
**A TRACER STUDY OF BACHELOR OF SCIENCE IN INFORMATION
TECHNOLOGY GRADUATES OF NORTHERN ILOILO STATE UNIVERSITY
MAIN CAMPUS FROM 2018-2022**

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ABSTRACT

This descriptive survey research was conducted to trace the whereabouts of the graduates of the Bachelor of Science in Information Technology at Northern Iloilo State University-Main Campus in Estancia, Iloilo, Philippines from Batch 2018 to Batch 2022. A stratified random sampling technique was employed to group the respondents by graduation batch. The CHED Tracer Study Questionnaire was used, encoded into Google™ Form, and distributed through an online survey. There were 235 respondents, out of the 356 graduates, who agreed to participate in this study. Frequency counts, sums, and percentages were used to describe the data. Findings revealed that a 66.01% employability rate was achieved, with 20.00% getting the primary and secondary job roles as defined in the CMO 53, S. 2015. However, it can be noted that 77.42% relevance of the various courses being offered in the current curriculum applies to the respondents' current jobs. More so, the 44.13% waiting period to land a first job between one month to six months period is indeed notable, showing the level of competencies that these graduates possess leading to employment. Positive feedbacks were provided by supervisors narrowing on the IT competence, knowledgeability, technical know-how, and positive attitude of the BSIT graduates.

Keywords: Tracer Study, Employability, BS Information Technology, Graduates, Supervisors' Feedbacks.

I. INTRODUCTION

Tracer studies are an important tool used by educational institutions to track the career paths and outcomes of their graduates. A graduate tracer study is an effective tool that can provide valuable information for evaluating the whereabouts and performance of graduates in the workplace [1]. It involves collecting data from former students to determine how well the education they received would prepare them for the workforce. This information is valuable for schools to evaluate the effectiveness of their programs and make improvements where necessary.

The Philippines' Commission on Higher Education (CHED) mandated Higher Education Institutions (HEIs) to conduct graduate tracer studies to examine the employability of graduates as well as the alignment of university programs with industry demands [2]. Tracer studies can help schools build stronger relationships with their alumni. By keeping in touch with former students and learning about their experiences after graduation, educational institutions can demonstrate their commitment to supporting graduates throughout their careers. Alumni networks can also be a valuable resource for current students seeking advice, mentorship, or job opportunities.

According to the Philippine Statistics Office, The rate of unemployment rate in the Philippines as noted by the Philippine Statistics Office in the month of July 2024 is at 4.7% [3]. While many factors may be attributed to this condition, a possible variable may be the mismatch of competencies that educational institutions provide to their students relative to the needs of the industries. In [4], she argued that the perceived mismatch between the skills of college graduates and the needs of the industries is a challenging issue in the education and labor market today. Thus, tracer studies can be carried out to gather feedback from alumni about their job roles, salary levels, and satisfaction with their education, institutions can identify areas where they need to update their courses to better align with the demands of the job market.

In Region VI (Western Visayas Region) where the Northern Iloilo State University is located, the Philippine Statistics Office reported that the region ranked second in positive economic growth at 7.2% in 2023 [5]. In the Services sector, of which the information and communications technology belongs, its regional performance contributed to the growth of 7.7 percentage points in 2022 [6].

The value of tracer studies on the career paths of graduates can provide schools with valuable insights that can inform future decision-making and ultimately benefit current and future students. For instance, [7] noted that 78.53% of their graduates of Information Technology Education from the year 2015-2017 were already employed with 69.78% (or 97 out of 139) perceiving that their first job is related to the program that respondents took up in college. They were also able to find out that 25.90% of the respondents took only 1-6 months to find their first job. With these revelations, they recommended that the school officials, academic leaders, alumni, students and industry representatives to regularly review the curriculum to guarantee that their graduates are equipped with the necessary knowledge and skills required in the industry.

