Industrial Technology Graduates' Acquired Skills and Competencies from the University

Amado C. Gequinto[1], Do Mads[2]

[1]College of Industrial Technology, Batangas State University JPLPC Campus Malvar, Batangas, Philippines
Email: amadogequinto@yahoo.com
[2]College of Teacher Education, Batangas State University JPLPC Campus Malvar, Batangas, Philippines
Email: deanofcollegesMALVAR@gmail.com

ABSTRACT

Skills and competencies are highly regarded in today's global market. Different agencies specifically those seeking for technologists, technicians, and engineers, have stressed out that skills and competencies as major components for individual workers. This aimed to determine the relevance and appropriateness of acquired skills and competences by industrial technology graduates, and determine the extent of use of skills and competencies in the current employment. Review of related kinds of literature and studies have been considered in the realization, understanding, analysis, and interpretation of this research exploration. A descriptive method of research was used with 78 graduates from 2015-2016 and 117 graduates from 2016-2017 at the Batangas State University JPLPC Campus, Malvar, Batangas, Philippines, who participated in the study survey process. The BatStateU Standardized Questionnaire was used to gather data. A brief interview and talk during the visit of alumni in the university was also considered, as well as the other means of social media like email, facebook, messenger, and text messaging. Results show that skills and competencies acquired by industrial technology graduates are all relevant and appropriate. The study also found that there is some to great extent use of acquired skills and competencies to their current employment. The study implies that the acquired skills and competencies from the university significantly provided the graduates the opportunities in the national and global markets and industries.

Keywords: *Industrial Technology Graduates; Acquired Skills and Competencies; Relevance and Appropriateness*

INTRODUCTION

The realization of learned facts, concepts and theories are reflected in the product, performance, and outcomes. Then, such concepts and theories that have been rooted from the *skills* may lead to *competence* necessary for life-long learning, growth, and development. It is also said that all these may serve as individuals' avenue for more demands, challenges and opportunities in the contexts of their lives.

The Philippines is in its 38th rank among 74 emerging economies for 2018 based on the Inclusive Development Index of the World Economic Forum. The Philippines has been said to be left behind as compared to other countries that motivated the country itself to include the policy and institutional indicators, like education and skills development, basic services and infrastructure, financial intermediation of real economy investment, basic asset building and

entrepreneurship, and employment and labor compensation enhancement in envisioning the better future of the country and its people (Valencia, 2018).

Education in the 21st century highlights globalization and internationalization. Any advancement of technology presents theory or constructs, and realistic insights in the development and enhancement of knowledge, skills, and attitudes among students and teachers (Boholano, 2017).

The College of Industrial Technology had offered academic undergraduate program particularly Bachelor of Industrial Technology, which was ladderized in nature, with dual training system (DTS) application. But, it was during that time under review by the Commission on Higher Education (CHED) based on PACUIT proposal. Through this program, it was said that the department in particular and the university in general has produced professionals in the fields and had the graduates who had been reported to excel in their individual employments.

Professional skills in this modernization and advancement are highly regarded by both the graduates and the employers as well. In this situation, most companies request technologist, technician, and engineering graduates who have acquired adequate theoretical knowledge, skills, and competencies for their professional skills. In Manchester Metropolitan University, competencies are the knowledge, skills, and practical attitudes and behavior of individuals. These are said to be measured and gained when they have passed certain assessment and evaluation, i.e., certification and eligibility through exams, training program/course, and practical technology work.

The Philippine Daily Inquirer in 2016 reported the estimates from the Trade Union Congress of the Philippines that up to 1.2 million graduates will find their job prospects hampered by a mismatch between their skills and those required by the market. It was stressed out to be not surprised that labor-education mismatches are viewed as market failures and evidence of wasted resources. As to research, a reasonably efficient labor and education markets, graduates may still find themselves mismatched and likely underpaid, particularly early in their careers as they continually acquire transferable skills and experiences that later may allow them to re-orient to more match careers (Robst, 2006).

Apparently, most industries are continuously seeking for graduates who possess the qualities like team-working skills and technical skills. They had been alarmed because of some complaints about unemployment of graduates because of the lack of skills (Selvadural et al., 2012).

