

## Engineer Utilizes Training To Beat High Energy Cost

Before energy costs started going through the roof, Edward Salmon, director of engineering services at the University of Southern Maine, rarely set foot in a seminar or workshop.

His 16 years of on-the-job expertise was quite sufficient to keep five dormitories and 10 academic buildings

operating smoothly. University of Southern Maine is the state's second largest university. Its enrollment of 8,500 students occupies two campuses, one in Portland for liberal arts and the other 10 miles away in Gorham, a teachers' college.

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Like many colleges and universities across the country, Southern Maine has a number of older buildings served by central heating plants. "Because of their age, many didn't have night setback or controls to adjust heat-



ing levels to varying winter weather," Salmon said. These situations were tolerable — until energy bills started soaring. Then something had to be done.

Almost overnight the emphasis of Salmon's work changed from routine operation and maintenance to developing conservation strategies that would assure the university of being able to hold the line on energy expenses.

"This is the point when training became an important tool. To be more fully aware of what could be done to conserve energy, of advancing technology, and how to apply it to conserve energy at Southern Maine," he said, "justified added professional education." Fortunately, Salmon was able to attend several local government-

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sponsored conferences.

Heating, ventilating and air-conditioning (HVAC) systems, the most energy-intensive point of a building, were the obvious targets for attention. "Controls," he said, "came up again and again, no doubt because they really make the difference between efficiency and inefficiency in an HVAC system." Controls thus became a major concern in Southern Maine's improvement program for better energy management.

To make the best recommendations from an operations standpoint, Salmon immersed himself in increasing his understanding of controls. Contact with control manufacturers led him to classes that would provide a thorough knowledge of how controls operate and how to adjust them for maximum efficiency.

"The Honeywell Building Services office here in Portland told me about their training center in Minneapolis where I ultimately went to take two four-and-a-half day classes back to back," he said. The first was device-oriented, delving into the components of a temperature control system: thermostats, electric pneumatic relays, pneumatic electric switches, valves and damper operators. He learned how devices were designed to operate and how to apply them for peak performance. The second class was system-oriented, zeroing in on how to make a temperature control system more energy efficient. He identified the potential benefits of retrofitting or modernizing a system.

"This knowledge," he said, "is now invaluable to making the recommendations and decisions for improvements Southern Maine is implementing." The university is proceeding to bring HVAC systems up to "design status," that is, to the peak of how they were intended to perform. Retrofits — or installation of newer, more effective controls — are also being scheduled as state and federal funds become available.

"Fortunately, Maine just passed a state referendum that will provide \$2 million for energy conservation in state universities," Salmon said, anticipating an accelerated timetable for Southern Maine's improvement program.

Already dual input controllers have been added to the hot water systems in dormitories. Best yet, "They've begun to pay off." The largest classroom building on the Gorham campus is being retrofitted with reset controls to facilitate different heat settings for day and night operation. Obviously eager for each new project, Salmon indicated, "We're also getting some buildings ready for automated controls."

Then he comes back to the topic of training. "Without it, I wouldn't have been as certain as I am now about the actions we're taking. I would have been in the dark when it came to talking with vendors. Asking the right questions to get the right answers hinges on a good, working knowledge."

Salmon has become such a "believer" in the value of keeping current on technology and updating understanding through classes and seminars that he prompted two more members of Southern Maine's Facilities Management Department to take Honeywell's two building operations equipment training courses. "The more we all know, the better."

# **Unique Behavior Modeling Application**

Behavior modeling has long been used to train supervisors, sales managers, salespeople and others in how to deal with people more effectively. Now it is being applied in a new area involving a difficult challenge - teaching interpersonal skills to disadvantaged minority youths.

The idea behind this application is that many minority and other disadvantaged youngsters fail on the job not because they lack motivation but because they lack the "people skills" needed to succeed in a middle-class work environment.

The Philadelphia Retail Council sponsored a behavior modeling program for 50 inner-city minority youth who were considered structurally unemployed. The council is made up of local retailers who have been concerned about reducing the turnover of minority employees and meeting EEO requirements. The result was a search for a means to give minorities the skills necessary to succeed.

