## **攀 INNOVATION ABSTRACTS**

PUBLISHED BY THE NATIONAL INSTITUTE FOR STAFF AND ORGANIZATIONAL DEVELOPMENT, THE UNIVERSITY OF TEXAS AT AUSTIN WITH SUPPORT FROM THE W. K. KELLOGG FOUNDATION AND THE SID W. RICHARDSON FOUNDATION

## Why Not Team-Testing?

The current wave of management theory in business is built around the team concept. Not just any old teamwork concept, not just participative management, not just quality circles, but teamwork in the very broadest sense—much like the Japanese view of total team orientation.

Contrary to popular belief, the Japanese approach to teamwork is not a cultural or inherent one. It is not, as many people think, an original notion of the Japanese. It is an adaptation of an American idea—that's right, American. The man who gets the credit in Japan is Dr. W. Edwards Deming. It was he who, just after World War II, got the Japanese system started down the road to the standard they now enjoy.

The Deming process employs quality as the driving force behind everything in business/industry. The idea of quality permeates the team effort; the team effort includes all persons associated with the business—i.e., management, engineering, production, support staff, vendors, and customers.

One of the most obvious examples of the results of this type of teamwork in American industry today is the Motorola Company, a manufacturer of electronic products and components. Everyone who <u>can</u> be involved to any degree in the production of their products <u>is</u> involved. The result, according to Motorola, is that by 1992 they will have only 3.4 defects per 1,000,000 products or customer services—in other words, insignificant defects. They are serious about quality—quality in the Deming sense of the word.

What does this have to do with education? The purpose of testing has long been to measure results of student learning. Testing also serves as additional time-on-task and is, therefore, a learning tool. In this regard, it is not unlike other learning tools such as visual aids, class discussions, or outside reading assignments. The testing method discussed here helps to reduce test anxiety, stimulates cooperation and teamwork, and increases students' sense of responsibility.

At our college, in the business management program, we have started to integrate the teamwork concept. The process is creating dramatic results.

It all started about two years ago with an idea from our curriculum development specialist. In a coffee break conversation one day, the inspiration tumbled out of his mouth in the form of questions—e.g., "This Deming approach may have some implications for us. How could we install it? What could we do to get the students to work in more of a teamwork setting?" Then it hit us. Why not let the students work in teams while taking tests? Simple!

Whoa! Radical idea! What would other instructors say? What would the students say? How would we set it up? What sort of results would we expect? Is it worth trying? Too radical? Who knows?

What followed in the ensuing semesters is having a definite effect. It works! Not only that, it works in a way that the students take to like "ducks to water." It's a motivator. It's a go-getter. It's whatever you want to call an idea that increases understanding, improves retention, and raises test scores.

The process is simple—so simple that it's been over-looked these many years. It goes like this:

At the beginning of each semester, the students are encouraged to form study teams—not a new idea. About a week before a major examination, the student study-teams are given study questions to review—not a new idea. Then, on test day, the students are allowed to take the examination in teams—NEW IDEA (at least at our college)!

The most noticeable aspect of the process at this point is what happens when we (the instructors) walk into the classroom on test day. There is a dull roar coming down the hallway. We enter the room to find the chairs rearranged into small circles, study questions are being "cussed" and discussed, negotiations between members of teams are taking place, teams are negotiating with other teams, highlighted book citations and notes are rampant, and electric excitement fills the air. They can't wait to get at it—like hungry lions about to be fed. (We've considered just throwing the test into the room and then running away.)

On the serious side, having been a teacher for almost three decades, it is fascinating to see the students in this state of mind when they are about to "get it socked to 'em" with a major examination.

Then we hand out the test. Each student gets a copy,



but only one from each group will be turned in for grading. That one copy must have on it the names of all persons on the team. The same score will be given to all members. [It should be pointed out that students may choose to take the examination alone. This, in fact, has happened, but for differing reasons. In one case, the student felt as though he hadn't prepared well enough and did not want to let the other members of the team down. In another case, the team did not have time to get together prior to test time and did not feel that it would be fair to team-test. Morals? Scruples? You bet!]

The results? No cheating—not even an attempt. Why would you cheat when all you have to do is ask another member of the team what he or she thinks? Leadership comes forth. The democratic process sets in. Arbitration and decision-making run amuck. Consensus abounds. Problem solving is seen in its best light. The team members assume more responsibility for the material and are willing to "instruct" other members: in other words, teamwork.

We have not discovered any type of test item that cannot be used on a team test. Average time spent on testing increases—students spend more time and make fewer careless errors.

When tests are returned and results are known, students are not willing to accept at face value the incorrect answers. They have reasons (sometimes very good reasons) for answering questions in a certain manner. They want to explain their reasoning, and they want to understand why these reasons are incorrect. They take ownership of the material and become involved with it to the end. This allows re-teaching to take place when the students are the most receptive to it.

We have found that the process spills over to other coursework in our department and to other departments, as well. For example, this semester there is a group that meets every Monday, Wednesday, and Friday morning at 7:00 a.m. They have breakfast together and review for a variety of classes, depending upon the group's needs for the day. The courses for which they prepare together include subjects outside business management where team-testing is not used. They have discovered the benefit of teamwork.

But the best result is that student understanding and comprehension improve; on the average, the test results increase from 20 to 22 percent! The best side effects are that the students find out for themselves that teamwork pays off, that every member of the team must contribute to the effort, that the chances of

beating the odds go up, that camaraderie has a definite place in the educational system, and that studying isn't so bad when you have someone to suffer with.

What's next? We don't know for sure, but we're toying with the idea of team-projects—i.e., research papers, case studies, etc. We're also looking at a team-oriented approach to redesigning the structure of entire classes, maybe even the Business Management program. Who knows? We may be onto something big here. But, all in all, we feel relatively sure that our business community will look at us from a different perspective once the word gets out.

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## Celebrate!

NISOD invites you to its twelfth annual International Conference on Teaching Excellence and Conference of Administrators, to be held in Austin on May 20-23, 1990. Major keynote speakers have been selected for the broad range of experiences that they will bring to our participants. They include:

- K. Patricia Cross, Professor, University of California at Berkeley, California
- Ronald J. Horvath, President, Jefferson Community College, Kentucky
- Robert H. McCabe, President, Mlami-Dade Community College, Florida

Special events at the conference will include:

- Mexican Buffet and Dancing to Texas Fever/ Monday, May 21
- ◆ San Antonio Trip/Tuesday, May 22

SEE YOU THERE!