In the internalization of the above concepts and situations, the researcher as the Dean of Colleges was motivated to conduct this study as he wishes to find out the truth about the industrial technology graduates' acquired skills and competencies as basis for further review and analysis of the curriculum guide and program which are relevant and appropriate to the needs of graduates and industries. Since, the researcher is directly exposed to academic works, guidelines and policy, dealing with this topic will provide him an opportunity to explore what has been going on with industrial technology graduates, and the capacity of the university to provide the needed skills and competencies. For Aceron and Arellano (2019), "The concern for the quality is a relevant call of the time as it provides tertiary students an apportunity to acquire practical knowledge, skills, and desirable attitudes and values" (p. 232).

The Philippine Statistics Office revealed that the Philippine unemployment and underemployment eased in April 2019 compared to the same period in 2018. It was found that unemployment fell to 5.1 percent from 5.5 percent while underemployment eased to 13.5 percent from 17 percent. The country's employment rate was at 94.9 percent from 94.5 percent. The April Labor Force survey was based on a population of 72.5 million compared to 71 million during the same month in 2018. According to the National Economic Development Authority (NEDA), it was the highest employment rate for the month of April since 2009. The 94.9 percent is equivalent to 42.2 million Filipinos with jobs. Some 1.3 million jobs were created for the month, double compared to April 2018.

But according to the Bureau of Local Employment (BLE) that despite improved employment rates in 2018, more effort is needed to achieve inclusive growth especially among the youth. In addition, global youth unemployment has risen the past 10 years, rising from 11.6 percent in 2007 to 1.0 percent in 2016.

In the same manner, in a document obtained by the Business World, 'young people often do not have the knowledge and skills they need to get decent jobs as employers find it difficult to hire them with the skills they need". In this situation, the Philippine Statistics Authority's Labor Force survey in July 2018 indicated that there were 1.040 million unemployment people aged 15 to 24 which can be attributed to mismatches between demand and supply of labor, as well as the limited absorption capacity of the formal economy.

Orbeta, Gonzales, and Cortez (2016) discussed in the paper that there are barriers to employment of fresh graduates like mismatch between graduate skills and those in demand among employers; oversupply of graduates in several fields and/or a shortage of employment opportunities in their field of specialization; entry-level position may pay low wages lower than what the graduates are expecting; lack of communication skills and competencies of average college graduates; nd being not aware of the job opportunities available.

Recently, it as featured in one of the leading TV networks in the Philippines, ABS-CBN that according to Ernesto Pernia, socioeconomic planning secretary, "both quality and quantity of work have to be addressed, at the same time that employment opportunities are being increased, where workers and job seekers must be enabled to improve their knowledge and skills through training and education. Apparently, job-skill mismatch is a factor which is a result of poor education curricula, unreasonable qualifications by certain industries, insufficient competencies of job seekers, and lack of employment services.

It was suggested that universities need to do more to improve graduates's chances in the labor market. This may be achieved when the competency-based approach of the curriculum development improves the graduates' transferrable skills, critical thinking, communication, team work, and systemic thinking (de Oliveira, 2010).

With these, the researcher was also encouraged to know the extent of use of the acquired skills and competencies in the current work or jobs of the graduates in which the data gathered may serve the basis for the improvement of the curriculum guide and program as well as the learning, skills, and competencies. In this case, the university may have the idea on how to match the curriculum guide and program, specially the skills and comptencies to the standards and requirements of different industries, or other center for technical training skills and competencies.

The result of this study will be of great help to teachers, heads/principals, and supervisors. To the teachers, this study will give them the idea and concrete knowledge that teaching is the noblest profession, as they shoulder tough responsibility in nurturing the young minds in the school; that through this study, they can find how they must be morally uplifted and boosted along their skills, knowledge and characters as mentors and individuals in the group; that they should be respected as they respect others regardless the status or position in the organization. To the heads/principals, this study would help them reflect and re-evaluate their leaderships towards teachers, and how effective and efficient are they in guiding and coaching their teachers towards schools' management and success; that this can be instrumental to call the attention of all heads or principals to ethically, professionally, and virtuously relate themselves to the teachers without pressure and degradations of ones' rights and privileges; uplift individuals through responsive support, love, and concern.

This research paper aimed to: (a) determine the relevance and appropriateness of acquired skills and competencies by industrial technology graduates from the university; (b) determine the extent of use of acquired skills and competencies in the current employment.

