The Study of Internship Performances: Comparison of Information Technology Interns towards Students' Types and Background Profiles

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Abstract—Internship program is a compulsory course of many undergraduate programs in Thailand. It gives opportunities to a lot of senior students as interns to practice their working skills in the real organizations and also gives chances for interns to face real-world working problems. Interns also learn how to solve those problems by direct and indirect experiences. This program in many schools is a well-structured course with a contract or agreement made with real business organizations. Moreover, this program also offers opportunities for interns to get jobs after completing it from where the internship program takes place. Interns also learn how to work as a team and how to associate with other colleagues, trainers, and superiors of each organization in term of social hierarchy, self-responsibility, and self-disciplinary. This research focuses on senior students of Suan Sunandha Rajabhat University, Thailand whose studying major is information technology program. They practiced their working skills or took internship programs in the real business sector or real operating organizations in 2015-2016. Interns are categorized in to two types: normal program and special program. For special program, students study in weekday evening from Monday to Friday or Weekend and most of them work full-time or part-time job. For normal program, students study in weekday working hours and most of them do not work. The differences of these characters and the outcomes of internship performance were studied and analyzed in this research. This work applied some statistical analytics to find out whether the internship performance of each intern type has different performances statistically or not.

Keywords—Internship, intern, senior student, information technology program.

I. INTRODUCTION

THE benefits of internship program and cooperative education falls to both interns and organizations in the real work settings and real work spaces. Training program is beneficial for students, industries and also for faculties. It helps to enhance and expand university's relationship with the real business organizations. For most curricula, this training experience is required as it prepares graduates for the working challenges. There are many universities focus on filed training as internship program by creating very effective internship program for their students. Internship is one of good strategies for each university to attract their students. These students are interested in a curriculum which provides an effective internship program for them. Tobias [1] agreed that students increase their demand for very good internship programs so they can acquire professional skills while at the same time, industry needs efficient methods to train student as trainees or interns in their organizations and to reduce uncertain possibility in the hiring process and also later stages. Thus, internship serves the needs of the three parties: students, universities and industrial partners. Workplace learning constitutes an important component in the training program of interns. Most of them are new and lock ot real workplace experience. There is a problem with the ways that quality of work experiences has been measured. In most cases, these measures have considered only in the quantitative aspects (e.g., the number of hours or certificates) [2]-[6]. The present study aims to overcome this set of restrictions and contributes to providing the benefits of internship on career development with evaluations of the quality of internships both types of student: normal program and special program.

II. LITERATURE REVIEW

Davies [7] stated that internship is a kind of experiential learning where students take the opportunity to apply learning theories from their schools in the real world situation and it provides opportunities for students to integrate thinking with action. Fox [8] considered internship as an opportunity to close the yawning gap between college-learnt theory and practical reality. Pauze, Johnson and Miller [9] articulated that internship is equivalent to fieldwork, field experience, practicum, coop or experimental learning with little variations. McMahon & Quinn [10] called internship a 'supervised work experience' (SWE) and that students are under special guidelines and attention during their internship instead of working alone by themselves in the industry. The relations between education and internship have been widely discussed. Shortt [11] stated that education must meet the needs of the industry, not just through the use of first class of academic staff but also under the provision of enough practical facilities. Individual career development comprehends processes in two areas: the internal adaptive process of construing a career identity in a responsive environment, and the gradual formation in the person's environment of a certain career significance fed by results and reputation. Focusing on the identity side, Fugate et al. [12] described career identity as a cognitive structure representing all that one has become and might become in the realm of work.

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Haag et al. [13] analyzed the internship program efficacy in the Ira A Fulton School of Engineering to find out answer of the following research questions such as what is industry's perception of Fulton's undergraduate and graduate interns in terms of Accreditation Board for Engineering and Technology (ABET) criteria? Do internships foster university-industry collaboration? Why does industry accept and train university interns? The study revealed overall satisfaction with engineering internship programs and their student participants. Students correspond to the industry needs: they had the technical and scientific knowledge and, they were good professionals working in teams. Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work owned by others than ACM must be honored.

