

(Speech delivered by Dr. Gary B. Hansen to the Western Conference of Apprenticeship Coordinators, Salt Lake City, Utah, June 4, 1991.)

## **Apprenticeship in 21<sup>st</sup> Century America.**

### **Introduction**

Good morning. It is a pleasure to be here today and to participate in the annual meeting of the Western Conference of Apprenticeship Coordinators. I appreciate the invitation from Ricky Bryan to address your group on the subject of apprenticeship in the 21<sup>st</sup> Century. Let me begin my remarks by outlining what I believe to be one of the greatest problems facing America today: increasing international competition.

### **I. The Problem**

In case you have not heard, America is in a competitive crisis. Report after report and article after article document that America's economic future is no longer secure. The world has changed, and we have failed to keep up with the changes.

What has happened in America and the world to cause these economic changes, and what does it mean for us in the apprenticeship community?

#### **A. The new economy**

We now live in a new economic order. Some call it the "post-industrial economy," others call it the "service economy," and still others refer to it as the "global economy." Whatever it is called it reflects a changed world featuring a globalization of economic activity, the increased wealth of nations, technical advances, a diversification of tastes, the increased value of human time; the commercialization of free labor, and the increased participation of consumers in production and service delivery (*America in the New Economy*, 1991.)

Most significantly, the new world economy is highly competitive—with run-down Third World nations such as Taiwan, Korea and Singapore becoming world premier exporters; and Germany, with one quarter of our population, almost equaling us in exports; and Japan becoming the world's economic juggernaut; and America becoming the world's biggest borrower.

Today, our economic success depends on our ability to compete in the world.

Yesterday we could compete on the basis of productivity and prices—but, during the past two decades our productivity growth has slowed to a crawl. It now takes nearly three years to achieve the same productivity improvement we used to achieve in one year. And, if that is not bad enough—

Today and tomorrow we must meet the competition on productivity and prices plus

quality, variety, customization, timeliness and convenience.

## **B. Competing in the new economy**

We cannot restore productivity to historical levels and meet worldwide competitive standards with an unskilled and untrained workforce.

In order for the U.S. to remain globally competitive, our businesses must produce more and better products than our competitors. We must have “robust productivity,” flexible volumes of output, short lead times, affordable quality, and a strong customer focus.

This kind of production requires “high performance work organizations,” of highly skilled, flexible, and independent workers—the type of workers who are trained in a quality apprenticeship system.

A unique mix of competencies, knowledge, and skill is necessary to meet the new competitive standards of a global economy. Consequently, our old productivity approach—of deskilling work and reducing personnel costs will not work in the new economy. The new technologies and organizational formats require more flexible and highly skilled—employees.

## **C. Our present training versus the training our workers need.**

Research studies on training in America have found that the attitudes of most American employers about training are Neolithic and abysmal. Study after study shows that most American workers do not have the kind of skills needed in the new economy, but American employers are doing little to change the situation.

(1) only about 5 percent of American companies agree that there is a skill gap in the American workforce (National Center on Education and the Economy, 1990).

(2) only 5 percent of American businesses are making the necessary transition from the traditional model of assembly line production to the “high performance work organization,” and these employers report skills shortages among entry-level employees.

The MIT Commission on Industrial productivity repeatedly found managers who said, “We have no training problem here.” The Commission concluded that “there seems to be a systematic undervaluation in this country of how much difference it can make when people are well educated and when their skills are continuously developed and challenged. This underestimation of human resources becomes a self-fulfilling prophecy, for it translates into a pattern of training for work that turns out badly educated workers with skills that are narrow and hence vulnerable to rapid obsolescence.”

The recent OTA report to Congress concluded that “Good training pays off—for the individual worker whose skills are upgraded, for the company seeking a competitive edge, and for the Nation—in overall productivity and competitiveness. But a 1987 survey of state and national trade associations revealed that most association executives question the benefits of

training. (Hilton, 1991)

Of the companies surveyed, 80 to 90 percent have chosen low-skill, low-wage employment in order to keep production costs down. Those companies are not concerned with whether their employees have the ability to perform complex tasks and are satisfied with putting “a picture of a hamburger on a cash register” so that reading and math skills are not required of their employees.

If our training situation is bad, how are we doing compared with our competition?

The answer is--poorly! We are in danger of becoming a second-rate economic power because of our complacent attitudes about training and the resultant failure of the private market to invest enough in human capital—when compared with the efforts of our competitors. An article in the current issue of *Business Week* states the issue succinctly:

Other advanced industrial nations make up for the failure of the private market to adequately invest in human capital. France requires that companies either spend 2% of their earnings on training or pay a tax into a common training fund. Sweden spends 2 to 3% of its GNP on worker retraining through a system of local labor-market boards responsible to management, labor, and local government. Germany has a world-class system of classroom instruction and on-the-job apprenticeship, which turns out first-rate technical workers. Trusting the market, fearing government, we have none of the above." (Kuttner, June 3, 1991, p. 16)

Our national Commission of Education and the Economy found that "other leading industrial nations are building strong economies around highly skilled workforces and new forms of work organization, while most employers in the United States continue to define jobs narrowly, asking people to perform repetitive, rote tasks that require little in the way of real skill."

