

Employability of Civil Engineering Graduates of Isabela State University Ilagan Campus (2016-2017)

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Abstract: *This study primarily aimed to determine the employment situation of the respondents in terms of current employment situation, waiting time before landing in the first job; job level position and their current gross monthly income. It also includes factors facilitated them in getting their first job, their assessment on the quality of college education obtained from ISU along the following indicators: course content; methods of instructions; faculty; library; laboratories; physical plant; career guidance; dormitories; job placement; academic counselling; extension services and general administration. A modified Graduate Tracer Study (GTS) instrument patterned from CHED was utilized to gather the quantitative data. The study was able to obtain observations addressing the established objectives. The respondents were graduates of 2016 – 2017 of Bachelor of Science in Civil Engineering program of ISU-City of Ilagan Campus. Findings show that the CE program was dominated by male graduates, majority were single and were on their late adolescence period. Further, the study found out that majority of the Civil Engineering graduates were fully employed and were working mostly in private firms as contractual employees and mostly were employed related to their field as civil engineers. Also it was found out that majority of the graduates were employed in their first job for six (6) months to one (1) year. However the graduates considered the delay of employment due to few jobs or no immediate vacancy on the time of their application, stiff competition and jobs available were not in line with their field of specialization. Moreover the graduates agreed that being eligible in the field of specialization, high grades in college and recommendations from former teachers helped them in their first employment. Moreover, the study sought feedbacks from the respondents regarding the quality of education at ISU-Ilagan. It was found out that curriculum and the faculty of the civil engineering program were rated “excellent”. For the current monthly income majority of the graduates were earning salary ranging more than P25, 000 and less than P 30, 000.00. Majority of the Graduates assessed their trainings in College to be “Extra Useful” to their present employment.*

Keywords: tracer study, assessment, employment, field of specialization, monthly income

1. Introduction

The most important objective of an educational institution is the employment of its graduates. Parents send their children to college/universities with the hope that their children will be able to land a decent and a stable job after graduation. Filipino parents considers the value of education as the most important legacy to be given to their children and the most effective means of getting job that would help build their future.

Employability of graduates is one of the measure of Higher Education to ensure that the quality of education they provide is suitable to the needs of the industry (Dotong et al, 2016). As tracer study is used in monitoring and evaluating training programs and curriculum, it is also imperative to be able to ascertain the effectiveness in the delivery of learning and skills of the students. It gathers vital information regarding the employment profile of graduates, their undergraduate experience, the first and current jobs of graduates and the applicability of their educational background and skills required in their job. In addition, it helps the institution to have a basis for areas that need improvement so that better learning experiences will be acquired by students who are still in the program.

According to the Accrediting Agency of Chartered Colleges and Universities in the Philippines (AACUP) one criterion to assess quality programs is the relevance of education of graduates to the workforce of the industry they are employed. Meñez (2014) conducted a study in order to find out whether there are mismatch, underemployment and promotion issues, employment status, school-related and work-related factors that affect the graduate’s employability and promotion among graduates.

2. Objectives of the Study

This study aimed to trace the civil engineering graduates of the Isabela State University City of Ilagan campus covering the period from 2016-2017.

Specifically, it sought to determine the following:

1. The demographic profile of the respondents.

Age
Gender
Marital status
Academic Assessment
Employment data

2. The waiting time before landing on the first job after graduating from college?
3. The reasons of taking too long to be employed in the first job?
4. The degree of agreement of graduates for the factors that helped them get their first job/ employment.
5. The assessment on the quality of college education obtained from ISU along
6. 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.
7. The current monthly salary of graduates.
8. The degree of usefulness of training in college in the needs of the present job.

3. Methodology

A modified Graduate Tracer Study (GTS) instrument patterned from CHED was utilized to gather the quantitative data. The respondents were graduates of 2016 - 2017 of Bachelor of Science in Civil Engineering program of ISU-Ilagan Campus. Social media through internet/Facebook was used to gather data, cell phones to call respondents to verify data and to friends and schoolmates who can give additional information regarding the graduates. Data gathered were tabulated and analysed using frequency counts, percentages, weighted means and ranks.

Likert scale used to describe the degree of agreement of graduates to the factors that helped them be employed and the assessment of the quality of education obtained from the school.

Scale	Agreement	Assessment
4.20 – 5.00	Strongly agree	excellent
3.40 – 4.19	agree	Very good
2.60 – 3.39	Neither agree nor disagree	good
1.80 – 2.59	disagree	poor
1.00 – 1.79	Strongly disagree	Need improvement

4. Results and Discussions

Profile of the Respondents

Table 1: Profile of the Respondents

Gender	Frequency	Percentage
Male	68	70.10
Female	29	29.90
Total	97	100%
Age		
29-above	8	8.23
26-28	23	23.71
23-25	47	48.45
20-22	19	19.59
Total	97	100%
Civil Status		
Single	85	87.63
Married	12	12.37
Widower	0	0
Total	97	100%

Table 1 presents the profile of the graduates in terms of gender, age and civil status. The Civil Engineering Graduates who responded to the tracer study were dominated by males with 68 or 70.10 % while female comprised of 29 or 29.90% of the total respondents. Moreover there were more single respondents at 85 or 87.63% while married respondents only comprised of 12 or 12.37% of the graduates. It is noted that many graduates were in their late adolescent period which is 47 or 48.45% age range from 23-25 years old. This trend primarily attributed to the inclusive years of graduation

from 2016-2017, hence many of the graduates were still young and single.

