CAREER TRAJECTORY OF INDUSTRIAL TECHNOLOGY GRADUATES OF CARAGA STATE UNIVERSITY AY 2016-2018

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ABSTRACT. *This study aimed to determine the career trajectory of the Caraga State University Cabadbaran City Industrial Technology Graduates AY 2016-2018. The study implored a descriptive survey design and adopted a graduate tracer study questionnaire from the Commission on Higher Education (CHED). The results showed that the majority of participants, who are usually technicians or associate professionals, are employed full-time or regular. All of the working graduates agreed that the abilities they developed in college—such as critical thinking, communication, innovation, teamwork, productivity, and accountability—as well as their capacity to obtain, analyze, and synthesize information—are helpful in their line of work. Future research is advised to assess in-depth if graduates attain other graduate qualities that were not examined in this study. Additionally, it is possible to increase the sample size and include earlier graduates in the survey.*

Keywords: career**,** employability, graduates, industrial technology, tracer, trajectory

1. INTRODUCTION

One of the measures of the success of the program is the number of graduates with academic degrees and their employability [1]. The best instrument to confirm the achievements of an academic program is through a tracer study. The information gathered may be used for further development of the institution and the academic program in particular in terms of quality. A tracer study is a widely-used policy by learning institutions to gauge the relevance of higher education and collect other valuable information from the graduates of the institutions.

The ASEAN integration and globalization have become a turning point of every HEIs in ensuring that their graduates would advance to the human resource needs in their respective fields after graduation. This has become the biggest challenge of the Philippine Higher Education Institutions to accommodate necessary reforms. For many decades as compared to other countries in Asia, unemployment and underemployment have been one of the many concerns of the Philippine government. The number of unemployed college graduates in the Philippines was estimated at 20.9 % [2]. The employability of graduates, therefore, has become an issue that is not easy to be ignored in the global economy [3]. Graduate Tracer Study is a means to collect information on the relevance of the curriculum to the global market and provide the required knowledge and skills of graduates, and boost+marketability of the academic programs. In the 21st century, employability skill is the most required skill besides technical knowledge in an attempt to compete for employment and sustain a job in the industrial global market. Education and training play a critical role in equipping learners with skills, knowledge, and personal attributes that increase the likelihood of being employed and pursuing occupations of their choice [4].

2. FRAMEWORK

The figure 1 shows the schematic diagram of the study which was anchored on the Human Capital Theory [5]. The theory elucidates the relationship between graduates' educational background and the labor market to determine if the university has met the needs of the industry. Education gives marketable skills and expertise essential to employee productivity. Therefore, the more educated a worker is, the greater the number of available and open employment opportunities as well as higher income in the labor market [6]. Human capital theory considers skills to be commodities. The theory also anchored on the supposition that a person will be able to invest in his studies since it will lead to more marketable qualities. Technological advancements require a better-educated workforce for the productive system to operate properly, these skills will be recognized by demand in the labor market [7].

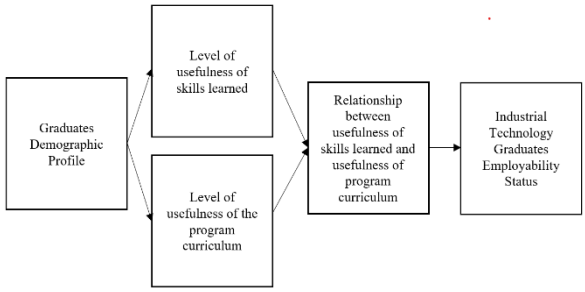

Figure 1: Schematic Diagram Showing the Conceptual Framework of the Study

This study assessed the graduates' demographic profile, the level of use of skills learned, the level of usefulness of the program curriculum, and the relationship between the usefulness of skills learned and the usefulness of the program curriculum. The theory explained the current study objectives of evaluating the gradates' competencies and skills obtained during their education in the university for their employment.

Specifically, the researchers determined the profile of respondents in terms of sex, age, civil status, obtained degree, and year graduated. It also identified the graduates' employability status in terms of employment type, occupational classification, no. of years at work, place of work, monthly income, and first job after the degree was obtained. The level of use of skills that the employed graduates learned from college in their present job was also explored including the level of relevance of the program curriculum in their respective jobs. Descriptive statistical measurements were calculated to answer the objectives of the study. The findings of the study provided a piece of important information to the university about graduates' current status after graduation, as well as the quality of the program

curriculum and related services provided by the university.

3. METHODOLOGY

Research Design. The study implored a quantitative approach utilizing a descriptive survey design [8]. The study was conducted at Caraga State University Cabadbaran City Campus (CSUCC), Industrial Technology Department located at T. Curato St., Cabadbaran City. The Industrial Technology Department offers programs that level III reaccredited by the AACCUP.

