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Facilities Manager

Volume 11 Number 1

WINTER 1995

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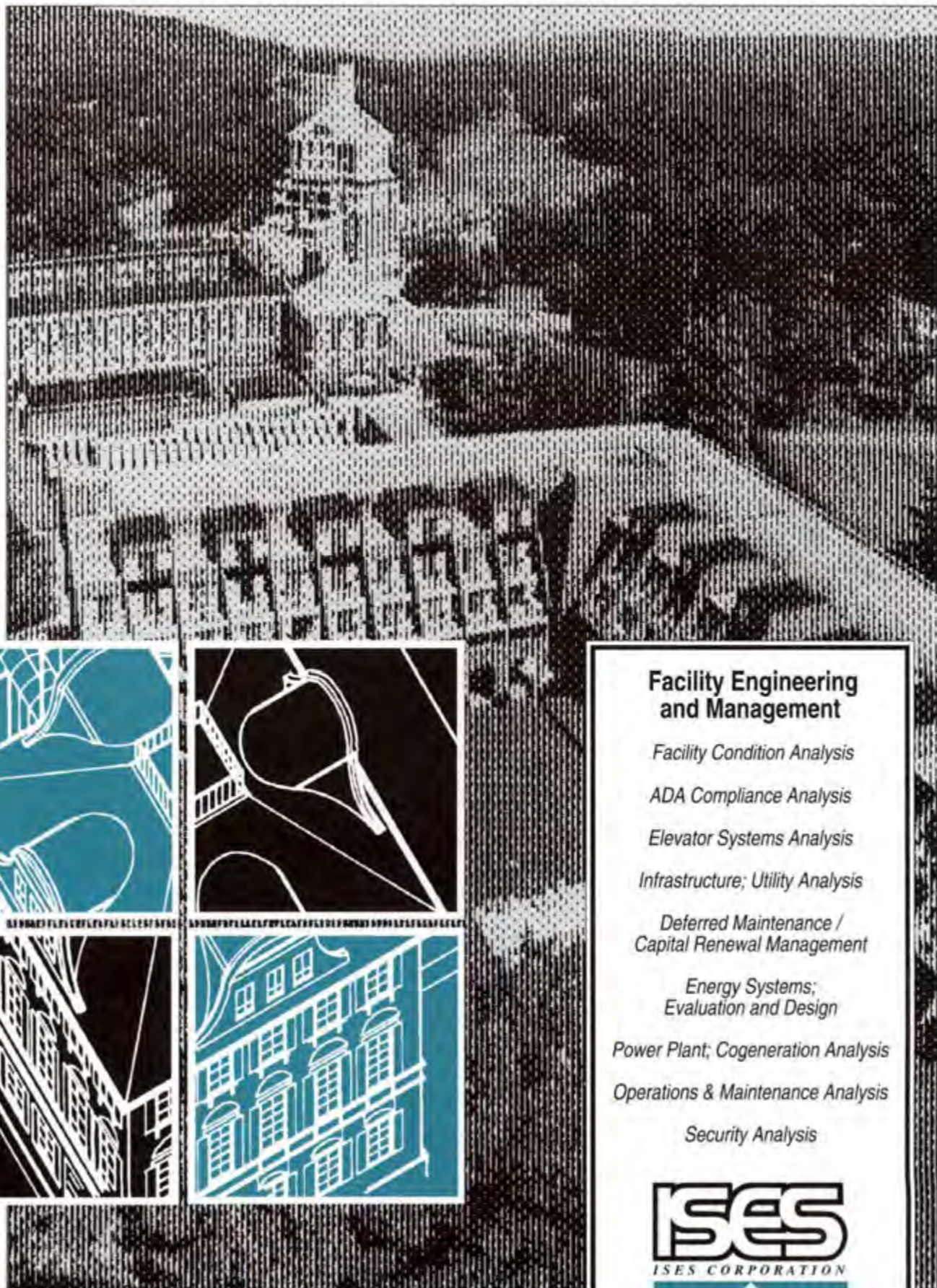
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ART DIRECTION/TYPOGRAPHY: Chronicle
Type & Design

PRINTING: Good Printers

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Facilities Manager (ISSN 0882-7249) is published quarterly (Winter, Spring, Summer, Fall) by APPA: The Association of Higher Education Facilities Officers, 1446 Duke Street, Alexandria, Virginia 22314-3492. Editorial contributions are welcome and should be sent to this address.

Of APPA's annual membership dues, \$40 pays for the subscription to *Facilities Manager* and *Inside APPA*. Additional annual subscriptions for both periodicals cost \$48 (\$60 for non-U.S. addresses). For information on rates and deadlines for display and classified advertising, telephone 703-684-1446.

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POSTMASTER: Send address changes to *Facilities Manager*, 1446 Duke Street, Alexandria, VA 22314-3492.

From The Editor

Steve Glazner

We thought it an appropriate time to publish a theme issue on the topic of leadership. The changes currently affecting higher education are both significant and long-term, and APPA and its members are certainly feeling the ongoing impacts.

What better person to serve as field editor for this issue than current APPA President Charlie Jenkins? Many of you have already heard the presentation that we present here, as Charlie has shared what he calls "Sermon #1" to members at several APPA Institutes, regional meetings, and other occasions. We thought it was a good time to publish it for all to appreciate.

We are pleased to have contributions to our topic of leadership by three well-known speakers and writers. In an article taken from his keynote presentation at APPA's 1994 annual meeting, Burt Nanus discusses the meaning of leadership and the importance of the visioning process to the facilities organization. And Bill Maynard and Tom Champoux, whom members know through an annual meeting workshop and regional meeting presentations, provide a dynamic piece on the necessity to sustain excellence as

your organization changes.

In this issue you will also find two different kinds of challenges to APPA, issued by Jack Hug and Bill Daigneau, as well as a report by President-Elect Doug Christensen on a visioning process currently underway by the APPA Board of Directors.

APPA is extremely proud to announce the presentation of Foundations of Leadership for Facilities Officers at the January 1995 Institute for Facilities Management. This week-long program was developed by APPA in cooperation with the Covey Leadership Center and generously sponsored by Marriott Education Services. See Gary Reynolds' article on page 32 for more information on this exciting new professional development program.

We have compiled what we hope is a strong collection of articles that touch on a number of leadership issues for the higher education facilities professional. This issue is intended to provide a small taste of the topic, which we will explore further in a full book due to be published in late spring.

As always, we appreciate your comments, suggestions, and continued support. Happy New Year! ■

APPA News

Readers Rate *Facilities Manager* Highly in Recent Survey

by Steve Glazner
APPA Director of Communications

APPA recently conducted a comprehensive, independent readership survey of *Facilities Manager* and *APPA Newsletter*, the first such survey in ten years. A total of 523 questionnaires were returned of 1,200 mailed to a cross-section of members, providing a tremendous response rate of 43.7 percent.

Our research shows that 90.5 percent of our readers are male, have an average age of 47.38 years, and that 82.4 percent have graduated college (with 36.6 percent going on to complete master's degrees, and 2.5 percent completing doctoral degrees). The average number of years in facilities management is 13.56. A full 89 percent believe that the technical level of the articles is about right—not too basic and not too advanced. More than 78 percent of our readers read all of the previous four issues, and 82.5 percent either saved the entire issue, passed it on to a colleague, or placed it in a library. The survey also indicates that the pass-along rate of each issue is 3.35, which means that more than 15,000 individuals read *Facilities Manager*.

You told us that *Facilities Manager* provides you with reliable, timely information that is valuable and specific to the profession of higher education facilities management. A total of 65 per-

cent of our readers ranked *Facilities Manager* among the top three industry magazines they read, with 14.1 percent rating it as number one.

The survey listed a number of topics and asked the reader to check those on which they would like to see more coverage in future issues. The top five topics were:

- Improving communications with campus customers—59.3%
- New technologies—57.5%
- Customer service—52.6%
- Campus facilities planning—51.9%
- Environmental and regulatory issues—49.8%

Readers had the opportunity to tell us what they liked most and least about the magazine. A sampling follows:

- "Includes new ideas and information that has direct application to my department"
- "Easy-to-read, relevant articles"
- "Timeliness and diversity of articles"
- "Quality info about the industry. New focus on leadership and quality"
- "I couldn't do without it! You are providing us with useful information and service."

Medea Ranck, newsletter editor, summarized in the December issue the survey findings specifically related to *APPA Newsletter*. Many readers complained about the loss of Job Corner as a service to members interested in tracking trends and changes in higher education facilities. As a result of these comments, we will begin listing recent job opportunities (title and institution) in the newsletter. The source will be APPA's twice-monthly job bulletin, *Job Express*, and the first listing will be published in the February issue of the newly designed *Inside APPA*, successor to *APPA Newsletter*.

We will continue to strive, in future issues of the magazine and newsletter, to bring you the best writing and resources on the many issues that comprise facilities management. Our thanks to everyone who completed the survey and shared with us our strengths and informed us of our weaknesses. We listen, we learn, and we improve. ■

Report of the International Relations Task Force

by Roy Dalebozik
Executive Director, Facilities Development
McGill University
Montreal, Quebec, Canada

The International Relations Task Force was formed at the 1993 APPA annual meeting by then-President Diane Kerby. The vision of the task force is to establish linkages between North American APPA members and facilities personnel in other parts of the world. These linkages have as a goal the expansion of APPA's presence as a resource base and the promotion of exchanges between facilities professionals worldwide that allow synergistic global learning.

Over the past year, the task force has sought to expand its membership. We established an agenda of projects at the San Antonio meeting and are now

endeavoring to fulfill these plans.

One project currently underway is the compilation of all foreign facilities personnel that international members have hosted



at their institutions. The database will help APPA link international facilities personnel looking for contacts within APPA with those persons with the appropriate experience or knowledge. We are currently developing a questionnaire that will make it easier for host universities to arrange contacts and supply needed information to the representatives of the visiting university. Steve Glazner, APPA's director of communications, was appointed as the staff member responsible for international issues and who will coordinate visits with the assistance of Task Force Chair Roy Dalebozik.

The task force also started a list of special activities we would undertake. We discussed the merits of creating an electronic bulletin board, which would solicit information and discussion on such issues as best practices on a world scale. This idea is still under discussion, and your input is most welcome.

Because of the membership size, we decided that a decentralized organizational structure would be tested for the next year. Ted Dews now represents Australasia and acts as a hub for distribution to that region. Victor Slater represents members in Great Britain and likewise acts as their distribution hub. The task force is still in need of a South/Central American representative, as well as a rep for the Caribbean.

Strategies for Higher Education in the Information Age

CAUSE, the association for managing and using information resources in higher education, has published *Organizational and Technological Strategies for Higher Education in the Information Age*, by David J. Ernst, Richard N. Katz, and John R. Sack. The paper is the most recent addition to CAUSE's professional paper series.

The paper examines five key trends affecting higher education administration and offers new strategies for dealing with them. The trends include

- flat or decreasing funding sources,
- public expectations and state mandates calling for more accountability,
- consumer expectations demanding more sophisticated services,

Information Request

An APPA member has requested information from any institution that has developed or implemented a preventive maintenance program that utilizes the barcode process. If you have any information to share on this topic, please contact Maxine Mauldin at 703-684-1446, or send it by fax to 703-549-2772.

- evolving organization structures that will change traditional hierarchies, and
- sophisticated, knowledgeable workers who require additional

technical and consulting support. Copies of the paper are available from CAUSE. To order call 303-939-0310, or e-mail to orders@cause.colorado.edu.



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- **Construction Services Contracts** (includes Concrete, Masonry, Carpentry, Drywall, Ceiling Tile, and Floor Tile)
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Caspa L. Harris Resigns as NACUBO President

Caspa L. Harris Jr., president of the National Association of College and University Business Officers, has announced his resignation effective no later than July 1995.

Harris has headed NACUBO since 1987, after serving for sixteen years as vice president for business and fiscal affairs at Howard University in Washington, D.C. He is credited with restoring the association to financial health and increasing its presence on Capitol Hill and within the higher education association community during his tenure.

Harris was instrumental in joint APPA/NACUBO projects, including the popular Institute for Facilities Finance and the successful survey and publication, *The Decaying American Campus: A Ticking Time Bomb* (1989), produced in cooperation with Coopers & Lybrand.

A search is presently underway for Harris' successor. ■

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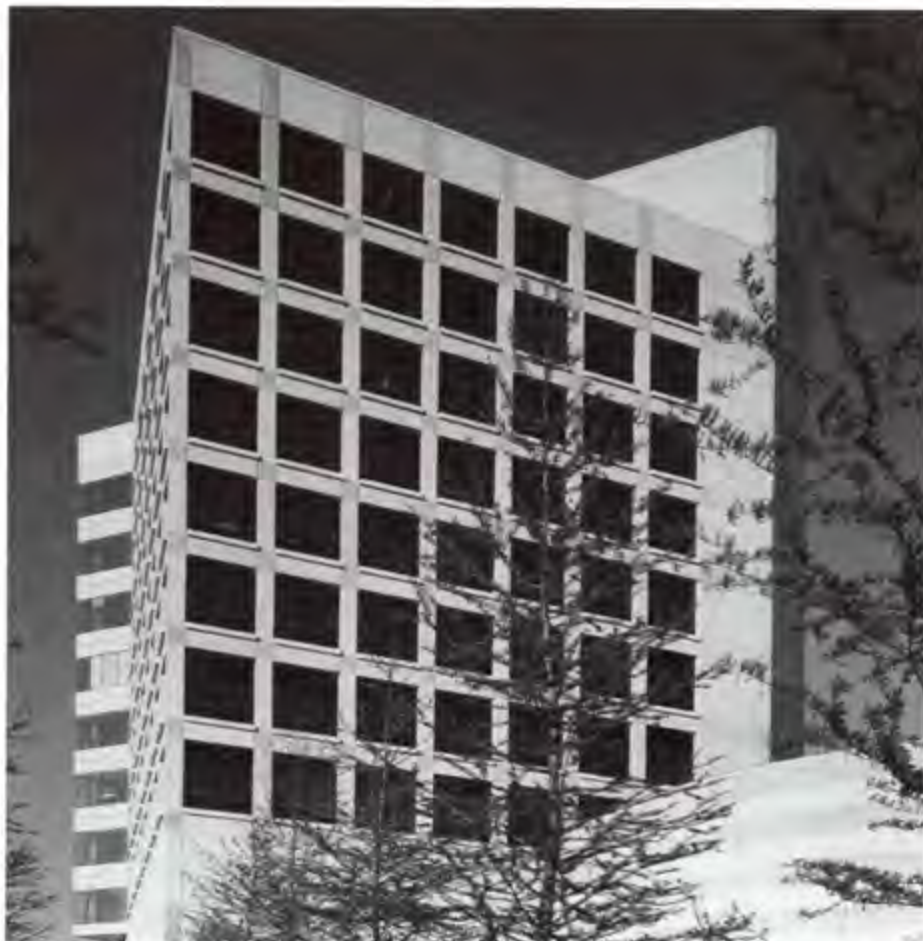
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Elevator/Escalator Performance Standards Published

The National Elevator Industry has published *Performance Standards*, a 42-page supplement to *NEII Vertical Transportation Standards*. The booklet contains definitions of more than forty technical

terms common to elevator services, and explains where they are applicable and how to measure and evaluate them. The booklet also contains electrical power guidelines and tips on modernizing existing equipment. Copies of the book are available from NEII, 185 Bridge Plaza North, Room 310, Fort Lee, NJ 07024; 201-944-3211. ■



Simmons Biomedical Research Building at the University of Texas Southwestern Medical Center in Dallas.

