# A Tracer Study among Medical Technology Graduates of LPU-St. Cabrini School of Health Sceinces, Inc.

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***ABSTRACT***

*Graduate Tracer studies are essential for understanding the relevance and quality of programs offered by the universities as well as the labor market. Medical Technology graduates can work in all areas of the clinical laboratory and perform a full range of laboratory tests. LPU-SC Medical Technology graduates demonstrated good results in their employability performance in 2016. This research primarily monitors and assesses the LPU-SC Medical Technology graduates, which is relevant in program implementation and curriculum enhancement or revision. The study covered the first two graduate batches of Medical Technology program in Lyceum of the Philippines St. Cabrini, specifically its 2016 and 2017 graduates. Findings revealed that 91% reported that they were able to be hired within 1 year of graduation, a great majority (86%) of the graduates reported that they are working in the program they studied, and they are working in hospitals or diagnostic laboratories. The graduates also assessed the program favorably, with ratings between 3.4-3.6 out of 4.0. Predictors of employability, career success (based on current positions), and length of time before they got hired also showed that gender was given as an "important" predictor for status of employment. Moreover, on the soft skills learned from the program, some of the skills that were rated low are Negotiation skills (31.4%) and Creativity and Innovation (both at 45.3%), which are operationally important for any position. Leadership skills, such as Delegation (34.9%) and Mentoring (48.8%) also scored among the lowest in the skills list. The results suggest that the program need to be studied carefully for continuous improvement to give better chances for students to be hired immediately after – or even before graduation.*

***Keywords:*** *Graduate tracer, Medical technology, employability, program assessment*

## INTRODUCTION

LPU-St. Cabrini School of Health Sciences (LPU-SC) is one of the internationally recognized educational institutions in the Philippines wherein graduates are preferred by healthcare organizations, continuously providing high-quality education that is carried out in multiple settings and various strategic locations. One of the course offerings of LPU-SC is the Bachelor of Science in Medical Technology. Medical Technology graduates can work in all areas of the clinical laboratory and perform a full range of laboratory tests. Also, they receive the patient's specimens, interpret, and report accurate results to doctors. LPU-SC Medical Technology graduates demonstrated good results in their employability performance in 2016.

Consequently, the K-12 integration in the ASEAN context helps in strengthening universities to compete with the world. This way, the Department of Education (DepEd), Commission on Higher Education (CHED), Technical Education and Skills Development Authority (TESDA), and the Department of Labor and Employment (DOLE) must ensure that training, skills, subjects, and courses would fit competition in the world market.

According to statistics, the unemployment rate in the Philippines in the year 2019 was approximately 2.41 percent and said to be in a steady downward trend from 3.6 percent in 2014 (H. Plecher, 2020). One of the main causes of unemployment in the Philippines is attributed to overpopulation, which results in an oversupply of the labor force on certain industries and the inability to take on available jobs.

In this regard, ASEAN integration can help Filipinos get more and better jobs with easier and cheaper travel options, goods, and services. As a result, more employment opportunities will be available

for Filipinos especially in the IT industry, with ASEAN having seven hundred million digital consumers. Furthermore, ASEAN's vision by 2025, is expected to grow 500% to $200 billion this will lead to ASEAN's goals, which is to decrease "unemployment and underemployment" across the region.
Cuadra et.al (2019) stated that a graduate tracer study is a very powerful tool that can provide valuable information for evaluating the whereabouts and performance of the graduates in the workplace. Moreover, graduate tracer studies (GTS) are important tools to monitor education output. The said study also revealed that most of the graduates were in their early 20s and has just recently graduated from the university. In addition, they were able to find a job through someone they knew. Most of the graduates have jobs related to their respective degree programs. The relevance of the degree program to professional requirements was a major strength of the undergraduate curriculum (Cuadra et.al, 2019).

Therefore, this research aims to help and monitor LPU-SC Medical Technology graduates. This will result in program implementation and curriculum enhancement or revision.

## Review of Literature

*Significance of Graduate Tracer Study*

A graduate tracer study is a very powerful tool that can provide valuable information for evaluating the whereabouts and performance of the graduates in the workplace (Cuadra et.al, 2019). This study aimed to keep track of the graduates in one of the state universities in the Philippines. A total of 1,983 graduates responded to this study. A structured survey questionnaire served as instrument to gather data interpreted through frequencies and percentages. Results revealed that most of the graduates were in their early 20s and have just recently graduated from the university. Furthermore, they were able to find a job through someone they knew. The relevance of the degree program to professional requirements was a major strength of the undergraduate curriculum. To enrich the existing degree programs, the institution has to focus on student mobility, credit transfers, quality assurance and research clusters as the four main priorities to harmonize with the ASEAN higher education system.

Furthermore, a graduate tracer study conducted by Sanchez and Diamante (2017) which revealed that nursing graduates are noted to have work that is not related to their course in college. Graduate Tracer studies are essential for understanding the relevance and quality of programs offered by the universities as well as the labor market. The study determined the current work status and employment data of the graduates of the University of Cebu Lapulapu and Mandaue (UCLM) College of Nursing of all batches from 2007 to 2014. The findings served as a basis for a report on the employment data of UCnian nursing graduates. The data for this tracer study was gathered through the Graduate Tracer Tool (GTT) patterned from the Commission on Higher Education (CHED). In the data analysis, descriptive statistics was used. The employment data of the respondents showed the current work status of the nursing graduates. The majority of the respondents are employed. In their present occupation, most of the respondents assume professional work and the major line of business is in the health and social work sector. It was depicted that most of them are regular employees, have professional occupations and have local jobs in the health and social work. Most are regular/ permanently and are locally employed. More than a half got their jobs within 1 to 6 months and almost two thirds of the respondents had jobs related to the course they took up in college. The competencies that the graduates find useful in their first job are communication skills, critical thinking skills and human relations skills.