One council member, from Gimbels - Philadelphia, acted as a lead person and set up a task force to identify

Minority youth participants in program study work materials. Emphasis is on teaching relational skills. Theory behind program is that lack of these skills rather than lack of motivation is prime factor in minority youth joblessness.

area resources. Through the Philadelphia Private Industry Council, a government-funded agency promoting employment of the disadvantaged, the Retail Council contracted with MOHR Development, a training consulting firm based in Stamford, CT, to develop the retail training program. Several of the sponsoring retailers had achieved results with MOHR's services to train managers and salespeople in the past.

The 50 youths began training last August, with two weeks of classroom instruction using audiovisual equipment and role playing techniques. The first week concentrated on basic retailing skills. During the second week participants received training in Effective People Skills (EPS). This phase of the program was designed to develop interpersonal skills for dealing effectively with supervisors and co-workers. In EPS, participants learned five General Principles of communication: Enhancing Self-esteem; Pressing for Specifics; Using Reinforcement Techniques; Active Listing; and Avoiding Defensive Behavior.

These general skills were then applied to dealing with four specific situations (skill modules): Getting Off to a Good Start; Gaining the Confidence of Senior Employees; Asking for Feedback; and Dealing Effectively with Criticism.

For the following seven weeks the youths worked in a retail firm for at least 32 hours per week and attended a half day of class each week. During classroom sessions trainees discussed actual situations they observed or were a part of that week, and whether the situations were handled properly. In this way, interpersonal skills needed on the job were reinforced.

Results thus far look promising. Of the 50 youngsters who have completed the program and started work, 45 are still on the job, an unusually high percentage. Companies that are concerned about the high turnover of entry-level employees or who need to meet equal opportunity obligations might look into it.

For further information, contact John Lee, Vice President, Retail Division, MOHR Development, Inc., 30 Oak St., Stamford, CT 06905.

# **Tenth International T&D** Conference

The I.F.T.D.O. 1981 World Conference is scheduled for Dublin, Ireland from Aug. 24-28. The Conference theme

adopted by the Irish Institute of Training and Development, who will be organizing the World Conference is "Individual and Organizational Development."

The program outline confirms that attention will be focused on issues affecting growth and development of

individuals and organizations, e.g. impact of new technology; energy and conservation; economic growth; rate of change and social and political issues. Subjects like career planning, leisure, work, rest, learning, time effectiveness and organizational growth will be discussed and speakers will be drawn from leading experts throughout the world. Every opportunity will be taken to ensure lively participation by Conference delegates.

For more information, contact Darius Van Fossen, P.O. Box 5307, Madison, WI 53705.

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# The Sky is the Limit for CAI

"Computer Assisted Instruction" was a much maligned phrase during the early '70s, as educators and businesspeople tried and failed to unite the technological revolution in media with the giant, room-sized computers which were vintage IBM. But for the '80s, according to the speaker at NAVA's Industry and Business Council session, CAI may well be the commonplace phrase of the '80s.

Dr. Carl Roetter, head of Bell & Howell's computer marketing effort, discussed selling computers in the audio-visual market during the NAVA Convention in Dallas Jan. 17. "With today's 'chip technology' in high gear, educators are fast realizing dreams of the "70s," Roetter said. Today's desk top computer will continue to be down-sized, and will continue to drop in cost until nearly every school system and every business can afford to have multiple computers driving sophisticated media apparatus and offering particular and individualized learning and training opportunities to each student. "The sky is the limit" as to what future computers can do in the field of teaching and training, according to Dr. Roetter. "And audio-visual people are the best qualified and the best situated to move this technology into the schools and businesses of America," he concluded.

Dr. Roetter's talk is the latest of a long line of information services provided to NAVA members by the Association's Industry and Business Council. I&BC was the first Council created by NAVA to offer services to members in a specific market area. The Council has provided publications such as the popular "User's Look at the Audio-Visual World," and such media programs as "A Place to Make It Happen." The Council has also sponsored 25 week-long Institutes on the campus of Indiana University for media use of audio-visuals.