UT Southwestern Building Design Lauded

The University of Texas Southwestern's new Simmons Biomedical Research Building received the Gold Award from the Texas Society of Architects Committee on Architecture for Health.

"We're pleased that our physical environment is receiving recognition along with our world-class scientific endeavors," said Kirby Vahle, associate vice president for facilities management.

The thirteen-story building contains

eight floors of biomedical research laboratories, two floors for research support, and three floors of parking. The underground parking is designed for future horizontal expansion. Notable architectural features are a pyramidal skylight and common areas with panoramic views of the main campus and downtown Dallas skyline. The building, completed in April 1993, is part of a 40-acre research complex that will include six research towers. ■



Staff Member Runs Marine Marathon

Medea Ranck, APPA's book and newsletter editor, completed the entire 26.2 miles of the annual Marine Corps Marathon, held in Washington, D.C. on October 23, 1994. She had trained nearly a year to prepare for this, her first marathon.

Despite nursing an injury from the previous month, Medea decided to run in the marathon with 16,000 other runners, including talk-show host Oprah Winfrey. When asked about her completion time, Medea said, "I finished after Oprah, but I wasn't last. I didn't expect to finish and was happy to have made it."

To date, Medea has not made plans to train for another marathon. ■

Mercury-Containing Lamps May Be Hazardous Waste

According to proposed Environmental Protection Agency (EPA) rules, mercury-containing lamps, including light-bulbs, may be considered as hazardous waste under the Resources Conservation and Recovery Act.

Depending on which approach the EPA pursues, lamps may be excluded from regulation as hazardous waste if they are disposed of in municipal landfills meeting specific EPA requirements; or they may be added to EPA

Universal Waste Proposal, which would make them subject to full Subtitle C RCRA regulations.

For specific information on the proposed rule, contact Valerie Wilson, Office of Solid Waste, Mail code 5304, EPA, 401 M Street SW, Washington, DC 20460; 202-260-4678. ■

Beverage Agreement to Benefit Facilities

An agreement between Pepsi Cola North America and Pennsylvania's State System of Higher Education could result in as much as \$12 million in revenue to be used in part for building repair, equipment purchases, and library improvements among the system's fourteen campuses.

The \$23 million, ten-year contract makes Pepsi an exclusive supplier of soft drinks and other products to the state system's schools, a market of more than 95,000 students. ■

UCLA Cogeneration Facility Recognized

The Association of Energy Engineers has chosen UCLA's Energy Systems Facility as the 1994 Cogeneration Project of the Year in the over 5MW category.

The facility, which took nearly three years to construct at a cost of approximately \$180 million, supplies the Westwood campus with electricity, cooling, and steam.

The system has more than proven its capabilities. Following the January 17 earthquake, it was able to provide an additional 20MW of electricity to the city of Los Angeles in addition to meeting the campus' energy requirements.

The project was financed entirely through publicly offered certificates, and the cost is expected to be paid entirely out of energy cost savings. ■

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Capital Notes

Barbara Hirsch

Survey Results

What follows are the results of the recent on-line APPA *Government Relations Update* readership survey. The "yes" column shows the percentage of APPA members who are interested in a particular issue (the percentage of members who rated an issue 3—very important, and 4—critical). The "no" column shows the percentage of APPA members who are not interested in a particular issue (the percentage of members who rated an issue 2—of little importance, and 1—not important).

As you can see, appropriations was ranked the lowest of all categories. Superfund and RCRA also rated low. However, for those of you who are interested in appropriations, this does not mean I will

ue to be covered, but on a more limited basis.

Members were most interested in OSHA, ADA, Hazmat, and Environmental Tobacco Smoke. I will increase coverage in those areas, in addition to addressing them in issue analysis papers and the upcoming APPA regulatory compliance seminar.

| ISSUE | YES | NO |
|--|-----|----|
| APPROPRIATIONS: | | |
| Energy and Water (funds DOE) | 32 | 68 |
| VA HUD (funds EPA) | 40 | 60 |
| Interior (funds DOE energy conservation) | 44 | 56 |
| NSF | 29 | 71 |
| Black Colleges | 12 | 88 |
| OTHER LEGISLATION: | | |
| Clean Water | 59 | 41 |
| Drinking Water | 57 | 40 |
| Environmental Technology | 62 | 35 |
| Environmental Tobacco Smoke | 70 | 30 |
| HAZMAT | 70 | 30 |
| OSHA | 87 | 13 |
| Risk Assessment | 60 | 40 |
| Superfund | 38 | 62 |
| Unfunded Mandates | 55 | 44 |
| REGULATORY: | | |
| ADA | 79 | 18 |
| Clean Air Act | 71 | 28 |
| DOE Grants | 30 | 68 |
| Energy Policy Act | 27 | 56 |
| OSHA | 84 | 13 |
| RCRA | 46 | 51 |
| USTS | 59 | 38 |

Totals of less than 100 percent indicate that some responders left that answer blank.

The questions on additional

issues and analysis of issues provided interesting anecdotal information, but no one subject stood out.

The APPA *Government Relations Update* is available without cost to all members of APPA who have access to the Internet. To subscribe write to appa@bitnic.bitnet or

appa@bitnic.educom.edu. In addition to your e-mail address, please provide your name, address, and phone number for our records.

Regulatory Compliance Seminar

APPA will hold its second regulatory compliance seminar March 6-7 at the Gateway Marriot Hotel in Arlington (Crystal City), Virginia. We are in the process of firming up the agenda, but expect to see the following subjects in the program:

- Clean water and drinking water
- Interstate waste
- Clean Air Act Title V permitting
- OSHA rewrite; rules on fall protection, personal protective equipment, and confined spaces; proposed rules on indoor air quality, asbestos exposure, ergonomics.

Speakers will also cover state trends in environmental and safety regulation, and the agenda of the new Republican Congress. Watch for a promotion with more details.



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cease covering the subject. In the future, I will advise you when appropriations bills are introduced and will update you when the measure is passed. Superfund and RCRA will also contin-

Barbara Hirsch is APPA's director of government relations.

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Focus on Management

by H. Val Peterson

Lesson in Leadership

As facilities managers we sometimes feel that our lot in life is hard. Being constantly bombarded by the challenges associated with inadequate operating budgets, growing backlogs of deferred maintenance, unfunded government mandates, complacency in the workforce, and working within policies and procedures that are bureaucratic in nature, could lead you to conclude that another profession would have been a better choice.

But if we take time to think about some of the global problems that we all face in today's world, the magnitude of our own challenges pale by comparison. Some items that immediately come to mind are:

- the threat of overpopulation and inadequate food supplies;
- the threat of nuclear warfare and terrorism;
- global warming and its resultant calamities;
- corrupt government and factional battles that lead to starvation, famine, and plague;
- the general degeneration of society as exhibited by increases in violence, racial strife, and poverty; and
- a global jockeying and restructuring by business and industry for competitiveness.

As you attempt to analyze the challenges facing our planet as well as those faced by all of us in our workday world, the common need is for leaders who have the right vision and who are willing to take charge. We are besieged

with theories about leadership: leadership for quality, principle centered leadership, visionary leadership, and this list goes on. Theories, techniques, and management practices constantly evolve, but none are useful or effective if there is no one to step up and take charge. In some areas, the lack of leadership has reached crisis proportions.

Perhaps one of the best examples (worst would be a better term) of this leadership crisis is that which exists within the federal government of the United States. Not too long ago the *New York Times* carried an article that quoted an unnamed bureaucrat who said: "The unequivocal message throughout the federal bureaucracy is that nothing is to be accomplished by this government except the creation of good feelings and the illusion of action. ... The best and the brightest at my agency and others dutifully exercise caution in substantive matters, avoid action, and continually seek another clearance, another authorization, until someone just finally says no. ... Matters afflicting the current and future well-being of Americans are seen only as mettlesome disruptions that must be calmed, rather than problems that must be solved or responsibilities that must be faced."



Does this revelation surprise anyone? No. Many state and local governments suffer from this same lack of leadership. And the problem doesn't stop there—it exists in the businesses and corporate world as well as at institutions both public and private.

The colleges and universities within which we work are not immune from this lack of leadership either. Let's hope that it doesn't describe an attitude that exists within our own organization.

The world and conditions around us constantly change. Advances in technology and social issues create conditions that are increasingly complex and uncertain. In today's world, being a good leader is more difficult and demanding than ever before. I for one, do not have the answer on how to solve the world's leadership crisis. I do know, however, that unless facilities managers such as you and I take the necessary steps to critique and revitalize our own organizations and work diligently to energize, inspire, and

empower our employees, our organizations will be much less than they might otherwise be. The old saying applies that if you are not moving ahead, you are falling behind—there is no standing still.

We need to learn this one lesson: The world (and our profession as well) lacks more for good leaders than for good managers. Managers are people who get things done by setting goals and objectives, making plans, developing strategies, deciding priorities, obtaining resources, managing people, solving problems, and correcting errors. On the other hand, leaders are the ones who take charge, make things happen, inspire trust, focus on people, are innovative and original, translate vision into reality, and have a long-range perspective. While managers are needed to get the job done today, leaders are needed to do the job tomorrow.

While most facilities managers work long and hard at being good managers, the challenge to our profession is to become good leaders as well. We all need to learn that lesson and act upon it.

CUSTODIAL STAFFING SOFTWARE

Jack C. Dudley, P.E., Editor and Co-author of the APPA Publication *Custodial Staffing Guidelines for Educational Facilities*, has developed software for analyzing custodial assignments in conjunction with helping a number of institutions around the country establish a rational custodial staffing model.

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Val Peterson is director of facilities management at Arizona State University, Tempe, Arizona.



I have been reading a lot recently on the subject of leadership and have discovered that it's a very broad subject. One of the authors I've read says that in researching for his book he discovered more than 350 definitions for leadership. They're usually pretty complex definitions, too. Consider this from *A Passion for Excellence* by Tom Peters and Nancy Austin: "The alternative we now propose is leader (not manager) as

cheerleader, enthusiast, nurturer of champions, hero finder, wanderer, dramatist, coach, facilitator, builder."¹ Excuse me, then, if I choose not to get too deeply into describing leaders but instead focus on a single observation that makes a lot of sense to me.

One common thread that runs through all my readings is this: Leadership is different from management. Leaders and managers behave differently and do different things. It's this difference that I'd like to explore. Each of the several authors I've read puts his or her own spin on the difference. The following metaphor comes from Stephen R. Covey:

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"You can quickly grasp the important difference between the two if you envision a group of producers cutting their way through the jungle with machetes. They're the producers, the problem solvers. They're cutting through the undergrowth, clearing it out.

"The managers are behind them, sharpening their machetes, writing policy and procedure manuals, holding muscle development programs, bringing in improved technologies and setting up working schedules and compensation programs for machete wielders.

"The leader is the one who climbs the tallest tree, surveys the entire situation, and yells, 'Wrong jungle!'

"But how do the busy, efficient producers and managers often respond? 'Shut up! We're making progress.'"²

My favorite, and I believe most succinct, explanation of the difference is found in the writings of Dr. Warren Bennis, a retired educator who served for several years as the president of the University of Cincinnati. He's now, among other endeavors, a noted consultant on leadership and management. Bennis has written four valuable books on leadership^{3,4,5,6}. In each of them he states the following at least once: "Managers do things right; leaders do the right things."

Whatever does that mean? Bennis goes on to explain that good managers excel in the ability to handle the daily routine, yet never question whether the routine should be done at all.

Some Thoughts on

by Charles W. Jenkins

LEAD

They complete each day's activities with skill and efficiency, they put out all fires, they clear every hurdle, but never ask, "Is what I'm doing or what my department is doing the most productive thing we can be doing for the university?" Leaders, on the other hand, do ask that question, regularly and frequently. Managers, I think, tend to honor the status quo. Leaders seek change, even to the point of chaos. Managers say, "If it ain't broke, don't fix it." Leaders say, "If it ain't broke, break it and put it back together better."

Now, I contend that given those definitions, we in the higher education facilities business tend to manage almost exclusively. I think our bosses, the business officers, do the same and, for the most part, their bosses, the university presidents, as well. The end result is that higher education falls into that group of American institutions that Bennis refers to as "over-managed and underled."

Facilities officers come by it naturally, of course. Being good managers is what got us to where we are today. We have a book that is referred to as the APFA bible, entitled *Facilities Management: A Manual for Plant Administration*⁷. It's 1,577 pages long. There are 22 pages, or about 1.4 percent, devoted to the joint topic of "Motivation and Leadership." Leadership didn't even get first billing. We have a magazine called *Facilities Manager*. For those who are inclined to seek it, we have an award called the Award for Excellence in Facilities Management, not Leadership. My friends, I contend that, like our handbook, we spend 98 percent of our time managing and, at the extreme, 2 percent leading. I further contend that the challenges of our workplace today demand that we alter that ratio significantly.

I don't for a minute suggest that we stop managing and become pure leaders. I simply think we must devote more time than we have been to behaving like leaders. If we can't do both, then it's better to stay a pure manager. In *A Force for Change: How Leadership Differs from Management*, Dr. John Kotter discusses the issue of strong management/weak leadership vs. the opposite and concludes that "Strong leadership with weak management is no better, and sometimes actually worse, than the reverse."⁸ So, all I'm talking about here is a micrometer adjustment in our style.

