

For the people of business

March-April 1981

MEASURE

HP flexes its
training muscle

Process Management's Guide

Business Planning for Competitive Advantage

The Six-Step Approach

Company's
Printed in U.S.A.
© Hewlett-Packard Co.
1981

**HEWLETT
PACKARD**

HP 10355-0077



Process of Management



New muscle for HP

TRAINING

By Betty Gerard

When Yvonne Peru went to her 20-year high school reunion last August, she had just received her undergraduate college degree.

"I've been in school all my life," Yvonne says. Since joining HP in Colorado Springs in 1973 on the production line, she has steadily made time for university and HP courses in a life that includes a husband and two children.

She's studied at both the major Colorado universities that have local branches, doing most of her undergraduate work at the University of Denver's weekend program for women. "HP picked up the tab and that was worth a lot," she says.

As her studies became more demanding, Yvonne's job assignments kept pace. When she became a publications supervisor, she was coached by HP in management skills. After other posts, she became the manufacturing information-systems (IS) manager for Colorado Telecom Division in 1990. She's currently studying at the University of Colorado for her MBA with an emphasis on IS.

She usually studies off-hours when her children July, 13, and Ryan, 9, are asleep. Having a mom who is always a student puzzles them a bit. Laughs Yvonne, "I heard the kids asking their grandmother the other day, 'What is it about mom, anyway? Is it just that she doesn't get it?'"

The rather awesome term "lifelong learning" means that



After hours, Yvonne Peru studies in her kitchen.

Training

people like Yvonne Peru are active partners with Hewlett-Packard in developing their own capabilities through continued learning.

How well is IHP holding up its end of that partnership?

The answer is that with the best of intentions, IHP has sometimes had a scattered approach to education and training (the terms are blending today). But the company's training community is getting its act together in exciting ways these days.

If you look at the money IHP spends on a myriad of training activities worldwide, the sum is impressive. Each year between \$150–200 million goes into developing or buying courses and delivering them internally. The cost of taking employees off the the job and their travel and living expenses while in class adds another \$300 million or so. Part of that expense is supporting college work, often aimed at an advanced degree.

The question is not how much HP is spending on employee education but whether the investment has a maximum

“No one functional area can deliver all the training one needs.”

bottom-line return. How well does available training match the skills and knowledge needed today? Is it delivered to people in a systematic and cost-effective way? What preparation will be necessary to keep up—to excel—in the work world of the future?

The professional trainers within IHP have had these concerns since 1986, when 13 independent training units formed the IHP Training Council for better coordination.



At the European Education Center in Lyon, France, students take a break in the atrium between classes. This year, biweekly satellite broadcasts will be made to 19 sites in Europe.

They were aware that, in an Open Line survey, IHP people had found training “inconsistent and fragmented.” Trainers in the field were bombarded with multiple lists of class offerings and 35 different enrollment systems. Measurements of effectiveness were sparse.

Consultant Jack Bowsher, author of *Educating America*, confirmed trainers' belief that a new education strategy was required to give HP a competitive edge in the 1990s.

It was time to couple education directly with business needs. Developing employees to meet new challenges would be critical as outside hiring slowed, the workforce matured, businesses changed and ability of people became the differentiator in a world of open systems.

And people, after all, are the largest single expense factor in the company's business: 40 percent of total costs. Raising each person's productivity could have a powerful effect.

The challenge for IHP, as Jack Bowsher sees it, is how to take “islands” of successful programs and the existing know-how in managing employee education and come up with a coherent companywide program. Once in place, it would be a stimulus to lifelong learning—“a nice concept that is rarely offered except in large corporations.”

He cited the need for IHP to identify pivotal jobs and key competencies within them, training requirements dictated by business needs at all levels, well-designed courses, new and cost-effective alternatives to the old classroom-based training, and greater professionalism of trainers.

One large step toward more coordination was taken in November 1989 when centralized training and development switched from Corporate Personnel to Business Development under Executive Vice President John Doyle. Neil Johnston became director of the renamed Corporate Education.

Since the corporate functions of Manufacturing, Engineering and Quality also report to John, the move opened the way to closer ties between four training arms.

Neil, who co-chairs the HP Training Council, is an advocate for even broader multifunctional cooperation. "No one functional area can deliver all the training that one needs," he says. The nature of work has changed, resulting in more interdependency. "The integration process we've been talking about for a long time is really essential."

At the center of this interrelated training is the individual. As Neil says, "You are the stable island; you can go ahead with your development. If you're relying on your job, organizational structure or supervisor to stay the same, you could be disappointed."