Robert P. Abrams, Certified Media Specialist, president, Williams, Brown & Earle, Philadelphia, chairs the Council and welcomes comments from commercial audiovisual companies as well as media users. For more information write to Industry and Business Council, 3150 Spring St., Fairfax, VA 22031.

## Keep Unnecessary Reports Off Your Desk: Here's How

The 80-20 rule applies to reports as well as other forms of information: 80 percent of the relevant information can be transmitted with 20 percent of the verbiage. And

some of those reports you receive may not be worth the paper they come on —especially those endless computer printouts. So take these tips from Lee Grossman, paperwork specialist, to



check off the reports you can eliminate. Ask yourself:

1. Do I need this report? If you don't, ask the sender to remove your name from the distribution list. Saves him or her the effort of sending it, and you the aggravation of dealing with it.

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2. Is this report relevant to my job? If you didn't get it, would you suffer in any way? If it's just "interesting" information, you could probably spend your time better elsewhere.

3. Do decisions depend on this information? If the answer is "no," then the report can be eliminated. You can do without reports that are for informational purposes only.

4. Does the report arrive on time? If it's consistently late, take steps to have the sender shape up, or eliminate the report.

5. Does it come at the right intervals? If you've been getting a computer report daily, could you cut back to weekly or monthly? Or perhaps you could request a printout only when needed. Same goes for subordinates' reports.

6. Is the report too accurate? Do you really need dollars and cents figures, or would rounded-off estimates be good enough? Determine the lowest degree of accuracy you need.

7. Is the format action oriented? Rather than a rambling report, suggest that people present problems and opportunities, and suggested action, all set off with subheads and underlinings to facilitate quick reading.

8. Is there too much information? Drop untimely facts. Eliminate background information. Make sure only pertinent data is included.

Most important, don't create new reports without deliberate thought. Make sure there's a *real* need for each report.

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#### **New A/V Newsletter**

The Audio-Visual Professional is a newsletter written for professionals in the AV field. The first issue was published on December 1, 1980, and has received an enthusiastic reception, judging from both the response and subscriptions.

"We created this newsletter because there was a definite need for the professional to keep up-to-date on news, equipment, and trends in the audio-visual industry," said Editor Renee Towle.

A reading of publications in the field underscores this statement. While there are a number of magazines and manufacturer's newsletters, no independent AV newsletter was previously available.

And, a glance at *The Audio-Visual Professional* indicates that the newsletter is on target in reaching its objectives. Some of the topics covered include: AV and copyright . . . the videodisc market . . . finding an AV photographer . . . marketing AV services . . . scriptwriting.

Evidence that the audio-visual industry is indeed booming — even during lean times — can be found in a recent survey by the New York-based Hope Report. The survey reported that slide expenditures alone increased 19 percent to \$2.4 billion in 1980.

Part of the reason for this unbridled growth is the many functions audio-visuals are filling in today's organizations — new employee orientation, training, as well as the well-worn "dog and pony" shows presented at conferences and seminars.

Keeping track of developments in this fast-moving in-

dustry is one of the editorial aims of *The Audio-Visual Professional.* One such development is the use of computers for AV presentations. The newsletter reported on computer-composed music and slides, predicting a bullish future for both.

"Computer-composed music has a heady future for AV productions. Producers can create their own custommade music without going to a library or buying original music. The result is an unlikely brew of computer science, music composition, and acoustics."

But, beyond such esoteric topics as computer-composed music, the nuts and bolts of audio-visual production are covered. A story on AV scripting:

"Should be both heard and seen. Emotions, feelings are touched in an AV show. Unlike other forms of writing, you need to think and write visually. Visualize the slide that will accompany your script. Use everyday, conversational language . . . the fewer syllables, the better . . . keep all sentences bite-sized, informal."

Equipment is another area that is covered — for good reason. Much of the technology is changing pace, making it difficult for professionals to keep informed. There may be a temptation to mix and match equipment lines to keep pace with the new technology. The newsletter advises:

"Don't do it. Manufacturers generally keep their lines independent of each other. A programmer from one company often is incompatible with a dissolve from another. Find a line that fits your needs, then stick with it."