Kotter also writes, "No one has yet figured out a way to manage people effectively into battle." That indicates to me that war stories are a good place to look for examples of leadership. I recently heard an address in which the Commanding General of the Fifth United States Army related a story from the Gulf War in Kuwait. He had heard the story from a reliable source, his son-in-law, who actually participated in the event. The general's son-in-law was assigned to an armored reconnaissance unit. Their job was to range out ahead of the main armored force and discover the enemy before being discovered, thus gaining the element of surprise for their unit. On this occasion, they had done exactly that. They had come upon a column of sixteen Russian tanks, manned by Iraqi crews, in a line across the desert. The American scouts were unobserved. They radioed back to the main force to report their discovery.

Soon the unit commander, a young lieutenant colonel, arrived in his command vehicle with a few of his staff. He sized up the situation and radioed back the message, "Send up one M1A1 tank." Soon the tank arrived. He instructed the

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crew, "Shoot the tank on the far left end of the line. We'll wait ten minutes and see what they do." The tank crew aimed and fired a single round. It struck the target vehicle squarely between the treads and at the center of the armor plate meant to deflect such projectiles. Instead, it penetrated the armor, passed completely through the tank, and out the other side. It was a high explosive shell, but for some reason it failed to detonate. Nonetheless, in passing through the tank it blew the turret completely off and onto the ground beside the tank. This was from a range of over 2000 meters, somewhere between a mile and a mile and a half. The Iraqis had no idea what had happened. They could see no enemy. They had heard only a whoosh and seen one of their tanks destroyed. The remaining crews dismounted their vehicles and fled on foot into the desert.

The general told that story to illustrate the awesome power of U.S. weaponry and the excellence of the training provided American troops, but then he went on to say, "Ladies and gentlemen, I submit to you that no society other than ours could have produced that young commander, who made a conscious decision to shoot one tank and wait ten minutes." I submit to you that it was the act of a leader. He could have been a superlative manager. He had the opportunity, the training, and the resources to annihilate the enemy force in business-as-usual fashion. Instead, he honored the ethic of respect for human life. He shot one tank and waited ten minutes. He did the right thing.

But, Charlie, you say to me, I'm not fighting a war in the desert. My battle isn't nearly so dramatic nor are my decisions so obvious. How am I to know what is the right thing? My reply is simple—ask.

In *How to Win Customers and Keep Them for Life*⁹, Dr. Michaël LeBoeuf, also a retired educator, talks about the two platinum questions. They are: "How are we doing?" and "How can we get better?" To find the right things to do, ask those questions of two groups on campus. The first group, of course, is your customers. They'll give you some great ideas, I guarantee.

How do you ask them? One of the best ways I know of is a customer survey. We've all seen them. It's hard to go to the restaurant anymore without finding one on the table. Please rate our service from "excellent" to "poor" in each of the following areas. That's "How are we doing?" Then there's always a group of empty lines with the heading "Comments." That's "How can we get better?" You can use the exact same format to survey your customers' degree of satisfaction with your organization's service. It's being done quite successfully at many universities and colleges. There's a wealth of suggestions for right things to do in a customer survey, whether you use a written instrument or conduct it face-to-face with the survey participant.

The second group to ask the platinum questions of is the physical plant department staff, those service providers who interact face-to-face with your customers every day. The form of the question may be as simple as, "Name one thing you'd like to be able to do for your customer but can't because of some department or university rule?" Or ask them straight out, "How can we get better?" Now we're talking about such TQM strategies as quality of worklife and empowered workers. This group also has great ideas. They'll tell you some right things to do.

Did you notice that I said to ask "the physical plant depart-

ment staff?" I didn't say "your staff" or "the people who work for you." Have you ever leaned back and expansively said, "Well, I'm only as good as the people who work for me?" If you have, I suggest that you're wrong on two counts. In the first place, you probably aren't that good. In the second, they don't work for you. They work for the university, for probably as many different reasons as there are staff members. They've simply been entrusted by the university to your stewardship. That stewardship entails giving them direction, motivation, leadership, satisfaction, recognition, nurturing, and the myriad other things that make the workplace where they spend a third to a half of their lives a rewarding place to be.

They're your colleagues, your associates, your teammates, whatever, in a joint endeavor to provide superlative customer service to the community. To speak or think of them as "your people" conjures the vision of a paternalistic, patronizing supervisory style that is obsolete. It no longer works. Revisiting your personal style might be one of the first right things you should do if you indeed consider them "your people." But let me tell you something else. You will have done a right thing just by asking the platinum questions. Peters and Waterman in *In Search of Excellence*¹⁰ call it getting close to the customer. In *A Passion for Excellence*¹¹, Peters and Austin call it listening naively. In *Principle Centered Leadership*, Stephen Covey mentions a "stakeholder information system (SIS)," the stakeholders in your success being the customers, the staff, your suppliers, etc.¹² Asking the platinum questions exercises that SIS.

There's still another reason why it's a right thing to do. We all know about Abraham Maslow's Hierarchy of Needs. Maslow postulates that all human needs can be sorted into categories and then rank ordered by their importance to us. At the bottom of the hierarchy are physiological needs, the basic things like air, food, and shelter. If those are missing, nothing else matters until we get them. When we have them, the next important needs are safety, security, and stability. As those needs are satisfied we then graduate to social needs (companionship, affection, friendship), then to ego, status, and self-esteem needs such as recognition and status, and, finally, to self-actualization needs such as growth and advancement.

Frederick Herzberg further asserts that the needs on the two lowest tiers are not motivators, just maintainers. If things such as shelter, safety, and security aren't there, people are dissatisfied. If they are there, however, people aren't necessarily satisfied—they just aren't dissatisfied. As an employer, providing those things for employees won't motivate them, but not providing them will certainly demotivate them. So, the best you can hope for is a neutral feeling. It's only when you fulfill the ego and self-actualization needs at the top of the ladder that you can satisfy and motivate people.¹³

Some years ago, I think at an APPA Institute, I heard a speaker use the Maslow hierarchy to explain why the best we can ever hope for in our business is anonymity. He pointed out that our very mission is to remove those dissatisfiers at the bottom of the hierarchy. We don't satisfy, we just assure the absence of dissatisfaction. If we aren't getting hate mail and reading snotty stories in the student newspaper, we're doing a super job. That was his theory, and now I'm finally to the crux of my theory.

When you go to your customers and ask them the platinum questions, look at where you're interacting with them. Way

up in the ego and status range. You're seeking their wisdom and inviting them to assist you with your challenges. You're recognizing that they have valuable insights. You're stroking those egos and increasing self-esteem and self-respect among your customers. Anonymity, indeed! Not any more. Now you're a satisfier and a motivator, and all just because you asked. Don't be surprised if you read a complimentary article in the student newspaper, either. It has happened.

By the way, the same dynamic works when you ask the staff for their opinion. They have egos, just as your customers do. But be forewarned: you're inviting change when you ask the platinum questions. You can't ask and then ignore everything you hear. You'll be watched carefully to see how you respond to the mandate represented by the answers given you. Don't be concerned that no one else on the campus is doing it. Nancy Austin says that you can be "an island of excellence in a sea of mediocrity." And so you can.

The nay-sayers and status quo defenders have been around forever and will probably always be. Consider the following classic example from our nation's history:

January 31, 1829

To President Jackson:

The canal system of this country is being threatened by the spread of a new form of transportation known as "railroads." The federal government must preserve the canals for the following reasons:

One. If canal boats are supplanted by "railroads," serious unemployment will result. Captains, cooks, drivers, hostlers, repairmen, and lock tenders will be left without means of livelihood, not to mention the numerous farmers now employed in growing hay for the horses.

Two. Boat builders would suffer and towline, whip, and harness makers would be left destitute.

Three. Canal boats are absolutely essential to the defense of the United States. In the event of the expected trouble with England, the Erie Canal would be the only means by which we could ever move the supplies so vital to waging modern war.

As you may know, Mr. President, "railroad" carriages are pulled at the enormous speed of fifteen miles per hour by "engines" which, in addition to endangering life and limb of passengers, roar and snort their way through the countryside, setting fire to crops, scaring the livestock and frightening women and children. The Almighty certainly never intended that people should travel at such breakneck speed.

Martin Van Buren
Governor of New York

My friends, the train of change is coming for higher education, and those administrators who want to usher the industry into the twenty-first century are lining up to get their tickets to ride.

So, put down that machete you've been sharpening and find a tall tree. Break something that ain't broke. Ask the platinum questions and respond to what you hear. Get on board the train. ■

Endnotes

1. *A Passion for Excellence: The Leadership Difference*, Tom Peters and Nancy Austin, Warner Books Inc., 666 Fifth Ave., New York, NY 10103, 1985.

2. *The Seven Habits of Highly Effective People*, Stephen R. Covey, Fireside, Simon & Schuster Bldg., Rockefeller Center, 1230 Avenue of the Americas, New York, NY 10020, 1989.

3. *Leaders: The Strategies for Taking Charge*, Warren Bennis and Burt Nanus, Harper and Row Publishers, Inc., 10 East 53rd St., New York, NY 10022, 1985.

4. *On Becoming A Leader*, Warren Bennis, Addison-Wesley Publishing Co., Reading, MA 01867, 1989.

5. *Why Leaders Can't Lead*, Warren Bennis, Jossey-Bass Publishers, San Francisco, CA, 1989.

6. *An Invented Life*, Warren Bennis, Addison-Wesley Publishing Co., Reading, MA 01867, 1993.

7. *Facilities Management: A Manual for Plant Administration*, second edition, APPA, 1446 Duke St., Alexandria, VA 22314-3492, 1989.

8. *A Force for Change: How Leadership Differs from Management*, John P. Kotter, The Free Press, A Division of Macmillan, Inc. 886 Third Ave., New York, NY 10022, 1990.

9. *How to Win Customers and Keep Them for Life*, Michael LeBoeuf, The Berkeley Publishing Group, 200 Madison Ave., New York, NY 10016, 1987.

10. *In Search of Excellence*, Thomas J. Peters and Robert H. Waterman Jr., Warner Books, Inc., 666 Fifth Ave., New York, NY 10103, 1982.

11. See Note 1.

12. *Principle Centered Leadership*, Stephen R. Covey, Fireside, Simon & Schuster Building, Rockefeller Center, 1230 Avenue of the Americas, New York, NY 10020, 1990.

13. For a discussion of Maslow's hierarchy and Herzberg's motivation-maintenance theory, see *Supervision*, Thomas O. Kirkpatrick, Wadsworth, Inc., 10 Davis Drive, Belmont, CA 94002, 1987, pp. 320-326.

14. Letter excerpted from *Dying for Change*, Leith Anderson, Bethany House Publishers, 6820 Auto Club Road, Minneapolis, MN 55438, 1990. ■



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VISIONARY LEADERSHIP:

Creating a New Tomorrow

by Burt Nanus

What can we expect about the future of colleges and universities that might be meaningful for APPA members?

First of all, we are all aware of the explosive technological change that surrounds us, caused by simultaneous and mutually reinforcing breakthroughs in many disciplines including, for example, materials, genetics, health care, electronics, space technology, automation, and instrumentation. The 21st-century college and university, in order to be considered competent and relevant, will have to ensure that its curricula and faculty research are always at the frontiers of all these relevant sciences and technologies. APPA members should expect that the obsolescence of existing laboratories and classroom facilities may accelerate and may lead to much closer collaboration with industrial and governmental research centers, perhaps even new facilities shared with those where the frontier research is being conducted.



The second obvious trend is the proliferation throughout the United States' post-industrial economy, and throughout all university disciplines, of powerful information and communication systems. Since the 21st-century college and university will be expected to employ the latest information and communications technologies in all its educational delivery systems and research, APPA members will face an increase in demand for these kinds of facilities, infrastructure, and services.

Third, with the globalization of business, politics, culture, and environmental concerns, the 21st-century university is going to have to be a global university tied to other leading institutions around the world, and will have to become expert in teaching students how to function effectively in diverse cultures. APPA members are likely to become key players in establishing linkages with these other institutions around the world, and some may well be responsible for millions of dollars of equipment and facilities located in other countries.

Fourth, high economic stress throughout society is likely to

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ensure continued inadequate governmental funding for both higher education and elementary and secondary schools. As a result, the 21st-century university will face enormous financial pressures, as well as additional challenges in compensating for inadequate early preparation in schools and homes. For APPA members, this means increasing shortfalls of funding from government sources to cover overhead and facilities, and increasing pressures to do more with less.

Finally, the demographic and sociocultural shifts toward far more diversity and fragmentation of American values and lifestyles suggests the proliferation of demands for specialized courses and research agendas, as well as a multiplication of constituencies that expect to be served by colleges and universities. Thus, APPA members will find increased demand for special facilities for various ethnic and cultural groups—fairs, exhibitions on campuses, increased demands for diversity of food and dormitory arrangements, and the like.

I could cite many other trends, but it's clear even with just these five that there will be rampant complexity, uncertainty, risk, and change as colleges and universities enter the 21st century. Every institution of higher education will have to be changing and adapting all the time, very likely at a far faster rate than they're doing now, for a whole variety of reasons: to cope with these and other changes in the larger society; to be able to attract students, faculty, and resources; to grow to accommodate new constituencies and services in an increasingly multicultural institution; to do more with less; to achieve and be recognized for excellence; and to sustain hope among its faculty, students, and staff personnel.

It all adds up to conflicting forces and pressures pulling and pushing institutions of higher education in every direction; curricula and research agendas proliferating and plagued by rapid obsolescence with accompanying impacts on facilities and equipment; the collapse of the so-called ivory tower with pressures both inside and outside the institution to accommodate new student needs and to collaborate with outside organizations and experts; and insufficient resources to be all things to all people. This demands a particular kind of leadership for 21st-century colleges and universities at every level, not just at the top.

- Leaders who can point the way out of all the confusing forces and pressures that are tending to pull the institution in every direction.
- Leaders who are themselves change agents who can make the kinds of bold decisions that create the future in their own institutions and help it adapt quickly to technological change, faculty demands, and new student needs.
- Leaders who can inspire, challenge and empower faculties and staff, helping them reach their full potential and real fulfillment in their own careers.
- Leaders who can gain the confidence and support of diverse external constituencies.

