SHARED INQUIRY: LEARNING HOW TO REALLY SUCCEED IN BUSINESS

Preparing today's students to become productive and successful members of tomorrow's workforce is a significant undertaking. Some organizations have tried to articulate the needs of the business community, but these efforts typically fail because they tend to speak at educators rather than to them in terms they can understand. This article examines some of the unique skill requirements essential for success in the current business environment and focuses on how these skills can be taught in today's education environment through the use of the shared inquiry technique. It also provides business leaders with advice on how to articulate these requirements to the academic world so that a bridge between the two communities can be established.

by Ronald D. Fricker, Jr., and Robert A. Wehrle

Soundbites, superficial newscasts, infomercials, and quick answers epitomize American popular culture of the 1990s. Today's students must contend with docudramas masquerading as hard news, newspapers competing with tabloids, and news organizations that retouch photographs. American society's accelerating pace is clearly embodied by MTV, the paragon of the younger generation, with its jumpy format and quickly flashing images. The end result is a student population, indeed an entire nation, with an ever-decreasing attention span and an eroding ability for thoughtful inquiry.

Paradoxically, the success of total quality management (TQM) and the steadily increasing pressures of global competitiveness have forced companies to become leaner and pushed responsibilities ever lower within organizations. These changes require an American workforce increasingly capable of critical thinking, coherent analysis, and continuous learning—abilities inconsistent with the environment to which the younger population is exposed.

Today's students are tomorrow's employees. The habits they acquire individually can either help or hinder their later careers; the habits they acquire as a group can either help or hinder a nation's global competitiveness. While business professionals can expect to have little effect on popular culture, it does behoove them to work with the education community to ensure that the workforce of the future is well prepared to address and meet the challenges of the business world.

In his widely acclaimed book The Fifth Discipline: The Art & Practice of the Learning Organization, Peter M. Senge contends that successful, competitive companies of the 1990s will practice organizational learning.

Senge's thesis is that successful organizations must "tap people's commitment and capacity to learn at all levels," and he discusses five disciplines that employees of a learning organization must master:

- Systems thinking—The discipline of seeing an organization or process as a system "bound by invisible fabrics of related actions" rather than unrelated, individual, or separate actions.
- Mental models—The discipline of being able to step outside ingrained assumptions or generalizations that are consciously or subconsciously

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NATIONAL PRODUCTIVITY REVIEW / Winter 1996
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CCC 0277-8556/96/1601071-05
employed to interpret or understand events or results.

- Personal mastery—The discipline of continuous learning and improving oneself; of developing patience; of working to see reality objectively.
- Building shared vision—The discipline of creating a common goal within an organization, to which all members willingly aspire to help the organization fulfill.
- Team learning—The discipline of working in teams so that the team's products and abilities are synergistically greater than the sum of the individual's.

Clearly these disciplines are desirable workforce skills. Yet it is the rare new employee, straight out of high school or college, who is even marginally functional in these areas. In fact, the U.S. educational system is structured to produce graduates who are conditioned to work alone and compete against their peers for grades, who think of the various bodies of knowledge as independent and unrelated, and who learn by rote the minimum required to pass tests. The end result is a new employee ingrained with work habits that are the antithesis of those required for success in the business arena.

What changes can be made in school curricula so that the future workforce can master Senge's skills before entering the business world? And how can business professionals communicate these desired changes to the academic community in terms they can understand and implement?

TEACHING THE ABCs OF BUSINESS IN THE CLASSROOM

An educator today would most likely teach Senge's disciplines in the time-honored didactic manner by defining them, breaking them down into component pieces, providing examples, etc. But this would be equivalent to learning to ride a bicycle by studying its physics and mechanics. Just as the only way to acquire and master the skill of bike-riding is to get on a bicycle and practice, Senge's disciplines are better acquired as business skills through use, not through memorization or detached analysis.

Of the five disciplines, building shared vision and team learning are cornerstones of any good school sports program. Such programs have long been recognized as providing students with useful career skills not otherwise provided in the classroom. The remaining three disciplines—systems thinking, mental models, and personal mastery—are not purposely taught in the school classroom or on the athletic field.

Fortunately, educators do not need to invent a new educational paradigm. It already exists and is being practiced in isolated cases in schools across the country. What is not understood by educators who use it, however, is that this pedagogic model teaches skills useful to the business community, and that it embraces and promotes the disciplines that Senge advocates. And the business community has yet to recognize this model as one that meets many of the requirements it is trying to articulate to the educational community.

