A Tracer Study On The Civil Engineering Graduates Of The Isabela State University-Ilagan Campus

Susan C. Vallejo

Faculty, College of Engineering, Architecture and Technology Isabela State University, Ilagan, Isabela

Abstract

The tracer study sought to determine the employability of Graduates of Bachelor Science in Civil Engineering of ISU-Ilagan Campus for the years 2008 - 2013, and to gather information regarding the relevance of their trainings and assessment of the quality of education obtained at ISU-Ilagan Campus, Isabela.

Most of the Civil Engineering Graduates landed a job in less than a year and are locally employed as casual/contractual in the national government, receiving not more than P20,000.00 monthly salary which is still above the new minimum wage rate (Php 255 per day) in region 02 under the category of Non-Agriculture as per record from the Regional Tripartite Wages and Productivity Board Region II, Tuguegarao city.

The graduates have high regard to the course content of the curriculum. They considered the members of the faculty and their methods of instruction as "very good". However, they cited that there is a need to improve the instructional support facilities and other student services like: construction of dormitory; establishment of job placement office in the campus and conduct Job fairs to facilitate employment. Although the curriculum was rated excellent by the respondents, there is still a need to enhance the content to be at par globally

The graduates believed that their trainings at ISU-Ilagan campus are very relevant to the performance of their job.

Keywords: Civil Engineering Graduates, Employability, Relevance, Tracer study,

INTRODUCTION

Tracer study is the follow up of graduates of higher education or institutes. It aim is to evaluate ones progress up to the time he or she gets a job. This study assesses the availability and quality of graduates. (CHED)

The Philippines Higher Education is mandated to contribute to building a quality nation capable in transcending the social, political, economic, cultural and ethical issues that constrain the country's human development, productivity and global competitiveness (CMO S 2012, Quality Assurance). Quality education is not an easy concept to quantify. It is a human right and a public good, it enables people to develop all of their attributes and skills to achieve their potentials as human beings and members of the society. Quality Education also includes outcomes that encompasses knowledge, skills and attitudes and are linked to national goals for education and positive participating in society (Motala & Pipho 2000).

This tracer study was perceived to be useful to improve the learning process that is quality education, gauge the markets' satisfaction and demand and alumni network. The curriculum can be improved based on input from graduates, the competencies they feel useful to the workforce and things that have not been taught in college. This study also keeps track of the performance of graduates whether they are applying the skills they have learned from the university or its relevance to the market. Hence this study was conducted to determine what happened to the graduates of the Civil Engineering Program of the Isabela State University, Ilagan Campus for the years 2008 to 2013 and to get feedbacks/information from them regarding their assessment on the quality and relevance of their education from ISU. Specifically, it sought to answer the following:1) determine the profile of the graduates in terms of: Gender; Civil Status; Eligibilities; and their circumstances of their Employment including their employer and monthly income;2) determine the reasons for taking them too long to land on their first job and factors that helped them get employed; 3) determine their assessment on the quality of college education obtain from ISU along the following indicators: course content; methods of instructions; faculty; library; laboratories; physical plant; career guidance; dormitories; job placement; academic counseling; extension services; and general administration and 4) determine their assessment on the degree of relevance of their ISU training in relation to the needs of their jobs; 5) determine their assessment on the degree of usefulness of the competencies learned in college.

METHODS

The study made used of the survey-assessment research to the graduates of BSCE program of Isabela State University, Ilagan campus for the years 2008 to 2013. About 80% of the graduates responded to this study.

A formal letter of request was given to the registrar's office to furnish the list of graduates in the annual graduation programs during the last 5 years. A structured questionnaire was used issued from the Quality Assurance Office at the main campus of ISU, at Echague, Isabela. Questionnaires are retrieved from the researcher's e-mail address, facebook account's and relatives or friends of graduates who are enrolled in the university. The assistance of the research

department was also solicited so as to provide the necessary services needed. A follow-up was made through calls or text messages for those with contact numbers.