I call this "visionary leadership." It requires leaders who can develop a powerful sense of direction and momentum for their institutions, and can marshal the energies and resources of the organization to move it in that direction. It is no longer enough to be just a good manager or administrator. One cannot be just a good compromiser between competing demands, or somebody who can somehow muddle through and keep an eye on costs. One must be a leader, a person who

can bring the institution someplace else, who can make real progress in coping with the new realities.

The Difference Between Leadership and Management

It is important to make a clear distinction between leadership, as defined above, and management, which is the process of planning, organizing, directing, and controlling organizational resources. The manager is the person who maintains and operates the organization, while the leader is the person responsible for innovating and developing the organization. The manager always has to have both eyes on the bottom line, which means that inherently the manager is a present-oriented person, while the leader always has to have his or her eye on the horizon, making the leader inherently a future-oriented person. The manager is concerned with stability, predictability, and control, while the leader is concerned with flexibility, change and adaptability. The manager is a problem solver, whereas the leader is a problem finder—somebody who looks for new issues and begins to marshal the resources to get the organization moving in a different direction. The manager deploys human resources while the leader serves, empowers, and develops human resources. And ultimately, the manager is concerned with efficiency, whereas the leader is concerned with effectiveness.

APPA members may be challenged to play both roles, but they must be clear which role they're playing. Often, the pressures for managerial action are such as to drive out the time available for leadership. This can be a serious problem in the kind of rapidly changing academic environment described earlier where leadership is so essential.

How do you know when leaders are effective? There are at least three measures of effectiveness that can be used. One is a new level of organizational achievement—e.g., an academic department moving into the top ten nationally in its field, or a facilities management department that reduces the number of facilities complaints by 70 percent in the face of great financial challenges. I use the example in *Visionary Leadership* of Regis University, a 110-year-old university that was nearly bankrupt before a new leader turned it around. It now has many vibrant new programs, has grown from 1,000 to 8,000 students in a single decade, and is a revitalized and strong institution today. There is little doubt about that leader's effectiveness. A second measure of effectiveness for leadership is growth in ability to serve, such as growth in employee capability, or increased loyalty of various constituencies. And finally, leadership can be measured by basic transformation in the character of the organization. A facilities manager may establish a new enterprise that better fits changing circumstances like a new kind of dormitory or even a whole new campus. Or he or she may change the mission, philosophy, or values of the organization. Or he or she may form strong new partnerships that extend the service area, like partnerships with the private sector or new research parks. So that's how a leader demonstrates effectiveness—by results; by transformation; or by a radical improvement in the ability to survive and to serve.

Leadership Characteristics

Now, what can we say about the characteristics of successful leaders? Kouzes and Posner, in their latest book,

Credibility, reported a study of 15,000 executives who were asked to check off the characteristics they most admired in the leaders they personally would be willing to follow.

There was strong agreement on the following four characteristics:

1. Honesty and integrity. Trust is the glue that holds an institution together. If followers can't trust the leader, there will be few followers and little potential for achievement. The leader has to create a climate of integrity and trust by being honest, open, respectful, and by keeping all promises made.

2. Forward looking. When an organization is bombarded by change and risk from every direction, as universities are, and there are many new services demanded and great uncertainty, wisdom for the leader resides in being able to anticipate change, understand the forces that are shaping it, and position the organization to take advantage of those forces.

3. Competence. We expect our leaders to know the organization and how it works, and to have the people skills and other skills and knowledge that are important in exercising good judgement.

4. Inspiring. We expect leaders to be able to enthuse, energize and stimulate others to take appropriate action. An inspiring leader genuinely cares about people, is willing to take responsibility, and passionately cares about the future of the organization.

Leadership Values and Attitudes

Along with these four characteristics, there are certain values and attitudes that also seem to apply to successful leaders. The first may be expressed as follows: "My function as a leader is to serve our constituencies—students, faculty, alumni, staff, the community, and so on—with empathy, compassion, and caring." The second is that leaders must fully commit themselves to the success of the organization. Effective leaders try to express the best that's in them. They develop their own self-knowledge to help them compensate for their weaknesses and build on their strengths. Successful leaders don't need other people to praise them, because they recognize their own achievements and seek their rewards internally rather than externally. They fully deploy themselves in the service of the organization.

The third important value is that leaders are perpetual learners and growers. Most leaders read widely, know a lot of people, are boundlessly curious, are good listeners, and are constantly reinventing themselves—seeking challenges, reflecting on experiences, learning from failures, and so on.

Fourth, effective leaders have a passion for the future of the organization. They have enthusiasm and optimism; they're risk takers; they have daring and courage; they are concerned about results; and they care about the legacy that they are leaving to their successors. Finally, leaders seek and accept responsibility for the institution's future. They have a sense of stewardship. They want to actively shape events, not just passively react to them.

Some people argue that leadership is a rare skill and that leaders are born, not made. Nothing could be further from the truth. Leaders may be born with certain leadership potential, but so are all of us—just as we're born with some potential to be parents or artists or runners. However, some of us develop our potential and others don't. Basically, leaders are self-made individuals who fully develop and display their leader-

ship potential. Moreover, it is the job of every leader to create leadership positions at lower levels to give people the opportunity to develop their own leadership skills and grow in their leadership potential.

Roles of Leadership

What are the roles of leadership that must be mastered by effective leaders? In other words, what do leaders do? A leader is constantly balancing the present against the future and the needs of the inside organization against the needs of the outside environment—in this case, including the university or college in which a facility manager is employed. To achieve these balances, there are four key roles of leadership:

1. direction setter (i.e., developing a vision)
2. spokesperson (i.e., developing allies, representing the organization to outside constituencies, negotiating for the organization, etc.)
3. coach (i.e., motivating, inspiring, and developing personnel)
4. change agent (i.e., decision making, innovating, forming new organizations or deploying new information technologies, etc.). These four roles define what leaders actually do, although at any given time, a leader may be doing more of one and less of another.

The literature of leadership appears to concentrate on the coaching function, perhaps because most of the people who write about leadership are psychologists. But there is more to leadership than just the relationship between leaders and followers. In fact, leaders can't even do good coaching unless they have a good sense of direction. The direction-setting role is the one that drives the other three, since only with a vision can one be an effective spokesperson, coach, or change agent.

A vision is a realistic, credible, attractive future for an organization. All of us dream. We dream in a socially useful way as soon as we have an image of what is desirable, practical, useful, and attractive for our organization. Once we give it a name, it takes on a reality, a motivating reality. It creates meaning in people's lives. It grabs attention and creates focus in the organization. People begin to see how what they're doing in the organization relates to the vision. That energizes people and provides a challenge to them. It also provides that all important bridge from the present to the future by showing how today's actions contribute toward the kind of organization the leader is building for the future. Ultimately it generates pride.

The right vision for a college or university, or for the facilities management function, would be appropriate for the organization and for the times. It would set high standards. It would reflect the organization's distinctive character. It would be widely shared, inspire enthusiasm and commitment, and be challenging. It would show a clear path toward a better future, and, most important, serve as the front end to a strategic planning process.

There's a clear difference between mission, vision, and strategy. A mission is a statement of purpose. Most colleges and universities have similar missions, although there might be slight variations between those of a research university and a small liberal arts college. On the other hand, there can be very different visions, or senses of how the educational enterprises should grow, which students it is hoping to serve, and what it wants to look like in ten or twenty years.

Examples of Vision

There are many different types of vision statements for a college. One type is a vision aimed at measures of ultimate value to the institution or society. These are outcome-related visions, such as: "This college or university aspires to be recognized as a world leader in research and instruction in (let's say) environmental sciences and natural resources." This vision says that if the institution moves in the indicated direction, it can stand out and become a world leader in that area, even if it is not a world leader in many other areas. Another example might be: "This university aspires to double the number of graduate students and facilities for graduate students in the next ten years."

A vision could also be related to the academic programs, i.e., what is going to be learned and by whom. A vision might say: "This college aspires to provide each segment of the student population with unique programs and facilities tailored to its special needs, capabilities, and opportunities." This would lead to a university with many core programs involved with specialized niches. Another example might be: "This college aspires to excel in science and engineering, particularly in skills demanded by high-tech employers in our region over the next two decades."

Vision statements could also be related to processes. For example: "This institution aspires to increase cost effectiveness by making the fullest possible use of outside resources—businesses, libraries, professional associations, etc.—in both teaching and research." Or: "This institution aspires to become a national leader in the design and use of new information technologies to deliver customized educational experiences on and off campus, including, perhaps, the development and sale of proprietary software packages."

Another possibility is a vision related to how the university is organized. For example: "This college aspires to establish partnerships with the private sector to subcontract many services and to teach in employers' facilities so that students can be close to their employment." Or: "This college aspires to establish overseas branch campuses in six countries over the next decade as part of a plan to become a global university." Or: "This college aspires to develop multiple uses for campus sites, including research parks, community resource centers, and conference centers to spread the cost of campus facilities and operations."

Different colleges can have different visions, and these will ultimately look quite different. In addition to vision, every leader needs a strategy, which is the long-term goals, objectives, and course of action designed to accomplish the vision. In the absence of a vision, there may be a strategy, but it likely neither perpetuates the status quo (e.g., student loads, square footage, costs, etc.), are simply projected into the future and called a strategic plan) nor is purely opportunistic. In the latter case, a donor comes along with a bundle of cash and says, "I want this kind of facility," and the college complies. There is no vision, no direction, no cohesion. To move the organization forward—to move it to a place where it can function and prosper in the 21st century—it needs all three: a mission, a vision, and a strategy.

There are many examples in our society today where this rule has not been respected. IBM, for example, had very good strategies but when its vision became blurred, it got into trouble. No organization, including IBM, can be all things to all

people anymore, so they must decide what they're going to emphasize—software, hardware, computer services, PCs, etc. There are other examples in our society of a good vision but poor strategies. For example, the solar energy industry has a fine vision of how we might at some future time use solar energy for many different applications, and for some the technology already exists there and is cost effective. But the industry has a poor strategy on how to get there. But then there are leaders like Nelson Mandela in South Africa who was enormously successful because he was able to combine a great vision and a great strategy.

The major lesson for facilities planners who find themselves on campuses devoid of a vision and strategy is that they may have to serve as the catalyst that makes it happen by asking the right questions. A facilities planner might be able to put the campus administration and Board of Trustees on the spot by saying, "Look, we've got to know exactly where this institution is heading if we're going to make intelligent decisions in the facilities area. Otherwise, you may be wasting millions of dollars on facilities that won't be right for the 21st century. And you're going to find that you're always chasing problems and never catching up."

Developing Vision

Where does vision come from? First, a great deal of information is needed—information about the past, the present, the future. Past history, trends, traditions, and values; present structures, opinions, and the needs of various constituencies; projections and anticipations of the future in various areas such as what the government is likely to do and where technology is headed.

Second, one must understand what is valued in the institution, such as student needs and wants, alumni values, faculty needs, and values of the campus leadership. Third, there is a need for a mental model of how the world works. When I do a visioning exercise with universities, this mental model usually takes the form of scenarios—alternative directions that the future can unfold in ways that are relevant for the particular institution. Then we try to think of what's the best positioning for this institution in those various worlds.

Ultimately a vision comes together with insight, intuition, judgment, and some creative synthesis of ideas. This can be done by an individual or in a group setting, but because of the collegial nature of higher education, I recommend the participative mode. APPA itself is going through a visioning exercise, and APPA members ought to think about doing visioning exercises on their own campuses, both with their own staffs and also as members of teams looking at the overall university or college's vision. I've been involved in five of these visioning exercises on college campuses and many others in the private and public sectors. I've used slightly different approaches in each case, but they all included a several-day retreat with key people, sometimes as many as twenty-five, involved in a systematic approach to developing a vision. We looked ahead at least ten years and in some cases twenty to formulate the vision. We focused on the big picture. The exercise helped build consensus and trust, helped locate champions for new ideas, and in most cases, resulted in new visions that could be used to drive strategies and action.

Basically, there are four major steps to go through in such an exercise. There is a "vision audit" to explore the current strengths and weaknesses of the organization, and what



Dr. Burt Nanus, keynote speaker at APFA's 51st Annual Meeting, addressed the audience on vision and leadership.

would happen if it continues on its current strategy. Then, there's the "vision scope," which examines the critical stakeholders in the organization, measures of effectiveness, timing for the vision and other boundary conditions. The third step is the "vision context" in which changes in the external environment that have relevance for the vision—technology, economic, political, and so on—are explored. Finally there is the "vision choice," which means developing possible visions that fit these considerations and evaluating them against various criteria, and ultimately converging a particular vision for the organization.

The advantage of such a visioning exercise is that it ensures broad participation in the search for a vision and benefits from a wide range of viewpoints. It also is quick, efficient, cost effective and systematic. It deals with alternative future scenarios. Every one of these exercises ended up with an agenda to drive strategy and decision making in the future.

The essence of leadership is working with others to develop a vision of the future, communicating the vision, getting broad commitment to it, and using the vision to make the necessary changes in the organization. The basic idea is that vision plus communication equals shared purpose. Shared purpose leads to empowered people, and appropriate organizational changes that add up to successful visionary leadership.

Developing Leadership

What can you do to develop visionary leaders in your own organization? First and foremost, develop a clear vision for your own organization, if one doesn't already exist. Second, develop your own skills as a visionary leader, both to increase your own effectiveness and to serve as a role model for others.

Third, identify and encourage visionary leaders throughout your organization. Find people who already have a track record of leadership. It need not necessarily have been in a

university context. Maybe they once served as president of a fraternity or sorority, captain of a sports team, deacon in a church, or head of a local PTA. Look for evidence that suggests that they have developed a leader's way of thinking—the attitudes, values, skills, and roles discussed earlier.

Fourth, look for individuals with the ability to learn and grow. They should have the key characteristics that came out of the Kouzes/Posner study—honesty, competence, forward looking, and inspiring—and they should be able to fulfill the key roles of direction setting, spokesperson, coach, and change agent. Another indicator is readiness. Look for maturity, breadth of judgment, self-knowledge, and relevant experience to be ready to move into a higher level of leadership responsibility.

Finally, facilities managers can help each other become better leaders. For example, it should be possible to establish in each major city or geographic region "leadership advisory boards," where facilities managers in local educational institutions come together once a month to share their leadership problems, and discuss important leadership books with their peer group. They can help develop each other as leaders, because most leaders learn best from their own experiences and from sharing the experiences of other leaders faced with similar challenges.