Research by ASTD confirms that "it is the lower half of the workforce that is not well prepared and this is where America is losing the competitive race." ASTD has estimated that the average U.S. firm spends only 1.4 percent of payroll on training, compared to roughly twice that amount by our foreign competitors. The handful of U.S. companies seeking to be “world class competitors” is spending from 3 to 6 percent of their payroll on training. (ASTD, 1990)

The differences in attitudes between the U.S. and our competition toward industrial training are marked. Let me give you one more concrete example: West Germany

Recent research by the OTA demonstrated that employers in what was formerly West Germany spent more than twice as much as u.s. firms on worker training--\$633 per worker annually compared to \$263 annually\_for U. S. workers.

The picture is even worse when comparing German expenditures for apprenticeship with those of U.S. employers. "West German employers invest nearly 17 times as much in training per apprentice as U.S. employers invest in training per average worker.

The West Germans provide apprenticeship training to 6.5 percent of their workforce. We provide apprenticeship training to only 0.16 percent of our workforce. About 65 percent of each class of West German middle school graduates enters apprenticeship training, with over 1.7 million young people in training at any given time.

The average u.s. apprentice is at least 23 years of age, has previous employment or education, and works in unionized construction or manufacturing. Clearly, apprenticeship is not the major mode of initial training for high school graduates in the U.S. "Instead, 57 percent of these graduates enroll in postsecondary education, and the majority subsequently drop out, leaving to employers the task of completing their training." (Hilton, 1991) j

## **II. Possible Solutions**

Given the dismal picture of industrial training in America, and the real danger this poses to our economic well being, are there any solutions to the mess we are in?

First of all, while the U.S. industrial training system is extensive, it is also fragmented and not integrated. In fact it is probably a misnomer to call it a system. The main burdens of industrial training fall on employers and the schools, neither of whom are doing an adequate job. Furthermore, there is little coordination and much jealousy among the players. The result, more often than not, is what the National Alliance of Business calls "muddling along with a fragmented work force development strategy." I would call it muddling along without a workforce development strategy.

What can be done about this situation? Let me list a few of the possibilities:

### **1. Reorganize the schools and expand the vocational education system**

Since industry in America depends on the schools to provide pre-entry vocational education and employers seem to like it that way, let us keep this system. However, since the schools cannot hold young people with their current curriculums and we need better training for our workers, why not turn the secondary school system into full-fledged vocational schools assisted by employer advisory councils to ensure that their curriculums and training programs are relevant to the needs of a competitive work force?

### **2. Expand the JTPA system.**

Since, for a variety of reasons, the schools have failed and will continue to fail to provide the education and training needed by our youth, why not expand the JTPA remedial training system to fill in the gap and give our young people some basic vocational training at federal expense. The Private Industry Councils could serve as the link between industry and youth training programs.

### **3. Place the full responsibility for training on business and industry.**

We can follow the Japanese example and place the full responsibility for training on

business and industry. The schools continue to teach the basics—reading, writing and arithmetic (now called computation) plus communication (speaking and listening), adaptability (problem solving and creative thinking), group effectiveness (interpersonal skills, negotiation, team work, (organizational), and influencing skills (leadership—but get out of the vocational education business and cast off their other extraneous activities. Get the basic education job done by age 16, and make companies responsible for training their workers after they are hired. We could even place a hefty training tax on them to ensure they get the job done, like the French.

#### **4. Adopt a European-style apprenticeship system**

Modernize and expand the nation's apprenticeship system to provide the primary source of skilled workers—except those requiring technical or academic training in colleges and universities. Change the nation's training system to provide apprenticeships for 50 to 60 percent of non-college bound youth in a much larger variety of occupations. For three or four years these would-be apprentices would spend four days per week in on-the-job training and at least one day per week at a state-supported vocational school. The apprenticeship would emphasize technical skills, developmental skills (self esteem, motivation and goal setting, personal and career development), group effectiveness skills, and influencing skills.

Financial carrots and sticks would encourage business and industry to organize in area or trade and industry associations. These organizations, together with labor unions, would provide representation to a BAT-run national Vocational Training Institute which would develop national curricula for each apprenticeable occupation. Federal resources would augment industry financial support of apprenticeship and help support training centers and foster group training schemes for smaller employers.

