

Project Evaluation Research of Labor Potential Development in Electrical and Electronic Industry

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ABSTRACT

The purpose of this research was to evaluate the success project of labor potential development in the electrical and electronic industry. The sample populations were divided into 4 groups which consisted of 283 of technician group, 298 of the new graduates, 338 of the trainees of labor development, and 56 of group of personnel at the information lecturer level. The research instruments were: 1) Success evaluation form of getting jobs on the new graduates, 2) Evaluation form of applying knowledges from training to apply to the technician jobs, 3) Satisfaction evaluation form of the trainees on the activities of labor development, and 4) Interview form. Data were analyzed by descriptive statistics, using SPSS for Windows.

The results of this research indicated that: 1) Technician group had the average of knowledge application on jobs at a high level in terms of self-development, work development and organization development, 2) The new graduates had the average of sense and success on getting jobs at a moderate level in every aspect in every year of study (2008-2010). However in 2011, the average of sense and success on getting job in terms of knowledges and competency was at a moderate level whereas the expectation and motivation were at a high level, 3) Almost all of the trainees of labor skills development were very much satisfied. The satisfaction on trainers were appropriate was at the highest level, and 4) lecturer personnel mostly applied the knowledges from training to convey by using single lecture the most.

Keywords— Labor potential development, Evaluation research, Utilization-focused evaluation, Outcome-based evaluation

1. SIGNIFICANCE OF PROBLEMS

Today, technologies are being developed rapidly. This affects the industrial parts are also being changed and the technologies are being improved consistently. Human resources are regarded as crucial basic factors for country development in all levels especially in the labor of manufacturing section in the industry since they are the parts to push the business to be able to compete in every condition. Moreover, today is called globalization which has serious and rapid competition to respond the industrial needs in a right way. Hence, good human resources should be the personnel who have knowledges, competency and skills of vocations. These are the factors affecting the response of organizational goals and affect the enterprise or business to be progress and be able to adjust and deal with problems, obstructions and world situations which are being changed rapidly and consistently.

According to the reasons above, it can be seen that things that the industrial sections have to operate include the labor potential development and productivity development which is eco-friendly products. This is because the labor potential development at initial time is the main duty of educational system. The manufacturing sections do not participate directly in the manpower development process. The trend of manpower development of Thailand is in wide form and focuses on producing lots of manpower to respond the labor market needs according to the concept of development of economic growth and employment. Therefore, the distribution of civilization hurriedly through rural section in order to reduce the economic overlap, the manpower development in terms of education above imply the equity building in education through the disadvantages more than focus on encouraging the technological potentials and competence according to the development plan of industry of the country. These affect the quality of the graduates are in the level of having competency towards perception and able to adjust themselves to the various productive technologies at a level, however they don't have the competency to develop the productive technology at all. Especially, the personnel in terms of research and development, design, quality control and marketing are needed really.

The electricity and electronic institute realize these problems. In addition, there is the survey of the requirement in terms of labor development through manufacturing section, the labor potential development in the electrical and electronic industry was carried out in order to support the labor skills development to enter into industry, raise the labor skills and adjust the labors to support the production process and technological production which has been being changed

rapidly and to make effectiveness for the system placement, reserve and develop the human resources effectively. This is the support of the globalization adjustment. The objectives are as follows: 1) to develop the skill labors to enter into the manufacturing section in accordance with the labor needs of electrical and electronic industrial factories, 2) to maintain the employment state of the skill labors in the manufacturing section especially the effective skill labors, 3) to develop the standard curriculum for Thai electrical and electronic industry, 4) to develop the support system of skill labors of E&E in the national level, and 5) to organize the effective data base in terms of effectiveness on wage, labor, and technology. The scope of work consisted of 5 main activities including curriculum development, system development of skill labor support, man preparation before entering into industrial section, personnel support and development at a lecturer level, and data base operation [1]

According to the above purposes and objectives, to know the results of project which leads to development, it has to evaluate the project. The evaluation is the mechanism used for considering and developing the value [2] The evaluation acquires the results of the project as well as acquiring the information to improve and develop for effectiveness and efficiency which will make the project operation consistent and sustainable forever.

2. PURPOSES OF THE RESEARCH

This research aimed to evaluate the project of labor potential development in the electrical and electronic industry. The special purposes of the evaluation were as follows:

2.1 To evaluate the application of knowledges from training to the technician work.

2.2 To evaluate the success of getting jobs of the new graduates who participated in the training of potential development for the new graduates.

2.3 To evaluate the satisfaction of trainees and employers on activities of labor development.

2.4 To evaluate the conveyance of knowledges of the trainees in terms of support and development of the personnel at lecturer level.