Conclusions

To summarize, the future environment is going through dramatic changes that have great implications for all aspects of college and university operations, especially facilities. These changes raise new issues and challenges that make it impossible to get along only with good management—leadership is essential. In fact, this demands a particular kind of leader in higher education—leaders who can point the way out of all these confusing forces impinging on the institution; leaders who are change agents themselves; leaders who can gain the confidence of diverse constituencies; leaders who can build and develop their own organizations and their knowledge base in anticipation of challenges yet to come; and leaders who can form alliances and partnerships outside the organization to advance the interests of the institution and spread its risks and costs. This defines "visionary leadership."

At the same time, the new circumstances require extraordinary management—managers who can operate facilities efficiently in the face of great turbulence; who can achieve high levels of service to all the stakeholders in the academic community; who can constantly improve operations and information systems; and who can inspire and challenge workers. This might be called strategic management in its highest sense. The point is that we need both visionary leadership and strategic management to succeed. Both are as vital for renewing existing services and operations as for starting new ones.

Although certain characteristics and attitudes were shown to be necessary for successful leadership, vision is the key to it all. That powerful image of the future is what drives decision-making and inspires people to high achievement. Many colleges and universities were founded on a dream. As we enter the 21st century, we must dream anew and act anew to make them equal to the challenges of the new millennium. ■

Catch the Spirit of LEADERSHIP

by Jack Hug



The year 2000 will dawn on a Saturday. Just 2,336 days from now. The half million people who will then be in the physical plant workforce will look back on a decade of change—all the more head-spinning because of its seemingly chaotic and transformational character. The changes are real, they're radical, and they're arriving everyday to a business or an institution near you. Some are opting for dramatic change as a planned and well thought out

strategy. Others are changing because there simply is no alternative. Either way, it's tough, it's painful, and it's confusing.

Consider these events:

1. The average size of our physical plant departments measured by the number of individuals we employ has decreased in spite of the fact that the size of our physical plants have increased.
2. The traditional hierarchies, these high-rise organizational structures, have given way to a variety of new organizational forms. The vertical division of labor is being replaced by a horizontal division.
3. Our paradigm of providing service is changing. On campus after campus, we have been handed a new mandate: A mandate to redefine our service measures in terms of results achieved for customers and Results Made Possible by the services that we provide.

Part of the challenge we face lies in the very nature of what has to be done—keep everything running and operating at

the lowest cost possible, satisfy every customer, while at the same time, change everything. One of our toughest jobs, no doubt, is designing a new organization while we operate the old one. We cannot "slam dunk" the new way into existence.

In considering our leadership role, I am reminded of the Spanish philosopher Jose Ortega Y Gasset. In Gasset's writings, *Mission of the University*, he emphasized that education should help one "live at the level of one's time."

Since we are a vital part of the educational enterprise, what does it mean for us as facility managers to "live at the level of our time"? What do we need to know? What skills do we need to have? In today's climate, the hot new skills required for success are contained in leadership—the ability to manage this change culturally, structurally, and emotionally.

The management philosophies and techniques of the moment also require

- a leadership belief in worker teams
- customer focus and
- worker empowerment.

Let's stop and think for a moment also about leading a physical plant department today. We are characterized by intensive operations extending to every corner of the campus, serving many departments with a great variety of activities. Our job has become increasingly complex. In addition to dealing with new technologies and rapid changes, we must also be able to handle many different "relationships" with an expanding and influential constituency. The watchwords for these relationships are cooperation, sharing, collaboration, teamwork, and partnership.

What we do requires effective delivery of physical plant services—services which truly and honestly allow the institution to get on with what it is intended to do. The challenge to our leadership is substantial and requires that we find the strength and resolve to combine, as a routine practice, both strong management and strong leadership. Accepting this challenge means addressing a large library of issues. A library that includes: the integration of facilities management with institutional planning and policy, and the quality of higher education physical environment.

Jack Hug is assistant vice chancellor, auxiliary and plant services, at the University of California/San Diego, La Jolla, California. He is a past president of APPA and a member of APPA's Publications Advisory Board.

Leadership Belongs to Everyone

How are we going to effectively manage in this framework? One way is to accept that the work of leadership belongs to everyone in this room. Today, there is a greater urgency than ever for us to understand and to connect solidly to the basic concept of the spirit of leadership. For it is through leadership as a friend, leadership as a partner, and leadership recognized as skills that can be acquired, and skills that are required, that we can find a way to equip ourselves to do our job better. George Wright's familiar power-packed phrase, "multiply yourself through others," has always been meaningful, but now its relevancy and importance are more fully understood. We need "multiples of leadership" at every level of the organization.

Our friends Stephen Covey and John Covey, in their work on principle centered leadership, remind us that if we are going to be leaders we have a responsibility and a duty to think more broadly and more seriously about the answer to these kinds of questions:

- How do we ... (How can I ...) communicate clearly and to express through behavior the beliefs and values of the institution?
- How do we ... (How can I ...) look at human weakness and shortcomings with compassion and understanding instead of accusation? We need to be concerned about how people in the organization respond and cope with change and to under-

stand interrelationships and patterns in solving complex problems.

- How do we ... (How can I ...) change and improve without creating more pain than gain? Help the organization view change as an opportunity for new alternatives and calculated risk taking.
- How do we ... (How can I ...) achieve a wise and renewing balance between work and family, between personal and professional ambitions in the middle of frequent crises and constant pressure?
- How do we ... (How can I ...) provide lean and simple statements of policy, consistent with organizational beliefs and values.

Where do we start? How do we keep energized to maintain momentum for learning, growing, and improving? How to do this successfully, seems to me to be a leadership requirement that must be met if we are going to be in a position to successfully live at the level of our time.

The world is a classroom...but what kind of classroom is it? All around us we see that it is a rapidly changing classroom. As we look to this changing classroom, most of us will find it uncomfortable to think of ourselves as the ones to initiate and create the necessary change. But if not us, then who? If not now, when? Now is the time, this is the place, for you to decide what you ought to be, what you can be, what you will be. ■

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At The Crossroads

by William A. Daigneau

During the last century, railways were a critical ingredient in the development of the industrial age. An industry in their own right, they created and supported significant numbers of jobs, with hundreds of enterprises involved in construction, manufacturing, chemicals, energy, real estate, and finance. They also owned one of history's most enormous physical plants. Their railroad terminals were designed by some of the great architects and engineers of their time. Their professional and trade associations kept them current on all the latest news, regulations, and developments. But by the middle of the 20th century, the entire industry was basically defunct.

Most would say that higher education has played a significant role in the development of the 20th century's post-industrial economy. It too employs millions, owns enormous physical plants, and has its share of associations. Could it too become defunct by the middle of the next century?

What killed the railways was not the automobile, the interstate highway system, or liberalized trucking regulations. "What killed the railways was that they were run by people who really liked choo-choos," writes J. Ian Morrison in a recent article titled "Railways of the Nineties," in *Healthcare Forum Journal*. The folks who ran them (railways) loved the trains so much they couldn't conceive why anyone would want to drive, fly, or truck. And although Morrison was writing about hospitals, what he says could equally apply to colleges and universities. The problem is that both higher education and hospitals are run by people fascinated with big buildings and all they contain. Ahhh, the problem with paradigms. We have become conditioned to think that the physi-

cal campus is the university. It is difficult for us to conceive of any other way to convey knowledge other than within the traditional college campus, which are devoid of the tawdry elements of commercialism, industry, and government. These special places are our sanctuaries of learning, as described by physical plant administrator Kirby Vahle in a recent edition of *CAPPA Newsletter*.

But change is underway. Although it might be difficult for us to perceive since we are caught in the middle of it, the signs are quite evident. Some futurists predict that as early as the year 2000, only 20 percent of our students will actually be enrolled in the traditional four-year, full-time program at one of our traditional campuses. At this very moment, students and their parents are incurring huge debts so that they can attend one of our special places of education. Many segments of society are openly questioning the value of this investment. At the same time, discussion of options swirl around us including long distance learning, electronic media, and a bachelor degree in three years or less!

Yet what are we, the professional facilities managers of higher education, doing to help our industry confront and hopefully evolve to this new paradigm? How are we helping our presidents, our business officers, and our trustees prepare for a future where we may not have the financial wherewithal to keep all of our existing buildings in operation? Or where higher education needs less space, not more. And where our beloved Old Main will be as obsolete as the railway industry's steam locomotive, and will likely share the same fate regardless of physical plant administrators' efforts to preserve them into perpetuity. Will our professional association help provide us with the information, ideas, and connections that can equip us with the tools and strategies necessary to deal with change? Will it help us prepare for this future even though the pace of change and the details of this future envi-

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ronment are yet difficult to discern? Is it now raising questions, researching answers, and helping the higher education enterprise understand the dimensions of its current financial and facilities problems, the explosive impact of technology, or the implications if some of the futurist's predictions prove accurate?

Such a role, if it is fulfilled, is truly the role of leadership. It is the attempt to seek answers to questions before the question itself is asked. It is the process of convincing people to develop skills that they don't need today, but will need tomorrow. It is the willingness to take risks and to suffer the criticism from those who are now deeply entrenched in the old paradigm. This is the stuff that inspires people to experiment, to take chances, and to embrace change, not resent it.

This is a role that is important to our profession, the success of our association, and most importantly, the future of higher education. But it is not a role presently played by our association. And, for an increasing number of us who think of ourselves as the new breed facilities manager, that is a problem.

Redefining Facilities Management

So what went wrong?

It's not that our recent assemblage of association presidents, their vice presidents, and our board members don't care and haven't tried to vision the future. It's not because some of our presenters at our annual meetings are boring, filling us with a lot of stuff irrelevant to the issues that I and others of my ilk face every day. And it has nothing to do with the quality of our association staff or of our various membership services, seminars, or publications.

It would be much easier if we could point to something that we as a profession or as an association have done wrong. That's one thing physical plant administrators are good at: fixin' problems!

No, the problem is much more enigmatic and complicated. It has nothing to do with deferred maintenance, customer focus, TQM, project management, or energy conservation. It doesn't even have to do with how well we build or maintain buildings. It has to do with a much more fundamental issue: the very disappearance of the job of physical plant administrator and the emergence of the need for facilities management. You see, the rules have changed and nobody told us.

There are still many folks who still haven't figured this out. They think that the change is just semantics. They reason that all you have to do is change the name of the physical plant department to Facilities Management and keep doing the same things you always did. But the fact is that while colleges still need their buildings built and maintained, they need more—they also need someone to manage facilities. And the type of facilities management they need is a lot different than what we have been doing for the past three decades.

No, the culprit is much more fundamental: higher education itself is changing. Just like the watch industry changed with the advent of electronic quartz technology, higher education is also being reshaped in the face of several inexorable and dynamic forces, albeit less dramatically and more slowly. And so too, we who specialize in facilities have a clear choice. We can react to the changes as did the Swiss watch industry. We can attempt to deny the implications of these changes as just a cheap imitation,

tawdry commercialism, or the product of a business decision. If so, I suspect our fate and the fate of our association will closely parallel that of the Swiss watchmakers.

What are these forces and why do they affect the way we need to manage facilities? Generally the primary culprits are changes in society, technology, and economics.

Forces For Change

Our society is evolving in many directions. Factors such as diversity, population growth, family structure, moral values, graying baby boomers, and a host of others are affecting not only who is educated, but how we educate them. This has spawned multicampus operations, storefront colleges, a burgeoning community college system, conference centers/hotels, extension courses, shared multi-use facilities, elderhostel, college abroad, part-time faculty, ad hoc faculty, visiting professors and researchers. ... Need I go on? All of this affects the type of facilities needed to support education as well as the background and orientation of those individuals called upon to devise the means to accommodate such programs.

Then there is technology. Laboratories are much different today than they were twenty years ago. At many institutions we are abandoning laboratory buildings that were built in the 1950s and 1960s because we can't economically update them to meet modern requirements. The campus library is being replaced by the learning center, with its stacks sized to accommodate optical disks, not books. Networks, environmental control, biological containment, and isolated foundations are now routine concepts in the lexicon of facilities management.

And finally, economics. Economics is not the great equalizer, but instead is the great fragmentizer and segmenter of higher education. It differentiates the type and quality of education between public and private, rich and poor, research and liberal education, downtown and suburban, and state-of-the-art or obsolete. It also affects the demand for education based on the need for and types of careers one can get out of a particular field of study. This also means that the type of facilities problems that will routinely surface at a major research university will be quite different from the ones occurring at a small, rural liberal arts college. In addition, higher education itself will likely continue to find that the competition for limited resources will increase, not diminish. This means that traditional approaches to soliciting resources, especially for capital intensive needs such as facilities, will become less and less fruitful. This single issue alone will drive the search for new and unconventional methods of educating our populace. Waiting for some future payday to bail the college out of its facilities problems will not only be risky, but downright deadly.

The New Era Facilities Manager

The facilities manager required by higher education in the future is not just a new improved and repackaged version of the former director of physical plant. In fact, physical plant administrators, while in their own right quite important to the successful operation of a college campus, will be but one member of a facilities manager's team. The facilities manager will operate in an environment set apart from shops, suppliers, factories, and architect's design rooms. The facilities man-

ager will instead have to be comfortable making presentations or striking deals in the board rooms and meeting rooms of accountants, bankers, attorneys, real estate developers, construction executives, politicians, and college trustees. They will be equally comfortable in the offices of the President and the Deans, or in a meeting of the Faculty Senate. They will operate in this environment, not because they have been invited but because 1) they are responsible for pursuing facilities solutions for their college or university, and 2) there isn't going to be anybody else in the university's administration who understands the multitudinous elements involved in these new approaches and solutions.

To successfully navigate the full spectrum of facilities issues, the prerequisite toolbox of skills will be much different than what has previously been required. Some of the major differences between the past and the future facilities manager include the following:

1. Strategic Planning. Facilities managers need to be able to visualize the big picture and then synthesize strategies on how best to meet the requirements for facilities. The identification of the full range of potential solutions to a problem, their systematic and thorough evaluation, and a concise, understandable presentation of a recommendation is just part of it. Defining the problem correctly is the first and most important component of problem solving. Since a facilities manager understands the long term cost liabilities associated with a bricks-and-mortar type solution, they will seek to examine other alternatives such as policy changes, better utilization of existing facilities, or short-term measures until other events reduce or eliminate the problem. This is the skill of thinking strategically, not just tactically, and it will be a key ingredient in how facilities managers view the world and their institution's place in it.

