Students' Perception on Industrial Training Program

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Abstract

Industrial training program provides students with opportunities to apply the knowledge and skills acquired at polytechnic to the working world. The program is hoped to equip students with the necessary knowledge and skills to help them secure jobs after graduation. This study aims at investigating the importance of industrial training to students' skills, knowledge, career adaptation and belief. A total of 426 students from all courses under the Commerce Department in Politeknik Ungku Omar, Ipoh, have participated in the survey. The data was analysed using descriptive analysis. The result shows that there was a high level of students' knowledge (mean = 3.358), skills (mean = 3.399), career adaptation (mean = 3.351) and belief (mean = 3.338). These findings suggest that industrial training is important and should be undertaken by students from all departments in Politeknik Ungku Omar.

Keywords*:* Skills, Career Adaptation, Belief, Industrial Training

1. Introduction

Industrial Training is part of the curriculum structure in polytechnics. Students are required to pass the industrial training before they can be awarded the Certificate or Diploma from Polytechnic of Ministry of Higher Education. Industrial Training refers to a program which aims to provide supervised practical training within a specified time frame. This program requires student to undergo practical training within an organization. It can be carried out either in government organizations or in the private sector. Industrial training can improve students' self-concept in terms of their knowledge, skills, career and belief.

Students are required to undergo Industrial Training in the appropriate field of study for a minimum of 20 weeks or in one semester. The main aim of the Industrial Training program is to produce graduates who are ready to face the working world. The program also aims to produce knowledgeable, skilled and experienced graduates, demanded by employers, who are able to apply the knowledge acquired at polytechnic to the working world. The Industrial Training program provides opportunities for exposure to the working world, which will make graduates more aware of the demands and expectations from the industry. The program will also equip students with the real work experience. Apart from this, the training experience will further solidify the

on-campus learning process and activities, while also providing students with relevant work experience.

In general, Industrial Training can expose students to the real working environment, enabling students to apply the theories learned in the practical aspects or rather, a strong sense of teamwork and good communication among employees to complete their given tasks. On top of that, students' will develop trust, confidence, and be responsible towards the organization.

Through the training period, students learn to build individual personality, develop confidence and independence, as well as make positive decisions. They can interact with other employees and carry out tasks with minimal supervision in the organization. In addition, students will learn specific skills in the organization by linking modules of study with work processes during training. Furthermore, during the Industrial Training students must develop and acquire communication skills, discipline, smart time management, committed to the task, leadership, cooperate with others and engage in discussions and group work in order to meet the requirements of industries. Increasing freedom allows adolescents greater opportunities to participate in activities in which they are competent, and increased perspective-taking abilities enable them to garner more support from others by behaving in more socially acceptable ways (Harter, 1999).

Problem Statement

As perceived from the point of view from industries, comments or feedback from industries are a major aspect to be considered. Comment from industries stated that commerce students are lacking in knowledge, skills, confidence level, communication skill and cooperation among students. During the industrial training, most students cannot perform their duties as required by the employer due to their lack of communication with colleagues. Then, when the students are assigned to participate in a program or seminar organized by the industry, they also cannot do a good job due to lack of confidence. In addition, when students are asked to complete a task, they cannot meet the requirements of employers and clients due to the lacking in knowledge and some of them are not able to cooperate with the colleagues.

Research Objectives

This study was conducted to evaluate the Industrial Training in view of knowledge, skills, career and belief after they have undergone the practical training. Specifically this study sets to achieve three broad objectives as below:

1) To determine students' knowledge via industrial training
2) To identify students' skills acquired via industrial training
3) To articulate students' career adaptation from industrial training
4) To respond students' belief from industrial training

2. Literature Review

Industrial Training

Consultations with employers showed that employers want graduates to have a wide range of skills, such as those personal and cognitive capabilities that people use to carry out in a wide range of tasks and activities. It is undeniable fact that industrial training is very important in accessing the ability of the student particularly with respect to the variations in training practices and attitudes across national cultures (Abderrahman Hassi & Giovanna Storti, 2011). The value of diversity training to promoting inclusivity, equality and fairness in organizations is underlined as is the importance of the human resource development community adopting a more proactive role in addressing the issue of diversity through research and course curricula (David McGuire & Mammed Bagher, 2010).