The data gathered was analyzed using frequency counts, percentages, and means. Inferences was used in logical analysis.

RESULTS AND DISCUSSION

A tracer study of 75 BSCE graduates of ISU-Ilagan campus for school- year 2008 up to 2013.

Table 1. Frequency and Percentage Distribution of the BSCE Respondent Graduates in terms of Gender, Civil Status and Eligibilities.

	frequency n=61	percent (%)
Gender		
male	44	72.13
Female	17	27.87
Civil Status		
Single	50	81.97
Married	_11	18.03
Eligibilities		
Board (CE)	56	91.80
Civil Service	1	1.64

Based from Table 1, the respondent graduates is male dominated (72.13%) course. There are 81.97% of the respondents are single and 18.03% of them are married. Most of them took the civil engineering licensure examination because passing the licensure examination is considered an ultimate goal in finishing the degree and considered the most important qualification for a graduate in applying a job.

Table 2. Frequency and Percentage Distribution of the BSCE Respondent Graduates in terms of Employment: Profile, Employment Status, Type of Company and the Length of Time in Looking for a Job.

Employment	frequency n=61	percent (%)
Profile		
employed	51	83.61
self-employed	1	1.64
ofw	4	6.56
unemployed	5	8.19
Status		
permanent	17	27.87
temporary	4	6.55
casual/contractual	33	54.12
job order	7	11.46
Type of Company		
national government	34	55.74
private	27	44.26
Length of time		
below 1 year	52	85.24
one year to below 2 years	7	11.48
two years to below 3 years	2	3.28
Monthly Salary		
5,000 - 9,999	4	6.56
10,000 - 14,999	19	31.15
15,000 - 19,999	25	40.98
$20\ 000 - 24,999$	10	16.39
25 000 – 30 999	1	1.64
50,000 – 54,999	1	1.64
60 000 – above	1	1.64

The employment profile of the graduates reflects the quality and relevance of the curriculum of the program offered by the University. Table 2 shows that 83.61% of graduates are employed, 1.64% self employed, 6.56% overseas foreign workers who are practitioner civil engineers and 8.19% are unemployed. Furthermore, 85.24% had been employed in less than a year after their graduation or just after passing the licensure examination that is 6 months after graduation. This implies that the services of the graduates are in demand in the market as gleaned from the high percentage employment and this is attributed to the relevance of the program and instruction being implemented by the campus as well as the university.

The status of appointment reflects the quality of performance of employed graduates, From data above, there are 54.12% of the graduates are casual/contractual and 55.74% are working in the government sector. The salaries received by the graduates is reflected from the position they hold in the agency/institution they are working . There are 40.98% graduates receiving between P15,000.00 to P20,000 per month, 31.15% receiving below P15,000 and 1.64% receiving monthly salary more than P25,000. Graduates with monthly salary more than P25, 000.00 are those occupying higher positions in the organization and those working abroad . This is in line with the fact that their salaries depend on their employment status .

The salaries of most of the graduates as gleaned from Table 2 is above the new minimum wage rate in region 02 which is Php 255 per day under the category of Non-Agriculture as per record from the Regional Tripartite Wages and Productivity Board Region II, Tuguegarao city.

Table 3 Frequency and Percentage Distribution of the BSCE Respondent Graduates' Reasons for Delay of Employment.

REASONS	Frequency	Percent	Rank
a. delay in the issuance of school	6	9.84	5
credentials			
b. delay in taking / passing the board	-	-	-
exam			
c. delay in the issuance of other needed	4	6.56	6
documents			
d. no immediate vacancy	13	21.31	1
e. tight competition for the job	12	19.67	2
f. available job/s are not in line with	8	13.11	4
specialization			
g. lack of financial support for job	11	18.03	3
hunting			
h. health reasons	3	4.92	7
i. early marriage	2	3.28	8.5
j. not emotionally ready	2	3.28	8.5