2. Executive level skills. To play in their league you gotta walk the walk and talk the talk. When dealing with executive level decision makers, the 300-page report with appendices will not do. Somehow that report must be condensed down to a one page (did you say *one* page!) executive summary that covers the issues, the bottom line, and why the recommended solution is the best. Furthermore it has to be presented in ten to twenty minutes, otherwise you will lose everybody and find yourself going back to study it some more. Finally, the question and discussion period following the formal presentation must convince the decision makers that the required thoroughness in analysis and staff work has been done. This requires the ability to anticipate concerns and issues facing the institution—financially, politically, and programmatically—and to ensure that they are addressed as part of the executive decision making process.

3. Experimentation. Higher education's future facilities manager will have to be prepared to run counter to the well-entrenched conventional thinking prevalent in these staid and conservatively run institutions. Overcoming the predominant tendency to further expand and build without considering its implications will require vision and a good dose of tenacity. The favorite question of college administrators and trustees "Has this been tried anywhere else before?" will need to be dealt with in the absence of being able to assure them that other colleges are doing or have done it before. This will

require skills in introducing change in organizations. It means knowing how to develop a process of very small steps toward change that, when taken together, represent a very large leap. The ability and willingness to attempt this experimentation will form the breakthrough innovation so necessary to new facilities management techniques and models, and the future success of higher education.

4. Networking. Best of Class or Best of Practice are terms associated with the processes of continuous quality improvement. Yet how do we know what is best practice if we do not communicate with the outside world? Writing in *Business Blindspots*, Benjamin Gilad attributes the troubles at many of our major corporations, such as GM, Kodak, and IBM, to competitive sclerosis... a disease that takes executives who have been extremely successful for many years and turns them blind to reality. For the facilities manager, benchmarking operations, testing how others are doing with their experimentation, and learning from other failures are part and parcel to good management. This means the willingness and ability to reach out and share information, as well as the ability to work collaboratively with peers at other institutions or in other industries. Part attitude and part skill, it represents the desire to constantly know how others are doing it and how one stands with respect to the competition.

5. Institutional Uniqueness. The facility needs of the research university are different from those of the small liberal arts college, which are quite different from those of the urban community college. While bricks are bricks and we probably all use similar lightbulbs, the conditions, demands, and use of facilities are much different from institution to institution. Therefore, while facilities managers may have a common goal—finding the best facilities portfolio that maximizes the goals of the institution—the range of solutions in that portfolio will be matched to the type of institution it is. This means that the profession of facilities management will become increasingly segmented, following the same trend as the institutions themselves. The required skill, skill level, information requirements, and sphere of interests will be markedly different for facilities managers, dependent on the type of institution they find themselves in, although they will all share the same title and all belong to the same association.

Or will they? Will the new era of facilities managers find relevancy in the programs that served physical plant administrators so well during the past three decades? Will they be attracted to participate, to contribute to our knowledge, and the level of practice. This past involvement has represented for so many years the real strength of APPA. Or is APPA doomed to decline because its products and services no longer truly address the issues of modern facilities management?

At the Crossroads

Some of us think that our association is at a critical juncture in its history. Perhaps the very things that led to APPA's past successes have created the conditions for its potential decline in the future. Some possible reasons:

Preoccupation with Maintenance. For years the primary focus of APPA and that of the majority of its members has been directed toward the methods of building or renovating buildings, and then maintaining them. While this has been a

major portion of the physical plant *raison d'être*, it has crowded out almost every other aspect of the facilities management agenda within APPA. We have learned how to maximize, optimize, measure, critique, and reenergize maintenance, whether it be routine, deferred, emergency, or just about any other brand of it. Perhaps we have exhausted this aspect of facilities and need to consciously work at the other elements. That might mean having our members speak at other associations' conferences about the area we have developed so well and inviting those from other associations to talk about that which we need to learn more about.

Members Needs? During the development of APPA's current long-range plan, debates arose about whether the association existed to meet its members needs or those of higher education itself. The debate arose because of the concept of institutional membership versus individual memberships. Several of us argued (unsuccessfully) that the association's energies should be directed toward anticipating and helping equip our membership to solve the facilities problems facing higher education. This role can be played by an international association with the resources and time to look over the horizon at what may lay ahead. Defining the trends within higher education will not be determined through member surveys. Instead, this requires constant questioning and discussion with others involved in the future of higher education. This

includes such entities as the American Council on Education and the Association of Governing Boards, as well as public policy makers and think tanks such as the Carnegie Foundation for the Advancement of Teaching.

Organizational Paralysis? Our representational organizational structure is great for leveling demands and, as some might argue, trying to make APPA all things to all people. Our type of organization, with regions that replicate the international structure, tends to promote conditions in which the established leadership tries to perpetuate itself. Therefore, there is a tendency in such organizations to see the same people serve repeatedly on almost every conceivable committee assignment, at the region and then at the international level. This observation is not intended to be judgmental. It is only intended to point out that a consequence of this structure is the tendency to create a "good ole boy" network. You end up having a relatively small group of individuals dictate what it thinks is in the best interests of the membership. As a result, many innovative or controversial ideas are dismissed before they ever see the light of day or the ears of the membership. This is what I call organizational paralysis. It is the very inability of the organizational structure to permit, let alone promote, any idea or proposal that is not in line with the leadership's perception of association's values or sphere of interests. This is not unique to APPA, but in recognizing this ten-



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gency, measures should be explored to mitigate its influence. One measure might be the creation of the association's own think tank with membership based on some criteria other than time served in committee work or offices held.

Leadership Anemia? On a similar note, our organizational structure also tends to create what might be called leadership anemia. Because our presidents only serve a one-year term, they have at best two years to establish a direction, convince the organization this is a worthy goal, and then try to mobilize resources to actually achieve some progress toward that goal. Realizing this is practically impossible, most of our recent presidents have attempted to pick a single issue that they would devote their energy toward its solution. Since most of the issues facing higher education are going to require significant energy and protracted effort, our association is unlikely to benefit from one of the cornerstones of leadership: a leader! We need to revisit our elected officer arrangement. Perhaps a structure where the President is appointed and serves a multi-year term with only the Board and its chairperson being elected annually, would better serve the cause of leadership.

Vision. Perhaps the most serious single deficiency in any organization is the lack of a unifying vision of what they are and what role they should play. Regarding our role within higher education, APPA's current mission statement is nice,

but frankly, it is unclear and uninspiring. Our vision should be worthy of the very mission of higher education itself. It should say specifically what makes us, and what we do, essential to the future success of our institutions. This is heady stuff, and I will not be so bold as to suggest what that vision should be. (I will say that I believe a vision is to devise facilities strategies that will enhance the goals of education, not do all those other things we currently identify as our mission and vision.)

This treatise started on the premise that conditions were ripe for initiating a new phase in higher education's evolution. We discussed the factors that were forcing changes in the methods of managing higher education and its facilities. The likely effect that these changes could have on the role and practice of facilities management were also reviewed. We then summarized several reasons why our association was not providing the needed leadership at this critical juncture in facilities management. So now, what do we do?

Hopefully, the ideas discussed in this article will not end the dialogue about our future, but will elevate it to a higher level of consciousness. If so, then I will have accomplished my purpose. In the meantime, life goes on. Some will continue to seek ways to trim another penny off the cost of their custodial services; at the same time, I'll be trying to devise a strategy where we might avoid the cost altogether. ■



Removing the Barriers: Accessibility Guidelines and Specifications

by Stephen R. Cotler, AIA

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Member Update on APPA's 1995-1996 Business Plan



by Douglas K. Christensen

APPA's Bylaws state that the responsibility of the President-Elect is to seek out and develop the strategy and direction that needs to be part of the business plan for the association for the upcoming year. I would like to take this opportunity to update the members about what has taken place in the planning for the upcoming year. The following activities have taken place to help focus APPA's Planning Committee on creating the "Strategic Plan" proposal for the February 1995 Board meeting.

1. 1994-95 "Vision" Exercise. Effort was made in the July 1994 Board meeting to seek expectations and needs from both the APPA Board members and invited guests concerning issues related to our profession and what the needs and expectations will be for the future. Effort was made to focus on two areas: 1) who are "the stakeholders" that have a direct impact on our profession, and 2) what are the "expectations" and "needs" that will drive and give vision to our association. The exercise produced nine different areas that the Board agreed to be considered as important issues to our future, as well as issues that will give us a vision and direction.

1. Facilities management style
2. Future of higher education learning

3. Facilities leadership
4. Infrastructure of campuses
5. Strategic planning
6. Needs/wants of higher education
7. Technological impacts
8. Political/regulatory impacts
9. International impacts

2. Identify a "Business Process." The challenge from the recent evaluation of APPA by the American Society of Association Executives suggested that we formalize our annual business process and identify resources and responsibility to the direction that APPA wants to go. A six-step process for doing strategic and business planning has been presented and will be finalized in the February board. (See Figure 1.) Note that this is still in the discussion stage and has not been finalized.

3. Establish a "Vision Statement" for APPA. Elected officers and staff have met with each of the regional boards of directors during their annual meetings to evaluate what elements are needed to develop an APPA Vision Statement. Time has also been spent with other APPA committees and Board members to get their clarification as to the kind of vision we ought to have for APPA. We are in the process of finalizing the Vision Statement and will present it for consideration at the February Board meeting. If there are any members within APPA who want to call, discuss, or share the "vision" of APPA, please feel free to call me at 801-378-5700.

APPA Business Plan

6 Step Process

| | STEP 1 | STEP 2 | STEP 3 | | | |
|--------------|---|---|---|---|---|--|
| Meeting | First Board Meeting | Region Visits | Planning Comm. w/ APPA Staff | Planning Committee | Planning Committee w/ Finance Committee | Executive Committee |
| Month | July | September /October | November | | | |
| Agenda Items | <u>Issues</u> 1. Review • Vision • Mission • Current strategy 2. Issues • Carry overs • Long range plan • New 3. Initiate • Current plan • Charge to board 4. Theme for next Annual mtg Based on current plan | <u>Issues</u> 1. Feedback • Members • Regional officers 2. APPA Info • Current plan • Awards • APPA officers • EVP • Address | <u>Issues</u> 1. Staff input on APPA 2. Review issues | <u>Determine</u> 1. Issues • Board • Region • APPA Staff • Carry over • Long-range • Other 2. Priorities 3. Responsibilities (assignments) | <u>Determine</u> 1. Level of resources | <u>Proposed Business Plan</u> 1. Strategy • Issues • Priorities • Responsibilities • Resources 2. Structure impacts 3. Systems impacts 4. Sharing process 5. Vision 6. Mission 7. By-laws impacts 8. Long-range plan |

| | STEP 4 | STEP 5 | | | STEP 6 |
|--------------|--|---|---|---|---|
| Meeting | Education Programs Committee Meeting | Board Committees (Planning, representatives, etc.) | Winter Board | Perm & Standing Committee Meetings | Current Board Meeting |
| Month | December | February | | | July |
| Agenda Items | <u>Share</u> 1. Proposed Strategy • Issues • Priorities • Responsibilities • Resources 2. Develop • Schedule • Objectives • Activities • Confirm • Resources 3. Current Operating plan status 4. Integration of Operating Plans 5. Annual Meeting Plan | <u>Share Proposed Business plan (Impacts)</u> • Strategy • Structure • Systems • Sharing • by-laws • Vision • Mission • Long-range Plan | <u>Share Business Plan</u> 1. Present Next yrs. Business Plan. 2. Report on Impacts • Systems • Structure • by-laws • Vision • Mission • Long-range plan 3. Report on Implementation Plans | <u>Share Business Plan</u> 1. Present next yrs. Business Plan (All Committees together) • Issues • Priorities • Responsibilities • Impacts 2. Develop Plans in response to Board approved issues (Individual Committees) • Schedule • Activities • Adequacy of resources verified • Timing • Assignments 3. Report Development Plans & Coordinate (All Committees together) | <u>Finalize Business Plan</u> 1. Status of Current operating plan 2. Present Next yrs Business Plan • Issues • Schedule • Timing • Assignments • Resources |

4. Survey Member Needs at Regional Meetings. We have asked the members who attend the regional business meetings to give direct feedback in the following areas.

- Identify the "Important Stakeholders" for each member
- Prioritize APPA board "Vision" issues
- Prioritize APPA "Long-Range Plan" current issues and needs that members would like APPA resources spent on.
- We asked the members to identify at least four "Critical Issues" that they are faced with and need assistance in completing their responsibilities at their institution.
- We surveyed the members' information services level of access and priority. The survey asked how far the APPA association should go with technology and at what level of expertise members are within their institution.

The importance of getting this feedback and information is to give the planning committee an idea of where and what the members are faced with and where the association ought to be. We will send back to the Region Presidents a summary of the information we learned from this survey at each region.

5. Feedback from APPA Staff. We spent a day with the APPA staff gathering information concerning their vision of APPA and where the association ought to be going. This information was very helpful to determine the long-range view that they have of the association and its members.

6. Planning Committee. As you are aware the Planning Committee for APPA is made up of the President-Elect as chair and the three elected vice presidents. We have reviewed preliminary results of the information learned. During the process of gathering feedback, the committee will determine the real needs and expectations of the association. These needs and expectations will become the strategic plan for 1995-96. The goal of the APPA planning committee is to meet in January 1995 and finalize the recommendation that will be made to the APPA Board in February 1995.

It has been a great opportunity for the leadership of APPA to visit with each of the region members, boards, and APPA staff and gather the kinds of issues that can and will affect the direction that APPA needs to plan to be successful. With emphasis on meeting the needs of the members and developing a strategy for implementing that direction will be the primary pieces of the business process for this year. It is my hope that you will feel free to contact us as we are doing this planning. We will announce our direction for 1995-96 later in 1995. It will include those things that are critical and important in meeting your responsibilities and stewardship to your institutions. We are learning a great deal and hope that the results will provide APPA with a better vision and more responsibility to the member with a better focus to customer/member services. ■

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Foundations of Leadership for Facilities Officers

by Gary L. Reynolds, P.E.

In January APPA will be embarking on an exciting new journey. The first step in this new journey will be taken when the new Foundations of Leadership for Facilities Officers program debuts at the Institute for Facilities Management in Austin, Texas. This will be a groundbreaking event because, for the first time, APPA will be adding to its traditional educational strengths in management programs by providing an educational experience in leadership. This first step may not seem like much. But I believe that when we look back, this program will be recognized as the beginning of a fundamental change in APPA's educational programs and in our profession. This first step has not come easily.