Knowledge

One practice that may have relevance to case management and action planning is a 'portfolio approach' that is discussed in the literature on prior learning assessment. Portfolios are a method to identify knowledge and skills that have been learned through non-formal education, training and/or experience in a wide range of circumstances, as well as clarify employment goals and values (Wodi, S.W & Dokubo, A., 2009). Identifying the transferable skills from work and everyday experiences has been found to help people during their job search. Ukwuoma and Akanwa (2008) citing Robinson (1998) observed that effective training brings about an increase in knowledge required in the job, knowledge of the structure and business arms of the organization. This implies that the knowledge base of the Practitioner increases in Proportion to the training acquired.

Skills

Training is an organized, coordinated development of knowledge, skills and attitudes needed by an industrial worker to master a given situation or perform a certain task within an organization setting (Ezeali & Esiagu, 2009). Then, the task or problem can be solved after reflecting the previous learning process by thinking critically. In addition, the multiple tasks or jobs should be given to the students during their training because they can develop more on the critical thinking skill (Eraut, 2000).

Career

Training, according to Ajidahun (2007), is an integral part of vocational or career development and it is fast becoming a global and pervasive phenomenon in any establishments, the absence of which spells doom for such an institution and the presence of which determines the success of any enterprise.

Belief

Smith and Hume (2005) also studied on the culture and ethics as this topic getting concern in organization. They narrow their study in the context of

individualism versus collectivism and power distance to perceive ethical beliefs in accounting field.

3. Methodology

According to the research conducted it is suitable for the researcher to use the quantitative strategy because of the large sample size to ensure the accurateness of the statistics figures. This research was conducted on 426 third year students in Commerce Department. The primary data was obtained through a survey instrument using self-administered questionnaires of a range of an empirical factors of knowledge, skills, career and belief test on students' perception towards industrial training.

Researchers had distributed the questionnaires to all respondents of 426 students. The purpose of distributing the questionnaires was to obtain feedback from respondents on our research project. Previously a pilot test had been conducted randomly on ten respondents. The questionnaires are divided into a few categories where respondents should answer based on the scales given. Likert scale is used to determine whether the respondents are 'strongly disagree', 'disagree', 'agree' and 'strongly agree'. The first section of the instrument covers the demographic information such as gender, age, race, and semester. The second section of the survey contained 34 Likert items questionnaires that cover the four main constructs in the instruments. All constructs are adapted from various researches to measure an empirical factor of skills, knowledge, and career adaptation and belief test in student's evaluation towards industrial training.

In order to measure the reliability of the instruments, the reliability test has been done using SPSS by using Cronbach Alpha Coefficient. Below is the reliability statistic for the mentioned variables. Noted that the rule of thumb about Cronbach-Alpha Coefficient size of 0.6 to 0.7 is acceptable and scores above 0.8 are preferable (Hair et al., 2006). Table 1 below shows the scores for the reliability analysis.

Table 1: Reliability Statistics for Instrument Measurements

Variables	No of Items	Coefficient Size
Knowledge	7	0.686
Skills	10	0.614
Career	10	0.771
Belief	7	0.775

4. Analysis of Results

Demographic Variables

The respondents consisted of 30.75% (n = 131) of male and 69.25% (n = 295) female. The majority of the respondents were students from the Diploma in Accountancy (31.20%), followed by Diploma in Business Study (23.90%),

Diploma in Banking and Finance (21.40%), Diploma in Islamic Banking and Finance (16.40%), and Diploma in Retail Management (7%). 50% of the respondents were attached to the government sector while the rest were in the private sector . The majority tasks given to the respondents during training were (35.20%) related to account and finance, followed by management tasks (21.10%), sales tasks (16.20%), banking tasks (9.40%), audit tasks (7%), clerical tasks (6.30%), and retail tasks (4.70%).

