. Here then is one of the sources for the continual confusion about what instruction should be. A lack of competence in managing the mechanical aspects of language is so obvious and so debilitating that there are many who would base their entire literacy programs on a text management curriculum. In fact, the methods used to teach reading and writing in schools have never left a fragmented skill-instruction approach. (Contemporary surveys indicate that more than 90% of the writing done by high school students is less than one paragraph in length!)

Language competency grows by attention to meaning, awareness of context, and lots of expansion and modeling of more mature language patterns—not by drills on the form of the language. "The meaning of a text is not a stagnant property inherent in it. Meaning happens to a text. It becomes meaningful, is made meaningful by the event of reading. Its meaning is in fact an event, a process." (Tom Estes, at an earlier NRC meeting, in a paraphrase of Wm. James). Contrary to a commonly held view, libraries do not store knowledge, they hold books, microfiche, and the like. When people read these materials, then the people become knowledgeable.

Students of language development consider each speech act to have *content*, *form*, and *function*. Note that this leaves articulation (and all of the other mechanical aspects) out of the act itself, but not out of the context. I am suggesting that reading and writing

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<sup>1</sup>This is an abridged version of the Presidential Address.

can also use this model: a language model with the "mechanicals" outside the meaning act, but still clearly within this sphere of influence which determines whether communication is successful or not. It is not that articulation is unimportant to oral communication, just that it is not the heart of an utterance. By putting pragmatics (function) into the model of reading used to plan instruction, teachers' concerns will tend to focus on meaning. Think of the change in teaching that might arise if phonics were considered as necessary, but not the heart of the act. Don Graves, and others, are doing this right now in their research on the development of writing as you will hear later in these NRC meetings. And as we heard yesterday, Harste and others are looking at beginning reading in this manner. Language is a context-determined event. What I have been calling the "mechanicals" are part of the context, but are not the event.

Adler and VanDoren (1972) have provided a definition of reading in the form of an analogy which is interesting:

Reading and listening are [sometimes] thought of as *receiving* communication from someone who is actively engaged in *giving* or *sending* it. The mistake here is to suppose that receiving communication is like receiving a blow or a legacy or a judgment from the court. On the contrary, the reader or listener is much more like the catcher in a game of baseball.

Catching the ball is just as much an activity as pitching or hitting it. The pitcher or batter is the *sender* in the sense that his activity initiates the motion of the ball. The catcher or fielder is the *receiver* in the sense that his activity terminates it. Both are active, though the activities are different. If anything is passive, it is the ball. It is the inert thing that is put in motion or stopped, whereas the players are active, moving to pitch, hit, or catch. The analogy with writing and reading is almost perfect. The thing that is written and read, like the ball, is the passive object common to the two activities that begin and terminate the process.

We can take the analogy a step further. The art of catching is the skill of catching every kind of pitch—fast balls and curves, changeups and knucklers. Similarly, the art of reading is the skill of catching every sort of communication as well as possible. . . .

There is one respect in which the analogy breaks down. The ball is a simple unit. It is either *completely* caught or not. A piece of writing, however, is a complex object. It can be received more or less completely, all the way from very little of what the writer intended to the whole of it. The amount the reader "catches" will usually depend on the amount of activity he puts into the process, as well as the skill with which he executes the different mental acts involved. (pp. 5-6)

However attractive the baseball analogy may be, let me remind thee that throwing and catching are baseball only when a game is on. Direct, supervised, intensive pitching, batting, and catching practice are valuable only as adjuncts to playing ball. What is more, without the complex integration of skills and attitudes acquired in actually playing the game, discrete skills are of no real value. Eliminating the game variables to stress drill does not guarantee a good game player. Penmanship and phonics are only writing and reading when comprehension is the game. Note well, that without "mechanical" skills both baseball and reading are clumsy or degenerate into chaos. And while demonstrations of discrete skills can be elegant, unless integrated into a useable whole they are trivial at best.

When one is searching for content, form, and function in an attempt to derive meaning, one is able to make sense of the communication in spite of there being considerable static or confusion in the environment. This ability to complete an incomplete utterance is a very powerful tool. It can be used so that the reader searches an incomplete text attempting to make meaning and thus is able to determine what information is missing.

A real concern for the wholeness of language would be a real attempt to deal with the basics of reading and writing—the never-ending search for meaning in language.

## LEARNING STYLE: THE IDIOSYNCRATIC SEARCH FOR MEANING

Reading is only a specific case of learning. And learning is only a specific case of being. Which means that the social aspects of being reside in reading and writing too! Sounds simple, but often forgotten in the concern "to cover the curriculum."

Let me take only one particular concern of learning style for consideration: the very different living and learning behaviors of lumpers and stringers. Lumpers are people who when faced with a decision consider the problem as a whole, turn it around and about until they intuit some way to start. Stringers are people who when faced with a decision tackle the problem by immediately analyzing it and seeing how it can be resequenced. You may recognize other terms for these behaviors: impulsives/reflectives; rapid and inaccurate observers/slow and accurate observers; divergent thinkers/convergent thinkers; good blenders/good rote memorizers; observers of similarities/observers of differences; generalists/specialists, etc. D. E. P. Smith has explored this consideration of learning style at earlier NRC meetings.

This very basic style of searching for meaning determines how we select information out of the blooming, buzzing stimulus array that is our lot whenever we try to learn some new thing. This is the perceptual problem of learning. If one is too rapid, inaccurate, and divergent there is a high probability that a wrong task will be done since the effort began before the directions were finished. If one is too perseverative, accurate, and convergent there is a high probability that no task will ever get done since the need for doing everything perfectly, effectively inhibits completion of anything.