APPA's journey was actually started more than six years ago when Diane Kerby (then APPA Vice President for Educational Programs), John Harrod (then Chair of the Institute for Facilities Management), and I took a stroll down the Mall during the APPA annual meeting in Washington, D.C. APPA's leadership had been encouraging the Institute for Facilities Management to add a "fourth" track to its current three-track program—a "graduate" track if you will. The question was, "What should it be?" The first kernels of an answer to that question sprang from that walk on the Mall and became the seeds for this new program. Interviews with APPA's leadership and membership over the next several years helped to solidify the concepts that can be found in the Foundations of Leadership for Facilities Officers program.

The journey has not only been a professional journey but a personal journey as well. When I first began to discuss some of the ideas of leadership with facilities officers around the country, and with the facilities staff at Iowa State, I was chal-

lenged by one of the ISU staff to change my title from Director of Facilities Management to Facilities Leader. At first, I was taken aback by that comment because it was such a radical idea. It did not conform with the university's personnel policies, it wouldn't be understood by outside organizations, etc., etc. I had a whole host of rationalized reasons why it wouldn't work. But it was a serious question that went right to the point. Am I leading or am I managing? I've struggled with this question for a long time, but I believe I have a better sense of how to answer that question today.

As an engineer and technocrat (as many of us in this business are), I've always focused on the technical issues and processes that ensure that each day the facilities are ready for the teaching and research endeavors that occur on this campus. Though many of the issues we deal with are personnel related, personnel issues do not tend to be the visible "show stopper" issues that are common to the logistical hurdles of daily operation. It is easy for the focus to become narrow and technically oriented, especially if that is your background. Every one of us deals on a daily basis with project management, environmental issues, safety concerns, deferred maintenance, computerization, etc., it is very easy to let these technically oriented issues dominate your entire agenda. However, through all these daily technical discussions something continued to gnaw at my mind. If we are working so hard, then why are we getting so far behind? Why have so many of us lost sight of the vision and mission of our institution? Why are we struggling with deeply rooted personnel issues such as sexual harassment, diversity, and union/management relationships? Why are the faculty so demanding when I know they know we have limited resources? Why is morale not as good as it could be? I felt there had to be another way.

I began to read material by Deming, Juran, Block, Covey, Senge, and others. In this material I found a rich philosophy that helped me to see that for facilities managers the focus had to shift away from technical issues and processes to the

Gary Reynolds is director of facilities management at Iowa State University, Ames, Iowa, and chair of APPA's Institute Subcommittee. He is also the editor and primary author of APPA's book, Building Quality: TQM for Campus Facilities Managers.

people: the staff and our customers. Marvin Weisbord's book, *Productive Workplaces: Organizing and Managing for Dignity, Meaning, and Community*, provides a sense of this issue. "Quality of working life—which is far from cultural change—can be seen as a serious effort to conserve our cultures deepest values against erosion by narrow economic and technocratic thinking." Stephen Covey, in his book *Principle Centered Leadership*, speaks about "leadership by the compass." By understanding the values we all hold, and by working with a common set of principles as a framework, we can develop a tool that will always show us "true north." Charlie Jenkins, President of APPA and facilities administrator at Saint Mary's University, understands the need to change the focus and has challenged the staff at Saint Mary's with a vision statement that departs from the traditional "thing" orientation to a "people" orientation. "Our mission is to assure that every occupant of our buildings and every recipient of our service is certain, beyond doubt, of our unqualified regard for their personal dignity and for the value and worth of their contribution to the university mission. Our customers feel nurtured, inspired, and uplifted by the excellence of our service and the caring concern of our service providers." Truly a people-oriented vision.

As I did research for the "new track" a clear theme began to emerge that contained the organizational concepts of staff participation, customer focus, and continuous improvement. I began to understand that the focus on these concepts had to be based on common underlying values and principles. Many of these concepts are embedded in the ideas of Senge's Fifth Discipline, Deming's Fourteen Points, and Covey's Seven Habits. I finally concluded that the discontent in my mind was like an early warning breeze signifying the beginning of stronger winds of change. Further, I now realize that these winds of change are not just a passing breeze but a permanent condition resulting from intrinsic changes in the environment. The whispering winds are saying, "Confirm your values, rediscover your principles, make a personal change." But how do we do that? How do we take our organizations and ourselves from the current technical, controlling resource limited mind-set and move them to a principle-centered, staff involved, quality work environment that is customer-centered and continuously improving? It is clear that surrounding these concepts are many other issues of organizational development, group norming, organizational learning, leadership style and skills, communications, etc., that need to be understood. These concepts are not the traditional issues that APPA's educational programs have focused on. And yet, it is clear that a people-oriented approach to managing facilities is what facilities managers must not only come to know but fully embrace.

At the same time that I was researching the fourth track, John Harrod asked Doug Christensen of BYU to review the other management programs that APPA offered, i.e., the Executive Development Institute for Facilities Managers and the Institute for Facilities Finance. As Doug and his committee reviewed these programs, and as he and I had numerous discussions, a picture began to emerge that suggested that a fundamental restructuring of APPA's educational programs may be appropriate. The vision that emerged included the

creation of centers of excellence that would focus on various management and leadership programs. The result would be a strengthening of the current management series and the addition of a new leadership series of educational experiences. From these discussions it became clear that a first step was needed. A step that would lay the framework for future leadership programs.

And so was born APPA's first leadership program, Foundations of Leadership for Facilities Officers. The week-long program runs in parallel with the Institute for Facilities Management from January 22 to January 27, 1995 in Austin, Texas. The first three days will be presented by the Covey Leadership Center and focus on principle-centered leadership, the Seven Habits, and personal and organizational development. The last two days will be case studies with APPA members sharing their experiences in leading their organizations through change. The program has three main goals: 1) provide a foundation for leadership skill that can be used to lead organizational transformations, 2) provide an understanding of your own personal leadership skills and provide a foundation for improving those skills, and 3) provide an opportunity to share the experience of others who are leading their organizations through transformation. The program is truly a unique blend of internationally recognized expertise and actual experiences of our members, thus providing a balance between theory and practice.

In addition, this program is unique in another way. It is important that APPA continue to provide the educational programs that have been its strengths of the past. The diverse management issues of custodial services, financial management, project management, etc., remain as important foundations for operating facilities on university and college campuses and are important to well run facilities organizations. APPA needs to continue to offer educational opportunities on these subjects. In order to continue the current programs while introducing new ones APPA has looked to the private sector to create partners in the delivery of educational programs. Corporate partnerships are and will be an important part of APPA's future as APPA responds to the needs of the membership. Through these corporate partnerships programs can be offered with fresh perspectives, at lower cost, and higher quality. An example of this cooperative relationship is this new leadership program where APPA is partnering with Marriott Education Services and the Covey Leadership Center.

This new program is just beginning. The title, Foundations of Leadership for Facilities Officers, was a conscious choice to signify that this program is only the beginning. The vision is to provide a series of educational offerings on leadership that will explore the complex and extensive theory and practice of leading facilities management organizations. Look for further developments.

Oh yes, the answer to that challenge to me? I am charged with managing the facilities on behalf of the institution's stakeholders, and the title of Director of Facilities Management will do just fine. I just need to remember that values and principles ultimately drive a successful organization and that the true strength of the organization is found in the people, not the facilities. ■

Sustaining Excellence:

Bold Strategies for Transforming Your Organization

by William G. Maynard and Thomas J. Champoux

*Excellence is not about having things,
or about having recognition, or about
having money or power or position.
It's about being part of something
worthwhile—where people can go above
and beyond.*

—Pat Riley

The pattern for the future has already been established. Those organizations that learn to excel and, more importantly, sustain their levels of excellence will succeed in the new global economy. Those that do not, will likely disappear.

After twenty years of working with culture change and helping organizations "do better," it is clear that the employees at all levels of your organization will be the key to your

future success. Fully utilizing both the technical and people resources will require doing things very differently—so differently that the transformation process will require courage and boldness on the part of today's leaders and managers. First, we will provide a framework for what we believe to be the current situation in most organizations, and then an outline of seven strategies we have found to be critical to the transformation of an organization.

In 1982, Tom Peters and Bob Waterman published their book *In Search Of Excellence*. It was an astounding bestseller, resulting in a wave of interest in "excellence." Though few realized it at the time, the book triggered a major shift in how leaders and managers viewed their organizations. The country was entangled in a serious recession, our economy was in trouble, and so were many organizations.

The conclusions that Peters and Waterman arrived at were based on studies of forty-three companies, all of which had for twenty years demonstrated superiority over their competitors. Each had been an industry leader. Peters and Waterman used as their criteria for identifying the "excellent" companies the twenty year averages of:

Bill Maynard, Ed.D., and Tom Champoux are cofounders of The Effective Institute, Redmond, Washington; Maynard is president and CEO, and Champoux is executive vice president. Champoux presented a day-long program on leadership at APPA's 1994 annual meeting in San Antonio. This article is an excerpt from a soon-to-be-published book, The Circle of Excellence: Bold Strategies for Transforming Your Organization.

1. compound asset growth
2. compound equity growth
3. ratio of market value to book value
4. return on capital
5. return on equity, and
6. return on sales.

Since the publication of their work a remarkable discovery has emerged. Within five years of the publication of the book, two-thirds of the companies were no longer on the list, and in 1990, only fourteen of the original forty-three were still considered "excellent." Peters and Waterman showed that achieving excellence is indeed difficult. And time has proven that sustaining excellence is nearly impossible. What goes wrong?

The Paradox of Excellence

*Excellence is not an accomplishment.
It is a spirit, a never-ending process.*
—Lawrence M. Miller

Excellence - to excel; to become the best at what you do.

It has become clear to us that most organizations are primarily driven by economic forces, by technological forces, or by both. These forces often result in short-term and quick-fix strategies, but rarely result in long-range, sustainable improvements. Typically, major changes in ways of doing things are pushed through in order to save money or generate more money. As an example, improvements in productivity are expected as a result of implementing Total Quality Management, quality circles, reengineering, downsizing, reorganizing, and other forms of technological change. These usually result in short-term changes in the financial indicators, but little change in the organization's ability to achieve or sustain a higher level of excellence over time.

Until very recently there has been little attention paid to the dynamics and interactions of people within organizations and the impact they have on bottom-line results. We believe that focusing only on economic and technological variables and issues can actually prevent organizations from achieving excellence and limit their success over the long run. Equal attention and the resources of time and energy must be paid to the development of people at all levels in order to truly transform an organization and sustain excellence.

Our view of excellence contains a paradox. True excellence is not achievable. Achieving and sustaining excellence is a process; the continuing process of becoming the best you can be—and then working at getting better. It requires generating a sense of urgency for change throughout the organization, and the wisdom to balance the financial forces with the needs and capabilities of the people. The difficulty is compounded by the nagging drive for quarterly earnings or short-term goals, at the expense of long-term benefits (sustaining excellence). There needs to be a balance—dollars and people working together to become the best. Sustaining this level of excellence not only results in financial success, but also in the stability and growth of the organization.

Building a Better Workplace

*We want satisfaction from accomplishment
and friendships, balanced personal and
professional lives, and to have fun in
all our endeavors.*
—Levi Strauss & Company

Organizations need to become healthy, fun, and good places for people to work. They need to be places that are not only exceptionally productive in terms of output and financial return, but must also be places of decency and dignity; where people treat each other with respect and kindness. When we ask hourly employees, or supervisors and managers about their workplace, 98 percent tell us they really want it to be a better place: more pleasant, more fun, with less stress and anxiety. They want to be treated with dignity and respect.

With few exceptions, a pleasant environment in which people treat each other well is a more productive place—and healthier. We have worked in places in which people treat each other kindly, and in places where people don't. Kind is better. We have also been in places where the primary mode of feedback is praise, and in those in which it is criticism. Praise is better. When people are treated poorly they become alienated and hostile. They put in their time and look for ways to get even. We are continuously amazed at the insensitivity and shortsightedness of many managers.

Consider these as situations that are not so unusual in our business world today.

Recently a mid-size manufacturing company was faced with a difficult financial decision. They had spent many months building trust and teamwork internally, but sales had slipped for several quarters, and Wall Street downgraded their rating. The management team decided that an immediate downsizing was a short-term but necessary solution. They also agreed that they needed to keep the whole thing quiet for two reasons: they didn't want to alarm the employees, and they wanted to minimize the effect on the stock price. The final decision was made on a Wednesday, and on the following Monday, without announcement, over 200 employees were handed "effective immediately" termination notices as they arrived at work. The layoff accomplished the short-term goal, but destroyed morale and trust. One unanticipated result was that a number of highly skilled, long-term employees who had survived the sudden termination, left the company to work at a "better place."

Here is how a manager who survived a major downsizing in another company described his experience.

"Ours is a \$1.2 billion organization which recently experienced a decline in profits and in stock price. A new president was brought in and a short time later ordered an across the board budget cut of 8 percent. We managers were told that if we made the cuts by April 1 (three months) we could charge them off on current expenses and not affect our next year's budget. No criteria for budget reduction were provided, so almost all of the cuts were accomplished through elimination of employee positions. Some 900 people were quickly terminated. Many had been with the company for ten to twenty-five years. Soon after the layoffs, upper management discov-

ered that many critical positions had been eliminated, so they brought back nearly 200 people.

"I know of one woman," he went on to say, "who had started with the company twenty-five years ago as an hourly employee, had continued her education and eventually was promoted into a management position. When her position was terminated, several other managers stepped forward and wanted to keep her. The decision went to the vice president of finance who said that, because of her salary, he couldn't justify keeping her, and she was terminated.

"There was total destruction of the social systems, of teams and teamwork, and of loyalty, commitment, and the desire to do the job. But Wall Street loved it. They called it a demonstration of commitment and control, and recommended a buy of the stock. I'm looking for a new job."

Contrast these examples with the Harman Management Company. They are fun people to be around. Pete Harman was the original cofounder, with Colonel Sanders, of Kentucky Fried Chicken. Pete at age 75 is still the active CEO of the company, and his executive vice chairman is Jackie Trujillo. Harman Management owns 265 KFC stores located in California, Colorado, Utah, and Washington. Pete and Jackie know each of the store managers and assistant managers personally. Managers are provided opportunities for

ownership in their stores, and actively engage all of their employees in the success of each store. Teamwork and playing fair are qualities emphasized throughout the entire organization. Pete and Jackie not only model these values, but also share the company's success; they have provided a profit-sharing plan that includes hourly employees. At Harman's people work hard and play hard. Every year the company provides a week-long conference for managers, assistant managers, and spouses. Half go to a resort in Southern California and the other half to Hawaii, then the following year they switch. All expenses are paid. A big part of their week is focused on relationships and play.

