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Employers' Satisfaction towards Industrial Education Graduates in Rajamangala University of Technology Phra Nakhon

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ABSTRACT

This study presents employers' satisfaction towards industrial education graduates in Rajamangala university of technology phra nakhon. It also provides a revelation on the comparison between employability skills of industrial education graduates and employers' satisfaction. Employability skills in this paper refer to ethical and moral, knowledge, cognitive skills, interpersonal skills and responsibility, and analytical and communication skills. Questionnaires are distributed through online 50 employers (22% of all). The data were analyzed using percentage, average, standard deviation. The results indicated that the overall rating for the opinions of the employers was at the high levels ($x = 4.22$). The aspect of cognitive skills had the highest ($x = 4.55$). The other aspects were as follows: interpersonal skills and responsibility ($x = 4.43$), analytical and communication skills ($x = 4.39$), ethical and moral ($x = 4.39$) and knowledge ($x = 3.33$). According to the study result, it should be update students' skills with training on the use of foreign language, new technology, adjustment, teamwork and legality of occupation.

Keyword: Industrial Education Graduates, Employers, Engineering Students

1. Introduction

Currently, industrial education graduates need to have high competitiveness in placing themselves in order to succeed in their profession. Recently, most fresh industrial education graduates have been facing toughest challenges and competitions in getting employed. (Amanuddin, S., Monamad, I. M., and Mohd, H.G., 2015). However, higher education has experienced massive expansion in terms of student enrolments and the emergence of new kinds of provider (Shah, M. and Jarzabkowski, L., 2013). Universities across the globe are increasingly required to produce highly skilled graduates who are able to respond to the ever changing and complex needs of the contemporary workplace.

Faculty of industrial education has organized education responded to the industrial sector and the teaching profession. The curriculum concept and teaching and learning methods are specifically based on providing essential knowledge for industries perceive that engineering students. In order to create a smoother transition from education to practice, some argue that engineering education need to give more emphasis on teamwork, communication, knowledge retention and the ability to synthesize and make connections between courses and fields (Stouffer, W.B., Russell, J.S. and Oliva, M.G., 2004).

Following up graduated students is one strategy of the industrial education to evaluate their performance as an index in a quality assurance system. Evaluative variables include knowledge, skill performances, Ethics and quality of learning and teaching process which are anticipated form the curriculum. Normally, job opportunities will be waiting for those who are competent. This means, relevant capabilities, skills, abilities and personal qualities are taken into serious consideration to enable those graduates to be accepted to work. Thus, the aim of this study is to examining employers' satisfaction industrial education graduates in Rajamangala university of technology phra nakhon in 2015 and have had working experience for at least 1 year. The findings from the study will be used to further enhance the quality of teaching and learning strategies.

2. Literature Review

This section presents a brief analysis of related literature reviews. These reviews provide a clear and concise explanation in order to deliver a better understanding on the purpose of undertaking this study. The Office of the Higher Education Commission (OHEC) has pointed out that a number of Thai universities, which possess a large number of new customized programs for particular needs of the market, may encounter a serious quality issues. Consequently, Thai Qualifications Framework (TQF) has been developed for all Thai legitimate higher education institutions to adopt (Pattanakul, C., Ratanaworabhan, P., Triyacharoen, P. and Supapa, S., 2010).

2.1 Ethical and Moral Development

Deals with ethical and professional issues involving values and moral judgments in ways that are sensitive to others and consistent with underlying basic values and relevant professional codes of practice. Demonstrates a high level of ethical behavior in situations involving value conflicts and competing priorities. Consistently demonstrates honesty and integrity with an appropriate balance of personal and group goals and objectives. Provides a positive influence to others through example and leadership in employment or other group situations in family and community.