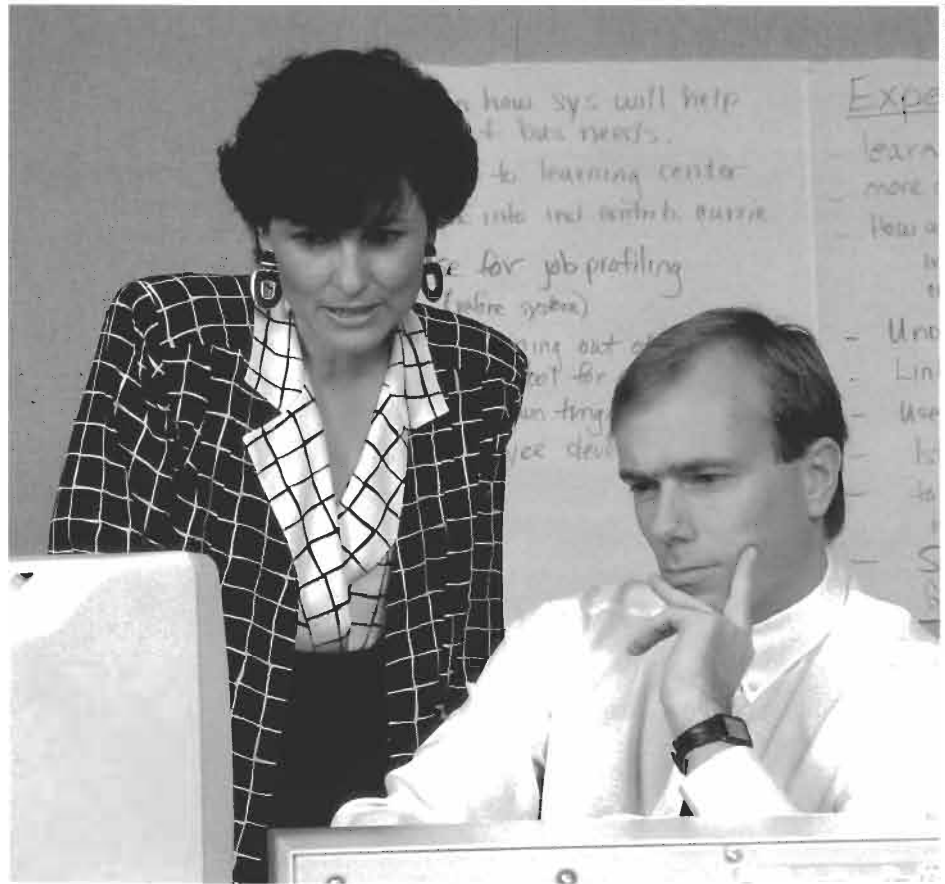
He doesn't overlook the role that a supervisor or manager should play.

"Education is more than a smorgasboard of programs picked out of a catalog," in Neil's view. Managers should guide developing a training plan, set expectations for results and see if they're achieved.

Corporate Education is starting to build a new curriculum framework for managers' own training, starting with the first-line manager. It provides a realistic outline of what must be learned in

"Education is more than a smorgasboard of programs..."

phases over the first few years. A similar definition of training stages for general managers is next. Embedded in both series of courses are certain "competencies" or traits needed for success.



Blanca Leiva of Corporate Education explains to David Peake, H.R. development manager for the Melbourne (Australia) sales area, how to create a job model using Vista software.

The Horizon project helped launch an educational planning process which is competency-based. Based on interviews with top performers, 16 core-competency models have been completed, including controller and product marketing engineer. More are under way.

Supporting this process is Vista, an on-line program that will start with job profiling, assessing gaps in skills needed for a job and the relevant training resources including those available in the community.

A multifunctional team led by Mary Nur and Russell Lash has just developed an advanced training program for professional trainers. "We saw the power of getting people with different perspectives involved in the design," says Maureen Simon, manager of education resources.

Corporate Education also offers consulting in instructional design: a systematic approach to making sure training fits a particular need.

Ron Liddell of Worldwide Customer Support Operations manages its state-of-the-art, customer-support training program and is co-chair of the HP Training Council.

He sees an even greater role for training in the support area in the next 10 years. As IIP moves into more relationships and support of multivendor networks, "negotiation skills, people skills and the ability to work in a work group will be value-added services that are needed" along with technical expertise.

His training operation is at the cutting edge in adopting new technologies for delivery of programs. It pioneered IIP's first worldwide-supported package for computer-based training. "Our 5-year vision is to customize training around business need and get it to the individual just in time," Ron says.

Susan Burnett is product training manager for the Computer Systems Organization. She's a true believer in using faster, less expensive alternatives

to the self-contained classroom (see story on this page).

She breaks her product training into four segments: basic fundamental knowledge, basic skills, advanced skill-building and coaching by managers before and after a sale. In the first category, a switch to largely self-paced methods saved \$25 million last year in the U.S. alone. "We're getting people up to speed much faster," she says.

Jeff Williams of U.S. Field Operations, Emile Van Reepinghen of European Operations and Margaret Jones of Intercontinental Operations stay in close touch about their field education and training activities.