In South Africa, graduate tracer studies became an appropriate research method for responding to various problems in the South African higher education context, including difficulties associated with higher education transformation and graduate employability (Senekal and Munro, 2019). However, there is little context relevant literature on the implementation of the various methodologies that may be used, and no assessment of the relevance of these methods for the South African context. Therefore, a systematic quantitative literature review was conducted of 23 graduate tracer studies from 13 countries, published between 1995 and 2016. The findings from this review point to three potential models for implementation in the South African context: a large-scale model, a smaller-scale model, and a mixed-

method model. These recommended models may allow for the more efficient and effective implementation of graduate tracer studies across the South African context.

Egesah and Wahome (2017) conducted a study around East Africa, which revealed that GTS is important in the utilization of feedback from graduates for improvement of teaching and learning spaces, conditions, provisions and programs. The governing bodies such as the Inter-University Council for East Africa (IUCEA) and in-country bodies such as Ministries of Higher Education (MoHE) and Commissions for University Education (CUEs) are included in this study. For instance, one recent and innovative way of ensuring quality learning at universities worldwide, is the utilization of feedback from graduates for improvement of teaching and learning spaces, conditions, provisions and programs. This way, feedback can be obtained and used from graduate tracer studies (GTS). Moi University researchers in Kenya developed and conducted a GTS, which yielded results indicating that there are challenges in the teaching and learning activities of the university. The GTS results further reveal weaknesses in teaching and learning, that the university should address by aligning improvement plans to the lessons learnt to improve teaching and learning. The GTS was conducted between 2010 and 2013 using a survey tool that examined the following objectives: sociobiographic characteristics of respondents; study conditions, provisions and experiences; job search and transition to work; employment and work; work and competencies; study and work link. In the end, GTS can be used to improve teaching and learning at Moi University by addressing study conditions, study provisions and study programs. Results show how expansion into practical, field, outreach, skills, competencies-based teaching, and learning is nuanced.

To put more emphasis, the GTS is important in program improvement; a tracer study by Mwakigonja (2016) in Tanzania allowed subsequent curriculum review and the introduction of full modularization and competency-based learning at MUHAS. It is envisioned that the tracer study findings will improve teaching, learning and inform next curriculum review at MUHAS leading to increased output of appropriately trained health professionals to fill the big gap in human resources for health (HRH) in Tanzania. This study conducted interviews to 147 MD graduates representing 29 % of the 510 students who graduated from the SoM between 2006 and 2008. Majority (70.1 %, n = 103/147) were males. About 70 % graduated in 2008 and majority (68 %, n = 100/147) were doing internship. Majority (60.5 % n = 89/147) were based in/near Dar es Salaam at district, regional or referral hospitals. Data gathered resulted to reasonable concordance, most competencies ranked low except on four aspects. Teaching, System-based Practice and Good Practice had the lowest.

*Employability of Graduates in the Philippines*

According to a study by Dotong et.al (2016) employability of graduates is one of the measures of Higher Education Institutions to ensure that the quality of education they provide is suitable to the needs of the industry. On this note, the researchers determined the employment status of engineering graduates in one Private University in the Philippines from the period of 2009 to 2012. Results showed that the engineering graduates are highly employable with 95.54 percent employment rating, with regular status and presently working as associate professionals in the Philippine manufacturing companies related to their college degrees who found their first job as walk-in applicants and stayed on their jobs for more than three (3) years. Moreover, communication skill is considered the foremost competency learned in college that found very useful to their job placement.

**Objectives of the Study**

The study aims to profile the first two graduate batches of Medical Technology program in Lyceum of the Philippines St. Cabrini, specifically its 2016 and 2017 graduates. It seeks to answer the following objectives: 1. describe the profile of the respondents as to: a) Sex; b) Age;

c) Year of Graduation;

d) Honors/Awards Received;

e) Current Employment Status;

f) Present Employer Type;
g) Position in the Company;
h) Length of time before getting employed

2. analyze the perception of the respondents as to their assessment of the program.

3. compare significant difference on their assessment of the program when grouped according to the profile variables.

4. identify the best predictors and resulting linear regression model on the following key employability indicators:

a) Current position in the company;
b) Status of employment; and
c) Length of time before getting employed

5. determine the perception of the respondents as to:

a) The soft skills they learned from the program;
b) Contributors to employability; and
c) How they got their job

## METHODOLOGY

This study is designed as a descriptive survey research, meant to establish the status of LPU-SC graduates of Medical Technology program for Batches 2016 and 2017, the first batches of the school. It also aimed to identify possible predictors of key data for employability of the graduates, including employment status, length of time before they got hired, and current position in the company, making the study predictive in nature as well.

The respondents of the study include 86 graduates of BS Medical Technology in LPU-SC, particularly Batches 2016 and 2017. In terms of Batch, 26 of the 42 graduates of Batch 2016, and 60 of the 75 graduates of Batch 2017 were surveyed. This represents 61.9% of Batch 2016, and 80% of Batch 2017. This corresponds to 73.5% of the total graduates. 77.9% are female, while 61.6% are aged younger than 22 years old.

