Learning About Thinking

A few years ago I decided to learn more about teaching thinking. It seemed to me that if I understood about thinking I would know more about teaching and learning too. I had taken educational psychology courses, but somehow I didn’t feel they had taught me much about thinking. My interest stemmed, in fact, from a staff development course I had taken several years earlier in which I learned to have students process information instead of only memorizing it.1

A good way to understand thinking, I thought, would be to learn about the brain. I read a number of books on the subject and I began to understand just how marvelously complex the brain is. I didn’t learn as much about thinking as I had hoped, but I did find that my conception of brain functioning as logical and machine-like was quite inaccurate.2 Interestingly, when our perceptions are incomplete, our brains invent plausible explanations to fill in the gaps, so we “see” things that aren’t really there.3

My purpose is not to trace my personal intellectual history but to illustrate a principle: our thinking starts with our current idea of something and changes as we accumulate impressions and information. What affects us most is direct experience. We do not absorb ideas ready made; we actually construct meaning for ourselves and reconstruct it over time.

An appealing illustration is the account by Lucille Falkof and Janet Moss (p. 4) of a group of Highland Park, Illinois, teachers who determined to teach their students about making inferences and analogies. They were pleased with the results, but soon decided that their students needed other thinking skills, too—so they started over again, defining the skills and exchanging ideas for practical ways to teach them concretely.

Their story is relevant because we are seeing the beginnings of a major new movement to promote intellectual development. In line with the views of futuroists that tomorrow’s citizens will require more higher-order thinking, most of the recent national reports call for more stress on intellectual activity. Meanwhile, as reported in our September issue, psychologists, philosophers, and educators have developed a variety of approaches specifically intended to improve students’ mental abilities.

Few things are more exciting to me than the prospect of developing students’ minds: not only teaching them facts and skills listed in most curriculum guides, but actually increasing their capability to deal with problems and reach decisions. This new challenge may excite teachers too, but those struggling to meet overwhelming demands under difficult conditions can be excused for being less than ecstatic about being asked to do more. Nevertheless, I am convinced that within ten years every teacher will be expected to understand cognitive processes and know ways to strengthen them. For now, the question is how to make progress in that direction.

The important thing is to consider teacher’s views: perhaps to begin, as Highland Park did, with teachers’ observations about the quality of their own students thinking. That is a matter teachers have reason to be concerned about, whether or not they are familiar with the literature on metacognition or feel prepared to list the mental operations prerequisite to success in the courses they teach.

As Irving Sigel (p. 18) explains, the notion of development applies to more than children. It applies to all of us.

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