Pete, Jackie, and the Harman management team have created an extraordinary culture in an industry noted for burnout and high turnover. Their results are equally extraordinary. The industry average annual employee turnover is 250 percent. At Harman's it is only 100 percent. The average industry turnover of store managers is near 100 percent, compared to Harman's 14 percent. On top of all this, Harman's is a very financially successful company; sales have continued to increase even in a declining market, they continue to reduce costs and increase efficiency, and they have been consistently profitable.

Continued on page 38



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Continued from page 36

Transformation Requires Courage

*Why not go out on a limb?
That's where the fruit is.*
—Will Rogers

In our work with clients, we have found that most executives, managers, and team leaders are hearing the message "we must change." Few however, know what to change or have acquired the knowledge and skills necessary for successful large-scale change. The reaction to change ranges from denial, sabotage, and frustration, to autocratic demands for democratic participation.

Why is it so difficult for executives and managers to develop and utilize healthy and effective strategies for change? We think there are several significant, yet resolvable difficulties. First, most don't know how to implement effective strategies. Their predecessors didn't do it. Their mentors didn't do it. These skills weren't taught in MBA programs. So they have had no model to learn from. Second, they are rewarded and promoted for their technical expertise, their financial management ability, and for accomplishing tasks, not for dealing effectively with their people. Third, it costs money and takes time to cultivate sustainable organizational change, and initially these dollars have a negative effect on the bottom line. These factors present powerful forces that create a situation difficult to change.

Bold Strategies for Transforming Your Organization

Our strategies for transformation are bold, but vital for the success of organizations. In addition, many are contrary to traditional management structures and most corporate cultures. Bold because they are perceived as "soft and fuzzy" by the bottom-line managers, and a "fad of the month" by others. Bold because they require total commitment by management and an investment of time and money—and they fly in the face of the drive for profits every ninety days that Wall Street demands. It takes boldness to change an organization from old ways of doing things, and it takes courage to stand up to the criticism, cynicism, and ridicule of those who refuse to believe differently, and who desperately hold on to the past.

It takes courage to act differently, but for those who do, the changes can be everlasting.

In brief, the strategies we have found to be most effective for achieving and sustaining excellence are:

Strategy One—Create a Climate of Caring

Theodore Levitt, as editor of the *Harvard Business Review*, wrote, "A business can never have too many customers, too many capital assets, or too much decency." Levitt's comment about decency goes to the heart of the most important key of all for transformation. A caring organization is healthy, innovative, fun, and profitable.

Strategy Two—Develop Cooperation at All Levels

A cooperative organization is one in which all employees work with each other, share knowledge and skills, and are

mutually responsible for the success of the organization. The prevailing attitude is, "We're in this together, and we need each other in order to win." Teamwork at all levels is promoted, and destructive internal rivalries are eliminated.

Strategy Three—Focus on Quality

In recent years there has been great emphasis on quality improvement. Most efforts are focused on the quality of products or quality of service within the organization. Our experience tells us that quality improvement needs to be a continuous process, focusing on quality of people's behavior and the quality of relationships within the organization as well.

Strategy Four—Adaptability; Ability to Turn on a Dime

The ability to turn on a dime is the real statement of adaptability. It has to do with developing an internal climate of innovation and rapid response: anticipation and action. This is a major shift for most organizations and requires breaking out of old "comfort zones."

Strategy Five—Continuously Develop Skills

People will be required to work in ways that are different than what they have done in the past. Real teamwork, for example, requires skills that are different from simply being a member of a work group. Skill development means an ongoing investment in training—but not just any training. Our studies show that 85 to 90 percent of the training provided managers is in the area of technical skill. Yet they spend nearly 85 percent of their time dealing with "people problems." There will need to be continuous emphasis on training in the areas of self esteem, interpersonal dynamics, and team dynamics.

Strategy Six—Promote Effective Leadership

Effective leaders focus on "doing the right thing" by

- 1) having a vision; an image, idea, and belief about how things could be better
- 2) being clear about their values regarding employees, customers, and quality, and they instill these values within their organizations
- 3) having the courage to act on their beliefs and values, and
- 4) holding themselves and others accountable for commitments and results.

Strategy Seven—Ethics: Managing Delicate Balances and Difficult Choices

The rate of change plus the number and kind of decisions managers must make pushes the limits of what is "right" versus what people sometimes have to do to "get things done." For many organizations, success will be determined by the delicate balances and difficult choices their people make; their ability to "do the right thing." Ethics is about "decency," doing what is good for the organization and what is right for the customers and the employees.

Striving for excellence is a very worthy goal, but you better not wait too long. There are bold and courageous people out there who have already started.

*Whatever you can do,
or dream you can...begin it.
Boldness has genius, power
and magic in it.*
—Goethe

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For more information about the **International Experience Exchange** or to receive a blank survey, call APPA Member Services at 703-684-1446. With all this information only a telephone call away, we encourage you to use this valuable APPA program.



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Database Update

Howard Millman

Safety Software: OSHA on a Disk

You've heard it before, "Safety is everybody's responsibility."¹ But as the physical plant director, it's more *your* responsibility than most other people's, isn't it?

Howard Millman is a systems integrator for universities and hospitals. His company, Data Systems Services, is based in Croton, New York.

Like every other facility management operation that uses numbers or words, creating and writing an OSHA-compliant employee safety plan just got a little easier. SafetyPlan Builder, a software package from JIAN, Inc., includes everything you need to create a written accident prevention plan.

While OSHA does not specifically require you to have a written plan as a practical matter to comply with their myriad regulations, you will be better served if you have one on paper. In addition, other regulatory agencies such as Federal Hazardous Communication Standards, require a written plan, as do many states.

SafetyPlan Builder, a one-size-fits-all safety plan, contains all the raw materials. It's up to you to browse through its 400 or so pages and select the elements you want included in your safety plan. While the program's text adheres to federal guidelines, it also includes state mandated distinctions. Twenty-two states have special requirements that

modify or exceed OSHA's regulations.

Included with the software is a comprehensive, fully indexed 200-page manual. While the disk contains the text database detailing OSHA regulations, the manual contains a wealth of safety related information including forms, supplementary sources, and legal obligations. In addition, the program includes two dozen preprinted sample forms covering all aspects of training, accident prevention, reports, and checklists.

JIAN spokesperson David Kaminer says that writing your own safety plan, including research, will take from 175 to 300 hours. He estimates that writing a safety plan using SafetyPlan Builder requires only five hours.

The software runs directly under MS-DOS, or in the MS-DOS shell of Windows 3.1. Rodent lovers can perform most of the navigation and menu selections with a mouse. The program practically installs itself, asking only an occasional question.

As you follow the instructions in the Getting Started manual, your first step is to configure the software by filling in the Templates. Templates customize the program to your department's trades and state, thereby personalizing and focusing the program's content for you.

Next, you answer a series of questions, Variables, that provide the program with your facility's name, the name of the safety coordinator, emergency phone numbers, and other site-specific information. After you answer these questions and fill in the Templates, you have essentially told the program what you want included in the manual.

Next, you review the manual's contents to see that it contains the provisions you want included. Here also is where you add or delete any wording that you want changed. SafetyPlan Builder contains an elementary word processor to make simple revisions. For major revisions you can import the text into a word processor.

Viewing the manual's content onscreen, prior to printing, is where I think the program loses some of its momentum. For example, in order to view the contents, you need to step through three menu levels. First you chose View Selections. Next, you chose Sections, then highlight the section you want to read and select View Text.

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This process could be made simpler.

The main body of safety related text, all 400 pages, consists of six main headings totalling 40 chapters. Accident Prevention/Safe Work Practices provides solid advice on raising your staff's accident awareness threshold.

Resources details and recaps training opportunities as well as listing in-house safety personnel. Safe Practices itemizes eight of the most common safety policies including electrical, fire, gas, chemical, and other. Safety Procedures recaps accepted procedures for dealing with problem areas and conditions, such as emergencies, ladders, confined spaces, materials handling, and protective equipment.

Special Applications focuses on issues concerning pesticides, carcinogens, bio hazards, and others. The Industry Specific groups define eight broad classification of high hazard industries (such as logging and oil wells) that warrant special attention.

Facility managers will probably excerpt sections from a number of sections. Browsing through the pages I could envision you compiling your manual with excerpts from Building Management and Construction, Pesticides, Safety Training, Ladders and Scaffolds, Material Handling, Portable Power Tools, Abrasive Grinders, Fueling, Lock Out Procedures, Powder Actuated Tools, and Fire Safety.

While most of these selections will result from your initial answers as you set up the Templates, you can subsequently modify your selections in the Browse menu.

Once satisfied with your selections, you can send the text to your printer. You have a choice of printing just the sections you selected or all 400 pages (but why?). Some professional touches include an automatically generated Table of Contents, a cover page, and the site-specific data excerpted from the Variables you provided during set-up. The program prints plain vanilla text. However, it offers you the easy option of generating an ASCII text file that all word processors can easily import. This text tends to the dry and technical, so layout tricks such as bolding, insets, and font changes will make it easier on the eyes. So, if you want more pizzazz, and I suggest it, import the text into your

word processor and punch it up a bit.

SafetyPlan Builder retails for \$139, while actual selling price runs nearer \$90 at national software chains. JIAN also sells the product directly. Reach them in Mountain View, CA at 415-254-5600, fax: 415-254-5640.

As always, the right software will

make a task more manageable. And SafetyPlan Builder will help you organize, manage, and update the volumes of safety data a comprehensive safety plan contains. It will also translate the rules into easy-to-understand "Do's and don't's." After that, enforcement is up to you. ■

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Other Events

Jan. 28-Feb. 1—American Society of Heating, Refrigerating, and Air Conditioning Engineers Centennial Meeting. Chicago, IL. Contact: ASHRAE Customer Service, 800-5-ASHRAE or 404-636-8400.

Feb. 2-3—Clean Water Permitting. Mesa, AZ. Contact Sarah Schuler, Government Institutes, Inc., 4 Research Place, Suite 200, Rockville, MD 20850; 301-921-2345.

Feb. 8-10—Telecommunications Infrastructure Planning. Seattle, WA. Contact: Andrea Luoma, Washington State University, Conferences & Institutes, 208 Van Doren Hall, Pullman, WA 99164-5222; 800-942-4978.

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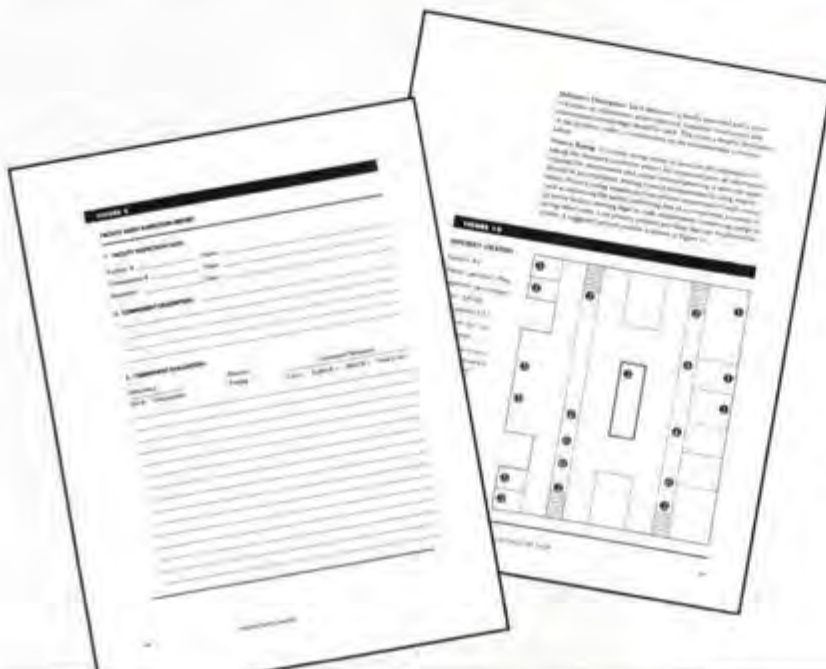
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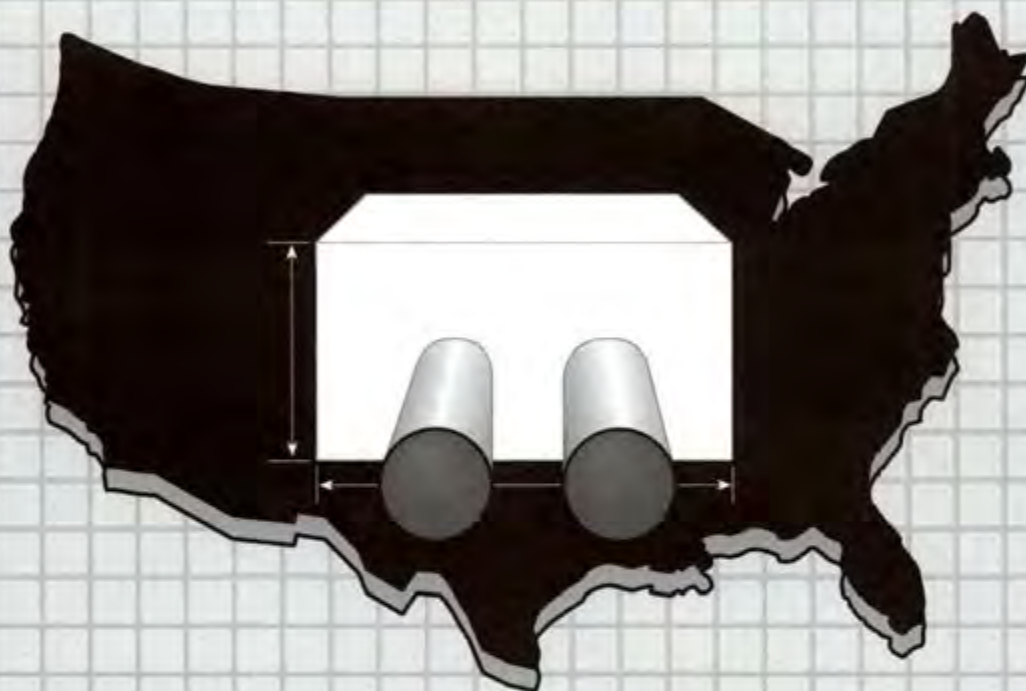
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