The research survey instrument is the standard Graduate Tracer Study (GTS) instrument designed by the Research Office of Lyceum of the Philippines University – St. Cabrini School of Allied Medicine, and was collected online through the help of the College's instructors and graduates. Link associated with the Google Forms of the GTS was shared repeatedly through Facebook and other social media platforms, such as Twitter, Messenger groups, Viber and Instagram, in order to reach as many as possible. Other data also came from scanned versions of the survey instrument distributed either manually or through social media and electronic mail. Results of survey were merged and integrated, and encoded and tallied in Microsoft Excel 2016. After this, consolidated tally was imported in Statistical Package for Social Sciences (SPSS) version 21.0, and analyzed using the same

Profile of respondents according to Sex, Age, Batch Graduated, and Honors Received etc. was analyzed using frequency distribution and percentage. Perception of respondents on the assessment of the program, was analyzed using mean and standard deviation. Comparison of means of the respondents' assessment of the program, and length of time they waited before landing on a job – when grouped according to the profile variables was analyzed using the SPSS standard comparison of means analysis program, using F-test with corresponding adjustment for degrees of freedom. Alpha (p-value) was tested at 0.05 levels. Finally, model summary of prediction using forward stepwise regression was analyzed using the Automatic Linear Modeling technique in SPSS, utilizing the stepwise-forward regression approach. Strength of prediction is given by accuracy levels, transformed to r-square or coefficient of determination, while predictors were automatically filtered using forward stepwise approach, and given by the linear coefficient (r, or slope), and the linear intercept (b). Degree of importance is also given as a percentage, considering only the critical predictors.

Cronbach Alpha for test of reliability was done using SPSS 21. Results for the seven (7) questions on the survey is at 0.871 as can be seen above, manifesting a very good reliability and consistency among responses.

## RESULTS AND DISCUSSIONS

### Graduates' Demographic Profile

Table 1 indicates the profile on sex. Result shows that there are more female respondents than males. In terms of sex, most of the respondents are female (n=67, 77.9%). This is also aligned to the make-up of Allied Medicine programs, with more women than men. Chaparro (2017) attested to this as well, pointing out that, medical and allied health professions are more popular to women than men.

Table 1. Demographic profile according to sex

| Gender | Freq | Percent |
|---|---|---|
| Male | 19 | 22.1 |
| Female | 67 | 77.9 |
| Total | 86 | 100 |

Table 2 highlights the profile on age. Result shows that most Medical Technology graduates belong to age 23 and below. Therefore, most of the respondents (n=53, 61.6%) are younger (<23, vs. 24-25, n=33, 38.4%). Considering that these respondents graduated prior to the full implementation of K-12 program of the government, it is noticeable that though some respondents have graduated some three or four years ago, some respondents are still below 23 years old, since the graduating age prior to K-12 implementation is usually 19 to 20 years old.

Table 2. Demographic profile according to age

| Age | Freq | Percent |
|---|---|---|
| <22 | 53 | 61.6 |
| 23-25 | 33 | 38.4 |
| Total | 86 | 100.0 |

Table 3 indicates the profile on the year of graduation. Result shows that most Medical Technology graduates who answered the survey are from the batch 2017 (n=60, 69.8%, vs. Class of 2016, n=26, 30.2%). It was harder to locate the Class of 2016, with barely 60% turn out, compared with the 80% turn-out of the Class of 2017.

Table 3. Demographic profile according to the year of graduation

| Year Grad | Freq | Percent |
|---|---|---|
| 2016 | 26 | 30.2 |
| 2017 | 60 | 69.8 |
| Total | 86 | 100 |

Table 4 shows the profile on the honors/awards received by the Medical Technology graduates. Result shows that most of them (n=70, 81.4%) said they didn't receive any award or honor in school. It is noteworthy that the graduate who eventually placed as topnotcher in the MedTech board exams responded that he did not receive any award or honors from the school when he was still studying.

Table 4. Demographic profile according to honors/awards received

| Honors/Awards | Freq | Percent |
|---|---|---|
| None | 70 | 81.4 |
| Yes | 16 | 18.6 |
| Total | 86 | 100. |

**Current Employment and Position**

Table 5 presents the current employment status of the Medical Technology graduates. In terms of employment status, majority of our graduates are either employed (n=74, 86.0%) or studying for graduate school (n=8, 9.3%). All those studying for graduate school, were former medical technologists, and gainfully employed within 3 or 6 months after graduating. However, four (4.7%) said that they are currently unemployed. Two are into their family businesses, while only one (see below) said he has not found employment since graduation (Batch 2017).

Table 5. Present employment status

| Status of Employment | Freq | Percent |
|---|---|---|
| Unemployed | 4 | 4.7 |
| Employed | 74 | 86.0 |
| Grad School Student | 8 | 9.3 |
| Total | 86 | 100 |

Table 6 presents the current employer of the graduates. Majority of Med Tech graduates said that they are working in hospitals (n=41, 47.7%). Diagnostic Laboratories and Medical Equipment Companies (n=16, 18.6%) are also favorite destinations of graduates, while others said they are working in private companies (n=13, 15.1%) or the government (n=4, 4.7%). It is noteworthy to report that one graduate said he is working in a BPO company.

