THE GREAT IDEAS ONLINE

Jun '03 Nº 228

Dr. Gary Hartzell

==========

ADLER'S FOUR GODS OF THE MIND

It's dangerous to confuse information with understanding

The great buzzword today is **INFORMATION**. we talk about the information explosion, and librarians call themselves information managers. We laud information technology, and we pride ourselves on being able to deliver information anywhere, anytime. But schools and school libraries are not really in the information business. They're in the learning business. It's important to distinguish between the two, and to promote libraries as instruments of learning, rather than as centers of information.

Nearly 20 years ago, Mortimer Adler, the late education reformer and philosopher, devised a system that is useful in understanding the learning process. Adler described what he called the "four gods of the mind." In ascending order of importance, they are Information, Knowledge, Understanding, and Wisdom. According to Adler, students must access information in order to extract knowledge. But to assess the value of that information and place it in a meaningful context, learners need to possess some prior knowledge and a measure of understanding. In other words, what students already understand determines the knowledge that they seek and, at the same time, provides a foundation for future wisdom.

It should come as no surprise that information is the most plentiful of the four "commodities", and the one most suited to computerization and technological transmission. But as we have seen, information is useless without understanding. How can we tell when students have comprehended something? Understanding is achieved when they instantly draw upon and apply what they have in their heads. Understanding is achieved when students are able to distinguish between the relevant and the useless, to detect connections and discern patterns, and to anticipate likely consequences.

Sir Isaac Newton's work is illustrative. His knowledge of the physical world in the 17th century led him to understand what he observed. That, in turn, encouraged the great scientist and mathematician to formulate all sorts of questions and to ascertain which of those questions were answerable. Then—and perhaps most important—he was able to determine which of those questions was worth answering. That, for lack of a better term, is wisdom.

Even in Newton's time, more information was regularly generated than any single person could absorb. The test now, as then, is to distinguish informational value. Librarians and teachers provide the arena for students to make those tests. By helping students evaluate the resources they find and assess their relative value, we build their capacity to discern. Then, by helping them to discern not only the implications of what they know, but how each piece may be interrelated, we enable them to construct the context that produces learning. It's that process that invokes Adler's higher-level gods of the mind. It's that process that draws knowledge from information and allows knowledge to evolve into understanding.

Our duty as educators is to recognize that information retrieval skills do not equate to learning and to celebrate the understood more than the found. And not to celebrate it silently. Leonard

Sayles, a wonderful organizational researcher, long ago pointed out that quiet competence bespeaks routine work, and doing routine work leads to powerlessness. Unless librarians stand out in some way, unless people are made to understand that they are engaged in the school's central mission, it is very difficult to be perceived as vital and integral. How ironic it would be if libraries continued to suffer second-class educational status because, for all the information they can provide, people didn't come away with knowledge and understanding of what they're really about. 🕮

Dr. Gary Hartzell is Professor Department of Educational Administration, University of Nebraska at Omaha

---

Sharon Begley

==========

East Versus West: One Sees Big Picture, Other Is Focused

You ask two new acquaintances to tell you about themselves. The Japanese gent describes himself as "outgoing with his family," "competitive on the soccer field" and "serious at work." The Briton doesn't parse it so finely, saying he is "friendly, intellectual and goal-driven."

Then you ask each to decide which two—of a panda, a monkey and a banana—go together. The Japanese man selects the monkey and the banana; the Brit, the panda and the monkey.

Like many scholars of human thought since at least Hume and Locke, today's cognitive psychologists tend to be "universalists," assuming that everyone perceives, thinks and reasons the same way.

"There has long been a widespread belief among philosophers and, later, cognitive scientists that thinking the world over is basically the same," says psychologist Howard Gardner of Harvard University in Cambridge, Mass. Although there have always been dissenters, the prevailing wisdom held that a Masai hunter, a corporate raider and a milkmaid all see, remember, infer and think the same way.

