Tracer Study Of Graduates Of The College Of Industrial Technology

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Abstract: People live in a rapidly changing world with the diverse demands and challenges. They additionally call on universities to facilitate the shift to cognizance-predicated economy and high-technology through efficacious linkages between research and industry to ascertain that their countries have a competitive edge in the ecumenical market. This study used the descriptive method of research and survey questionnaire as the main data gathering instrument to trace the Batangas State University-College of Industrial Technology graduates of the Bachelor of Industrial Technology program from 2013-2016. Based from the findings, the Bachelor of Industrial Technology graduates mostly were male, 20-24 years old, single and graduates of Instrumentation and Control Technology. In term of educational profile, the Bachelor of Industrial Technology graduates across major of specialization have no professional examination but they are willing to pursue advance studies for professional development. In terms of employment, BIT graduates were mostly employed, end of contract was the reason for unemployment, they get their jobs for 2-5 months, they have one job after graduation, permanent in status, locally employed in non-government organizations for less than 7 months, and most jobs were relevant to their major of specialization. Lastly, the proposed recommendations to further enhance the employability Bachelor of Industrial Technology focused mainly on National Certifications, attendance to seminars and training, and meeting with advisory councils.

Keywords: employment, graduates, professional development, profile, tracer study.

1. Introduction
Preparing adolescent people to enter the labor market has therefore become a critical responsibility for universities. However, the pertinence of their program and employability of their graduates are posing an incrementing challenge for the universities, concretely in view of two sets of statistics: enrollment and youth unemployment rates. Since Batangas State University is the only state university located in Batangas, it plays a significant role in the upliftment of employment, and thus helps the government. The Batangas State University, like all other universities aspires for the effective performance of its students. It is true to its vision of being a center of higher learning committed to the promotion of wisdom, excellence, human dignity and national pride in the Filipino. [1] However, given the wide comprehension of employability, perceive that the nature of a college graduate is not only an impression of the nature of the educational modules and its supporting academic environment. It also reflects the demands of the industry and also the competence of the regulating body in shaping the characteristics of higher education graduates. It might be excessively oversimplified to note that universities are encouraged, if not pressured, to produce employable graduates. In addition, professional-level training is constantly included inside Higher Education, and as a rule in graduate schools, since many postgraduate academic disciplines are both vocationally, professionally, and the erotically research oriented, such as in the law, medicine, pharmacy, dentistry, and veterinary medicine. A basic requirement for entry into these graduate-level programs is almost always a bachelor's degree, although alternative means of obtaining entry into such programmers may be accessible at some universities. The Bachelor of Industrial Technology program offers students with knowledge in the manufacturing process, electronic and mechanical components and systems, quality assurance and control, materials science, packaging, production and operations management, and manufacturing and design. Each specialization, cumulated with a certificate and/or professional experience, makes one a professional in a categorical field. There are many types of technicians and mechanics, each specializing in a categorical field of expertise (Automotive, Electrical, Electronics, Refrigeration and Air-conditioning, Computer, Mechanical, Welding and Fabrication, etc.). [2] Each of these jobs is considered a profession, because it requires a specialized set of skills and sometimes a certificate. Modern Technology graduates are popular abroad. Most jobs related to this program are in the skilled workers sector, which is in demand in many foreign countries, most especially the Middle East, Canada, Australia and Singapore. Filipinos are typically utilized in remote nations as welders, iron specialist, mechanical engineer, machine administrators and comparative jobs. Although most occupations offered abroad are at section level, these employments normally pay higher than the midlevel and propelled positions in the Philippines. [3] Other courses such as Welding and Fabrication Engineering Technology, Electrical Engineering Technology, Electronics Engineering Technology, Mechanical Engineering Technology, Automative Engineering Technology and Food Engineering Technology comprise the eleven major courses of Bachelor of Industrial Technology. [4] Lately, CIT pursues accreditation in TESDA and this provides walk through to all BIT students to become competitive locally and internationally. Up to this point, the College is as yet intending to offer such courses that keep on enhancing the learning and aptitudes of personnel and understudies through the Dual Training the Philippines System (DTS) program. [4] All this ten (10) components of BIT were subjected for Level III Accreditation last February 11 – 14, 2008 and on December 2018, the college is awarded with Level IV Phase I Accreditation. In connection, doing a tracer study enables the college to locate alumni of academic institution, former beneficiary of scholarship grants and participants in order to collect data and update information about the CIT graduates. This tracer study of Bachelor of Industrial Technology Graduates from 2013 to 2016 was steered to give noteworthy response and to relink alumni to their Alma Mater. Likewise, this endeavor will also give some notable inputs towards the
betterment of the college and attainment of its program goals.

