A study investigated the current enterprise training system in Taiwan and proposed suitable training suggestions for manufacturing industry through a carefully designed case study. Literature review and field study were used to gather research data. Interviews were conducted at four large manufacturing companies during the period October 1990 to January 1991. Content analysis was used to report the survey findings and to integrate the significant factors for the proposed training model. The study concluded that large manufacturing companies in Taiwan are facing new challenges that come from international competition, changes in the workforce, technological advancement, and lack of appropriate training models. Therefore, the training system of the manufacturing industry and its training course content must be revised. Global skills, collaboration, accountability, support for training, and employees' attitude development are the key concepts and the most important components for enterprise training in the manufacturing industry. (Contains 12 references.) (Author/KC)
The Enterprise Training System and Training Content
Analysis of Selected Manufacturing Companies
in Taiwan, R.O.C.: A Case Study

by

Dr. Mike Chu-Hsun Kuo, Professor
Department of Industrial Education
College of Technology
National Changhua University of Education
Paisa Village, Changhua City, 50058
Taiwan, R.O.C.

Presented
St. Louis, Missouri U.S.A.
December 7, 1992

TRADE AND INDUSTRIAL EDUCATION DIVISION
AMERICAN VOCATIONAL ASSOCIATION CONVENTION
The Enterprise Training System and Training Content
Analysis of Selected Manufacturing Companies
in Taiwan, R.O.C.: A Case Study

by

Mike Chu-Hsun Kuo *

ABSTRACT

The purposes of this study were to investigate the current
enterprise training system and to propose suitable training
suggestions for manufacturing industry through a carefully
designed case study. Literature review and field study were
adopted for gathering research data. Four large manufacturing
companies in Taiwan were chosen for the case study. The research
period was from October 1990 to January 1991. Content analysis
was employed to report the survey findings and to integrate the
significant factors for the proposed training model.

It is concluded that large manufacturing companies in Taiwan
are facing new challenges that come from international
competition, change in workforce, technology advancement, and
lack of appropriate training models. Therefore, the training
system of the manufacturing industry and its training course
content must be revised. Global skills, collaboration,
accountability, support for training, and employees' attitude
development are the key concepts and the most important
components for enterprise training in the manufacturing industry.

* Dr. Mike Chu-Hsun Kuo, Professor
Department of Industrial Education
College of Technology
National Changhua University of Education
Paisa Village, Changhua, 50058
Taiwan, R.O.C.
FAX (886)-4-721-1176
Phone (886)-4-721-1003
I. Introduction

There are only eight years left before the year of 2000. During the past decades, the world has been changed dramatically. The changing nature of modern society is sustained and has been accelerated, and thus humanity is stepping into a new era (Toffler, 1980).

Likewise, social change has shaped the new structure of Taiwanese enterprise. The visible changes are the unbalanced labor supply and demand, increased labor costs, and the outdated character of labor organization. To cope with these changes, enterprises are being forced to upgrade their good training methods and provide better training curricula for their workers (Stern, 1988; Stern, 1990).

Recently, some Taiwanese companies that once created economic miracles now have closed up their business in local markets, and moved to eastern Asian countries such as Mainland China, Philippines, Thailand, and Indonesia. This is due to their inability to pay ever rising wages and salaries (Kuo, 1990). High polluting industries such as chemical companies, and labor intensive industries such as electronic and shoe manufacturers, are facing new challenges (Japan Management Association, 1989).

Obviously, if no action is taken to refine production processes, adopt high technology equipment, or enhance workers skills, the traditional Taiwanese companies will soon be phased out of the international market (Stern, 1990; Stern & Muta, 1989; Stern, 1986). Enterprise training then becomes an important
priority concern for most Taiwanese companies.

Gaining an understanding of how large Taiwanese manufacturing companies are shifting their enterprise training course content and adjusting their training structures (Deal & Kennedy, 1985) will certainly provide important implications for the international community on human resource planning and development (Sredl & Rothwell, 1987; Walker, 1980). Recognizing these present and ongoing changes, the author then conducted this study by interviewing enterprise training specialists, human resource planning professionals, and then proposed research recommendations.

II. Methodology

A traditional lengthy questionnaire survey usually takes fifteen minutes to complete. Generally, a questionnaire survey has the defects such as low rate of return, low reliability, and the possibility of sampling bias (Dillman, 1978). In order to not be trapped on these defects, this author visited the surveyed companies, and interviewed the enterprise training professionals that were working for the training and development department and/or human resource development department of each company, to gather the research data.

With the help of EVTA (Employment and Vocational Training Administration), a visit to the four selected large manufacturing companies in Taiwan was made possible. These companies are Nanchiao Chemical Company, Chiasin Food and Oil Producing

The research period was from October 1990 to January 1991. Content analysis was employed to report the survey findings and to integrate the significant fact... or the proposed enterprise training recommendations.

III. Findings and Discussions

A. New features of enterprise training in large Taiwanese manufacturing companies.

1. Multidimensional design of training methods and training course content.

Adopting new technology equipment to strengthen employees' professional knowledge, improving technical abilities, consolidating enterprise centrifugal force, and establishing organization culture, become the common goals for the administration of the large manufacturing companies.

With an income tax reduction plan, companies can gain significant tax exemption by providing enterprise training for their own workers.

At present, three common training fields in Taiwanese large companies are: (1) work related training programs, (2) fundamental skills and knowledge training programs, and (3) leisure time education programs.

2. Flexible time slot and training programs.
In addition to arranging company training by themselves, large manufacturing companies also send talented workers to training programs outside the companies. An approximately fifty percent subsidy for workers' training costs was also available if the workers decided to take training course that was less related to their job.