In [8], she conducted a 7-year tracer study for graduates of Bachelor of Science in Information Technology at Lyceum of the Philippines–Laguna covering the period of Batch 2011 to Batch 2018. The salient findings of her study included the employability of graduates at around 33.00% within three months after graduation. She also noted that 31.00% were employed as specialists. Overall, a 92.00% employability rate was achieved showing the relevance of their program offering.

In another tracer study by [9], they argued that among graduates of the BSIT program at Bulacan State University covering Batch 2016 to Batch 2019, they found that most of their graduates ended up having jobs related to their field of study (51.18%) in the Philippines (97.49%) within the first six months after graduation (50.74%). Similarly, Mina et al. [10] surveyed BSIT graduates from Nueva Ecija University of Science and Technology, San Isidro Campus who graduated during the Academic Year 2016-2017 and Academic Year 2017-2018 with 219 respondents. Their investigation revealed that 72.00% of the respondents were employed with 40.00% getting employed within the first month after graduation while 45.00% were employed between seven to eleven months after they graduated. These results suggest the effectiveness and relevance of the program being offered by their university.

On the other hand, Macadangdang [11] conducted a tracer study on the employability of BSIT graduates Batch 2016 from Cagayan State University. Her finding revealed that the respondents of the survey were employed with meager income with the majority of them being underemployed.

In a report by the Philippine Institute for Development Studies [12], the Philippines is facing an oversupply of information technology (IT) graduates in 2025. Thus, higher educational institutions offering information technology education must find ways and strategies to provide a competitive edge for their graduates. Identifying the strengths and weaknesses of the respective current curricula of the whereabouts of their graduates through the conduct of tracer studies can provide school administrators relevant information that will result in a more efficient and significant BSIT program that will cater to the needs of the industry.

In line with this, the main objective of the study was to trace the Bachelor of Science in Information Technology graduates of Northern Iloilo State University-Main Campus from Batch 2018 to Batch 2022.

Specifically, this tracer study sought to answer the following questions:

1. What is the general profile of the respondents in terms of year graduated, sex, and civil status?
2. What is the employment history of the employed respondents regarding current employment status, current job positions, type of company and location, monthly income, relevance of the field of study to the current jobs, and duration to land their first job?
3. What is the employment profile of the unemployed respondents regarding reasons why respondents did not have jobs?
4. What are the supervisors feedback on the performance of the BSIT graduates in their respective workplaces?

II. METHODOLOGY

Research Design

This study utilized the descriptive survey method. The main goal of a descriptive survey research design is to provide a thorough and accurate description of the traits, behaviors, opinions, and attitudes of the target group by means of a methodical and structured approach to data collection from a sample of individuals or entities within a larger population. It was specifically conducted by an online survey with the graduates of the Bachelor of Science in Information Technology from Batch 2018 to Batch 2022 at Northern Iloilo State University (formerly Northern Iloilo Polytechnic State College) Main Campus in Estancia, Iloilo, Philippines.

Sampling and Data Gathering Procedure

There were 356 BSIT graduates from 2018 to 2022. Of these, 95 graduated in 2018, 83 graduated in 2019, 31 graduated in 2020, 50 in 2021, and 97 graduated in 2022. A stratified random sampling technique was employed to gather responses based on the grouping by batch of graduates. Of the total number of graduates, 235 alumni (66.01%) adhered to the call for the survey.

An online version using Google™ Form was created based on the Commission on Higher Education (CHED) Tracer Study Survey Instrument [13] was used in the gathering of data. The corresponding link was then forwarded to the email addresses as well as to the known social media accounts of those BSIT graduates for them to be included in the study. The gathering of responses was done between March 2024 to August 2024.