Research Sample and Sampling. A total of 75 industrial technology graduates of which 34 were traced as graduates of Bachelor in Automotive Technology (BAT), 22 from Bachelor in Architectural Drafting (BADT), 12 from Bachelor in Electrical Technology (BELT), and 7 from Bachelor in Electronics Technology (BELX) of Caraga State University Cabadbaran City campus were the target respondents of the study who graduated in the academic year 2016 to 2018.

Research Instrument. The graduate tracer study questionnaire used in this study was adopted from the Commission on Higher Education (CHED). Some components of the questionnaire were revised to match the items with the study objectives. The survey questionnaire was composed of IV parts of which items were all closed-ended. Part I sought to determine the demographic profile of respondents which includes sex, age, civil status, obtained degree, and year graduated. Part II was concerned with the respondents' employment status which includes the employment type, occupational classification, no. of years at work, place of work, monthly income, and first job after degree obtained. Part III is concerned with the perception on the level of usefulness of skills that the employed graduate learned from college in their present job. Part IV is concerned with the level of relevance of the program curriculum in the employed graduates' respective jobs.

4. RESULTS AND DISCUSSION

The figures 2 and 3 shows the distribution of graduates based on employment type, occupational classification, no. of years at work, place of work, and monthly income. According to the graduates' current employment type, there were 85.33% of graduates were employed as regular or permanent, and 5.33% are employed part-time, and 9.33% represented the unemployed. Data also showed that, in terms of occupational classifications, a large number of graduates at 38% are employed as technicians, and 14.66% are in the clerical or staff work level position and in-service work. In the current job level position of the graduates, the result showed that 10.67% represent those who are working in the construction firm, and 6.67% were assigned as either associate and assistant or supervisor. A significant proportion of the industrial technology graduates were professionally employed, based on the findings of the study.

It can be worth noting that, in terms of no. years at work, a large majority, or 40% of the graduates were already secured jobs between 2 to 3 years, 34.66% of which are 4 to 5 years already, and 1.34 % had been working already for 6 to 7 years. The 24% of the graduates belonged to 0 to 1 year in terms of no. of years at work.

As can be gleaned from Table 2, it is interesting to notice that most of the graduates secured their respective jobs in the country, particularly Caraga Region with 44% of the total, Davao Region comes next with 22.67% for a place of work. There were 6.6% who signified that they have been working overseas. There were 9.33% who did not specify place of work, which may be interpreted as those who considered themselves unemployed as shown in Fig. 1.

In terms of monthly income, Table 2 demonstrates the monthly income of the graduates based on their initial and current job. Most graduates have a monthly income of P10,957.00 and below which comprised of 72% of the total, which according to PSA (2019), the income bracket is considered poor. There are 12% of the graduates who were classified as earning lower income but not poor with a monthly income of P10,957 and P21,914.

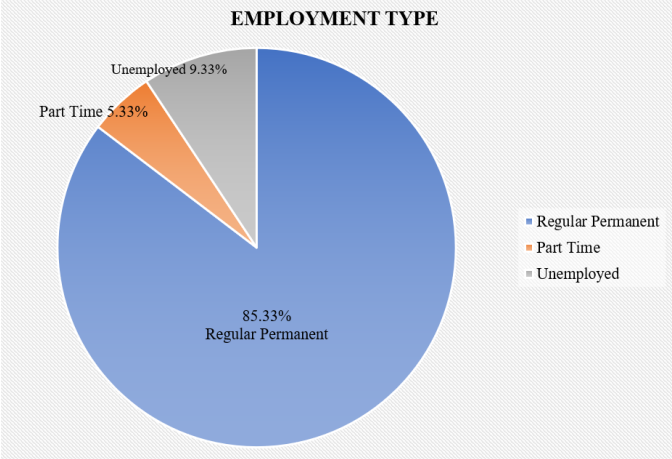

Figure 2. Employment Type

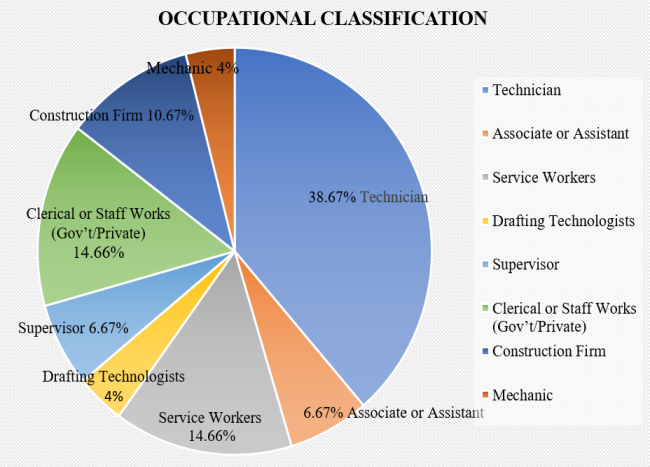

Figure 3. Occupational Classification

Table 1. Level of Usefulness of Skills Learned from the University

Indicators	SD	Mean	Descriptive Interpretation
Critical Thinking	0.91	3.92	Very Useful
Communication	0.93	3.84	Very Useful
Innovation	0.93	3.92	Very Useful
Productivity and Accountability	0.92	3.93	Very Useful