3. SCOPE OF THE RESEARCH

The frame used in this study and evaluation of operation used the concept of model of utilization-focused evaluation according to the concept of Patton (1997)[3]. Moreover, both projects have been operated; therefore they were integrated by outcome-based evaluation according to the concept of Schalock (2001)[4] as well. Both concepts led to the purposes determination of this evaluation as follows:

4. RESEARCH METHODOLOGY

4.1 Sample Group

1) Technician group was 283 persons, 2) the new graduates for 298 persons, 3) the trainees of labor development for 338 persons, and 4) the personnel of information lecturer level for 56 persons.

4.2 Research Instruments

The instruments used in this research were 4 types which include 1) Success evaluation form of getting jobs of the students, 2) Evaluation form of knowledge application from the training to the operation of the technician, 3) Satisfaction evaluation of the trainees on the training activities of labor development, and 4) Interview form.

4.3 Data Analysis

This research divided the data into 2 parts; part 1) Basic data, the statistics used were frequency, percentage, average, standard deviation, and part 2) Data analysis for answering the purposes of research. This part used the basic statistic analysis whereas the qualitative data analysis used the content analysis.

5. DATA ANALYSIS RESULTS

5.1 Data analysis results of applying knowledges from training to the operation of technician

For knowledges from training could be applied to the operation, it was found that the responders of the evaluation form by representative in each year (2008-2011) had the average of applying the knowledges to the operation at a high level in terms of oneself, operation and organizational level except the responders who were the representatives between 2008-2010 which indicated that the knowledge from training could be applied in the organizational level at a moderate level.

For knowledge could be applied as overall image, it was found that knowledge was applied to the operation/ the percentage of applying knowledge was at a high level (60%-79.99%) the most (38.65%), the second was applying knowledge for operation/the percentage of applying knowledge was at a moderate level (40%-59.99%), and applying the knowledges to the operation/percentage of applying at the highest level or more than 80% was 33.33% and 20.92%, respectively.

According to the data analysis from open-ended questions, it was found that the trainees applied the knowledges could be divided into 3 groups as figure 1 as follows:

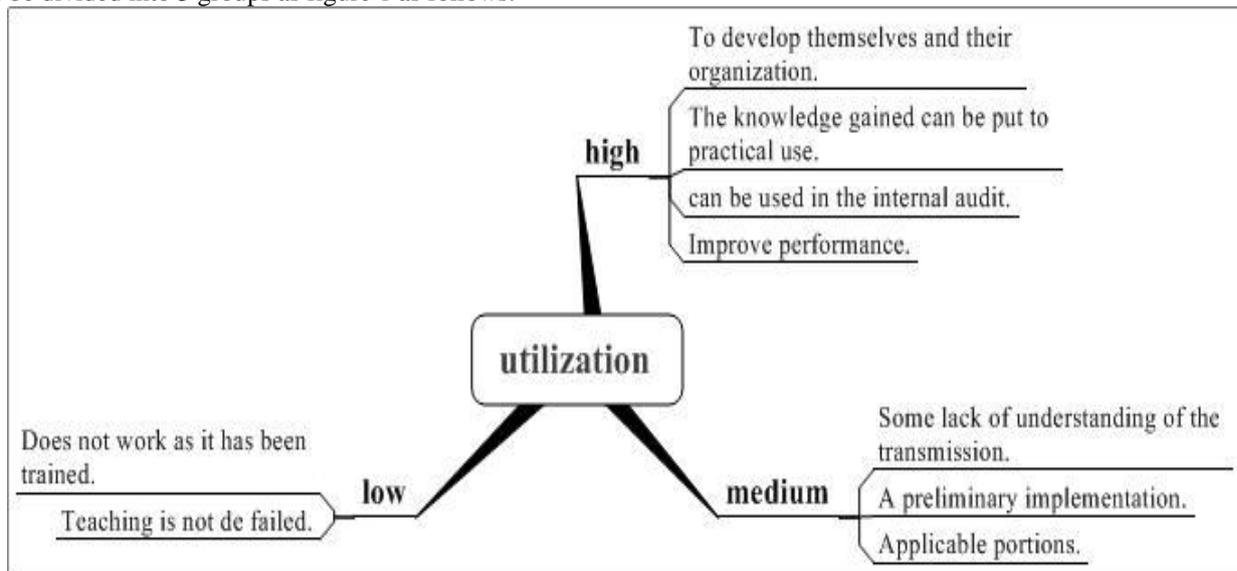


Figure 1: Level of application from training

5.2 Data analysis results of success on getting jobs of the students

The success of getting job categorized by the topics included knowledges and competency, expectation, and motivation. The result found that the responders of evaluation form had the average of sense and success of getting job at a moderate level in every aspect in every study year (2008-2010). However in 2011, the responders had the average of sense and success in terms of getting job at a high level in terms of expectation and motivation except in terms of the knowledges and competency which had the average at a moderate level as table 1 as follows:

Table 1: results of success on getting jobs of the students

success on getting jobs	Mean	S	Level
Data, 2008 (n=49)			
knowledges and competency	3.32	0.63	Moderate
expectation	3.39	0.64	Moderate
motivation	3.26	0.68	Moderate
Data, 2009 (n=50)			
knowledges and competency	3.55	0.69	Moderate
expectation	3.64	0.73	Moderate
motivation	3.43	0.71	Moderate
Data, 2010 (n=50)			
knowledges and competency	3.15	1.24	Moderate
expectation	3.33	1.39	Moderate
motivation	3.27	1.32	Moderate
Data, 2011 (n=50)			
knowledges and competency	3.65	0.81	Moderate
expectation	3.80	0.83	High
motivation	3.89	0.86	High

5.3 Data analysis result of satisfaction data of trainees on labor development

For the satisfaction of trainee, it was found that almost all of the trainees were satisfied. The satisfaction of the topic on lecturers was the most appropriate was at the highest level.

5.4 Data analysis result of conveyance of knowledges of trainees on personnel support and development at the lecturer level

5.4.1 Reasons of trainees at the lecturer level

According to the interview form about reasons of getting trained between 2008-2011 could be categorized the reasons of getting trained to be 5 groups as follows: Group 1 was the group who was the lecturer in the organization. The important reason of getting trained was the trainees wanted to get knowledges and practices skills of good lecturer for being the professional in this field and could apply the knowledges from getting trained to the organization as well as increasing the network of acquaintances interested to be the lecturers as well. Group 2 was the group who was the lecturer in the organization already but getting trained to apply knowledges to develop the curriculum of training in their own organization. Group 3 was the group who was not the lecturer in the organization but getting trained because they want to be the lecturers in the organization according to their own need and organization's need. Group 4 was the group who wanted to convey the knowledges through the personnel in the company because it was the policy, and Group 5 was the group who wanted to practice the personality.

5.4.2 The conveyance of knowledge of the trainees at the lecturer level

This group was divided into 2 parts, part 1 was the trainee who had the conveyance of knowledges to other personnel, and part 2 was the group who had no the conveyance of knowledges to other personnel as the details as follows:

5.4.2.1 Group of trainees who had the conveyance of knowledges to other personnel

The group who participated in the training and had the conveyance of knowledges of personal development training to other personnel, according to the interview form, most of the responders (70%) between 2008-2011 found that the responders conveyed the knowledges by single description the most. Moreover, there were some trainees used the way of integrated conveyance by 4 methods including the conveyance by description, conveyance by concept, conveyance by story telling and questioning, and conveyance by suggesting until getting self-access.

5.4.2.2 Group of trainees who had no conveyance of knowledges to other personnel

This group never conveyed the knowledges to other personnel during this interview. However, the possible plan and prediction were as follows:

1) Plan to convey the knowledges to the trainees who had no conveyance of knowledges to other personnel

Between 2008-2011, the trainee who had no conveyance of knowledges to other personnel mostly had no plan to convey knowledges but had the intention to use the method of telling or suggestion.

2) Results from conveyance of knowledges

Between 2008-2010, the group of trainees who had no conveyance of knowledge to other personnel mostly thought that it had no the results from conveying knowledges whereas the year of 2011, the trainees who had no conveyance of knowledges to other personnel mostly thought that the results of conveying knowledges would increase knowledges to themselves and others and could apply to solve the problems of the operation. However, it depended on the competency of the person who would apply.

6. RESEARCH CONCLUSION

Based on the finding and conclusion of this research show that the labor potential development in the electrical and electronic industry was carried out in order to support the labor skills development to enter into industry, raise the labor skills and adjust the labors to support the production process and technological production which has been being changed rapidly and to make effectiveness for the system placement, reserve and develop the human resources effectively.

7. RECOMMENDATIONS

7.1 Policy Level

Having clear policies, ways of operation and conduction, commandment or various governmental letters as well as the authorities responsible for the projects in every organization/educational institute organizing the related training should be make the policies clear and systematic.

7.2 Practical Level

7.2.1 There should be the placement of structure, system, data base to be up to date or develop the data base system of the trainees that can be linked to one another among organizations/educational institutes which organize the training as well as the trainees.

7.2.2 The evaluation results should be brought to review with the data or operation result from the research.

7.2.3 The committees should be set up to be the representatives from several parts to determine the ways of project operation which will be very beneficial for the project.

7.2.4 Organizations/educational institutes which organize the training should realize and understand the purposes and principles of the project. In addition, it should have the drive or movement on the project seriously.

8. ACKNOWLEDGMENT

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