III. RESULTS AND DISCUSSION

On Demographic Profile

Distribution of Respondents by Batch

At the end of the conduct of the survey, the responses included 46 graduates (48.42%) were from Batch 2018; 61 graduates (73.49%) were from Batch 2019; 22 respondents (70.97%) from Batch 2020; 26 responses (52.00%) were from Batch 2021; and 80 graduates (82.47%) were from Batch 2022. There were 235 respondents (66.01%) who participated in the study. Those who did not respond were not considered as respondents of the study. In the interpretation of the results, frequency counts, sum, and percentages were used. Table 1 shows the data.

Table 1: The BSIT graduates per batch and number of respondents from Batch 2018 to Batch 2022.

Batch	No. of Graduates	No. of Respondents	%
2018	95	46	48.42
2019	83	61	73.49
2020	31	22	70.97
2021	50	26	52.00
2022	97	80	82.47
Total	356	235	66.01%

Distribution of Respondents as to Sex and Civil Status

Based on the gathered data, the following demographic information is presented. As to sex, there were 80 males (34.04%) and 155 females (65.96%). As to civil status, respondents who are still single are 223 (94.89%) and those who are already married are 12 respondents (5.11%). Figure 1 shows the distribution as to sex while Figure 2 shows the distribution of respondents by civil status.

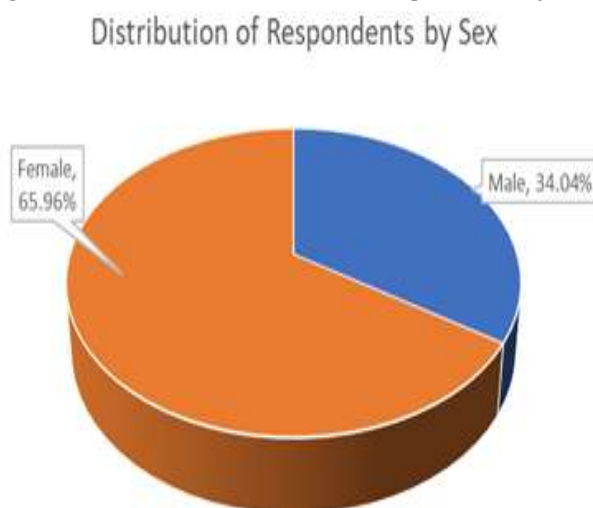


Figure 1: Distribution of Respondents as to Sex

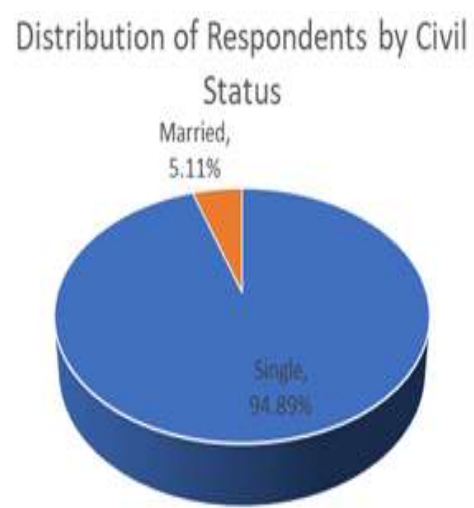


Figure 2: Distribution of Respondents by Civil Status

On Employment History

Current Employment Status

As to the employment history, it was revealed that 186 respondents (79.15%) are currently employed while 49 respondents (20.85%) are currently not employed. Figure 3 shows the data.