Humor is also part of the arsenal of this fast-paced publication. One story entitled "God and Multi-Image" details how evangelists are using slide/tape presentations to spread the gospel.

No stranger to AV production, Renee Towle was the former director of a national trade association's AV department, and now is executive director of an AV production company. The December issue of the *Training* and Development Journal published an account of Towle's audio-visual presentations for training bank personnel for robbery and extortion prevention.

"Our editorial goal is to free up the professional's time by publishing a newsletter that can be read in a few minutes, yet contains need-to-know information about audiovisuals," said Towle.

For a free copy of this monthly newsletter, contact Renee Towle, Vista Productions, 6120 University Avenue, Middleton, WI 53562.

## Kelly Services Introduces Innovative Training For Word Processing Operators

To meet the business community's greatly increased demand for word processing operators, Kelly Services, Inc., the international supplier of temporary help, is launching a totally new and simplified training program. Beginning this spring the program will be available to Kelly temporary employees in all 450 offices with office/ clerical divisions.

In making the announcement at Detroit's Renaissance Center, Terence E. Adderley, president, said: "Office costs now account for 40 to 50 percent of a typical company's total expense, and the preparation, duplication, handling and storage of paper accounts for one-third of



Word processing is no mystery to Kelly Services temporary employees who have participated in an innovative test program to train operators of electronic office equipment in language everyone can understand.

that cost. Word processing can contribute to increased productivity and efficiency in these important functions."

According to Adderley, the growth of word processing has been so rapid that it has outpaced the ability of present training systems to train the required operators. Over one million word processing units are already installed in offices and another 1.5 million are expected to be added in the next four years.

"Both factors — increased office costs and advanced word processing technology — have brought about an explosion in word processing," Adderley said. "Kelly's new program, designed by Universal Training Systems Co. of Chicago, will begin to remove the biggest obstacle to greater utilization of this cost-saving technology operator shortage."

Using video and audio tapes and workbook exercises, the trainee learns the concept of word processing, that is what the equipment is supposed to accomplish, rather than concentrating on specific buttons and controls on a particular model of equipment. This training will be done in Kelly Services offices and takes approximately four hours. The second part of the training takes place in the customer's office under the customer's direction. It is a "Guided Discovery Learning" procedure that enables the operator to apply the concepts to the customer's word processing equipment and procedures.

The "Guided Discovery Learning" portion takes from two to four hours depending on the equipment and the application. Thus, in six to seven hours, as opposed to one-week training required under present educational systems, a Kelly employee can be on the job and productive.

The program has been tested and Kelly trained operators are already successfully using such diverse units as the IBM Mag. II, IBM OS/6, Lanier "No Problem", Wordstream, Vydec, Micom, Lexitron, CPT, Wang and NBI in eight test markets: Detroit; Chicago; Denver; Northern New Jersey; Orlando, Florida; Madison, Wisconsin; Los Angeles and Ventura, California. "After testing the program in this cross-section of offices, we know the program works," Adderley said.

The Kelly training program should be an important step in solving the critical shortage of word processing operators and at the same time provide many employment opportunities.

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## Problem Employees in Professional Jobs: How to Help Them Improve

Ideally, performance evaluation is both a judgmental and a developmental process. It should let people know where they stand and what they can do to improve job performance. There are a number of reasons why the performance appraisal process takes on special significance when dealing with problem employees in professional jobs.

First of all, any organization has a considerable investment in its professional employees, and it obviously wants to get a return on that investment.

Second, most organizations feel some moral and social obligation to help employees attain satisfactory performance levels. There is an implicit, if not explicit, contract in the hiring process for employer and employee to try to work together to attain mutually desirable objectives.

Finally, there may be legal or quasi-legal reasons for trying to deal constructively with performance problems. Today, equal employment opportunity considerations, fair employment practices, and the close attention of various special interest groups greatly restrict the maneuvering room for employers to deal arbitrarily with performance problems through firing or layoff. And, if the performance problem does get to the point where dismissal is inevitable, the performance appraisal process is the basis for justifying it, both to the individual and to people outside the organization who might be concerned.