Table 2 shows the descriptive analysis on knowledge. The overall mean showed that respondents agree on the level of knowledge towards industrial training (Duru, 2006). The value was 3.358, showing that they can acquire and apply the knowledge learned in polytechnic during industrial training.

Table 2: Overall Analysis on Knowledge

Likert scale	Frequency in scale	(%)	Overall Mean
Agree	269	63.10	3.358
Strongly Agree	157	36.90	

Table 3 illustrates the frequency by scale for item 1 to 7. For item 7, most of the respondents 60.80% (mean = 3.35) agreed that they were able to apply core knowledge within their field of study. Followed by item 6, 59.20% of the respondents (mean = 3.39) agreed that they were able to apply the knowledge learned during training. For item 5, 58.50% of the respondents (mean = 3.34) agreed that they were able to share knowledge of contemporary issues and 41.8% of respondents (mean = 3.41) strongly agreed that they were able to understand the job nature (item 2). With regard to item 1, only 1.40% of the respondents (mean = 3.44) disagreed that they were able to understand the nature of job. For item 3, 42.50% of the respondents (mean = 3.40) strongly disagreed that they were able to express ideas about a task. For item 4, 55.40% of the respondents (mean = 3.37) agreed that they were able to function in multi-disciplinary groups.

Table 3: Descriptive Analysis on Knowledge

Items	Mean	Frequency (%)			
		Strongly Agree (%)	Agree (%)	Strongly Disagree (%)	Disagree (%)
I am able to apply theory to practice	3.44	1 (0.20)	223 (52.3)	196 (46.0)	6 (1.40)
I am able to understand the job nature	3.41	178 (41.8)	245 (57.5)	0 (0.0)	3 (0.70)
I am able to express ideas about a task	3.40	1 (0.20)	237 (55.6)	181 (42.5)	7 (1.60)

I am able to function in multi-disciplinary groups	3.37	174 (40.8)	236 (55.4)	0 (0.0)	16 (3.80)
I am able to share knowledge of contemporary issues	3.34	4 (0.90)	249 (58.5)	162 (38.0)	11 (2.60)
I am able to apply the knowledge learned during training	3.39	170 (39.9)	252 (59.2)	0 (0.0)	4 (0.90)
I am able to apply core knowledge within my field of study	3.35	158 (37.1)	259 (60.8)	0 (0.0)	9 (2.10)

Skills Acquired by Students Via Industrial Training

Mean of 3.399 measures the skills of Commerce Department students gained from industrial training as shown in Table 4. It shows that most of the respondents agree that they can enhance their skills during industrial training.

Table 4: Overall Analysis on Skill

Likert scale	Frequency in scale	(%)	Overall Mean
Agree	256	60.10	3.399
Strongly Agree	170	39.90	

Items 8 through 17 were formulated to determine the skills level of Commerce Department students. Table 5 illustrates the frequency for items 8 to 17. Most of the respondents 63.8% (mean = 3.33) agreed that they were able to complete work assigned to them successfully (item 16) and followed by item 13, 63.4% respondents (mean = 3.31) agreed that they were able to develop their self-confidence. For item 14, 59.4% respondents agreed (mean = 3.39) that they were able to deal effectively with conflict and 59.2% respondents (mean = 3.39) also agreed that they were able to contribute to the team effort (item 15). However, 4.0% respondents (mean = 3.37) disagreed that they were able to complete the prioritized task (item 11). Item 17 showed 0.90% respondents (mean = 3.39) disagreed that they were able to develop a sense of responsibility in themselves. With regard to skill level, 43.70% respondents (mean = 4.41) strongly agreed that they were able to develop social interaction skill (item 12) and for item 9, 43.0% respondents (mean = 3.40) also strongly agreed that they were able to function effectively in group. For item 8, 58.20% respondents agreed (mean = 3.38) that they were able to communicate in public and 56.1% respondents (mean = 3.39) also agreed that they were able to develop team working skills (item 10).