In academia the model is known as shared inquiry. Socratic in nature, it involves students in group discussions of a selected text or a specific subject. The teacher's role in these discussions is to ask students carefully prepared interpretive questions and to guide the ensuing discussion. The goal is to force students to think and analyze information as a group, rather than to simply ingest an instructor's presentation. For example, in an English class, the group may be asked to address a portion of a text's passage and interpret the author's meaning. In a statistics class, the group may be asked to perform and analyze an experiment as a group, and then present and discuss the results.

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Consider shared inquiry in terms of Senge's five disciplines. Participants involved in an English class discussion are forced to contemplate and respond to thoughts and ideas that may differ significantly from their own. These students have read the same passage and each has responded to it differently. Now, not only are students required to express their interpretation of the passage clearly, they are encouraged to carefully consider the ideas of others and to defend their own ideas in real time. In the statistics class, they are required to perform as part of a team, formulate a problem-solving methodology without formal guidelines, and think of the whole problem as a system of interrelated smaller problems. In short, students are required to think on their feet, respect the ideas of others, consider complex ideas and issues in the context of an often fast-paced and lively discussion, and articulate their ideas clearly. Shared inquiry discussions thus embody every one of Senge's five disciplines.

As the book An Introduction to Shared Inquiry states, "Each participant brings a unique perspective that influences how he or she understands the assigned story or essay; thus, by sharing their interpretations in discussion, participants can discover new aspects of the work and deepen or even change their initial understanding." Students learn to look for connections they might not otherwise have considered as they struggle to express what the text meant to them and
then consider their conclusions in light of another student’s interpretation—the essence of systems thinking.

Students are exposed to several different interpretations of the same passage and are thereby encouraged to think outside their own mental box. Different solutions to the same problem or different interpretations of the same text are quite often-offered, encouraging students to see a problem from different perspectives—the essence of mental models.

Shared inquiry fosters the flexibility of mind to consider problems from many different angles and the discipline to analyze ideas critically, enabling students to acquire the confidence and the intellectual capability needed to approach many fields of knowledge. By giving them practice in actively seeking out answers and evaluating ideas, shared inquiry prepares them to be life-long learners—the essence of personal mastery.

During a shared inquiry discussion, students’ original ideas are often altered slightly, occasionally significantly, as a result of the interaction with the other students. Students thus learn to listen carefully to others, that their opinion is often only one of many, and that their ideas may offer only part of the total solution—the essence of building shared vision.

Finally, students involved in a shared inquiry discussion learn as part of a group. The skills essential to Senge’s team learning discipline are practiced, not preached. The benefits derived from the discussion are, at least directly and perhaps geometrically, proportional to their active participation—the essence of team learning.

Shared inquiry is not a new concept or innovation. It is a proven technique that predates current educational institutions and paradigms. Here are some examples of shared inquiry in the modern classroom.

St. John’s College—Founded in 1696, St. John’s College in Annapolis, Maryland, embodies the concept of shared inquiry. Since 1937, students at this private four-year college have been taking a fixed course of study in which they read and discuss the classics of western civilization. Instead of lectures and written exams, students at St. John’s learn by reading and discussing the “great books” and are evaluated solely on the basis of oral examinations. Approximately 75 percent of the students go on to graduate school and St. John’s ranks in the top 10 percent of American colleges and universities whose graduates hold Ph.D.s. Twenty percent of St. John’s alumni work in education, an equal percentage in business, and about 10 percent practice law. Alumni include Warren Winiarski, owner of Stag’s Leap Winery in California, Ray Cave, retired managing editor of Time magazine, David Lee Zlatoff, creator of TV’s McGyver, and Amanda Dalton, a Ringling-Bros. Barnum & Bailey clown.

How does shared inquiry work at St. John’s? The following excerpt from a 1986 New York Times article explains:

... the third and central element of the St. John’s pedagogical troika is the seminar, a format that undergraduates elsewhere normally encounter only in advanced classes, if at all. It begins ritually—each Monday and Thursday evening at 8 o’clock—with a question.

In seminar, the first rule freshmen encounter is: No unsupported opinions. “You have to come to your point reasonably, or find something in the text that deals with it,” says Carrie Kropeck, who graduated last spring; personal experience that might bear on the question is apt to be dismissed. The highest value is placed on close, careful listening. “And the more you believe in something, the more you have to listen to it attacked,” says an older alumnus. “The more you listen, the more you realize the other person might just possibly be right.”