Acquiring mastery of the "mechanicals" is basically a perceptual task. And if one fails to master these conventions, reasonable communication breaks down: sufficiently inventive spelling is unreadable; a massive inability to blend stops both word attack and comprehension efforts. Perception is a selective process. Determining which of all the impinging stimuli is really important is a very active process.

Our basic approach to learning also determines how we add information to our perceptions (of whatever veridicality and fluency). This is the cognitive problem of learning. Is one so divergent and labile that observers might have a difficult time being able to tell what the original stimulus was. Or is one so restricted to the data at hand that one is unable to make sense of the stimulus as a whole. Note that this adding of memories, biases, needs, interests to one's perceptions is also a very active process. What the eye tells the brain may well be less important than what the brain tells the eye: but without some control by the text, one is only fantasizing about possible appropriate meanings. Note that some tasks are better handled by one approach than by the other: brain-storming vs. proofreading, etc. Also note that if one agrees that there can be some sort of consensual agreement as to what a particular communication is about, then extreme top-down or bottom-up hypotheses are not of much interest. There can be variations in the processing of interactive attempts to make meaning, but there must be interaction or there is not communication. (Even proofreading requires attention to content in order to make decisions about correct spelling of homophones, etc.)

As a pedagogical note, NRC has heard over the years about the value of group interaction or modeling behaviors. Consider the value of these interactions as a means of providing models of learning styles appropriate to particular tasks.

A real concern for efficient learning would be a real attempt to deal with the basics

of learning—the never-ending search for meanings generated by differing learning styles.

### STUDY SKILLS: THE ADJUSTABLE SEARCH FOR MEANING

Remember Ann Brown's lovely caution that we need to learn how to monitor our own learning, especially when we use books, because there is no chance that a book will notice if we have failed to understand!

When we learn about our own learning then we are intimately involved with learning style. Metacognition is a current term which can be used to represent the conscious search for incompleteness and organization in and of material to be learned. How one approaches studying, or how one teaches study skills to others, has a great deal to do with learning style. A tight and reflective student does not need another system, but rather needs to understand that studying means getting all the way through some study procedure—all the way through to testing of one's mastery of the material. A loose and speedy student needs to acquire a system (nearly any system) and to have some systematic means of checking off each step, so that each step is completed, and in the intended order.

Judy Langer has pointed out that levels of existing knowledge are better predictors of passage recall than is IQ. But so are cloze scores better predictors of potential text mastery than readability scores. Both prior-knowledge estimates and cloze scores involve interest and learning-style in the performance.

Mapping of ideas and their relationships as a means of developing understanding and of building long-term memory has often been advocated. Venn diagrams, matrices, graphic organizers, mnemonics, time lines, and the like, have all been used to aid the mastery of studied materials. Understanding one's own approach to the world and learning to monitor one's behavior during studying can aid in developing clever tactics for apprehending and integrating information. For individuals who are good at seeing relationships (lumpers), a notemaking format that demands analysis and provides a means of checking the acquisition of specific details allows self-monitoring of mastery. For individuals who are good at rote memory (stringers), a format that demands synthesis and a means of checking that interesting relationships are discovered allows for self-monitoring of mastery. Whatever system one uses for studying, it must allow for active testing of one's recall memory. (Very few tests of mastery are simply recognition memory tasks.) One can no more look at notes and test one's mastery than one can look at a word and test one's competence for spelling that word.

When my children were young, we once happened upon a fire sale at a grocery store. They were selling cans, whose labels had been washed off by the fire hoses. Each of the kids got to pick out a sack full of cans. We had very exciting and strange suppers for some time after that as the kids took turns picking out an unlabeled can or two for that evening's main course. But note that even if there had been labels on the cans, given the limited dining experiences of these children, reading the words on the labels might well not have been sufficient to prevent strange suppers. A label is clearly not the same as the contents of the can!

We can take this story one step further: notes are like the contents of a condensed or dehydrated package. To condensed soup one needs to add water to get the "original" soup back. To a set of notes one needs to add memory and thinking to get the "original" lecture or text back. Notes are like the contents of the condensed soup can. What is needed, in order to see if one knows what the contents are without actually opening the can, is a label.

Creating labels for one's notes is one way of allowing (demanding) synthesis of details and the opportunity to discover interesting relationships. Using labels, covering up the notes and seeing if one can recall the contents, is one way of allowing (demanding) analysis and the opportunity to check for the recall of details. Several procedures which might allow this separation of note making from note using have been reported over the years here at NRC. Postilism, not filling pages, allows one to test one's own mastery of the material covered. To be useable, what is needed is not just notes, but comments upon the contents of the notes. Metacognition may be a big word, but the monitoring of one's own learning is what makes the difference between success and failure for many of our students.

A real concern for study skills would be a real attempt to deal with the basics of monitoring one's learning—the never-ending search for meaning in texts and talks.

### FUTURE SEARCHES

Our NRC meetings and publications are yet another kind of search for meaning. In my search, I have found efforts by NRC to understand: the universality of language; the impact of individual learning styles; and, ways to increase the effectiveness of searching for meaning by adjusting study efforts to fit the reader, the text, and the context.

One does need to be skillful in managing text for independence and accuracy, but managing text is not reading. Meaning is our entry into knowledge, into adventure, into ourselves. The searches go on.

### REFERENCES

Adler, M., & VanDoren, C. *How to read a book* (rev. ed.). New York: Simon & Schuster, 1972.