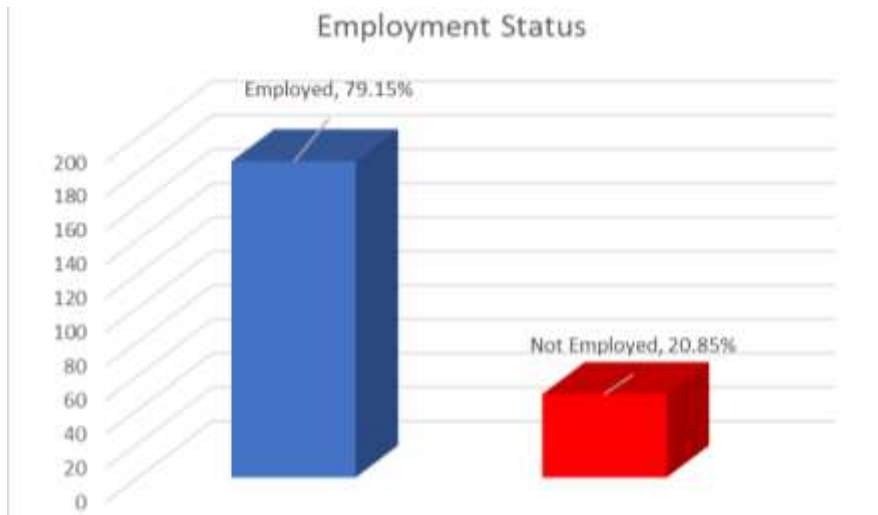


Figure 3: Distribution of Respondents as to Employment Status.

Current Job Position

When asked about their current job positions, the alumni respondents revealed that 19 of them (10.05%) are currently employed as web applications developers; one graduate (0.53%) is a network administrator, three (1.59%) are working as network staff while 16 of our graduates are currently working as technical support specialists (8.47%) in non-voice BPO companies and eight graduates (4.23%) are freelance computer programmers. It can be noted that these positions are considered professional occupations for BSIT graduates as defined in the CHED Memorandum Order 25, Series of 2015.

Other current job positions of the respondents are BPO agents (31, 16.40%); PNP/AFP/Coast Guard Personnel (8, 4.23%); IT Clerks/Staff in private and government offices (13, 6.88%); graphic artists (14, 7.41%); customer service or sales personnel (61, 32.28%); IT teachers/instructors (8, 4.23%); and entrepreneurs (4, 2.12%) as owners of internet cafes and other local business establishments. Table 2 shows the data.

Table 2: Distribution of Responses as to their Present Job Positions.

Current Job Positions	f	%
Web Applications Developers	19	10.05
Network Administrator	1	0.53
Network Staff	3	1.59
Computer Programmers	8	4.23
Technical Support Specialists	16	8.47
BPO Agents	31	16.40
PNP/AFP/Coast Guard Personnel	8	4.23
IT Clerk/Staff in Private and Government Offices	13	6.88
Graphic Artists	14	7.41
Customer Service Representatives or Sales Personnel	61	32.28
IT Teachers/Instructors	8	4.23
Entrepreneurs	4	2.12

Type of Company and Location

Additionally, the respondents disclosed that as to the type of companies they are connected with, those who are working in the government accounted for 44 respondents (23.66%) while those who are in private companies are 142 respondents or 76.34%. Meanwhile, respondents who are currently employed locally are 178 (95.70%) while those who are working abroad are 8 respondents (4.30%). Figure 4 shows the distribution of respondents with current employment as to the type of companies they are connected with while Figure 5 shows the distribution of respondents with current employment as to location.

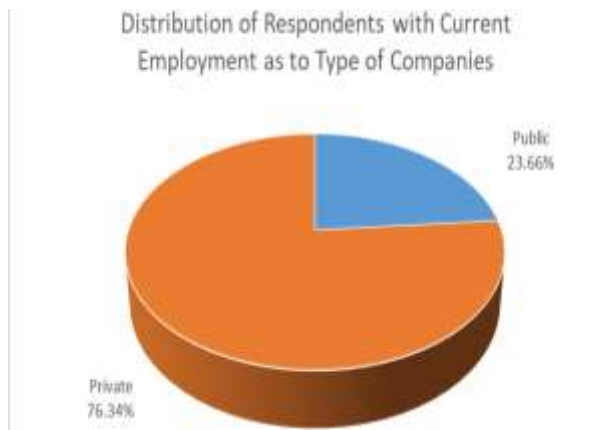


Figure 4: Distribution of Respondents with Current Employment as to Type of Companies