Twenty students sit around three tables butted up against one another to form a single large one. The conversation twists and turns. The topic is tossed around like a baseball. No one takes notes. No one raises a hand to speak, or raises a voice in anger. Students and tutors address one another as Mister or Miss. The ambiance is that of animated, yet studiously polite, dinner conversation. At 10:05, five minutes past the session’s normal end, the bustle of a seminar letting out upstairs rumbles... A student gets up to shut the door.

Some educators might bemoan the fact that St. John’s does not use written tests to measure students’ performance. One wonders if a student could simply slide through the entire program without working, or if the student body as a whole is less capable because its members have not been driven by a testing regimen. Yet, the opposite is the case: The students are self-motivated and the achievements of the graduates speak for the success of the program.

Further, consider the behavior of the students in the New York Times excerpt. In that one seminar, the students demonstrated mastery of all five of Senge’s disciplines. Clearly a graduate of the St. John’s program would be an immediately functional member of the business world. Unlike the average college graduate, a St. John’s graduate will find the transition from academia to business much easier and he or she will be a productive team member from the start.

But St. John’s structure and approach represent too radical a departure for the average educational institution. This is a special case that demonstrates the successful use of shared inquiry on a large scale. Widespread implementation of shared inquiry programs must be on a smaller scale and, as the next example demonstrates, this, too, is possible.

Teaching Statistics—Chance is a successful introductory college statistics course that uses shared inquiry techniques (though not under that name) to generate interest in statistics and statistical thought among college students who might otherwise be uninterested in a purely mathematical
course. Developed cooperatively by Middlebury, Grinnell, Spelman, the University of California at San Diego, and Dartmouth, it is a case study course based upon current events of a statistical nature as reported in newspapers, such as the New York Times and the Washington Post, and current journals, such as Chance, Science, Nature, and the New England Journal of Medicine. The implementation of Chance has varied from school to school and instructor to instructor, yet the shared inquiry approach is a common bond. For example, at Princeton “students were asked at the beginning of each class to form small groups and consider a pair of questions for about 20 minutes. Each group assigned a reporter to present its conclusions, and most of the remaining class time was spent responding to the groups’ findings.”

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**Educating the Educators of the Future Workforce**

The following organizations are influential in promoting change in education:

**Business Roundtable**
1615 L St. NW, Suite 1100, Washington, DC 20036
(202) 872-1260

An influential lobbying force representing the views of American business, the Business Roundtable maintains 12 task forces, including an Education Task Force. It conducts extensive research, often drawing on the staffs of member companies for talent and expertise.

**Education Commission of the States**
707 17th St., Suite 2700, Denver, CO 80202-3427
(303) 299-3600; ecs@ecs.org
Contact: Ms. Kay McClenny

The Education Commission of the States seeks improvement in education by establishing a partnership of political and educational leadership between the states. It provides a forum for the discussion of major educational issues and a mechanism for interstate cooperation in educational policy formulation.

**Coalition of Essential Schools**
Brown University, Box 1569, Providence, RI 02912
(401) 863-3384
Contact: Mr. Bob McCarthy

The Coalition of Essential Schools comprises more than 150 member schools, primarily high schools, in 37 states; nearly 550 more are exploring application. It seeks to reform secondary education and improve student learning. Member schools tailor the common principles to the unique needs of their specific situations.

The following organizations can provide a wealth of information and support in the effort to incorporate shared inquiry into local school systems:

**Re:Learning**
c/o Education Commission of the States
707 17th Street, Suite 2700, Denver, CO 80202-3427
(303) 299-3600
Contact: Ms. Judy Bray

Re:Learning is a joint project that includes the Education Commission of the States and the Coalition of Essential Schools. It is designed to promote collaboration among school faculties, district personnel and state education and government leaders in the strategic redesign of teaching and learning activities in schools.

**The Paideia Group, Inc.**
P.O. Box 3423, Chapel Hill, NC 27515
(919) 929-0600; paideiagp@aol.com
Contact: Dr. Patricia Weiss

The Paideia Group, Inc. is a nonprofit organization founded by educators to promote shared inquiry and provide guidance for training and development of shared inquiry in schools. It offers seminars, conferences and resource information, including The Paideia Handbook.