Practical facilities do not necessarily mean a business setting or environment inside an educational institution; it can be substituted and supported by incentive industrial training to fulfil the business oriented purpose [14]. As a ''golden opportunity to try before buying'' [15], [16], a growing number of students would prefer joining the tourism and hospitality schools with an internship component ranging in length from a few weeks to a year. In a comparative study of hospitality and tourism graduates in Australia and Hong Kong, internship was consistently ranked by students for building their ability to get a job [17]. Busby et al. [18] pointed out that tourism and hospitality schools providing internship program also seem to put a lot of efforts into teaching students a range of technical skills such as information technology, financial management and quantitative methods. Watson [19] explained that such an approach, together with the function of internship, could result in a fuller development of student potential. Although there is a rise in demand for labor in the tourism and hospitality industry, this has not led to an increase, but a remarkable decline in the number of tourism and hospitality school graduates joining the industry [20]. One of the possible reasons was noted by Patterson and George [21] that the tourism and hospitality industry is considered low pay with long hours of working which results to only a small percentage of graduates applying for jobs. Patterson and George [21] also found that even if students have an intention to work in the industry, some may consider it as a temporary and transactional stepping stone, and treat the work as a short term financial gain or exposure to more internship opportunities. Jenkins [22] commented that the tourism and hospitality industry is characterized by relatively high levels of labor turnover because of poor image perceived by students and greater challenges than in other industries that help to drive them away. Because the industry fails to retain significant numbers of graduates, it becomes a concern for tourism and hospitality schools to carefully plan their internship program in order to increase the retention rate of students in the industry [23]. In Thailand, Suan Sunandha Rajabaht University has seen the significance and importance of the internship program. It has developed and implemented a mobile application, run on mobile phones with Android operating system, in order to monitor each intern's practices and problem. Moreover, trainers or supervisor of each host organization are able to monitor and evaluate each intern's performance regarding their work practice. This application enhances the internship program of information technology program of this university very efficiently [24].

III. METHODOLOGY

Demographic questionnaire was used to collect data regarding each supervisor's perspective from the host organizations where 113 students as the interns from information technology program of Suan Sunandha Rajabhat University (SSRU) practiced. All of them were categorized in to 2 different programs but the same curriculum -- normal program and special program. Each program has different target students, number of studying term, different studying time table. Each program also has its own interns' unique characters and background profiles. Online questionnaires were sent to each hots organizations of each intern for each intern's superior to evaluate the working performances individually. For normal program intern, they were evaluated between August to December 2015 and special program interns were evaluated between January to April 2016.

IV. RESULTS

Table I illustrated demographic information of all interns. They are women more than men. Most of them studied in the normal program, weekdays from Monday to Friday, studying hours from 8 AM. To 5 PM. Most interns did not received wages for their organizations, just only 4% interns received wages from their internship. IT support was the most interesting position for most interns. Almost half of them, 43.4% practiced their internship in governmental organizations with grade point average from 2.50 to 3.00 out of 4.00 the most.

Table II identifies each required competency of the interns. For most competencies, the normal program student as interns gained higher evaluated score than the special program students. However, there were some competencies that the special program students as interns gained higher score than the normal program students. Nevertheless, statistical analysis technique in this table show no difference mean value among them. This indicates that their competency performance was all at very high score as same as each other significantly.

Table III shows each working personality of both types of interns. There was an interesting point of view which is the normal program students as interns gained higher score in every question than the special program students. However, the statistical test identified that both of them gained no difference score in this section significantly.

Table IV shows that all evaluated scores of interns who studied in the normal program gained higher score than interns who studied in the special program. Except the score of leadership that interns who studied in the special program gained higher score than interns who studied in the normal program. However, the statistical test identified that both of

them gained no difference score in this section significantly as same as other tables.