But an ever-growing number of studies challenge this assumption. "Human cognition is not everywhere the same," concludes psychologist Richard E. Nisbett of the University of Michigan, Ann Arbor, in his new book, "The Geography of Thought: How Asians and Westerners Think Differently ... and Why." Instead, he says, "the characteristic thought processes of Asians and Westerners differ greatly."

The book compares people from East Asia (Korea, China and Japan) with Westerners (from Europe, the British commonwealth and North America).

As the Monkey-Panda example shows, Westerners typically see categories (animals) where Asians typically see relationships (monkeys eat bananas). Such differences in thinking can trip up business and political relationships.

The cognitive differences start with basic sensory perception. In one study, Michigan's Taka Masuda showed Japanese and American students pictures of aquariums containing one big fast-moving fish, several other finned swimmers, plants, rock and bubbles. What did the students recall? The Japanese spontaneously remembered 60% more background elements than did the Americans. They also referred twice as often to relationships involving background objects ("the little frog was above the pink rock").

The difference was even more striking when the participants were asked which, of 96 objects, had been in the scene. When the test object was shown in the context of its original surroundings, the Japanese did much better at remembering correctly whether they had seen it before. For the Americans, including the background was no help; they had never even seen it.

"Westerners and Asians literally see different worlds," says Prof. Nisbett. "Westerners pay attention to the focal object, while Asians attend more broadly—to the overall surroundings and to the relations between the object and the field." These generalizations seem to hold even though Eastern and Western countries each represent many different cultures and traditions.

Because of their heightened perception of surroundings, East Asians attribute causality less to actors than to context. Little wonder, then, that West and East see North Korea's nuclear threats very differently. "Understanding how other people think and see the world is crucial in international disputes," says psychologist Robert Sternberg of Yale University in New Haven, Conn.

Divergent East-West thinking also has produced some tense business conflicts. In the 1970s, Japanese refiners, having signed a contract to buy sugar from Australia for $160 a ton, asked to renegotiate after world prices dropped. The Aussies refused. To the Asians, changing circumstances dictated changes in agreements; to the Westerners, a deal was a deal.

One striking east-west difference centers on drawing inferences. Imagine a line graph plotting economic growth in which the rate of growth accelerates (that is, the line gets steeper to the right). Researchers asked college students in Ann Arbor and Beijing whether they thought the growth rate would go up, go down, or stay the same. The Americans were more likely to predict a continued rise, extrapolating trends, than were the Chinese, who saw trends as likely to reverse.

Westerners prefer abstract universal principles; East Asians seek rules appropriate to a situation. For example, when researchers in the Netherlands asked people what to do about an employee whose work has been subpar for a year after 15 years of exemplary service, more than 75% of Americans and Canadians said to let her go; only 20% of Singaporeans and Koreans agreed.

Cognitive differences likely originate in child rearing and social practices, but are far from hard-wired: Asians living in the West and Westerners in Asia often find that their cognitive style goes native. Similarly, bicultural people, like those in Hong Kong with its British and Chinese history, show thinking patterns intermediate between East and West. That's a model that workplaces might do well to emulate, says Prof. Nisbett: The more cultural diversity

and, hence, thinking styles in a workforce, the likelier it is to see problems clearly and solve them. 🕮

Sharon Begley, widely known throughout the industry for her ability to break down complex scientific theories and write about them in simple prose, is senior editor of Newsweek.

==========

WEBSITES OF INTEREST

The University of Pennsylvania's Online Books Page listing 19,000 free books on the Web:

http://digital.library.upenn.edu/books/

Submitted by Ron Wild.

==========

WELCOME NEW MEMBERS

Deborah Kingdon

Paul Warehall

****

THE GREAT IDEAS ONLINE
is published weekly for its members by the
CENTER FOR THE STUDY OF THE GREAT IDEAS
Founded in 1990 by Mortimer J. Adler & Max Weismann
Max Weismann, Publisher and Editor
E-mail: TGIdeas@speedsite.com
Homepage: http://www.thegreatideas.org/

A not-for-profit (501)(c)(3) educational organization.
Donations are tax deductible as the law allows.