**The Great Books Foundation**
35 E. Wacker Dr., Ste 2300, Chicago, IL 60601-2298
(312) 332-5870

The Great Books Foundation provides people of all ages with the opportunity to read, discuss, and learn from outstanding works of literature. It conducts courses in shared inquiry, the method of reading and discussion central to the Great Books program. It publishes An Introduction to Shared Inquiry, Leader Notes (a quarterly), and a newsletter, as well as reader and leader aids, curriculum materials, and activity books.

**Augsburg College Paideia Program**
731 21st Ave., Minneapolis, MN 55414
(612) 330-1654
Contact: Ms. Rita G. Kaplan

The Augsburg College Paideia Program trains educators from all levels on how to integrate socratic seminars into their program. It conducts an annual week-long Paideia Institute in June, which provides experience and practice for teachers with seminars, small group sessions, coaching, and curriculum development.

**Excel, Inc.**
23385 Old Barrington Rd., Barrington, IL 60010
(847) 382-7272; michael@excelcorp.com
Contact: Mr. Michael McCarthy

Excel, Inc. is an educational consulting firm that specializes in training business and educational professionals in how people learn. It explores the process and structure of learning, emphasizes different types of learning and promotes more effective teaching and training. It publishes About Learning.
The Minneapolis Chance course designed a test to see if there was an association between the taste and cost of chocolate chip cookies. The student’s design resulted in rating 12 brands of cookies on a scale of 1 to 5 (appearance and taste) and relating the average class ratings for taste and appearance for each cookie with its cost per ounce. The overall results for best tasting cookies were found to agree with those of a taste test carried out by Consumers Report.

Professor J. Laurie Snell, the founder of Chance, states, “We learned that it is difficult not to lecture, and we had to adjust to the experience of responding to students after they have discussed an idea in small groups. We found that our traditional neat and tidy presentation of concepts is not what occurs naturally to students.” Though still in its infancy, Chance is a hit with students. Said one UCSD sophomore, “It seems a lot more practical for a math class. It relates to life.”

Chance is an excellent example of shared inquiry applied to the modern classroom. For the statistics profession it sparks student interest in a subject typically burdened by the usual didactic method. For the business community it demonstrates that shared inquiry can be applied on a much smaller scale within the current academic environment. And, once again, this example demonstrates that shared inquiry applied in the classroom naturally causes students to exercise Senge’s disciplines.

Business Schools—If the shared inquiry approach provides the proper preparation for the business world, a skeptic would ask why it has not already been implemented. The answer is that many of the nation’s best business schools do use shared inquiry, but under another name—case study. The case method dates back to Harvard Law School in 1870, and Harvard Business School instituted a case study program in the 1920s. Since then it has probably become the most respected method of management instruction. While one of the main strengths of the case study is that it immerses students in real-life, messy management situations, the case method also strongly uses the shared inquiry approach. The use of the case method in business schools clearly underscores shared inquiry’s desirability and applicability to the business world.

GETTING TO THE BUSINESS OF EDUCATION

Clearly, the skills that individuals need to excel in the workplace—and to help their organizations achieve their goals—can be taught in today’s high schools and colleges via the use of shared inquiry. This technique, which is familiar to many educators and fully accessible to the rest, provides the “bicycle” for practicing the techniques most necessary for success in the corporate environment of today and tomorrow. Therefore, it is highly advisable for the business community to foster and encourage the use of shared inquiry in the schools. Among the steps to be taken:

- Recommend the use of shared inquiry to the Business Roundtable Education Task Force. With headquarters in Washington, DC, the Business Roundtable lobbies on behalf of American business.
- Provide financial support to the national organizations that promote shared inquiry. These include Re:Learning, The Paideia Group, Inc., and The Great Books Foundation. (See the box on page 76 for further information.)
- Encourage local school systems to try shared inquiry. Attend school board meetings and speak up as a local business representative, touting the strengths of shared inquiry from a business perspective. School boards really do listen.
- Adopt a local school or school system that uses shared inquiry and provide financial support for materials and ongoing facilitator training.
- Exercise business contacts at the national and state level that may have influence on curriculum content and education reform.

Business professionals recommending the use of shared inquiry can be confident that they have provided a recommendation that educators understand and have the tools to implement. They can be confident that future employees trained under the shared inquiry method will be better prepared to function in today’s lean environment, able to directly contribute to the learning organization, and capable of helping their organization realize its TQM goals. Thus, shared inquiry can serve as an important bridge between the business community’s needs and the academic world’s abilities.

ADDITIONAL RESOURCES