Research Capsules

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Many of us in HRD take part in long, intense conversations about wanting to create positive change in the workplace. But most of the time, we can't bring those discussions to resolution, and we end up feeling frustrated or confused.

Peggy, a colleague of mine, has an interesting and positive way to eliminate some of those feelings: "At the end of a session like that, I try to find one thing that I can act on today in order to move forward."

We are all faced with major and complex challenges, and Peggy's method provides us with a tool to help us shape the change rather than having the change shape us. It gives us a direction toward which we might move. Rather than feeling fragmented and powerless about dealing with impending change, we may be able to identify specific actions that will enable us to ride the waves rather than be swamped by them.

The research projects discussed in this month's column deal with actions human resource developers and others can take to foster change and to set up creative atmospheres for people and organizations to enhance individual and organizational self-worth. From them, you might glean an idea you can use to support the type of creative atmosphere you or your organization needs today.

Avoid Discounting

key to organizational change is the generation of new ideas—for processes, services, or improvements. Many of us are familiar with brainstorming as a technique to produce creative ideas. Among its maxims:

Avoid judgment.

- Seek quantity.
- Welcome "freewheeling."

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• Combine and improve on the ideas of others.

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Research conducted by Bruce Smith of the University of Alaska, Fairbanks, suggested that eliminating "discounting" should be included as another brainstorming guideline. Discounting is defined as verbal and nonverbal behavior that attacks the self-esteem of a particular person. The result of discounting is often some kind of retaliatory response, which sets up a discount/revenge cycle. It is important that we help people learn what discounting is and how to avoid it.

Smith's research was conducted with eight groups of volunteers at the university. The groups were given 20 minutes to produce as many ideas as possible through brainstorming on a particular topic. Participants were told to be as creative as possible.

Four of the groups faced various types of verbal and nonverbal discounting. Non-verbal discounting included such actions as rolling of the eyes, folding arms tightly and scowling, drumming on the table, and tapping feet. Verbal discounting included such statements as "Wasn't that mentioned already?" "Tm having trouble with that," "That won't work," and "What makes you think people want to hear that?"

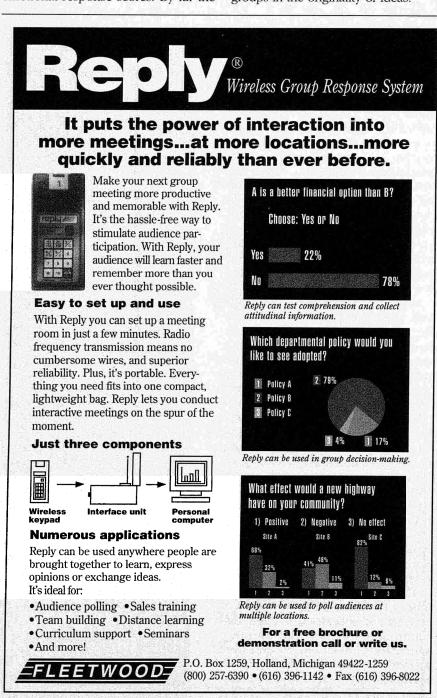
The other four groups were not subject to discounting; two of them were trained specifically to avoid discounting behaviors. The training, which took less than 10 minutes, defined the term discounting, gave examples of the behavior, and discussed the consequences of that behavior.

Results from the study were consistent with prior research. There was a These reports suggest quick actions HRD people can take to help foster more creative organizational climates.

Research Capsules

statistically significant difference (P < .05) in the productivity of the groups, measured by the quantity of ideas produced and by people's emotional response to the group process. Discounted groups produced significantly fewer ideas than control groups, and members of discounted groups recorded significantly more negative emotional-response scores. By far the most productive groups were those that were trained to avoid discounting.

On another of the study's dimensions—the quality of ideas—the results were not as clear. The four discounted groups produced ideas that were scored as less useful and less understandable than control groups, but there was no difference between groups in the originality of ideas.



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Smith's research reinforced the concept that to be effective, group processes need to create and ensure safe environments for people. When people feel unsafe, they defend themselves, and they are less likely to express ideas that are too different from past experience. Given the gravity and scope of the issues we face in today's workplace, an emphasis on developing a process that keeps group members feeling safe by avoiding discounting may be even more important than in the past.

(For more about discounting, see the article, "When Discounting Gets in the Way," on page 55 of this issue.)

For a copy of Smith's research report, "Training Groups Not to Discount Pays Off in Added Productivity," or for more information, contact the researcher.

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Enhance Self-Efficacy

Tracy McDonald and Marc Siegall of California State University looked at a slightly different change-related problem. They examined the relationship between perceived self-efficacy (the belief in one's ability to perform a task) and people's reactions to change.

