

A Survey on Customer Satisfaction in Industrial Training Placement for Students in Institut Latihan Perindustrian and Employers

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Abstract

Currently, growing concerns from customer about poor education and training quality had forced institutions of higher learning to seek ways and means to improve their education and training quality. In order to achieve this objective, one of the efforts is to conduct a customer's satisfaction survey focussing on the industrial training program provided to their students. This paper is based on a survey conducted on Institut Latihan Perindustrian (ILP) students and employers that participated in the industrial training program. This survey uses a five-point Likert scale questionnaire to measure the students' and employers' perception as regards to their satisfaction level. This survey questionnaire was based on satisfaction factors as proposed by past researchers but was modified to suit the context of ILP environment. It was developed to collect information on the students' and employers' satisfaction of the industrial training placement program. This study also explores the relationship between students and employers satisfaction level regarding the industrial training placement program. The paper concludes by discussing the customers survey satisfaction results and proposed some recommendations to improve the customers' (i.e. students and employers) satisfaction in future industrial training placement programs.

Keywords: ILP; survey; training; satisfaction; customers

1. Introduction

Higher education and training institutes has been under severe critics to improve the quality of their graduates. This is may be due to the fact that the graduates from these institutes are said to be incompetence and do not posses the required skills as required by their future employers. Thus, higher education and training institutions have no other choice but to embark on programs to improve the educational and training knowledge creation process, which include the delivery aspects of it (Mehra and Rhee 2004; McHardy and Allan 2000).

By its very nature, vocational training is incomplete without industrial experience that can only be acquired through on-the-job training. For this reason, most of the courses offered in ILP require industrial training or in-plant training program.

However, up till now, the answer is still remain largely unknown on the effectiveness of the industrial placement training program in providing the students exposure and experience to the actual working environment (Knemeyer and Murphy 2002).

According to Hill (1996), prior to conducting any survey one should be able to define clear and realistic objectives. Therefore, for this survey the authors had identified three main objectives as follows:

- i. To determine whether the students and employers were satisfied with the overall industrial training program.
- ii. To determine whether the students were being placed at suitable unit/department according to their course of study.
- iii. To determine whether there were opportunities given to the students to upgrade their knowledge and skills.

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2. Literature Review

Parker and Mathews (2001) have the opinion that the word satisfaction was derived from Latin “satis” meaning enough and “faction” or “facere” meaning to do or make. On the other hand, the Oxford Library of Words and Phrases (1993) regards satisfaction as “release from uncertainty”. Meanwhile, other authors such as Shanahan and Gerber (2004), NPC (2001) and Hill (1996) defined satisfaction as at least meeting or exceeding customers needs and expectations.

Industrial training placement programs are often view as a win-win proposition for both employers and students. It can also be viewed as a work programs that are designed to supplement a student’s academic work. Therefore, by bridging the skills and knowledge gathered from the learning place to work place has long been a concern of training institutions and industry. For example, modern industrial training programs strive to address needs of the learner, the training institution, and the industry. They are called by a variety of names such as cooperative education, field experience, service learning, field-work, practical training, on-job training, in-plant training, externship and apprenticeships (Dodge and McKeough 2003).

A critical role of any organization is the identification and fulfilment of their customers’ needs. Thus, for achieving a quality service to success is not just satisfying customers but to delight the customers. Therefore, according to Ahmed and Rafiq (1998) in order to satisfy and delight the customers requires a customer orientation.

3. Research Methodology

There are many methods available for obtaining information about people perceptions and beliefs. The most common and widely used methodologies by the social science researchers are the experimental research, the correlational research, historical research, descriptive research, and survey research. In the case of survey research, the self administered questionnaire form is the most common form of research method for surveying or measuring people’s opinions, belief, perceptions or interests (Shamsuri 2004; Hill 1996; Salkind 2003; Fink and Kasecoff 1998).

Therefore, in this study the authors had utilized the self-administered questionnaire form to be filled up by the respective respondents and collected upon their completion. Survey respondents were aimed at those

students who are undergoing their practical training placement program and the respective industrial training providers, companies and industries. In this survey, the questionnaire forms were distributed by the ILP officers/supervisor who visited the students while they are undergoing their industrial training at the respective companies site and collected the completed questionnaires before leaving the companies.