2. Objectives of the Study
The primary purpose of the study is to trace the Bachelor of Industrial Technology graduates of 2013-2016. Specifically, it attempts:
1. To describe the profile of the respondents in terms of sex, age, civil status, and major of specialization.
2. To determine the educational profile in terms of professional examination passed, advanced studies, and reasons of pursuing advance studies.
3. To determine the employment, reasons not employed, number of months before getting first job, number of jobs after graduation, nature of employment, place of work, nature of work, length of service, and relevance of job to course.
4. To propose recommendation to further enhance the employability of Bachelor of Industrial Technology graduates.

3. Methodology
The study used the descriptive method for the 1193 graduates or 79 percent of the total 1519 graduates were traced. Survey questionnaire was used as the main data gathering instrument. The list of graduates was requested from the University Registrar and gathering was done from November to February 2017.

4. Results and Discussions

4.1 Profile of the BIT Graduates
The profile of BIT graduates were described in terms of sex, age, civil status, and major of specialization.

Sex. Figure 1 and 2 shows the distribution of BIT graduates according to sex. It can be gleaned from the figure that there is gender equality in the technology courses of the College of Industrial Technology.

The College of Industrial Technology was able to educate male and female students with 86 and 14 percent respectively. Thus, the technical field of education is more enticing on the male population. [5] But the Gender and Development encourages incoming students to consider the technical fields for their career opportunities.

Age. Figure 3 and 4 shows the distribution of graduates according to age.
Based on the tracer study, most of the CIT graduates were 20-24 years old with 80 percent of the total population and they were considered ideal age for the need of the labor market. Accordingly, these age ranges were more on competitive, talented, and can be developed for future productive workforce. [6]

**Civil Status.** Figure 5 and 6 shows the distribution of graduates according to civil status.

![Figure 5. Distribution of Graduates According to Civil Status per Major of Specialization](image1)

With 94 percent and 6 percent of the total population, it is very clear that most of the BIT graduates were single and married, respectively. These imply that most graduates can increase their attachments and engagement in work. [7] They are more flexible to perform jobs that may be assigned from time to time.

**Major of Specialization.** Figure 7, 8, and 9 shows that distribution of graduates according to major or specialization.

![Figure 7. Distribution of Graduates According to Major of Specialization](image2)

Based on the gathered data, Electrical Technology and Instrumentation and Control Technology only have 96 and 72 percent of traced graduates, respectively. One of the main reasons given by the researchers were the unresponsiveness
of the graduates. Thus, BatStateU-Alumni Office was having a massive campaign in terms of tracer studies. They have Alumni Orientation Programs to educate graduates regarding the importance of said Tracer Study.

4. 2 Educational Profile of BIT Graduates

The educational profile was presented in terms of professional examination passed, advanced studies, and reasons of pursuing advance studies.

Professional Examination Passed. Figure 10 shows the education profile of BIT graduates according to professional examination passed.

![Figure 10. Education Profile of BIT Graduates According to Professional Examination Passed](image)

Based on the data presented, most of the CIT graduates were no professional examination at 81 percent. This result was already been addressed by the department and required students to take any professional examination related to their field of specialization. [8]

Advance Studies. The educational profile of BIT graduates in terms of advanced studies was presented in figure 11.

![Figure 11. Education Profile of BIT Graduates According to Advance Studies](image)

It can be observed that there are 62, 31, and 7 percent distribution of Bit graduates pursue advance education for professional development, unresponsive, and promotion. The goal of BIT graduates to professionally develop was also evident with their enthusiasm to become top executives of their own field of specialization. [9]

4.3 Employment of BIT Graduates

In terms of employment, BIT graduates were traced according to their reasons of unemployment, number of months before getting first job, number of jobs after graduation, nature of employment, place of work, nature of work, length of service, and relevance of job to course.

Employment Status. The employment status of BIT graduates was presented in figure 13 and 14.

![Figure 13. Employment Status of BIT Graduates According to Year Graduated](image)
Sixty-eight percent of the total population were employed while only 26 percent were still searching for jobs. This figure is still above the 2016 national employment rate of the Department of Labor and Employment. [10] Thus, BIT graduates were employable and was able to impart in the national economy.

Reasons for Unemployment. Figure 15 presents the reasons why BIT graduates were not employed.

Most of the reasons of BIT graduates of unemployment is end of contract with 287 of the total respondents and the least was pregnancy for female graduates. The issue of end of contract was very evident both in manufacturing and service industries and this also hampers the career development and security of tenure of most of the working professionals. [11] On the other hand, the new government policy of Endo was significant to BIT graduates for them to be able to have continuous employment.