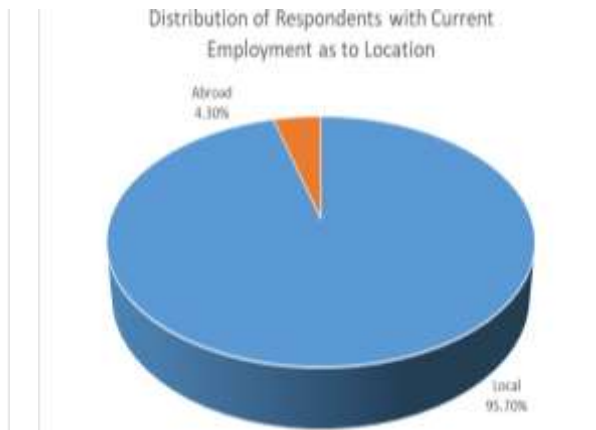


Figure 5: Distribution of Respondents with Current Employment as to Location

Monthly Income

As shown in Figure 6, when the respondents were asked about their monthly income, 14 of them (7.53%) said they were earning PhP 5,000.00 and below. Thirty-nine respondents (20.97%) disclosed that they are earning between PhP 5,001.00 to PhP 10,000.00. Also, 97 respondents (52.15%) said they are being paid between PhP 10,001.00 to PhP 20,000.00 while 36 respondents (19.35%) replied stating that they are earning above PhP 20,000.00.

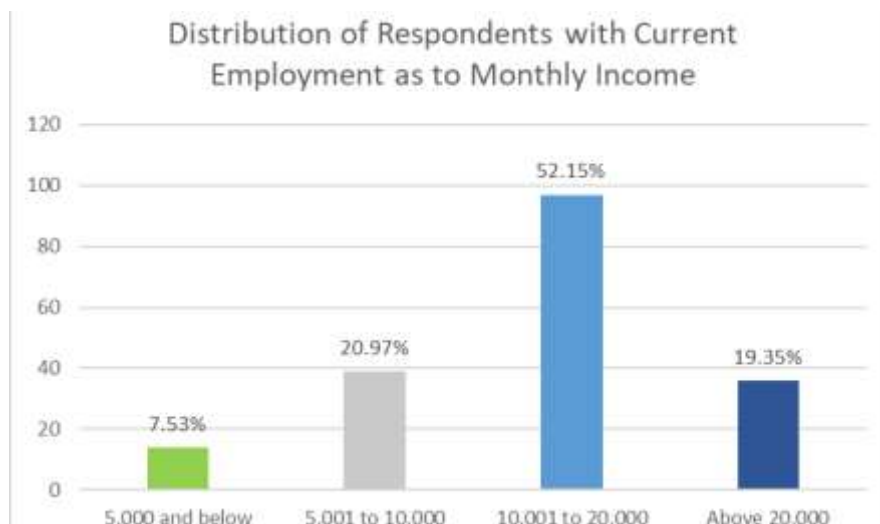


Figure 6: Distribution of Respondents with Current Employment as to Monthly Income.

Relevance of Field of Study to Current Jobs

The respondents were also asked whether their field of study is related to their current jobs. This question denotes the appropriateness of the competencies they learned from various courses and their applicability to their current jobs. As such, 114 (77.42%) responded that the field of their study in information technology education is indeed related and valuable to their current jobs while 42 respondents (22.58%) said that their current jobs have nothing to do with their field of study. Figure 7 shows the data.