Table 5: Analysis of the Instruments by Item for Skill

Items	Mean	Frequency (%)			
		Strongly Agree (%)	Agree (%)	Strongly Disagree (%)	Disagree (%)
I am able to communicate in public.	3.38	171 (40.1)	248 (58.2)	0 (0.0)	7 (1.60)
I am able to function effectively in group.	3.40	183 (43.0)	233 (54.7)	1 (0.20)	9 (2.10)
I am able to develop team working skills.	3.39	177 (41.5)	239 (56.1)	0 (0.0)	10 (2.30)
I am able to complete the prioritized task.	3.37	176 (41.3)	233 (54.7)	0 (0.0)	17 (4.0)
I am able to develop social interaction skill.	4.41	186 (43.7)	230 (54.0)	0 (0.0)	10 (2.30)
I am able to develop my self-confidence.	3.31	144 (33.8)	270 (63.4)	1 (0.20)	11 (2.60)
I am able to deal effectively with conflict.	3.39	169 (39.7)	253 (59.4)	0 (0.0)	4 (0.90)
I am able to contribute to the team effort.	3.39	170 (39.9)	252 (59.2)	0 (0.0)	4 (0.90)
I am able to complete work assigned to me successfully.	3.33	148 (34.7)	272 (63.8)	0 (0.0)	6 (1.40)
I am able to develop a sense of responsibility in myself.	3.39	170 (39.9)	252 (59.2)	0 (0.0)	4 (0.90)

Adaptation to Career Advancement

Mean of 3.351 represents the career adaptation that can be provided by the industrial training company for Commerce Department students as shown in Table 6. This indicates that most of the respondents agreed that they have an opportunity to adapt and adjust to career advancement at the industrial training company.

Table 6: Overall Analysis on Career Advancement

Likert scale	Frequency in scale	(%)	Overall Mean
Agree	276	64.80	3.351
Strongly Agree	150	35.20	

Table 7 illustrates the descriptive analysis of the perception on career advancement. For item 23, 64.60% respondents (mean = 3.31) agreed that they were able to recognize their own development needs and followed by item 24, 63.80% of them (mean = 3.33) agreed that they were more aware of the career opportunities after the training. For item 25, 61.0% respondents (mean = 3.36) also agreed that they have opportunities to to learn from professionals in their field. With regard to item 19, 13.10% respondents (mean = 3.08) disagree that they have opportunities for self-development and followed by 2.80% respondents (mean = 3.35) disagree that they were able to motive themselves to continue training and persist to graduation (item 26). 2.60% respondents (mean = 3.36) also disagree that they have an opportunities to contribute ideas toward achieving a solution (item 27). With regard to career, 43.40% respondents (mean = 3.41) strongly agree that they were desire to pursue life-long learning (item 20) and 42.70% respondents (mean = 3.51) strongly agree that they have opportunities for career guidance (item 18). On item 21, 60.8% respondents (mean = 3.35) agreed they were able to able to adapt to the work environment. 59.9% respondents (mean = 3.35) agreed that they were able to work with others to accomplish a goal (item 22).