2.2 Knowledge

Has possession of a comprehensive, coherent and systematic body of knowledge in a field and the underlying principles and theories associated with it. Is aware of related knowledge and theory in other disciplines and, in the case of professional programs, other professional fields. Is familiar with the latest developments at the forefront of specializations within the main field of study including critical awareness of current research relating to resolution of issues and extension of knowledge. In programs preparing students for professional practice students is aware of relevant conventions, regulations, and technical requirements and of how these may be modified over time in response to changing circumstances.

2.3 Cognitive Skills

Is able to carry out investigations, comprehend and evaluate new information, concepts and evidence from a range of sources, and apply conclusions to a wide range of issues and problems without external guidance. Is able to investigate complex problems and recommend creative and innovative solutions taking account of relevant theoretical knowledge and practical experience and the consequences of decisions made. Can apply these skills and insights in professional and academic contexts relevant to the field of study undertaken. In professional programs can use routine procedures appropriately, but identify situations requiring innovative solutions and draw on relevant theoretical and practical insights in response.

2.4 Interpersonal Skills and Responsibility

Contributes to and facilitates constructive resolution of issues in group or team situations, whether in a leadership role or as a member of a group. Can exercise group leadership in undefined situations calling for innovative responses. Accepts personal responsibility for actions undertaken and shares responsibility as a member of a group. Shows initiative in identifying issues requiring attention in both personal and social situations and in addressing them appropriately on an individual or team basis. Accepts responsibility for own continuing learning and personal and professional development.

2.5 Analytical and Communication Skills

When investigating issues and problems can identify relevant statistical or mathematical techniques and apply them creatively in interpreting information and proposing solutions. Can communicate effectively both orally and in writing, selecting and using forms of presentation appropriate for differing issues and audiences. Routinely uses the most appropriate information and communications technology in gathering, interpreting and communicating information and ideas.

3. Methodology

This study is a descriptive. Its objective was to investigate employers' satisfaction. The subjects were 224 company at least one-year experienced graduating from the Rajamangala university of technology phra nakhon in 2016. A questionnaire was used as a research tool. There was including 5 aspect consist of ethical and moral, knowledge, cognitive skills, interpersonal skills and responsibility, and analytical and communication skills. Fifty questionnaire were sent back with the response rate of 22%. The data were analyzed using descriptively statistic to show percentage, average, standard deviation.

4. Data Analysis

In this section, there are two demographic profiles of the respondents being analyzed. The demographic information that had been included is characteristics of company and employment position. Results from the descriptive analysis of the demographic profile of the respondents, majority of the respondents are working in private companies which represent 80.77% of the sample. Which, 53.85% of the respondents have the top management or head of department.

4.1 Employer's Level of Satisfaction

Based on the Table 1, The results indicated that the overall rating for the opinions of the employers was at the high levels ($x = 4.22$). The aspect of cognitive skills had the highest ($x = 4.55$). The other aspects were as follows: interpersonal skills and responsibility ($x = 4.43$), analytical and communication skills ($x = 4.39$), ethical and moral ($x = 4.39$) and knowledge ($x = 3.33$)

Table 1: Descriptive Statistics of Employer's Level of Satisfaction

Employer's Level of Satisfaction (N=50)	Mean	Std. Deviation
1. Ethical and Moral	4.39	0.621
2. Knowledge	3.33	0.702
3. Cognitive Skills	4.55	0.538
4. Interpersonal Skills and Responsibility	4.43	0.649
5. Analytical and Communication Skills	4.39	0.645
Total	4.22	0.631

4.2 Ethical and Moral

Table 2 shows the descriptive statistics of each item in ethical and moral. Most graduates are diligent patience to work very well ($x = 4.72$). Followed by discipline respect the rules of the agency ($x = 4.36$) and truth and ethically ($x = 4.25$).