Reasons for Delay of Employment. The following are the reasons cited by graduates for taking them too long to be employed are: "no immediate vacancy"(21.31%); tight competition for the job (19.67%); lack of support for the job hunting(18.03%); available job/s are not in line with specialization (13.11%); delay in the issuance of school credentials (9.84%); delay in the issuance of other needed documents (6.56%); health reasons (4.92%); early marriage (3.28%) and not emotionally ready (3.28%). Jobs not in line with specialization and tight competition for the job which are ranked 2nd and 4^{rth} are related to the lack of relevance of the course offered by the campus/university to the needs of specialization. In line with this, the graduates after taking the board examination find it difficult to land a job since there is no hiring done at the end of the year, the period when they passed the examination.

Table 4. Frequency and Percentage Distribution of the BSCE Respondent Graduates on Factors Facilitating them in Getting their 1st or Present Job.

factors	frequency	percentage(%)	
a. educational qualifications	41	67.21	
b. assistance of the ISU's placement office	-	-	
c. government employment office	08	13.11	
d. media advertisement	03	4.92	
e. recommendations from relatives/ friends	20	32.79	
f. recommendations of politicians	07	11.48	
g. recommendations from former teachers	0 7	11.48	
h. personnel office of the company	03	04.92	
i. job fair / dole	-	-	
j. former employer/s	03	04.92	
k. on line applications	14	22.95	

Multiple responses

Factors that Facilitated Graduates Get a Job. From Table 4 the factors with the highest ratings: (1) educational qualifications (2) recommendations from relatives/ friends; (3) on line applications and (4) government employment office. Majority of the graduates cited that educational qualification that includes their eligibility as registered civil engineer is the most important factor that helped them acquire job easier. This indicates that the school has succeeded in preparing the graduates of the civil engineering program of ISU-Ilagan campus to face the world of competition in the global market. However, the graduates did not consider the assistance of the ISU's placement office as a factor in facilitating them in getting their first job since there is no job placement unit in the campus and no Job fairs conducted to handle their needs.

Table 5 Frequency and Percentage Distribution of the BSCE Respondent Graduates According to their Perception of the Usefulness of Competencies Llearned in College

	Type of skills	Frequency	Percent (%)	
--	----------------	-----------	-------------	--

communication skills	42	68.85
human relation/ interpersonal skills	38	62.30
leadership/ managerial skills	29	47.54
entrepreneurial skills	02	03.28
information technology skills.	14	22.95
problem – solving skills	45	73.77
critical thinking skills	37	60.66
research and extension skills	11	07

Competencies. The competencies reflects the level of performance of graduates in their job. As gleaned from Table 5, most of the graduates cited that problem- solving skills (73.77%) has the greatest contribution in their job performance together with their communication skills (68.85%) and their human relation/ interpersonal skills(62.30%). The other factors cited are: critical thinking (60.66%), leadership/ managerial skills (47.54%), information technology skills (22.95%), research and extension skills(7%) and entrepreneurial skills (3.28%).

The "problem – solving skill " is believed to be very useful to the graduates probably because of their course, which deals with design, analysis and construction of structures , vertical and horizontal structures which entails solving problems. Moreover, this skill is much needed for them in passing the licensure examination and eventually helped them get job easier in the world of labor force. This indicates graduates rigid preparation in college is the greatest factor that helped them in their job performance as civil engineers.

Table 6. Frequency and Percentage Distribution of the BSCE Respondent Graduates Assessment on the Degree of Relevance of ISU-Training.

relevance	frequency	percent (%)
	(n=61)	
very relevant	38	62.30
relevant	19	31.15
fairly relevant	3	04.92
not relevant	1	01.64

RELEVANCE. The perception of the graduates on the relevance of the training they got at ISU reflects the quality of trainings given by ISU-Ilagan Campus. As gleaned from Table 6, majority (62.3%) of the graduates of the civil engineering program consider their training at ISU very relevant; 31.15% considers it relevant; 4.92% fairly relevant and 1.64% consider their trainings in the university not relevant. With the above result, the university has to do more to improve or enhanced the trainings so that graduates will not be left behind but rather they will be at par globally.