Table 7: Descriptive Analysis of Career Adaptation

Items	Mean	Frequency (%)			
		Strongly Agree (%)	Agree (%)	Strongly Disagree (%)	Disagree (%)
I have opportunities for career guidance.	3.51	182 (42.7)	237 (55.6)	0 (0.0)	6 (1.40)
I have opportunities for self-development.	3.08	152 (35.7)	187 (43.9)	31 (7.3)	56 (13.1)
I am desired to pursue life-long learning.	3.41	185 (43.4)	233 (54.7)	1 (0.20)	7 (1.60)
I am able to adapt to the work environment.	3.35	158 (37.1)	259 (60.8)	0 (0.0)	9 (2.10)
I am able to work with others to accomplish a goal.	3.35	161 (37.8)	255 (59.9)	0 (0.0)	10 (2.30)
I am able to recognize my own development needs.	3.31	141 (33.1)	275 (64.6)	0 (0.0)	10 (2.30)
I am more aware of the career opportunities after the training.	3.33	148 (34.7)	272 (63.8)	0 (0.0)	6 (1.40)
I have opportunities to learn from professionals in my field.	3.36	159 (37.3)	260 (61.0)	0 (0.0)	7 (1.60)
I am able to motive myself to continue	3.35	159 (37.3)	255 (59.9)	0 (0.0)	12 (2.8)

training and persist to graduation.					
I have opportunities to contribute ideas toward achieving a solution.	3.36	165 (38.7)	250 (58.7)	0 (0.0)	11 (2.6)

Students' Belief towards Industrial Training

Mean of 3.338 measures the belief of Commerce Department students towards industrial training as shown in Table 8. It means that most of the respondents agree that they have a high level of belief during industrial training.

Table 8: Overall Analysis for Belief

Likert scale	Frequency in scale	(%)	Overall Mean
Agree	278	65.30	3.338
Strongly Agree	146	34.30	

Table 9 illustrates the descriptive analysis on belief. Regarding item 29, 64.60% respondents (mean = 3.33) agreed that their practical training related to their career goals, followed by item 30, 64.30% respondents (mean = 3.30) agreed that their practical training view their career expectations realistically. With regard to item 34, 61% respondents (mean = 3.36) agreed that the organization provided Well-structured training to cover all areas in the Company.

For item 28, 2.30% respondents (mean = 3.34) disagree that their practical training related to their major and 2.10% respondents (mean = 3.35) disagree that the organization was supportive in providing task information (item 33). With regard to belief, 39.0% respondents (mean = 3.37) strongly agree that they gained knowledge in their core study during training (item 32) and 38.70% respondents (mean = 3.37) strongly agree that they have put themselves best effort to learn (item 31).

Table 9: Descriptive Analysis on Students' Belief

Items	Mean	Frequency (%)			
		Strongly Agree (%)	Agree (%)	Strongly Disagree (%)	Disagree (%)
I belief that my practical training related to my major.	3.34	153 (35.9)	263 (61.7)	0 (0.0)	10 (2.3)
I belief that my practical training related to my	3.33	146 (34.3)	275 (64.6)	0 (0.0)	5 (1.20)

career goals					
I belief that my practical training view my career expectations realistically.	3.30	140 (32.9)	274 (64.3)	0 (0.0)	12 (2.80)
I belief that I have put myself best effort to learn	3.37	165 (38.7)	252 (59.2)	0 (0.0)	9 (2.1)
I belief that I have gained knowledge in my core study during training	3.37	166 (39.0)	251 (58.9)	0 (0.0)	9 (2.1)
I belief that the organization was supportive in providing task information	3.35	158 (37.1)	259 (60.8)	0 (0.0)	9 (2.10)
I belief that the organization provided Well-structured training to cover all areas in the Company	3.36	159 (37.3)	260 (61.0)	0 (0.0)	7 (1.60)

5. Conclusion and Suggestion

In conclusion, the objectives of this study have been achieved as all data of the effectiveness of industrial training were successfully obtained. Almost all the students agreed that by undergoing the industrial training they have really benefited. In addition, the four aspects i.e. knowledge, skills, career and belief have significantly improved. As suggestion for future studies, researchers can include responses from industrial supervisors and the higher education lecturers.

A study on the experiences gained during the practical training and how these experiences relate to students' academic studies when they return to campus to complete their final year will also be useful. What is demanded by the firm to students will be identified and met by the polytechnic to provide guidance to students. While the current study identified some areas for improvement, future research is needed to examine other factors and areas that contribute to the importance and success of polytechnic practical training program.

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