#### **5. Develop an effective, comprehensive national training policy**

Accept the idea that there should be a public-private partnership and close cooperation between the two. Develop a rational and logical framework for training with appropriate and well-defined roles for each player and a coordinated delivery of training and services. The system would include a major role for apprenticeship, adequate resources for all forms of entry-level skill training and for retraining, and provide remedial training and support services for people who need additional help to succeed in the labor market.

A system of accountability would be developed for all players, and they would be held to it. Finally, the system must be flexible enough to meet the needs of a dynamic economy and administered and financed to provide effectiveness and efficiency well into the 21<sup>st</sup> century.

#### **6. Continue to muddle along**

If all else fails and not political consensus can be reached in support of any of the previously mentioned solutions, we can continue as we have been doing and risk a second-rate economic power with a much lower standard of living for our children.

### **III. Where Does The Apprenticeship community fit in to all this?**

If one assumes that change is needed and/or that changes in our workforce training system will occur because of the pressures from the new economic order, what will/should be the role of the apprenticeship community in the process?

- A. We can be creative contributors and active players in the decision-and policymaking process
- B. We can stand on the sidelines and watch the process occur around us, or
- C. We can hunker down, fight changes and protect the existing apprenticeship system at all costs.

The strong negative reaction expressed by many in the apprenticeship community to the recent proposals by the Office of Workbased Learning to modify Section 29-29 demonstrates how serious the situation is and suggests that some of you have opted for the third course of action.

While I respect the opinions of those who oppose change and understand their desire to retain the existing system of apprenticeship, I do not agree with that position. More importantly, I do not think their position and attitude is tenable in the face of the new world economic order.

Let me present the issue for you in the form of three propositions: (1) America desperately needs a coherent national training policy and a new training system if we are to continue to be competitive in the new world economic order; (2) the pressures for change are so great that something must be done—including adopting new policies and programs for industrial training; (3) if the apprenticeship community wants to be an integral part of the system which will be created, it had better come up with some workable ways to modify traditional apprenticeship concepts so that they meet the needs of the new system. Otherwise the policy makers and designers of the new national training system will bypass apprenticeship and its institutional framework altogether. What remains of traditional apprenticeship will be left to languish in the backwater.

Now, it is one thing to argue about the details of apprenticeship—such as minimum length, portability, minimum ratios of apprentices to journeyman, and state preemption—as if these are the real issues of the day. (Perhaps a little like playing cards on the deck of the Titanic after the ship rammed the iceberg.) But, it is quite another thing to talk about how you can be an important part of the nation's training system in the 21<sup>st</sup> Century. You have a choice!

Do you want to continue your present role of serving only 0.16 percent of the labor force and ignoring the remaining 120 million members of the labor force, or do you want apprenticeship to become a major component of America's work-based learning system in the 21<sup>st</sup> Century? I sincerely believe that is the choice before you today. And your decision must be made fairly quickly, because improvements are long overdue.

It is my firm belief that apprenticeship is and can be an effective program for training a

large segment of our young people for work in the new economy, but not without substantial modification and adaptation. A public representative of the FCA, I am willing to devote my time and energy to achieving two objectives that I believe are not mutually exclusive: (1) helping preserve those elements of apprenticeship which are essential for its continued success as a system of skilled training; and (2) overhauling and promoting an improved apprenticeship program so that it becomes a major component of the nation's training system for the 21<sup>st</sup> Century.

I personally hope you choose to join me in this effort because the journey will be exciting, and with your help could provide the nation with a time-tested, yet dynamic new training system which can make us competitive once again.

Thank you.

### **Notes for the introduction of the Speaker**

**Gary B. Hansen**, is a Professor of Economics and Director of the Business and Economic Development Services, Utah State University. He holds a Ph. D. from Cornell University with specializations *in* Labor Relations and Labor Economics. He was a Fulbright Scholar at the London School of Economics and received his B.S. and M.S. degrees in Economics from Utah State University. Dr. Hansen is the author of 90 publications in the areas of employment and training policy, labor relations, entrepreneurship and new business creation. He is a member of the American Economic Association, Industrial Relations Research Association and the International Industrial Relations Association. Dr. Hansen is a practicing arbitrator and has been a consultant to numerous businesses, labor and to government. agencies, including U.S. West, U.S. Army Europe, Ford Motor Company, AFL-CIO Industrial Union Dept., U.S. Dept. of Labor, Utah Office of Job Training for Economic Development, and the International Labor Office in Geneva, Switzerland. In 1985 and 1986 he was a member of the Secretary of Labor's Task Force on Worker Adjustment that helped design a new national system for assisting workers displaced as a result of structural changes occurring in the American economy. The recommendations of the task force were subsequently enacted into law by the U.S. Congress. He also served a three year term as a member of the Federal Committee on Apprenticeship from 1990 to 1993.