Table 7 presents the current position of the Med Tech graduates in their companies. In terms of positions in their companies, majority are aligned to their programs, with 59.3% (n=51) working as medical technologists, and 16.3% (n=14) as junior medical technologists or laboratory assistants. An additional 9 graduates (10.5%) said that they are supervisors, area heads or section heads in the laboratories of their hospital employers.

Table 6. Present employer

| Type of Employer | Freq | Percent |
|---|---|---|
| None | 12 | 14.0 |
| Hospital | 41 | 47.7 |
| Diag Lab / Med Equip | 16 | 18.6 |
| Government | 4 | 4.7 |
| Others (Private) | 13 | 15.1 |
| Total | 86 | 100 |

Table 7. Position in the company

| Position in the Company | Freq | Percent |
|---|---|---|
| None / Not connected | 12 | 14.0 |
| Medical Staff (other than MT) | 14 | 16.3 |
| Medical technologist | 51 | 59.3 |
| Supervisor / Area or Section Head | 9 | 10.5 |
| Total | 86 | 100 |

Table 8 presents the length of time before getting employed. When asked how long it took them to land employment, about 75% said that they were employed either within 3 months after graduation (n=33, 38.4%) or 6 months after graduation (n=31, 36.0%). An additional 3.5% (n=3) said that they were employed even before graduation, while 17.4% (n=15) said they were employed between 7 months to 1 year after graduation. This makes employment for medical technology graduates relatively easy, with 96.51% (83 of 86 graduates) landing job within a year after graduation. Only one (1.2%) said he has found no work up to the time he was surveyed.

Table 8. Length of time before getting employed

| Length of time before getting employed | Freq | Percent |
|---|---|---|
| Before graduation | 3 | 3.5 |
| within 3 months | 33 | 38.4 |
| within 6 months | 31 | 36.0 |
| 7 months to 1 year | 15 | 17.4 |
| 1 1/2 years to 2 years | 3 | 3.5 |
| No work until now | 1 | 1.2 |
| Total | 86 | 100.0 |

**Assessment of Learning and Program**

Table 9 presents the assessment of the program. Among the statements surveyed, internship being "enough to equip the students with hands-on experiences related to the job" received the highest rating (mean=3.6604, std dev=0.55273), while that manifesting "quality instruction" as being "sufficient for the requirement of the workplace" received relatively lowest ratings among the statements (mean =3.3962, std dev=0.49379). Considering that the statements are rated with a 4-point Likert scale though, this is still high, and labeled as "Agree" on the scale. Consolidated total is at mean = 3.5229, std dev 0.51611. This shows that the graduates appreciated their program of study in LPU St. Cabrini, with all statements receiving scores from 3.3962 to 3.6604, from a scale of 1-4.

Table 9. Assessment of the program

| Statements | Mean | Std. Dev |
|---|---|---|
| The course content is very comprehensive and relevant to the job | 3.6038 | 0.49379 |
| The objectives of the program are similar to the objectives of the workplace | 3.4906 | 0.54146 |
| The program length is sufficient to produce graduates with the required entry-level knowledge and/or skill in the field/workplace. | 3.5094 | 0.50469 |
| The program description captures the types of duties a graduate can expect to perform in the work environment. | 3.4906 | 0.50469 |
| Quality of instruction is sufficient for the requirement of the workplace. | 3.3962 | 0.49379 |
| Interpersonal relationships had been developed in school. | 3.5094 | 0.50469 |
| On-the-job training/internship is enough to equip the students with hands-on experiences related to the job | 3.6604 | 0.55273 |
| Totals | 3.5229 | 0.51611 |

Checking the differences of means in Table 10 given to the statements, and checking with the demographics of the graduates, there are three (3) standouts, with significant difference verdict ($p<0.05$). First, the statement "the course content is very comprehensive and relevant to the job" revealed a p-value of 0.015 when grouped according to current position, with Medical Technologists (mean =3.71) and Supervisors/Area heads (mean=4.00), giving significantly higher responses than those in junior positions and unconnected jobs (mean =3.3). The statement "Interpersonal relationships had been developed in school" also received a significant difference verdict ($p=0.03$) when grouped according to whether they received awards when they were still students. Interestingly, those who received no awards (mean = 3.58) responded significantly higher than those with awards (mean = 3.20). This could mean that students who are active in school, who got awarded, still felt that their program needed more interpersonal relationships

building or activities that produce the same, particularly since they are more active and want more in school activities.

Table 10. Comparison of means when grouped to profile variables

| Statement | p-value | Variable | Results |
|---|---|---|---|
| The course content is very comprehensive and relevant to the job | 0.015 | Position | Full-pledged MT (3.71) and Supervisors/Area heads (4.00) significantly higher responses than those in junior positions and unconnected jobs (3.3) |
| Length before they landed a job | 0.014 | Position | Full-pledged MT (3.5 - within 3 months) and Supervisors/Area heads (3.4 - within 6 months) significantly quicker to be hired than those in junior positions (3.00 - within 1 year) and unconnected jobs (2.4 - within 1.5-2 years) |
| Interpersonal relationships had been developed in school | 0.030 | Awards | Those who had no awards (3.58) responded significantly higher than those with awards (3.20) |

Finally, checking the length of time before they landed a job versus their current position, the survey revealed that full-pledged Med Techs (within 3 months) and supervisors (within 6 months) were hired significantly quicker than those in junior positions (within 1 year), and those who are in unconnected jobs (within 1.5 to 2 years). P-value is at 0.014.