Usually, those who are chosen to participate in training programs outside the companies are potential supervisors, program directors, and managerial successors. The most popular methods chosen by the workers are taking credits or degree programs at a four-year university or graduate school.

It seems that low level skill workers are trained within their own companies. One of the most preferred training methods used to train base level workers is the apprenticeship system. Medium level supervisors and high level management staffs usually take their degree study or credit courses at a four-year university or special training agency.

Usually, the training time for base level training is between six months and one year. For the managerial position successors, this ranges from one year to several years depending on job characteristics. In other words, training time is flexible based upon the jobs or positions that the company needs.

3. Collaboration between companies and academic units is strengthened.

Virtually, almost all large Taiwanese companies have some collaboration with academic programs. Three cooperative systems are used to implement this join effort. Sending employees to
contracted vocational or technical high schools to study senior high school curriculum is one of the most preferred ways. Workers usually take a half day study and half day work program.

The second way of cooperation between technical high schools and industry is that the workers must in turn work three months in the affiliated company and take three months courses in a contracted school for three years. Working and studying together with a flexible time slot is an effective way of collaboration at senior high school level. Under this system, a beginning worker then can benefit from taking a full time job and as a full time student at the same time.

Sending college students to a contracted company during summer vacation for three months skill practice is another way of collaboration in Taiwan. Companies can benefit from such cooperation by obtaining new ideas to develop their new products, while college students can take their apprentice experiences from industry.

4. Systemized human resource planning departments are well established.

More and more managers believe that human resource development is an asset to their enterprises. This perception has facilitated the establishment of training centers in large manufacturing companies possible for enterprise training.

Managers of enterprises believe that if an enterprise wants to pursue a better development, it is necessary to teach and/or train workers adequate and updated knowledge and skills to avoid
becoming obsolete. Besides, a well designed training program can also insurance a stable and qualified labor supply, especially in a large manufacturing company.

The educational backgrounds of training professionals in large Taiwanese manufacturing companies today are improved significantly. Most responsible persons that work for human resource departments or training departments are graduates from a college or university either in Taiwan or abroad. Thus, aside from training expenses, pursuing a better way of training in Taiwanese large companies is not a difficult task to fulfill.

B. Difficulties of enterprise training and its challenges.

1. Lack of training programs for trainers.

It is true that those who conduct enterprise training might have no in-service training programs. Therefore the workers for such a company might have only fifty percent of useful knowledge left if they take no in-service training in five years. This, then, is a crisis for large Taiwanese companies-to produce effective trainers to run these programs in their companies.

2. Insufficient funding available for enterprise training.

Projects of human resources development for company training usually fit into a company's long term strategy planning. Needless to say, managerial consideration about expenditure allocation will be put on production or services as first priority. Thus, company training usually receives only a small part of a company's resources. Large companies in Taiwanese
industry reveal this embarrassing and typical lack of adequate funding for training.

3. Evaluation about training outputs is not well designed.

In the educational system, evaluation has been implemented for quite a long time. However, in the training system, conducting a training effectiveness evaluation is not so often to be seen. Measuring training outputs is the only way of providing feedback and refining training content. Naturally, managerial staffs prefer an intuitive way of assessing the lack professional knowledge about enterprise training systems and their content.

IV. Implications

1. It is necessary to shift the legal perception to practice in the enforcement of the Vocational Training Act (VTA).

The way of hiring highly talented workers in Taiwanese manufacturing industry, especially the high technology companies, is by paying a higher salary than offered by other companies. That is hiring talented people that were trained by the other companies.

EVTA is the only government agency in Taiwan, the Republic of China, that prepares budgets for training skilled workers for enterprises. However, paying training costs through private industries is reasonable because EVTA's budget is supported by all taxpayers rather than enterprises exclusively. Another legislation such as providing subsidies for enterprise training maybe the first step to implementing the vocational training act.
into reality.

2. Training agencies should provide international training programs for enterprises that want to franchise their business overseas.

Internationalization is becoming an important component in large companies. Most enterprises have no international professionals while considering making joint ventures overseas. Responsible agencies should pay more attention to this new tendency. Programs such as international trade, foreign language training, foreign culture understanding, customs, working conditions, and the study of federal laws where the joint venture company is based are just some examples of what large companies have needed the most.

Providing such training opportunities is extremely necessary for most companies that want to expand or set up their new business territories overseas.

3. An effective consulting group organized by a professional association or government agency is a good way of improving a company's training system and training content.

Legal specialists, training experts, academic program researchers, and government officers are key persons to assist enterprises in their company sponsored training. A joint effort by grouping these highly talented people will surely provide a sound systematic examination of enterprise training problems and difficulties. The subject matter expert (SME) comments and recommendations that are given for the consulted companies will
prove invaluable.

In fact, this approach is another vehicle of collaboration between industry and the outside world of the company. With this assistance, enterprises that are lacking talented people to design or implement their enterprise training program, then, can easily setup their own training system.

4. A proposed training model for large manufacturing companies.

Large manufacturing companies in Taiwan now are facing new challenges that come from international competition, change in workforce, technology advancement, and the lack of appropriate training systems and models. Therefore, the training systems of manufacturing industries and its training course content must be revised. A proposed training model for large manufacturing companies is shown in Figure 1. Global skills, collaboration, accountability, support for training, and employees' attitude development are the key concepts and the most important components for enterprise training in manufacturing industry.
Figure 1. A proposed training model for manufacturing companies.
V. References