Entrepreneurship	0.99	3.85	Very Useful
Global Citizenship	0.93	3.95	Very Useful
Adaptability	0.95	3.91	Very Useful
Accessing, Analyzing and Synthesizing Information	0.92	3.93	Very Useful
Grand Mean	**0.88**	**3.91**	**Very Useful**

Table 1 indicates the level of skills that the employed graduate learned from the college in their present job. The results revealed that all of the indicators of skills and competencies that they have learned from CSU Cabadbaran City were "Very Useful" with a grand mean of 3.91.

Table 2. Degree of Relevance of the Curriculum to the Graduates Jobs

Indicators	SD	Mean	Descriptive Interpretation
General Education Courses	0.90	3.79	Very Useful
Core courses	0.78	4.27	Extremely Useful
Professional Courses	0.84	4.03	Extremely Useful
Elective Courses	0.82	3.81	Very Useful
On-the-Job Training (OJT)	0.87	4.24	Extremely Useful
Grand Mean	**0.88**	**3.91**	**Very Useful**

Table 2 displays the level of relevance of courses and related activities experienced by the respondents in CSU Cabadbaran in their respective jobs. Among the indicators, the results showed that core or major courses and the internship or on-the-job-training program were extremely useful with a mean of 4.27 and 4.24, respectively. All the other indicators were very useful with elective course as the least rated with mean of 3.81. In summary, the course curriculum is very useful with a grand mean of 3.92. The results suggest that the graduates of Caraga State University Cabadbaran City recognized the important role of major courses and the importance of internship programs and on-the-job training programs as a contributory factors in their actual field of work.

Table 3 showed the relationship between the usefulness of skills that the employed graduate learned from the college in their present job and the relevance of the program curriculum in their respective jobs. Results showed that with Spearman – R of 0.72 with interpretation as Significant, the relationship suggests high significance. The results further suggest that graduates' survey results are important for the analysis of the relationship between higher education and work [8]. Furthermore, tracer studies provide quantitative structural data on employment and career, the character of work and related competencies, and information on the professional orientation, and experiences of their graduates [9,10].

Table 3. Relationship Between Usefulness of Skills and Relevance of Program Curriculum

Variables	-R	T(N-2)	p-value	Decision	Interpretation
The usefulness of Skills that the Employed Graduate Learned from the College in their Present Job and the Relevance of the Program Curriculum in their Respective Jobs	0.72	8.81	0.00	Reject H0	Significant

5. CONCLUSION AND RECOMMENDATION

Conclusion. The majority of participants, who are usually technicians or associate professionals, are employed full-time or regularly. Their average length of service is three to four years. In the Caraga Region, the majority are employed. They typically make P10,957 or less per month in gross income. Their position at the time the survey was conducted was regarded as not being their first job or they had not yet secured employment immediately following graduation.

All of the working graduates agreed that the abilities they developed in college—such as critical thinking, communication, innovation, teamwork, productivity, and accountability—as well as their capacity to obtain, analyze, and synthesize information—are helpful in their line of work [11,12].

The courses that are regarded as being highly valuable in their professional work are the Core or Major Courses and the Internship or On-the-Job Training (OJT).

The CSUCC Industrial Technology program gave graduate students advanced knowledge and theories, essential soft skills that are valuable to their field of study, and developed skills that are applicable in their actual working environment.

Recommendation. Based on the results of the study it is suggested to establish more reliable data that represents the employability of the graduates in Industrial Technology, and conduct Graduate Tracer Studies on a regular basis, at least every other year, encompassing a wider reach in terms of graduates in prior years.

Moreover, students should have a very suitable on-the-job station to give them the chance to expressively experience and examine the skills necessary in the Industrial Technology field of specialty.

The conduct of periodic curriculum reviews by academic leaders, alumni, and industry representatives is essential to ensure that graduates are equipped with the knowledge and skills to make them highly employable in the industry. This will further increase the marketability of Industrial Technology programs and the employability of the graduates they produce.

Future research is advised to assess in-depth if graduates attain other graduate qualities that were not examined in this study. Additionally, it is possible to increase the sample size

and include earlier graduates in the survey.

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