In a large telecommunications company, they surveyed technicians' reactions to the introduction of a new job assignment called Computerized Access for Technicians. CAT represented a major technological change in the technicians' job, and the researchers wanted to know whether technicians with high levels of perceived self-efficacy would fare better after the changeover, compared with technicians with lower levels of selfefficacy.

McDonald and Siegall defined technological self-efficacy (TSE) as the belief in one's ability to perform a technologically sophisticated new task. They measured TSE using a survey containing the following five items:

• When I have to learn a new task that is high-tech, my first reaction is that I'm sure I can do it.

In terms of my ability to learn

new tasks that are high-tech, I would describe myself as one of the best in my work group.

• In the past, I have had a great amount of experience (either on or off the job) working on high-tech tasks.

• I am extremely confident that I can learn to use CAT on my job.

• CAT will allow me to perform my job better and more efficiently.

For each item, the technicians responded using a 5-point Likert scale, with 1 signifying "strongly agree" and 5 signifying "strongly disagree."

The researchers used other, wellestablished scales to measure job satisfaction and organizational commitment.

Survey responses from 250 technicians indicated that technicians with high levels of TSE were significantly more satisfied with their jobs and more committed to the organization after the changeover, compared with workers with low levels of TSE. High-TSE technicians reported performing more work of a higher quality since CAT. They were absent and tardy less frequently than low-TSE technicians.

Researchers consider those findings to be strong evidence that there are many positive outcomes for companies when workers perceive themselves as self-efficacious in anticipation of technological change.

McDonald and Siegall provide the following guidelines for companies to use to enhance self-efficacy when making technological changes:

Introduce the technological change gradually.

• Instill confidence in workers through training of both workers and managers.

Point to past successes.

• Give workers time to get used to the change.

• Select workers with high levels of self-efficacy.

Of the five, the researchers consider training the most important. They pointed out that, like athletes, workers need plenty of experience practicing their newly changed jobs in order to gain confidence in their ability.

McDonald and Siegall contend that the best type of training in this situation is through simulations that allow workers to practice the new skills, using the new technology, in an off-the-job setting where mistakes do not matter.

The researchers suggest that managers be trained, too—not only in using the new technology, but also in instilling confidence in workers. In addition, they believe that managers must be trained to focus on their workers' successes, not only on their shortcomings. Managers also should be taught techniques for giving positive reinforcement and specific feedback.

For a copy of the report, "Enhancing Worker Self-Efficacy: An Approach for Reducing Negative Reactions to Technological Change," contact the researchers.

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Define the New Global System

The World Future Society's World 2000 project provides an opportunity for HRD practitioners to participate in an international planning dialogue that can help shape an emerging global system. The dialogue's purpose is to bring together diverse views from all sectors of society to form a global consensus on how the world may realize a shared vision of the future.

Human resource developers can join with others to share their impressions on the trends that are affecting the world and the strategies that can create needed changes. The project has many phases, several of which were discussed at the World Future Society's annual conference, June 27 to July 1, 1993.

A key part of the project is the development and distribution of the World 2000 paper, written by William Halal, a management professor at George Washington University. The paper presents preliminary results of the early stages of the dialogue in the form of a tentative global strategic plan. It also invites participation in collaborative planning efforts. The plan summarizes nine "super trends" or driving forces that are moving the world in new

Researchers' Guidelines

"Research Capsules" is a quarterly column sponsored by the Research Committee of the American Society for Training and Development. It is compiled and edited by Linda Morris, director of industry services education for Ernst & Young.

Topics of interest include studies of attitudes or trends in training and development, HRD techniques and methods, and research findings that have clear HRD implications. Of special interest are research studies conducted in your own organization.

To contribute, please send a complete report and a brief description of the problem investigated, methods used, results, conclusions, and implications for HRD. Include your name, address, and phone number so that readers may contact you for further information. The address is at the end of the column.

directions. It highlights issues that pose barriers to movement toward an integrated global community.

The report also suggests strategies to encourage cooperation, communication, and a shared international culture built on respect for individuals, diversity, and such transcendent values as community and creativity. The strategies include disseminating advanced technology, integrating economics and society, integrating ecological realities into economic and social life, decentralizing institutions to empower individuals, and fostering collaborative working relationships.

To obtain a copy of the World 2000 paper and to participate in the dialogue, contact Halal at the address given below.

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"Research Capsules" is a quarterly column by **Linda Morris.** Send submissions, comments, and suggestions for topics to her at Ernst & Young, Fairfax Square, Tower 2, 8075 Leesburg Pike, Vienna, VA 22182; 703/903-5000.