Table 7. Assessment on the Quality of Education Obtained at ISU-Ilagan

FACTORS	WEIGHTED MEAN	Description
1. Curriculum/course content	4.23	Excellent

2. Methods of instruction	4.11	Very Good	
3. Faculty	3.95	Very Good	
4.Facilities	2.66	Good	
A. Library	2.82	Good	
B. Laboratories	2.62	Good	
C. Physical Plant	2.55	Good	
5. Student Services	2.57	Fair	
a. Career Guidance	2.68	Good	
b. Housing/Dormitories	2.38	Fair	
c. Job Placement	2.56	Fair	
d. Academic Counseling	2.66	Good	
6. Research Services	3.07	Good	
7. Extension Services	3.09	Good	
8. General Administration	3.15	Good	
Total	3.31	Good	

Quality of ISU Services and Facilities:

The respondents considered the curriculum/ course content of the engineering program as "Excellent", while they rated the faculty and the methods of instruction as "very good". The school facilities like: Library, Laboratories and Physical Plant are rated "good". Overall rating of graduates to student services is "fair" that includes housing/dormitories and job placement. Other factors rated as "good" are: career guidance; academic counseling; research; extension and general administration. Thus, the overall assessment of graduates to quality education obtained at ISU-Ilagan is "good".

The graduates still have a high regard to the relevance of the curriculum of the civil engineering program, to the faculty and their method of instruction. This output is reflected from the high passing rate of graduates in the civil engineering licensure examinations as per record from the PRC.

CONCLUSIONS

Majority of the graduates were employed in less than a year after graduation and few months after passing the board examination. Most of them are working locally in the government sector as contractual or as casual employee. The salary received by most of the graduates is less than P20, 000.00 per month.

The graduates have high regard to the course content of the curriculum. They described the members of the faculty and the methods of instruction as "very good". Although they had rated support facilities and student services as "good" still they emphasized that there are no job placement office found in the campus and no job fairs conducted to facilitate employment

RECOMMENDATIONS

The university should focused more to the improvement of the instructional support facilities and student services. Although the curriculum was rated excellent by the respondents, there is still a need to enhance the content to be at par globally

The university should look into the establishment of a job placement office in the campus, construct housing/dormitories and conduct job fairs that will facilitate the employment of the graduates.

REFERENCES

- Alvarez, N.S. 2002. Tracer Study of the Graduates of the College of Engineering, ISU-Echague. Unpublished Report. Echague, Isabela
- Cruz L.T. and Alcantara, N.V. (January 2014) Tracer Study of RTU Graduates: An Analysis (Vol.5, Issue-1)E-ISSN 2229-4686
- Egesah, O et al, 2014, University Graduate Tracer Studies (unitrace): Methodological Lessons and Utilization of Selected Results in Kenya
- Geronimo, C.A, A.L. Geronimo, 2011. Employability and Productivity of BSU College of Engineering Graduates; An Evaluation
- Laguador ,J M et al. 2013. Tracer Study of BS Computer Engineering Graduates of Lyceum of the Philippines University
- Perera, L ,2010. Graduates', university lecturers' and employers' perceptions towards employability skills,
- Rocaberte, T.G. The University of Pangasinan Graduate Tracer Study
- Tarun, M. P. 2014. Tracer Study on the Graduates of Isabela State University, San Mariano Campus (2009-2013) Unpublished Report. San Mariano, Isabela
- Toquero, E.C. 2003. Tracer Study of the Graduates of ISU, Unpublished Report. Echague, Isabela
- Vong, C. Tracer Study 2014 Graduates of Year 2012, Published by RUPP, January 2015
- CMO S 2012, Quality Assurance

Regional Tripartite Wages and Productivity Board Region II, Tuguegarao city.

IJSER