Automatic Linear Modeling in Figure 1 reveals that among the predictors for their current position in the company, the main one appears to be the statement "The course content is very comprehensive and relevant to the job" ($p=0.003$, Importance = 100%). However, considering that this has a negative coefficient estimate ($r=-1.068$), it means that those who rated this statement higher ended up having lower positions in the company. Intercept is at $b=2.688$ with $p=0.000$. Considering the reverse, reveals an interesting analysis – those who said that their program's course content is not comprehensive and relevant to the job, ended up with higher positions in their work, which points out that education was merely a steppingstone for them. They did not rely solely on the content of their programs, and improved themselves and their job marketability, by studying some more, and focusing on other relevant topics not covered in class. Coefficient of determination is at a low 14.0%.

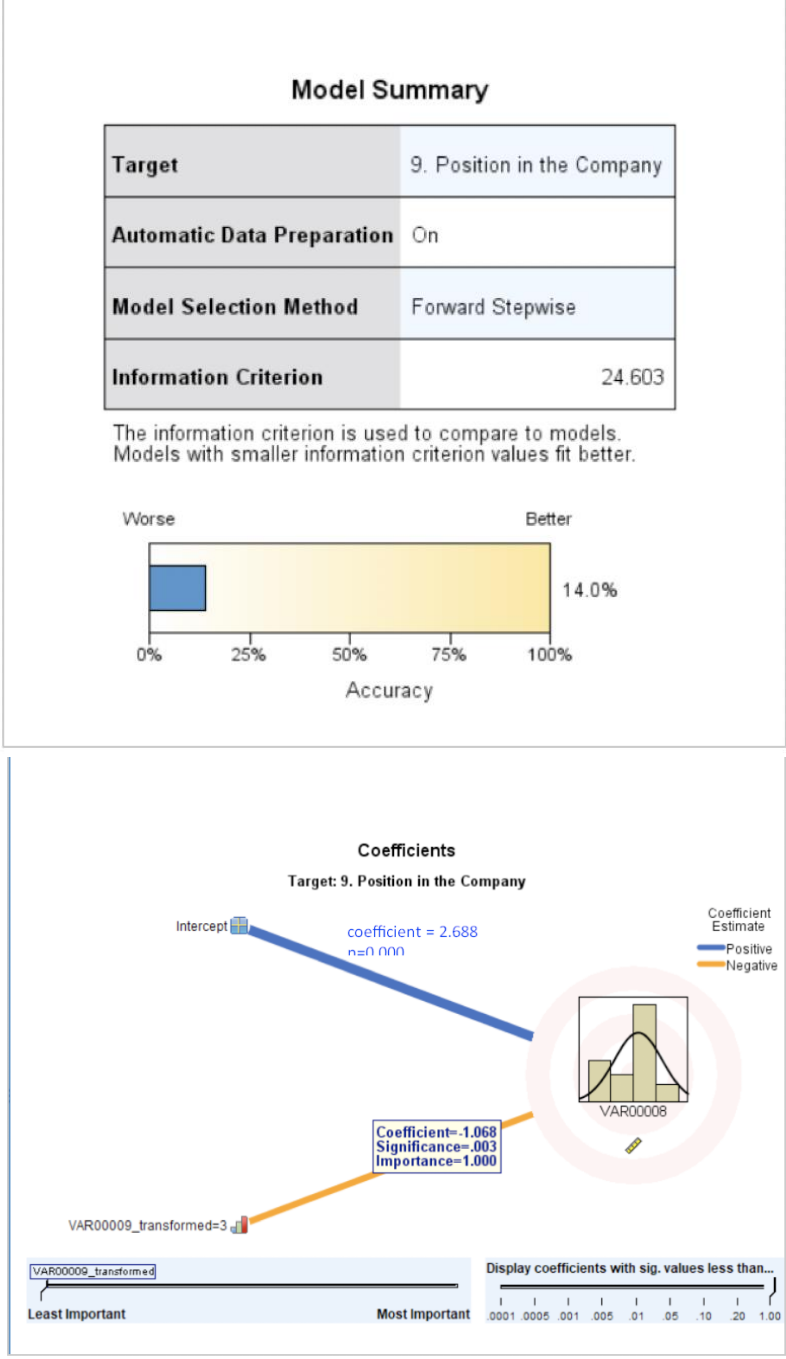
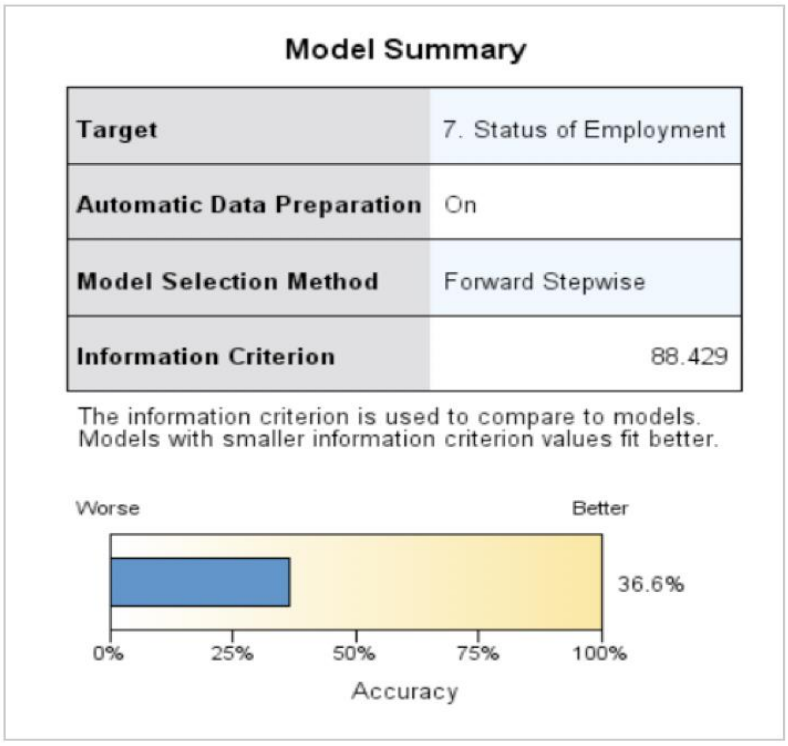