Employment Data

Below are the employment data of the graduates: current employment status, type of company where the graduates were employed and their status of appointment.

Table 2: Current Employment Status

Employment Status	Frequency	Percentage
Employed	95	97.94
Unemployed	-	-
Self employed	2	2.06
Total	97	100%

As gleaned from Table 2, there were more graduates at 95 or 97.94 % fully employed while self-employed respondents comprised only 2 or 2.06% of the respondents. It is worthy to note that almost all of them were employed. This implies that civil engineering graduates are highly in demand in the labour force.

Table 3: Type of company/agency

Type of company/agency	Frequency	Percentage (%)
National Government	6	6.32
Provincial Government	24	25.26
Local/City Government	10	10.53
Private Corporation /partnership	55	57.89
Total	95	100

Table 3 reflects the type of company where the graduates were employed. The study found out that 55 or 57.89% of respondents were employed in private firms. Moreover, there were 24 or 25.26% of the total respondents employed in the provincial government while 10 or 10.53% and 6.32 % were employed at the local government and national government respectively. It can also be noted that civil engineering graduates are competitive in the sense that some were being employed in the national level.

Table 4: Status of Appointment

Status of Appointment	Frequency	Percentage (%)
Permanent	15	15.79
Contractual / substitute	61	64.21
Casual	19	20.00
Total	95	100 %

The status of appointment of the respondents is shown in Table 4. It is noticeable that majority of the graduates at 61 or 64.21 % were contractual employees and 19 or 20% were employed as casual while only 15.79% of the respondents were handling permanent position.

The findings were supported through interviews of graduates with permanent positions. Through the rationalization program of the government many vacant positions were created hence graduates were given

permanent items or positions in provincial as well as national government.

It is evident from the result that majority of the graduates were able to exercise their field of specialization as civil engineers.

Table 5: Job Titles of Graduates

Job Titles	Frequency	Percentage (%)
CE Aide	15	15.79
Project/Site Engineer	65	68.42
Quantity Estimate	4	04.21
Police Officer	1	01.05
Lab Technician	3	03.16
Professor	2	02.11
Steel Detailer	5	05.26
Total	95	100%

Table 5 shows the distribution of graduates' position employed in the different firms. Of the different Job titles, 65 or 68.42% were project or site engineers, 15 or 15.79% of the respondents were Civil Engineering Aides, some were steel detailers, laboratory technicians, estimator, professors and police officer.

Table 6: Waiting Time for Graduates before landing in their First Job after graduation

Time	Frequency	Percentage (%)
Less than six(6) months	15	15.79
Six (6) months to one (1) year	80	82.21
Total	95	100%

In terms of the waiting time for graduates' first employment it was found out that the respondents constituted 82.21% employed within six (6) months to one (1) year while only 15 or 15.79% were employed in their first job for less than six (6) months. The result shows that there is a high demand of the graduates' services in the market.

Table 7: Graduates' Reasons for taking them too long to be employed in the first job

Factors	frequency	percentage	Rank
a. Delay in taking/passing the Board Examinations	6	6.19	4
b. No immediate vacancy	39	40.21	1
c. Stiff competition for the job	32	32.99	2
d. Available jobs are not in line with the field of specialization	8	8.25	3
e. lack of financial support for job hunting	4	4.12	5
f. Health reason	1	1.03	8
g. Early marriage	2	2.06	7
h. No political backing	3	3.09	6

Table 7 shows the factors considered by the graduates in taking them too long to be employed in their first job. Majority of the graduates encountered difficulties in looking for a job. Few jobs or no immediate vacancy was ranked 1st, stiff competition ranked 2nd and jobs available are not in line with their field of specialization was ranked 3rd.

Table 8: Factors that helped the graduates got their first job

Factors	Wm	Description
a. Through the assistance of ISU's placement office	2.59	Disagree
b. Through the government employment office	2.59	Disagree
c. Through media advertisement	2.37	Disagree
d. Through recommendation of relatives/friends	2.93	Neither agree nor disagree
e. Through the recommendations from former teachers	3.41	Agree
f. Through the personnel office of the company	2.99	Neither agree nor disagree
g. Because I was emotionally ready	2.71	agree
h. Because I had high grades in my Transcript of Records	3.50	Agree
i. Because of my Major/Area of Specialization was needed	3.67	Neither agree nor disagree
j. Because of my eligibility/passing the CE Board Examination	3.85	
k. Because of the Prestige of ISU-Ilagan	3.35	

WM- weighted mean

Table 8 shows the factors that helped the graduates got their first job. As reflected, the graduates agreed on the following four (4) factors that helped them in their first employment: passing the CE Board Examination (wm= 3.85); their field of specialization was needed (wm= 3.65); high grades in the Transcript of Records (wm= 3.50) and recommendations from former teachers (wm= 3.41).

