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# A Study on the Role of Public Vocational Training in the Area of Human Resources Development in Japan

Tsutomu SHIMIZU

This article intends to make clearer the mission or role of public vocational education and training in Japan, which, in author's opinion, is not so concrete as to be able to transform it into actual course curricula.

The mission or role has been being changed in the past in connection with changes of economical and social environment. More direct effect on it has been the varied changes of technical and manufacturing structure in individual firms, which brought about the education and training needs in technology and skills, as far as public institutes can or obliged to undertake the education and training to satisfied the needs. In other words, if they fail to satisfy the needs, specific mission or role is not performed. In the end of discussion so far, followings are suggested as the minimum roles of the public institutes.

- 1) Education and training which individual firms have difficulties to conduct by themselves because of financial burden or of others and which, in the stand-point of public benefit, are supposed to be managed by the government.
- 2) Maintenance and succession of "absolutely basic skills" and "manufacturing minimum skills" which have been declining due to manufacturing revolution.
- 3) Education and training which involves methods or techniques difficult for firms to conduct by themselves.

In addition to them, two programs among those which are undergoing in public institutes are taken up for deeper examinations in terms of their roles, that is, how the needs are satisfied by these programs. These are "Initial Training" and "Practical Course". Especially, the latter still now under construction, is discussed as it is a good clue for further investigation into the mission or role of public education and training in terms of its fitness to needs of firms. As far as looking into the plans compiled so far, concept as a whole is excellent. And, if it is actualized in the future, innovative change may come about. However, the more the program is innovative, the more it could encounter difficulties in its implementation process. Some realistic recommendations are presented to those who are going to involve in the planning and implementation of the program.

# How to Develop a CAI Courseware (2)

Masayuki SHIMADA, Taiji ONO

This paper deals with how to develop a CAI courseware by the use of Macromedia Director.

Conventional CAI coursewares have been developed without any consideration for modification or revision by instructors. CAI courseware has traditionally been regarded as the materials developed by professionals. Therefore, it is not easy for instructors to develop and revise a CAI courseware only by themselves. This direction of CAI courseware development, however, will produce some educational problems in the near future. In the area of CAI teaching materials, the instructor should have more responsibility in the development and revision of the materials.

Giving priority to instructors in utilizing and developing the CAI teaching materials, we have identified two proposals in the utilization method of authoring system.

The first proposal is to develop a guide book for the development of CAI courseware. The authoring systems prepare some manuals for the users, but their description is too detailed for instructors to develop CAI teaching materials. A guide book or guided coursewares are necessary for instructors who are willing to develop CAI teaching materials. In this paper, we have proposed how to prepare such guide books and how to write them for instructors.

Second, we propose to develop some examples, samples, graphic data and sound data, which are useful to develop CAI courseware.

Some examples of the guide book, CAI courseware, samples, graphic data and sound data, which we developed using "Macromedia Director Version 4", are also described.

# Production Equipment Change and Problems of Maintenance Skilled Worker Training

– Investigation of the car manufacturing companies –

Kazuo MORI

This research tried to examine the influence of the change in the production equipment by a recent technological revolution on the maintenance skill. Moreover, taking into account the characteristics and the vocational ability required for maintenance skilled workers the problems of the skilled worker training were examined.

As for the research method, we selected three companies related to the car manufacturing to conduct hearing investigation and the questionnaire. The hearing results were documented and classified. The questionnaire results were classified by the key words. The problems of maintenance skilled worker education can be summarized into the following six points.

- (1) Many factors can change maintenance skills.
- (2) Planned implementation of the maintenance skilled worker education has just started.
- (3) Neither OJT nor Off-JT is enough.
- (4) Operators need to receive the maintenance education.
- (5) Now, it is difficult to hand down the maintenance skills.
- (6) It is necessary to set the ability development process according to maintenance skilled worker's characteristics.

# The Development and the View of CUDBAS

– Preliminary research concerning structurizing and  
systematization of vocational ability evaluation –

Kazuo MORI

CUDBAS (A Method of CURriculum Developing Based on Ability Structure) developed in 1989 is used in a wide field. The trends in the CUDBAS have never been researched yet. It is assumed that there is a certain tendency there in the method according to its characteristics and effects. This thesis tried to examine development and the view of CUDBAS. We collected and analyzed related documents. As a result, the development can be seen in the following three areas.

- (1) Curriculum development
- (2) System construction for education and training in enterprise
- (3) Evaluation of education and training

Challenges of CUDBAS, as a vocational ability analysis method, can be the following 4 points. First, the relation among the obligation, the education, management, evaluation, and personal arrangement has to be further clarified. Second, the CUDBAS has to be simplified. Third, the cost of introducing CUDBAS has to be reduced. Fourth, the CUDBAS can be adopted in similar and related occupational categories.

# “Human resources development facility for the multimedia age”

– Basic research for building in-home learning systems –

Shizuyasu SHIMA

With development of information communication technology, especially the advanced digital and network technology in recent years, the economic society has brought significant changes to the family lives, including the drastic spread of the Internet. It is truly the arrival of multi-media information communication society now. Under this circumstances, Construction of learning systems at home using the multi-media related equipment have been in demand for promotion of the development of vocational ability which can make the best use of workers' personality.

Based on the circumstances, for the construction of the learning system at home, this investigation has been conducted to grasp the users' needs and pigeonhole the required conditions of the system.