To help factory-training developers and marketing engineers understand what it means to be in a sales rep's shoes, Jeff's organization developed a program, "Sales Rep for a Week." Designing a field-marketing guide, factory people now understand how it fits into the tight schedule of the real sales world.

In Europe, where changes in 1992 will accelerate competition, Emile has introduced several new courses to help sales reps move forcefully into account management for major accounts, key dealers and wholesalers, and value-added resellers. He took a lead in the first European

"People are really hungry for educational opportunity."

Training Technology Event (ETTE) last October, which recognized education as an important competitive weapon for both nations and companies.

In Intercon, the Asia-Pacific Education Services Centre in Melbourne, Australia, addresses local training



Competing with classrooms will be new learning devices like the multimedia center shown here with Chosen Cheng and Derrick Kikuchi.

Training turns to high-tech tools

Some high-tech alternatives to the self-contained classroom:

Teleclasses are broadcast via satellite from the Interactive Technical Education Network in Cupertino, California, to other HP classrooms or learning centers. Using a keypad, students at 35 U.S. sites can flash answers back to the instructor.

Teleconferences are broadcast regularly by HP-TV in the U.S. and by the Lyon (France) European Education Center.

Two years ago South Queensferry, Scotland, pioneered computer-based training (CBT) for use by both teams and individuals.

For self-study, a student may receive a workbook, audiocassette or videocassette. Some CBT tutorials and simulation have interactive video added. Adding the same video and audio capabilities to databases

creates hypermedia.

Corporate Education's education technology group under Chosen Cheng and HP-TV are co-developing a Media Applications Project that will be a showcase for the newest learning modes.

An HP Vectra personal computer with a multimedia card allows an integrated display of audio, video, graphics or animation on a single screen. The project team is testing various configurations for a basic platform anyone can use.

Bernie Trilling of HP-TV foresees the day when an HP student can quickly jump from work on a desktop computer to watching a teleclass on a window of the screen. "You'll be able to dial up at your desk a multimedia course that includes stills and live video," he predicts.

needs. It is managed by Bruce Marsh. Last year the center shortened the eight-week Far East Sales School's basic training in Hong Kong by packaging the first week's instruction into local languages for use in the countries.

Margaret Jones and Bob Coutts, Intercon personnel programs manager, work closely together. They have developed a "one-stop delivery" model for integrated training. An education manager will be named in each country this year.

Locally, trainers may add their own courses, such as the JumpStart program developed by Canada's Professional Development Center to give newcomers the practical know-how they need, including HP Desk.

The corporate departments of Manufacturing, Engineering, Marketing, Quality, Finance and IS provide specialized courses for their functions that are often shared. For example, Corporate Marketing Education's popular "Building Market-Focused Organizations" is delivered to cross-functional business teams. Quality training has long since

"As our business has changed, people need new skills..."

spilled out of the production area and is used across the company.

In Corporate Engineering, Scott Beth has developed a modular program for "Project Management Training" in R&D that also applies to other functional areas. Local trainers can select from a sequence of 30 courses, some developed within HP and others obtained from outside vendors.

For the Massachusetts sites of the Medical Products Group, Kathy Marble has combined elements of Scott's curric-



STEVE CASTILLO

A six-person team from a WCSO Functional Management program plan their strategy to compare how two stores in a San Jose (California) shopping mall satisfy their customers.

ulum with others from the Cupertino site and Boise, Idaho, and added such medically focused courses as physiology.

At the Boise Printer Division, R&D section manager Jim Hall has been a champion for bringing more technical education to the remote Idaho city through seminars and televised courses. He finds "people are really hungry for educational opportunity." He co-chairs a site Engineering Education Council to advise on classes of great interest.

At HP Labs Bristol, trainer Jacquie Penn finds senior management "takes training education and development as seriously as the Japanese do—it can be a real competitive advantage." Along with a full schedule of courses and off-sites, regular brown-bag luncheons feature outside speakers suggested by members of the technical staff. Foreign language instruction is popular.

Some technical problems in labs at the New Jersey Division led R&D manager Jim Gallo to propose a division-wide self-assessment of technical

strengths and weaknesses to guide training in core competencies. Employees helped shape the survey.

"As our business has changed, people need new skills and the flexibility to change with the times," Jim believes.

The need for a heightened commitment to career-long education for engineers is clear from estimates of the early obsolescence of technical skills (a half-life of 2.5 years in software engineering). "With fewer recent graduates hired from universities to replenish our technical knowledge, we must get our innovation from the people we have," says Alfred Moyé, manager of continuing education in Corporate Engineering.

Each year thousands of HP engineers take advantage of televised university courses and others in all functions, like Yvonne Peru, enroll as students on university and college campuses.

To answer the question posed by Yvonne's kids, "Continuing education and training is where it's at." ■