4. Survey Results and Analysis

In this study, 600 questionnaires were distributed to the students of three ILPs (i.e. ILP Kota Kinabalu, ILP Ipoh and ILP Pedas) and employers. However, 298 only responses were obtained from the students or about 49.7% response rate. Meanwhile, only 169 or 28.2% response rate were obtained from the employers. In this survey, the authors attempted to investigate the respondents’ (students and employers) overall perceptions on satisfaction of the industrial training placement. In this study, the authors had tabulated and compiled the survey results as shown in Table 1, Table 2 and Table 3. On the other hand, Table 4 shows the summary of the one-way ANOVA analysis results of the students’ satisfaction regarding their industrial training placement program. Meanwhile, Table 5 shows the summary of the one-way ANOVA analysis results with respect to training providers’ satisfaction of the industrial training placement program.

Table 1. Respondents Based on the ILP (Institut Latihan Perindustrian)

| No. | Name of Institute | Quantity | Percentage |
|--------------|-----------------------------|------------|------------|
| 1. | ILP, Kota Kinabalu, Sabah | 129 | 43.3 |
| 2. | ILP Ipoh, Perak | 121 | 40.6 |
| 3. | ILP, Pedas, Negeri Sembilan | 48 | 16.1 |
| Total | | 298 | 100 |

In this study, the total number of responses from the ILP students was 298. Table 1 shows 43.3% of the respondents were from ILP Kota Kinabalu, Sabah, followed by ILP Ipoh, Perak with 40.6% and the rest (16.1%) were from ILP, Pedas, Negeri Sembilan. Meanwhile, Table 2 shows the distribution of respondents based on the courses they followed in the ILPs. Their distribution is quite diverse ranging from mechanical, electrical, production, information technology, electronics, civil and building, electromechanical and others. Referring to Table 2, the top four courses comprise of mechanical, electrical, production and information technology.

Table 2. Respondents Based on the Students' Course of Study

| No. | Course of study name | Quantity | Percentage |
|-----|------------------------|------------|------------|
| 1. | Mechanical | 68 | 22.8 |
| 2. | Electrical | 66 | 22.1 |
| 3. | Production | 54 | 18.1 |
| 4. | Information Technology | 49 | 16.4 |
| 5. | Electronics | 27 | 9.1 |
| 6. | Civil and Building | 18 | 6.0 |
| 7. | Electromechanical | 14 | 4.7 |
| 8. | Other courses | 2 | 0.7 |
| | Total | 298 | 100 |

Table 3. Respondents Based on the Employers' Business Sector

| No. | Training employers sector/classification | Quantity | Percentage |
|-----|--|------------|------------|
| 1. | Construction | 53 | 31.4 |
| 2. | Learning institutions/Training provider | 39 | 23.1 |
| 3. | Manufacturing | 37 | 21.9 |
| 4. | Services | 29 | 17.2 |
| 5. | Marketing | 7 | 4.1 |
| 6. | Production | 4 | 2.4 |
| | Total | 169 | 100 |

In this study, the total number of responses from the employers for the industrial training placement was 169. With regards to the respondents from the employers' for the industrial training placement, the four biggest employers were as follows: 31.4% construction industry, 23.1% learning institutions or training provider, 21.9% from manufacturing industry, and 17.2% services (see Table 3).

Table 4. Summary of the One-Way ANOVA analysis results: Students satisfaction regarding their industrial training placement program

One -Way ANOVA at 0.05% Level of Significant

| No. | Likert-type questions* | F-value | Sig. Value |
|-----|---|---------|------------|
| 1. | I am satisfied with the overall industrial training placement program | 0.781 | 0.604 |
| 2. | I have been placed at unit/department in line with my course of study | 2.297 | 0.027 |
| 3. | A lot of opportunities to upgrade my knowledge and skills | 1.470 | 0.178 |

In order to test the objectives of this study, the One-way ANOVA and cross tabulation available from SPSS software were used to analyse the questions against the respondent's course of studies.

Objective 1: To determine whether the students were satisfied with the overall industrial training program.

Hypothesis 1

H_0 = The students were satisfied with the overall industrial training program.

H_1 = The students were not satisfied with the overall industrial training program.

From Table 4, One-way ANOVA test indicated that the significant value is 0.604, which is very much higher than 0.05 (assume value), thus revealed that there is not enough evidence from the data to reject the Null hypothesis. Therefore, it can be concluded here that the students were satisfied with their overall industrial training program.

Objective 2: Students being placed at suitable unit/department according to their course of study.

Hypothesis 2

H_0 = The students were placed at suitable unit/department with their course of study.