TABLE I
DEMOGRAPHIC INFORMATION OF INTERNS

	Frequency	Percent
Student type		
Normal Program	72	63.7
Special Program	41	36.3
Gender		
Female	59	52.2
Male	54	47.8
Wage		
No	96	85
Yes	17	15
Position		
IT support	58	51.3
Web master	17	15
Network Admin	15	13.3
Programmer	10	8.8
Graphic designer	7	6.2
Administrator	2	1.8
Software Analyst	2	1.8
Management	1	0.9
System Engineer	1	0.9
Organization type		
Government	49	43.4
Private	37	32.7
State enterprise	27	23.9
GPA.		
2.50-3.00	51	45.1
3.01-3.49	34	30.1
2.00-2.49	18	15.9
3.50-4.00	9	8
Less than 2.00	1	0.9

TABLE II
INDEPENDENCE T TEST OF INTERNS' COMPETENCY MEAN SCORE

Question	N	Mean	F	Sig.
knowledge and skill in IT	Normal	4.28	1.158	0.284
	Special	4.27	1.391	0.241
compliance to orders and rules of organization	Normal	4.54	1.778	0.185
	Special	4.44	0.072	0.789
completing tasks as objectives	Normal	4.51	0.588	0.445
	Special	4.46	0.006	0.94
completing tasks as assignments	Normal	4.62	3.099	0.081
	Special	4.63	0.321	0.572
having ability to solve working problems	Normal	4.39	1.158	0.284
	Special	4.39	1.391	0.241
having innovative mind	Normal	4.22	1.778	0.185
	Special	4.32	0.072	0.789
having ingenuity and witty	Normal	4.44	0.588	0.445
	Special	4.29	0.006	0.94
seeking for new knowledge and skills	Normal	4.38	3.099	0.081
	Special	4.39	0.321	0.572

V. CONCLUSION

The result of this research shows that senior students of Suan Sunnadha Rajabhat University, major in Information technology, gained very high score from the field practice.

These scores came from 2 organizational types: government and private sector. Each type of intern had different background profiles, for special program the majority of them had to work full time and took a part-time internship program. On the other hand, interns from the normal program did not have to work, just studied full-time. Then, they could take the full-time internship program. Both types of SSRU intern gained no difference for their high score in 3 areas: Information technology competency, responsibility, and personality. The result identifies that the standard of SSRU interns whose major is information technology is one standard even though their background profile and their studying program are different.

TABLE III
INDEPENDENCE T TEST OF INTERNS' RESPONSIBILITY MEAN SCORE

Question	N	Mean	F	Sig.
working punctually	Normal	4.58	1.615	0.206
	Special	4.71		
having diligence and attention	Normal	4.71	1.367	0.245
	Special	4.63		
following code of conduct	Normal	4.67	3.058	0.083
	Special	4.56		
following up assignments	Normal	4.71	3.647	0.059
	Special	4.54		
devoting full dedication	Normal	4.64	0.605	0.438
	Special	4.61		
being honest	Normal	4.85	4.547	0.035
	Special	4.71		
being careful of using equipment	Normal	4.62	0.936	0.335
	Special	4.59		

TABLE IV
INDEPENDENCE T TEST OF INTERNS' PERSONALITY MEAN SCORE

Question	N	Mean	F	Sig.
Following code dressing properly	Normal	4.71	0.619	0.433
	Special	4.66		
having good manner and polite words	Normal	4.74	0.016	0.900
	Special	4.73		
having maturity and ability to control moods	Normal	4.68	0.601	0.440
	Special	4.61		
having leadership	Normal	4.26	0.577	0.449
	Special	4.44		
having ability to work with all operational levels	Normal	4.72	1.263	0.263
	Special	4.59		

There is a very interesting point of view which is position of most interns was IT supporter, fixing IT problems and giving solutions for organization users. However, information technology program does not offer core courses in this area of information technology supporting. Program committee must revise the curriculum or take a closer look in to the interns and information business. The scores of interns who studied in the normal program were higher than the scores of interns who studied in the special program. There were some qualities of interns who studied in the special program were better than the normal program. This could be the reason of part-time internship program that students who studied in the special program must took it. Then, they could not focus on their internship program 100%. However, their scores were slightly

different without statistical significance. Program committee must take a closer look at some perspectives of this research to improve student's quality. There are 2 perspectives with the lowest score must be considered closely. The leadership skill of interns should be improved in the study course-work for the first 3 years of study. Moreover, the innovative mind of interns should be concerned too. These 2 points of view had just only 4.2, the lowest score of all. Lastly, all host organizations must be maintained very good relationship with the university in order to enhance the further cooperation and collaboration.

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