Table 2: Descriptive Statistics of Ethical and Moral

Ethical and Moral (N=50)	Mean	Std. Deviation
1. Truth and ethically	4.25	0.534
2. Discipline respect the rules of the agency	4.36	0.452
3. Politeness respect honor others	4.37	0.764
4. Sacrifice and have a public mind	4.32	0.456
5. Have a good attitude towards the organization.	4.36	0.734
6. Be diligent patient	4.72	0.534
7. Be on time	4.32	0.874
Total	4.39	0.621

4.3 Knowledge

Table 3 shows the descriptive statistics of each item in knowledge. Most graduates are knowledgeable about their general academic knowledge ($x=3.42$). Followed by always develop themselves ($x = 3.34$) and professional knowledge and responsibility ($x = 3.26$).

Table 3: Descriptive Statistics of Knowledge

Knowledge (N=50)	Mean	Std. Deviation
1. Professional knowledge and responsibility	3.26	0.375
2. General academic knowledge	3.42	0.846
3. Always develop themselves.	3.34	0.725
4. Ability to convey / disseminate knowledge	3.29	0.863
Total	3.33	0.702

4.4 Cognitive Skills

Table 4 shows the descriptive statistics of each item in cognitive skills. It shows that employers see that graduates have ability to learn more to develop the work ($x = 4.73$). Followed by ability to think apply knowledge and problem solving in the work ($x=4.62$) and Vision and creativity in work ($x = 4.42$).

Table 4: Descriptive Statistics of Cognitive Skills

Cognitive Skills (N=50)	Mean	Std. Deviation
1. Ability to think Apply knowledge and problem solving in the work.	4.62	0.345
2. Ability to learn more to develop the work.	4.73	0.463
3. Vision and creativity in work.	4.42	0.621
4. Ability to solve problems immediately.	4.45	0.745
5. Pursuit of new knowledge to be able to perform tasks.	4.52	0.517
Total	4.55	0.538

4.5 Interpersonal Skills and Responsibility

Table 5 shows the descriptive statistics of each item in interpersonal skills and responsibility. Most employers see that graduates have leadership and good followers ($x = 4.73$). Followed by accountability to work on duty ($x = 4.42$) and human relations with supervisors colleagues and guests ($x = 4.25$).

Table 5: Descriptive Statistics of Interpersonal Skills and Responsibility

Interpersonal Skills and Responsibility (N=50)	Mean	Std. Deviation
1. Human relations with supervisors colleagues and guests	4.25	0.872
2. Accountability to work on duty	4.42	0.537
3. Working with others or working as a team	4.32	0.753
4. Leadership and good followers	4.73	0.434
Total	4.43	0.649

4.6 Analytical and Communication Skills

Table 6 shows the descriptive statistics of each item in analytical and communication skills. Most employers see that graduates have ability to use information technology and the use of computer programs ($x = 4.53$). Followed by ability to use statistical and computational capabilities ($x = 4.43$) and ability to use foreign languages ($x = 4.21$).

Table 6: Descriptive Statistics of Analytical and Communication Skills

Analytical and Communication Skills (N=50)	Mean	Std. Deviation
1. Ability to speak and write to communicate their thoughts to others properly.	4.26	0.952
2. Ability to use information technology and the use of computer programs	4.53	0.426
3. Ability to use foreign languages	4.21	0.542
4. Ability to use Statistical and computational capabilities	4.43	0.634
5. Ability to use Other talents	4.51	0.673
Total	4.39	0.645

5. Conclusion

This paper has presented the employers' satisfaction towards industrial education graduates in Rajamangala university of technology phra nakhon. There was including 5 aspect consist of ethical and moral, knowledge, cognitive skills, interpersonal skills and responsibility, and analytical and communication skills. The results indicated that the overall rating for the opinions of the employers was at the high levels. The graduates have academic knowledge and can work as required by the establishment. Accord with

the policy of the faculty of industrial education emphasis on the development of development of graduates to work.

6. Recommendation

It is suggested that the findings from the study should be update students' skills with training on the use of foreign language, new technology, adjustment, teamwork and legality of occupation.

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