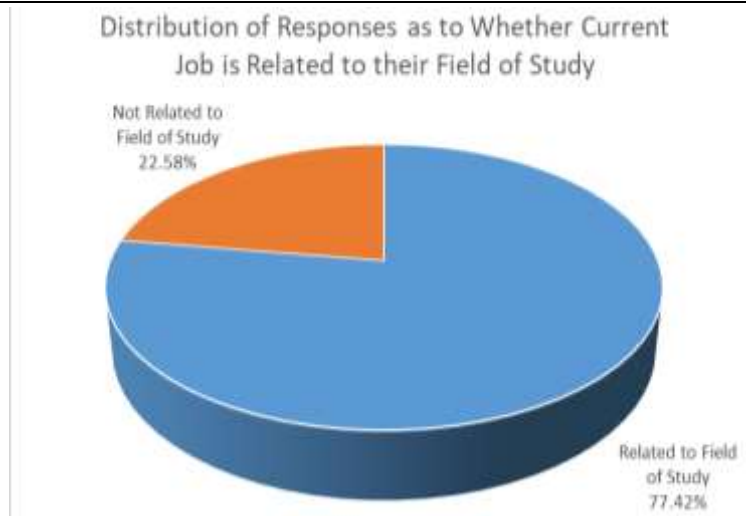


Figure 7: Distribution of responses as to whether the current job is related to their field of study.

Duration to Land First Job

The duration to land the first job usually indicates the employment opportunities can be available in the marketplace to graduates for their grabbing. This can also be an indicator that the area's economic growth is indeed vibrant due to available work. With this, 42 respondents (19.72%) disclosed that they were lucky to land their first job less than one month after graduation. Ninety-four respondents (44.13%) said they got their first job between one month to six months after they graduated. Also, 49 respondents (23.00%) said they were given the opportunity to get their first jobs between seven months to one after their graduation. Twenty-eight respondents (13.15%) said they got their first job beyond one year to less than two years after their graduation. Figure 8 shows the data.

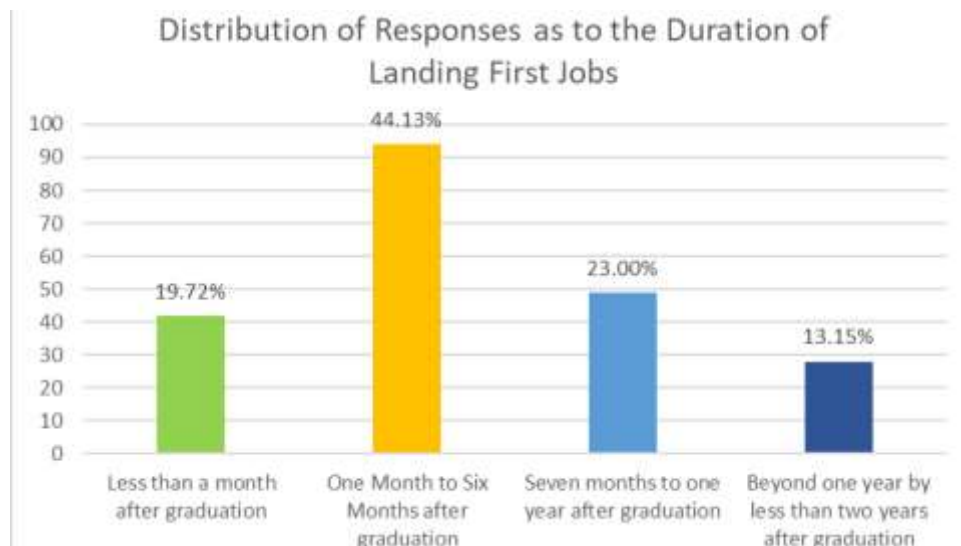


Figure 8: Distribution of responses as to the duration of landing first jobs.

On Reasons Why Respondents Did Not Have Current Jobs

From the 235 respondents who participated in this study, there were 35 graduates who responded as to why they did not have current jobs. It should be underscored though that 13 of the 35 graduates were able to get a job but eventually decided to refrain from looking for a job or were not able to get a job during the conduct of the survey. One of the reasons was "no job opportunity" with four respondents stating it.