Figure 1. Model Summary and Prediction for Current Position in the Company

Using automatic linear modeling in Figure 2 for predicting status of employment (or whether they are now employed) revealed a high predictability or coefficient of determination (r-square = 36.6%), and three major predictors. First, employer type (r=1.147, p=0.000, 52% importance) is the highest. Negative transformation here refers to the fact that hospitals (1) and diagnostic laboratories (2) are labeled with lower numbers. This means that employment for Med Tech graduates are predicted by whether they will be hired by hospitals or related employers. The next predictor is gender (r=2.227, p=0.004, 26% importance), which translates to the fact that most female graduates are more employable. It is interesting

and should be a subject of further study, whether gender is a predictor of being hired, or whether this is predicated of other factors, e.g. attitude, grit, etc associated with gender. Finally, the statement "Program captures type of duties a graduate expects to perform in the work environment" is also a major predictor (r=1.644, p=0.009, 21% importance). This statement manifests somehow that those who focus on their performance, tasks and outcomes and relate them to the work environment (internship and work), somehow have better chance to be employed. Intercept is at b=2.259, p=0.000.



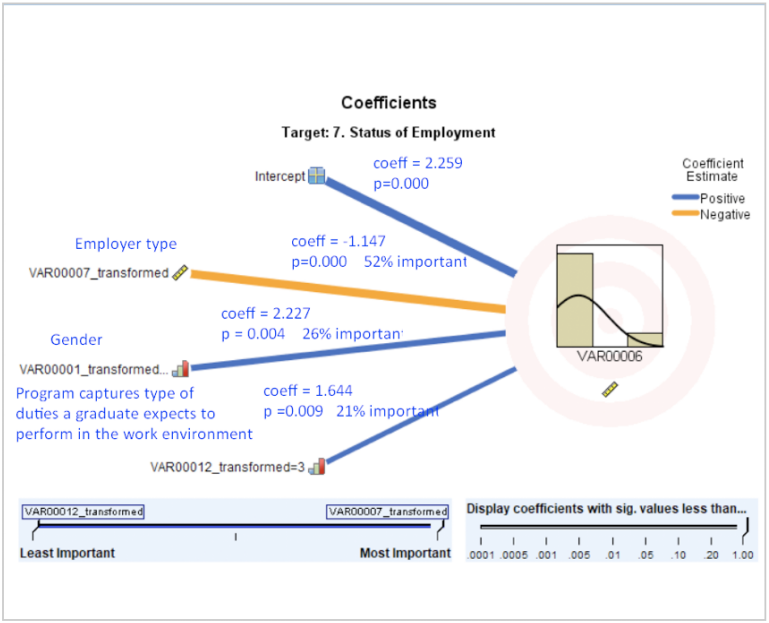




Figure 2. Model Summary and Prediction for Status of Employment

Finding predictors for the length of time in Figure 3 it takes to be employed for Medical Technology graduates reveals two (2) major predictors (accuracy = 17.5%). First, the statement "OJT is enough to equip students with hands-on experience related to the job" is the best predictor (p=0.009, 71% importance), followed by the statement "The objectives of the program are similar to that of the workplace" (p=0.086, 29% importance). Interestingly, these two predictors are transformed, which means their coefficients are negative (r= -0.766, and r= -1.667 respectively). This means that those who rated these two statements higher, ended up waiting longer to be employed, than their counterparts who rated these statements lower. Inspecting the two statements reveal a similar idea as the analysis above, with the juxtaposed statements showing the connotation: graduates who rely on the instruction at school, and the objectives of their programs, will not be as aggressive as those who continuously search for better ways to do their tasks and hence, improve their performance. On the other hand, it is also worth studying why those who rated statement "The objectives of the program are similar to that of the workplace" lower apparently get better results in employment. For one, this could be a red flag on the relevance of the educational objectives of the program, and the manifested student outcomes of the same. Intercept is at b=3.432, with p=0.000.