Moreover, the graduates expressed their disagreement on the following: assistance of ISU's placement office; through the government employment office and through media advertisement. However, they expressed their uncertainty to the following: recommendation of relatives/friends, through the personnel office of the

company, emotionally readiness and Prestige of ISU- Ilagan.

Table 9: Assessment of the Quality of Education at ISU-Ilagan

	wm	Description
Curriculum	4.2	Excellent
Method/s of instruction	4.11	Very good
Faculty	4.32	Excellent
Facilities	3.29	Good
Library	3.31	Good
Laboratory	3.26	Good
Physical Plant	3.3	Good
Student Services	2.83	Good
Career guidance	3.29	Good
Housing/dormitories	1.69	poor
Job placement	3.14	Good
Academic counseling	3.19	Good
Extension Services	3.29	Good
General Administration	3.6	Very good

Wm-weighted mean

The Assessment of the Quality of Education at ISU-Ilagan is revealed in Table 9. It was found out that the respondents rated the curriculum and faculty of the civil engineering program as “excellent”. The graduates described that the methods of instruction and the general administration of the institution to be “very good” while student services and extension services were described as “good”. Moreover the graduates assessed the facilities of the school as “good” however they gave a poor evaluation to housing facility.

According to (Husain, 2010) the graduates’ perception on the skill in identifying problems and making decisions in short time period were need for curriculum enhancement.

Table 10: Current Gross Monthly Salary

Salary	F	%
Below 5 000	-	-
5 000- 9 999	-	-
10 000- 14 999	-	-
15 000- 19 000	14	14.7
20 000- 24 999	25	26.3
25 000- 29 999	30	31.6
30 000- 34 000	11	11.6
35 000- & above	15	15.76

Table 10 reveals the current gross monthly income of graduates during the time of data gathering. As shown from the result there were 30 or 31.6% of graduates whose salary ranges from P25, 000to P29, 000.00 (25 or 26.3%), and 14 or 14.4% salary range of P15 000.00 to P 19, 000.00. It is worthy to note that 26 or 27.36% of the graduates were receiving P 30, 000.00 and above as monthly salary and these were the graduates working in a private firm handling big projects and high level positions in the country and in abroad.

It is noted that graduates are earning based from their level of positions and through their experience and expertise as civil engineers.

Table 11: Graduates assessment in the usefulness of trainings in College to the needs of the present Job

Description	Frequency	Percentage
Extra Useful	55	57.89
Very Useful	29	30.53
Useful	5	05.26
Barely Useful	4	04.21
Not Useful	2	02.11

Graduates’ assessment in the usefulness of trainings in College to the needs of the present Job is presented in Table 11. It is noted that 57.89% of the graduates expressed their trainings in college as “Extra Useful” to their present employment and 30.53% described it to be “very useful” in their jobs. In addition few of the respondents did not agree with the usefulness of their trainings in school probably because their jobs were not related to their field of specialization.

5. Conclusions

The study was able to obtain observations addressing the established objectives. The respondents were the graduates of the civil engineering program of ISU-City of Ilagan Campus for annual years 2016 - 2017. Findings shows that the CE program was dominated by male graduates, majority were single and were on their late adolescence period.

Further, the study found out that majority of the Civil Engineering graduates were fully employed and were working mostly in private firms as contractual employees. The graduates worked as project or site engineers, civil engineering aides, steel detailers, estimator which are all

related to civil engineering works. It was noted that only few were employed permanent probably because the respondents were still young in their job.

Majority of the graduates were employed in their first job for six (6) months to one (1) year.

However the graduates considered delay of employment due to the top three (3) major factors cited, that few jobs or no immediate vacancy on the time of their application, stiff competition and jobs available were not in line with their field of specialization.

Moreover the graduates agreed that being eligible in the field of specialization, high grades in college and recommendations from former teachers helped them be employed in their first job.

Further, the study sought feedback from the respondents regarding the quality of education at ISU-Ilagan. It was found out that curriculum and the faculty of the civil engineering program were rated "excellent". However, the graduates had "poor" evaluation to housing facility since there is no dormitory in the campus.

For the current monthly income majority of the graduates were earning salary ranging more than P25, 000 and less than P 30, 000.00.

Majority of the Graduates assessed their trainings in College to be "Extra Useful" to their present employment, some assessed it to be "very useful" and few did not agree with the usefulness of their trainings probably because their jobs were not related to their field of specialization.

6. Recommendations

In view of the findings the following were recommended:

To facilitate easier employment the Job placement office should enhance their services to the graduates. More Computer units with engineering software's be provided for design subjects.

Construction of dormitory to cater the needs of student especially those from far places.

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