There is little that is truly unique about the issue of performance evaluation for problem employees; the differences are a matter of degree. Where job performance among professionals is not living up to standards, careful attention to a well-devised performance appraisal process just becomes a more important component of effective supervision. Specifically:

• Among problem employees, careful attention should be paid to the selection of what to evaluate. The critical performance criteria have to be clearly highlighted as the basis for determining when performance is unsatisfactory as opposed to when it is acceptable. These criteria must be very clear to the problem employee as well as to the supervisor.

• Particularly in the case of performance problems, open and clear communications between subordinate and supervisor as to expectations, plans, and evaluations need to be maintained. Performance standards need to be openly and jointly agreed upon.

• Appraisals dealing with performance problems should be more timely than is necessary under more normal circumstances. This means that once-a-year appraisal is not frequent enough. *Performance dis*cussions should be a part of the regular dialogue between supervisor and employee — perhaps daily. And the results of the discussion should be documented so that there is no misunderstanding at future meetings.

• Finally, performance review discussions should be very specific, perhaps dealing with only one agreed-upon element of the performance improvement plan at a time.

Although modifications to the time limit and the plan can be justified, based upon the emerging circumstances, performance-improvement plans certainly should not be dragged out forever. If a conscientious effort on the part of the supervisor to help the employee improve performance does not succeed, termination may be the only answer.

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This article is excerpted from *Performance Evaluation* for *Professional Personnel*, by John R. Hinrichs and John Newman of Management Decisions Systems, management consultants, Darien, CT. This volume, published in Fall 1980 by Work in America Institute, Inc., is the newest in the Work in America Studies in Productivity/ Highlights of the Literature.

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### U.S., Canadian Managers Average over \$23,000 in '80

The average annual salary for middle managers in 1980 was \$23,798 in the United States and C\$24,880 in Canada, according to the ninth annual 1981 AMS Guide to Management Compensation, recently published by the Administrative Management Society, headquartered in Willow Grove, PA.

In a survey of 3,490 North American companies, AMS gathered salary and fringe benefit information on 65,755 exempt middle management employees in 119 cities. These employees represent 20 key middle management positions found most often in all types of business: 14 are general administrative positions and six are plant or factory related.

For the first time in the nine years the survey has been taken, a middle management position has averaged over \$30,000 in both the United States and Canada. As of September 19, 1980, U.S. plant managers averaged \$31,700 per year, and in Canada, they earned the average of C\$30,900.

Also in the U.S. and Canada, 18 of the 20 positions averaged salaries in the \$20,000 to \$30,000 range. Only payroll supervisors at \$18,400 in the U.S. and at C\$18,400 in Canada earned less than \$20,000 for their national averages.

In addition to national statistics, the survey report provides regional information by dividing the United States into five geographic areas. Of these areas, the West led the country with an overall average of \$24,853. The following chart shows the regional averages and the salary range for each region. Due to a smaller sample size, Canada is not reported by region. However, statistics for individual Canadian cities, as well as for those in the U.S., are given in the complete report.

#### U.S. SALARY AVERAGES BY REGION - 1980

U.S. Region	All 20 Positions	Salary Range
Western	\$24,853	\$17,200 - \$33,500
East Central	\$24,259	\$19,100 - \$33,300
West Central	\$23,987	\$18,400 - \$30,200
Eastern	\$23,299	\$18,700 - \$32,000
Southern	\$23,013	\$18,500 - \$30,700

Also, the AMS survey looks at U.S. salary averages by type of business for each of the 20 positions. Businesses are categorized as: 1. Manufacturing/Processing; 2. Banking/Insurance/Financial; 3. Retail/Wholesale Sales and Distribution; 4. Utilities; and 5. All Other Types including Governmental, Educational, Employment and Medical.

Within these groups, the highest salaries come from the utilities area where 11 of the 20 positions averaged over \$28,000 in 1980. The single highest-salaried position in the U.S. is earned by personnel directors with utilities at an average of \$33,500 last year.