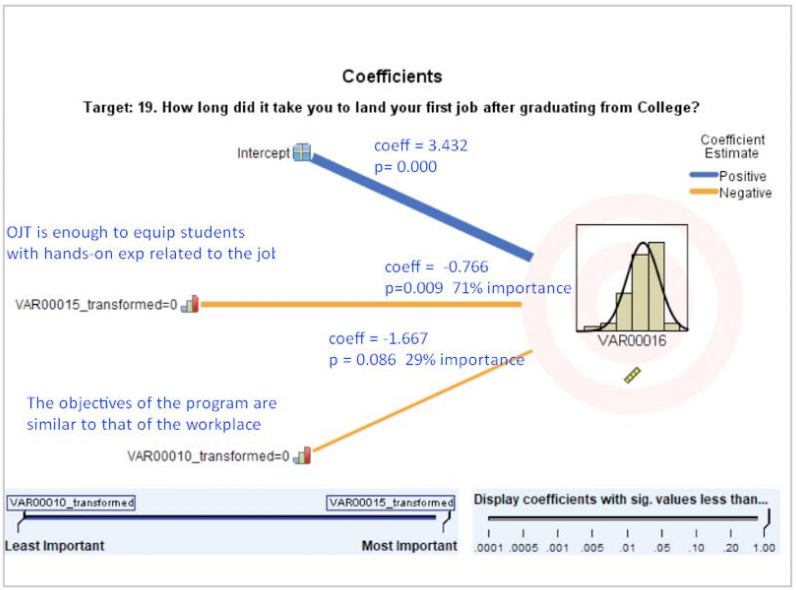



Figure 3. Model Summary and Prediction for Length of Time before Employment

When asked which soft skills were learned by them from the program, Figure 4 shows that Medical Technology graduates scored Professionalism (98.8%) the highest, followed by Analytical skills (90.7%) and Decision-making (88.4%). Cooperation and Time management skills (both 82.6%) also scored high, as well as Work Ethics and Adaptability (both at 80.2%). Negotiation skills (31.4%) and Delegation (34.9%) scored the lowest among the skills list, as well as Creativity and Innovation (both at 45.3%). Mentoring follows among those marked low at 48.8%.

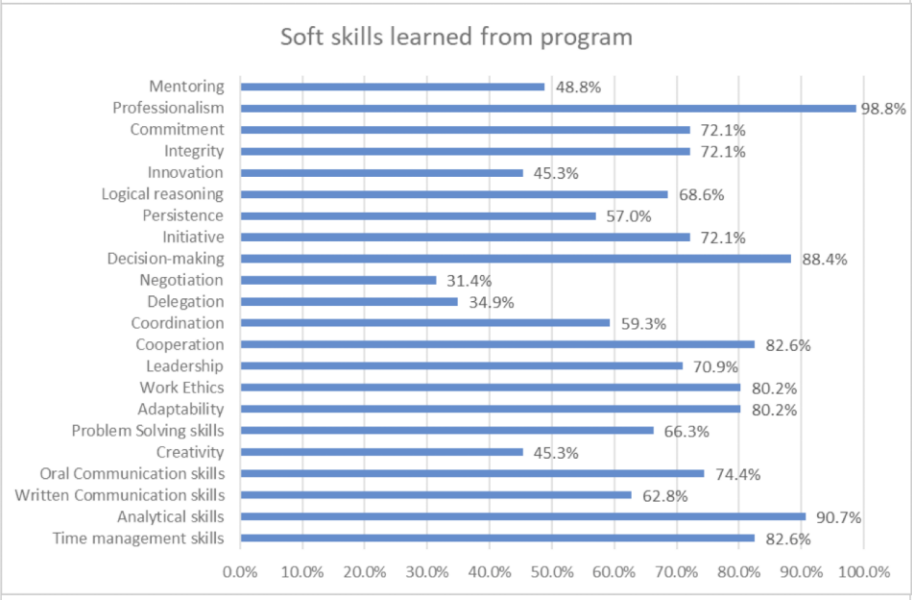



Figure 4. Soft Skills Learned from the Program

Rating the contributors to employability in Figure 5, Medical Technology graduates manifested that location and opportunity has the highest contribution at 80.2% (69 responses), followed by high demand for job at 57.0% (49 responses). Internship was rated the lowest at 1.2% (1 response). This result manifest the fact that most of the graduates prioritize location that are somehow near to them, and the opportunity within their area is enough, making them immediately employable, considering the length of time before they get hired (See Table 8).

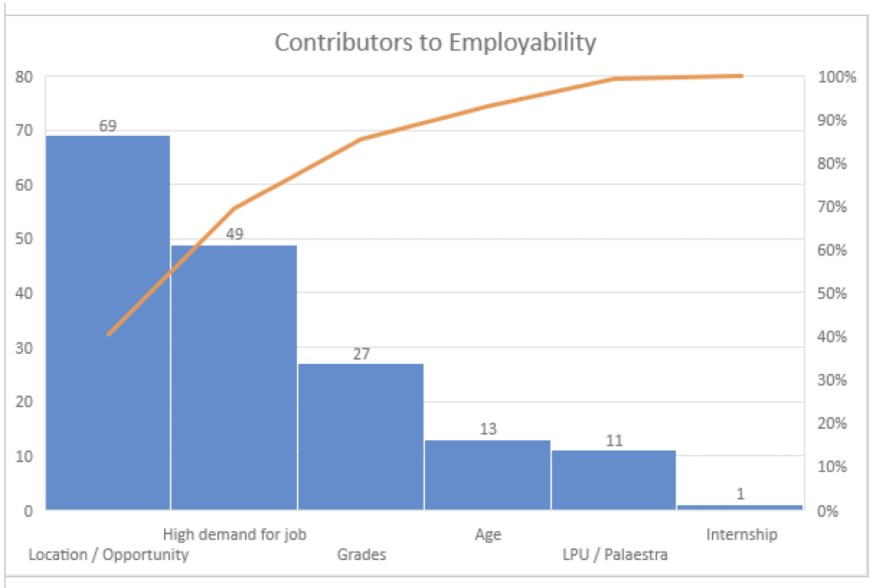



Figure 5. Contributors to Employability

On the question how they got their job), Figure 6 shows that majority of Med Tech graduates said that they just walked in (56.3%) Another 36.2% said that they were recommended or acted on

recommendation, while 11.5% said they responded to an advertisement. An additional 8.6% said that they got the information from their friends and classmates.