H_1 = The students were not placed at suitable unit/department with their course of study.

From Table 4, one-way ANOVA test indicated that the significant value is 0.027 which is smaller than 0.05 (assume value). Thus, it revealed that there is enough evidence from the data to reject the Null hypothesis. In other words, the students were not placed at suitable unit/department according to their course of study. That is, the result from the one-way ANOVA test is in conflict with the result found in objective 1, which showed that students were satisfied with their placement at company unit/department. Thus, it could be concluded here that students were satisfied with their industrial training placement program even though they were not placed at the company unit/department in accordance to their course of study.

Objective 3: To determine whether there are opportunities given to the students to upgrade their knowledge and skills.

Hypothesis 3

H_0 = A lot of opportunities were given to the students to upgrade their knowledge and skills.

H_1 = No opportunities were given to the students to upgrade their knowledge and skills.

From the Table 4, one-way ANOVA test indicated that the significant value is 0.178, which is very much higher than 0.05 (assume value) and thus revealed that

there is no evidence to reject the Null hypothesis. In other words, the students were given a lot of opportunities to upgrade their knowledge and skills. Therefore, it can be concluded that the students were satisfied with the opportunity given to them to upgrade their knowledge and skills.

Table 5. Summary result of the One-Way ANOVA analysis: Training employers' satisfaction regarding the industrial training placement program

One -Way ANOVA at 0.05% level of significant

| No. | Likert-type questions* | F-value | Sig. Value |
|-----|--|---------|------------|
| 1. | Overall satisfaction with placement program | 3.681 | 0.037 |
| 2. | Students are being placed at suitable unit/department according to their course of study | 6.574 | 0.004 |
| 3. | Students are being exposed to the equipment and technology used by the company | 0.883 | 0.424 |

Objective 1: To determine whether the employers were satisfied with the overall industrial training program.

Hypothesis 1

H_0 = Employers were satisfied with the overall industrial training program.

H_1 = Employers were not satisfied with the overall industrial training program.

From Table 5, one-way ANOVA test indicated that the significant value is 0.037, which is smaller 0.05 (assume value) and thus revealed that there is enough evidence to reject the Null hypothesis. In other words, the employers were not satisfied as regard to the overall industrial training program.

Objective 2: Students being placed at suitable unit/department according to their course of study.

Hypothesis 2

H_0 = Students placement were done at suitable unit/department in accordance to their course of study.

H_1 = Students placement were not done at suitable unit/department in accordance to their course of study.

From Table 5, one-way ANOVA test indicated that the significant value is 0.004, which is less than 0.05 (assume value). Thus, it revealed that there is evidence to reject the Null hypothesis. In other words, the students

were not placed at suitable unit or department with respect to their course of study.

Objective 3: To determine whether the students being exposed to the equipment and technology used by the companies.

Hypothesis 3

H_0 = Students were exposed to the equipment and technology used by the companies.

H_1 = Students were not exposed to the equipment and technology used by the companies.

From Table 5, one-way ANOVA test indicated that the significant value is 0.424, which is very much higher than 0.05 (assume value). This result revealed that there is no evidence to reject the Null hypothesis. Thus, there it can be concluded that the students were exposed to the equipment or technology and technology used by the companies.

5. Conclusions and Recommendations

It can be concluded that the industrial training placement program followed by the students from industrial training institute for the duration of three months and six months at various organizations and companies are as follows:

(a) From the students' point of view.

First, the one-way ANOVA test results shows that the students were very satisfied with their overall industrial training program.

Second, the one-way ANOVA test results shows that the students were not placed at suitable unit/department according to their course of study.

Third, the one-way ANOVA test shows that the students were very satisfied with the opportunity given to them to upgrade their knowledge and skills.

(b) From the employers' point of view.

First, the one-way ANOVA test results shows that the employers were not satisfied as regard to the overall industrial training program.

Second, the one-way ANOVA test results shows that the students were not placed at suitable unit or department with respect to their course of study.

Third, the one-way ANOVA test shows that that the students were exposed to the equipment or technology and technology used by the companies.

Based on the findings of the survey results, it can be concluded that the study had been successful in fulfilling the survey objectives. Here, the authors would like to recommend future studies be considered in these respective areas. First, to study the industrial training effectiveness by conducting a survey before and after the students had undergone the industrial training placement. Second, conduct a customer satisfaction survey for three main customers, namely: students, employers and lecturers of the institutes.

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