Three respondents said they did not have work at the time of the survey due to "health-related reasons", therefore they opted not to get employed. Two of the respondents said they "lack work experience" while four respondents said they had "family concerns and decided not to find jobs". With "advancement or furthering of study" on their priorities, two respondents decided not to look for work at the time of the study, and eight

respondents "decided not to look for a job" at the time of the survey. Finally, 17 respondents have other various reasons as to why they were not employed during the conduct of the study.

Supervisors' Feedback on the Performance of Respondents in their Respective Workplaces

Three supervisors were asked about the performance of the BSIT graduate currently employed in their organization. These supervisors include Supervisor 1, head of an administrative unit in a state university where a graduate from Batch 2020 is currently connected since 2022; Supervisor 2 is a team leader in a private company specializing in developing web and mobile applications where a graduate of Batch 2018 is a part of his team; and Supervisor 3 is a department head in state university where a graduate from Batch 2019 is currently employed as an IT instructor. Open-ended questions were asked from these supervisors for their feedback and comments.

When asked about the general attitude to perform the job as an IT professional, all of the participants provided positive feedback stating "he's very dependable, when given a task, he can do it with minimal supervision" said Supervisor 1. According to Supervisor 2, "his know-how in web programming languages is already sufficient to produce the desired outputs, however, there are still a lot of things that he needs to learn, but he can learn it for sure because he has that willingness to learn. *Indi lang magtinamad* (he needs not to be lazy)". For Supervisor 3, he said "Ms. X exhibited a great deal of professionalism in the performance of her work. She has a positive attitude and does not complain about various assignments given to her".

The second was about the knowledge and competencies of the BSIT alumni under their supervision as information technologists. Supervisor 1 acknowledged that "he is very competent and knows what he is doing", referring to his subordinate. He also said that "he even suggests many things that made our processes cut off time". For Supervisor 2, he said that he is confident that "your graduate knows what he is doing, he knows his craft and can be mentored further". In the case of Supervisor 3, he also affirmed that his "new instructor does her homework to make herself ready for the subjects assigned to her. I think that it is a good quality of a teacher, who may have already known the topics, but is still continuously updating herself".

When asked about what should be needed to further improve the quality of our graduates, Supervisor 1 and Supervisor 2 agreed that there is a "need to further improve his competence and confidence in both oral and written communications, since it is important to articulate the situations later to other people. Although I also recognized *nga basi huya-huya pa sya* (that maybe he is just a reserved type)". For Supervisor 3, he mentioned that "apart from being technically competent, a development further of the self-esteem is noteworthy".

IV. CONCLUSION

The findings of this graduate tracer study suggested that the current curriculum of the Bachelor of Science in Information Technology at Northern Iloilo State University Main Campus in Estancia, Iloilo, Philippines can provide the necessary competencies to its graduates resulting in a 66.01% employability rate. This is notwithstanding the possibility that those who were not traced within the duration of the online survey may have been employed but were not counted.

As for the Program Educational Objectives, it turned out that 20.00% of the respondents were able to land professional occupations, defined as primary and secondary job roles, for graduates of the BSIT as per CMO 53, S. 2015. However, we do not discount the other jobs currently employed by some of the respondents as these jobs are high-paying and are likely to be relevant to the field of their study such as those IT teachers and instructors teaching in higher education institutions, PNP personnel assigned in the Cybercrime Division and many others.

A 44.13% waiting period to land a first job between one month to six months period is indeed notable, showing the level of competencies that these graduates possess leading to employment. Another noteworthy result that emerged was the 77.42% relevance of the various courses being offered that apply to the respondents' current jobs. This can be one of the factors that indeed the current curriculum of the BSIT program at NISU Main Campus meets the needs of the industry.

Supervisors provided positive feedback narrowing on the IT competence, knowledgeability, technical know-how, and positive attitude of the BSIT graduates. However, improving written and oral communication skills, and self-esteem is also desired.

Finally, continued efforts to trace all graduates are imperative to capture a bigger picture on the significance of curricular offering to a more informed decision for future activities.

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