Number of Months before Getting First Job. Figure 16 and 17 shows the number of months before a BIT graduate can get his or her first job.
Figure 18. Number of Jobs after Graduation According to Year Graduated

Based on the figure above, BIT graduates mostly have 1 job while the least were 5 jobs with 39 and 1 percent, respectively after graduation. Job satisfaction, promotion, and professional advancement were some of the reasons why the graduates were able to stay in a certain employment. [12]

Nature of Employment. Figure 20 and 21 shows the nature of employment of BIT graduates.

Figure 19. Number of Jobs after Graduation

Figure 20. Nature of Employment According to Year Graduated

Thirty-four percent of the total population were permanent, 29 percent contractual, 17 percent no employment, 10 percent temporary, four percent casual, self-employed and 2 percent were job orders. These figures were significant in the employment status of BIT graduates since the permanent status indicates security of tenure. [13]

Place of Work. The place of work is presented in figure 22 and 23.
Seventy-seven percents of the BIT graduates were employed in local companies and 23 percent were in abroad. It is also evident that the international labor market considers hiring and employing BIT graduates. Thus, the graduates were also flexible in terms of place of work and were able to adopt to different nationalities and competencies needed in their jobs. [14]

**Nature of Work.** Figure 24 and 25 shows the nature of work of BIT graduates.

![Figure 24. Nature of Work According to Year Graduated](image1)

**Figure 24.** Nature of Work According to Year Graduated

![Figure 25. Nature of Work](image2)

**Figure 25.** Nature of Work

Based on the figure above, BIT graduates were mostly employed in non-government institution like private organizations and companies with 94 percent and 6 percent only for government organization. These employment were substantive since their on-the-job trainings were also done in manufacturing/ private companies. The massive need of technologist and technicians in the private organizations paves the way for BIT graduates to look for employment in non-government organization. [15] Likewise, there is high income opportunities in private organization as compared to public. [16]

**Length of Service.** Figure 26 and 27 shows the length of service of BIT graduates in their present job.

![Figure 26. Length of Service According to Year Graduated](image3)

**Figure 26.** Length of Service According to Year Graduated

![Figure 27. Length of Service](image4)

**Figure 27.** Length of Service

With regards to the length of service to present job, most of the BIT graduates were less than 7 months with 33 percent of the total population. On the other hand, 18 percent for no length of service yet, 17 percent for more than 24 months, 15 percent for 7-12 months, 10 percent for 13-18 months, and 7 percent for 19-24 months. The length of service BIT graduates rendered in their present job implies job satisfaction and expertise. [17]

**Relevance of Job to Course.** Figure 28 and 29 shows the relevance of job to course as perceived by BIT graduates.
Eighty percent of the BIT graduates from 2013 to 2016 said that their program was related to the present job while only 20 percent were not related. Most of the traced-graduates uttered that they were satisfied and motivated to do their job. This affirms that BIT graduates were able to adopt to the changing need of the workforce and can able to withstand challenges in the industrial sector. [18]

4.4 Proposed Recommendations to Further Enhance the Employability Bachelor of Industrial Technology Graduates
1. The College of Industrial Technology may require all incoming fourth-year students to take and pursue TESDA-National Certification II or III whichever is applicable based on the major of specialization.
2. The Bachelor of Industrial graduates were encouraged to attend seminar and pursue post-graduate studies to further enhance their knowledge and skill and to respond to the challenges and demands of global market.
3. CIT may use the result of the study in the Industry Advisory Council meeting to determine the most appropriate strategies to meet industry demands.

5. Conclusions
Based from the findings, the following conclusions are drawn:
1. The Bachelor of Industrial Technology graduates mostly were male, 20-24 years old, single and graduates of Instrumentation and Control Technology.
2. In term of educational profile, the Bachelor of Industrial Technology graduates across major of specialization have no professional examination but they are willing to pursue advance studies for professional development.
3. In terms of employment, BIT graduates were mostly employed, end of contract was the reason for unemployment, they get their jobs for 2-5 months, they have one job after graduation, permanent in status, locally employed in non-government organizations for less than 7 months, and most jobs were relevant to their major of specialization.
4. The proposed recommendations to further enhance the employability Bachelor of Industrial Technology focused mainly on National Certifications, attendance to seminars and training, and meeting with advisory councils.

References


Author Profile

Dr. Philip Y. Del Rosario is currently the Dean of Batangas State University – College of Industrial Technology Pablo Borbon Main II. He graduated his Doctor of Philosophy major in Peace and Security Administration in Bicol State University. Moreover, he earned his Master of Technician Education major in Technical Drawing and Bachelor of Science in Industrial Education major in Drafting Technology in Marikina Institute of Science and Technology and Pablo Borbon Memorial Institute of Technology, respectively. His notable experience as administrator for decades nurtured him with the skills and expertise in the field of management and technology both in local and international organizations.