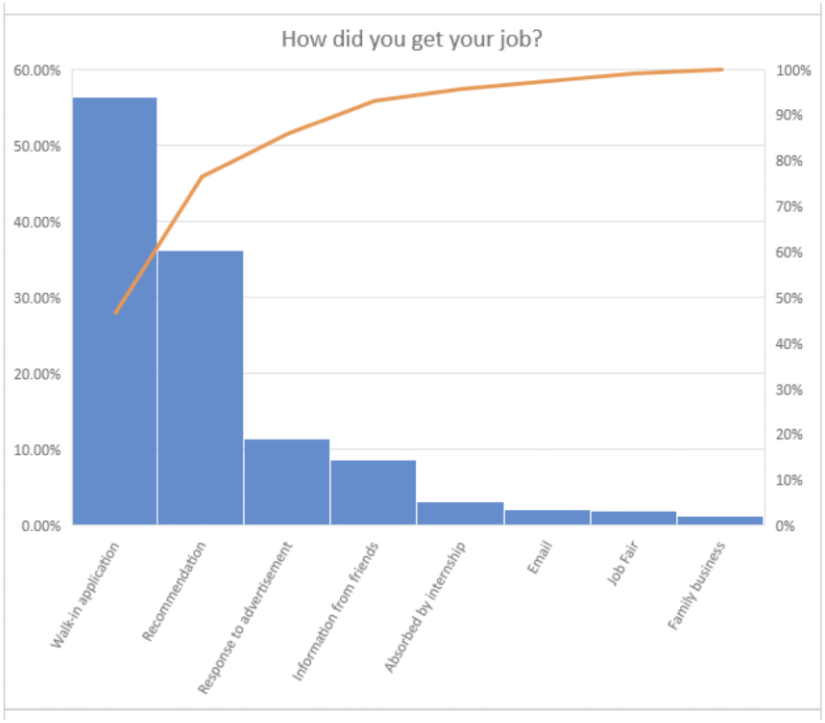



Figure 6. How Graduates got their Job

## CONCLUSIONS AND RECOMMENDATIONS

Considering the two batches surveyed, employment is high with the Medical Technology program. While 4.7% of the respondents are currently unemployed, 91% reported that they were able to be hired within 1 year of graduation, with 41.9% hired within 3 months. Only 1 respondent (1.2%) has yet to find a job since he graduated. Wherefore, respondents currently unemployed may just be in-between jobs. Further, a great majority (86%) of the graduates reported that they are working in the program they studied, with 10.5% reporting that they were already promoted to being supervisors and section /area head in their work. Further, 66.3% reported that they are working in hospitals or diagnostic laboratories.

The graduates also assessed the program favorably, with ratings between 3.4-3.6 out of 4.0. Analysis of these ratings revealed that those who merely relied on the instruction in college, end up with lower positions than their counterparts who rated the statement "The course content was very comprehensive and relevant to the job" significantly lower. It is recommended that this be studied further, as there may be some areas that needed to be improved in the course content of students, to make their career progression in the industry efficient. Length of time associates also with their current position, with those in full-pledged MT and supervisory level positions hired significantly quicker than those in positions that are not connected with their programs. This may be due to the fact that graduates apply first in positions connected to their programs, and when they are not successful, they go to other jobs, which explains the length of time they have to wait before landing a first job. Further studies may be recommended to trace this and explain why these graduates find it difficult to land a job. It is recommended to analyze the reasons for this and find out if it is a demand problem in Calabarzon, or a supply problem, particularly in skills and attitude.

Predictors of employability, career success (based on current positions), and length of time before they got hired also reveal interesting finds. For example, gender was given as an "important" predictor for status of employment. This may be studied further in order to look for underlying reasons why female graduates are more easily hired than their male counterpart. As above, length of time to get hired is predicted by the difference of rating in OJT and similarity of objectives of the program and the workplace. The results that show the negative alignment of these two predictors to the length of time before they get hired, manifest that those who rated the OJT program adequate, and the similarity of program and workplace objectives end up getting hired later than those who rated the statements lower. Sure, this may be due to the fact that those who end up better in the workplace, who get hired faster, are the ones who go beyond what they learned in school and their OJT program. However, this should be studied in depth to find out whether there is a disconnect between the objectives of the program and the workplace. Finally, the OJT program needs to be studied carefully for continuous improvement to give better chances for students to be hired immediately after – or even before graduation.

Finally, insights can be gathered from the perception of the respondents on the factors that help them get employed immediately. First, on the soft skills learned from the program, some of the skills that were rated low are Negotiation skills (31.4%) and Creativity and Innovation (both at 45.3%), which are operationally important for any position. Leadership skills, such as Delegation (34.9%) and Mentoring (48.8%) also scored among the lowest in the skills list. While these may not be essential for immediate employment, it is still important for career progression, as clear from graduates who were already promoted to supervisory and managerial levels even just after 3-4 years from graduation. This should be studied further to analyze skills that are important for employability of graduates, as well as their career progression.

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