METHODS

Research Design. Descriptive method of research was utilized to determine the relevance and appropriateness of acquired skills and competencies by industrial technology graduates from Batangas State University JPLPC Campus, Malvar, Batangas, Philippines. This study also determined the extent of use of acquired skills and competencies in their current employment.

Participants. The respondents of this study were 122 industrial technology graduates from academic year 2015-2016 and 145 industrial technology graduates from academic year 2016-2017. No sampling method was used in this study. But, due to time constraint, and the availability of the graduates, there were 78 graduates from 2015-2016 and 117 graduates

from 2016-2017, who participated in the study survey process.

Table 1. Distribution of Industrial Technology Graduates, Academic Years 2015-2016 and 2016-2017

Major	2015-2016		2016-2017	
	Population	Participants	Population	Participants
Food Technology	8	6	12	11
Civil Technology	22	17	23	21
Electrical Technology	21	4	26	17
Mechanical Technology	12	11	29	28
Automotive Technology	10	10	4	4
Electronics Technology	8	4	14	10
Computer Technology	24	9	26	15
Mechatronics Technology	17	17	11	11
TOTAL	**122**	**78**	**145**	**117**

Instrument. This study utilized the BatStateU Standardized Questionnaire that focused on the relevance and appropriateness of acquired skills and competencies by industrial technology graduates, and on the extent of use of skills and competencies in the current employment. No validation was made by the researcher since the questionnaire is readily available for use of the university system. For the relevance and appropriateness of acquired skills, there are six parameters, namely: knowledge and technical skills, communication skills, human relation skills, research skills, problem solving skills, and information technology skills. As to relevance and appropriateness of acquired competencies, there are National Certificate (NC) from I to III, Civil Service, and other Eligibility.

Procedure. The researcher sought permission from the respondents through social media, messenger chat and emails to participate in the study about the the relevance and appropriateness of acquired skills and competencies by industrial technology graduates, and on the extent of use of skills and competencies in the current employment. A survey was also made possible through unsolicited talk with the respondents during their visit in the university, specially when some of them were taking their Transcript, Yearbook, and other school records. Some also shared their throughs and opinions during the alumni meeting and gatherings conducted by the office of the Alumni Affairs.

Data Analysis. Likert Scale 1-4 was used to analyze and interpret the data gathered on the relevance and appropriateness of acquired skills and competencies by industrial technology graduates.

Scale	Mean Ranges	Verbal Interpretation
4	3.25-4.00	Highly Relevant/ More Appropriate
3	2.50-3.24	Relevant/Appropriate
2	1.75-2.49	Least Relevant/Least Appropriate
1	1.00- 1.74	Not Relevant/Not Appropriate

Then, Likert Scale 1-4 was also used on the extent of use of acquired skills and competencies in the current employment.

Scale	Mean Ranges	Verbal Interpretation
4	3.25-4.00	Great Extent
3	2.50-3.24	Some Extent
2	1.75-2.49	Limited Extent
1	1.00- 1.74	Very Limited Extent

Mean was used to determine the graduates' assessment on the relevance and appropriateness of their acquired skills and competencies, and on the extent of use of skills and competencies in the current employment.Thus**,** the mean scores from the responses of industrial technology graduates were analyzed, interpreted, justified, and supported by some theories and empirical research findings.

Composite Mean was also used to determine the over-all assessment of the graduates on the relevance and appropriateness of acquired skills and competencies, as well as the extent of use of acquired skills and competencies in the current job or employment.

RESULTS AND DISCUSSION

Results

The findings of the study are presented based on the specific objectives. Table 2 presents the relevance and appropriateness of industrial technology graduates' acquired skills from the University in 2015-2016.

Table 2. Relevance and Appropriateness of Industrial Technology Graduates' Acquired Skills from the University in 2015-2016

Skills	Relevance			Appropriateness		
	Mean	*VI*	*Rank*	*Mean*	*VI*	*Rank*
Knowledge and Technical	3.44	HR	2	3.42	MA	2
Communication	3.46	HR	1	3.43	MA	1
Human Relation	3.43	HR	3	3.32	A	3.5
Research	3.34	HR	5	3.32	A	3.5
Problem Solving	3.40	HR	4	3.31	A	5
Information Technology	3.23	R	6	3.21	A	6
Composite Mean	**3.32**	**Highly Relevant**		**3.34**	**More Appropriate**	

Table 3 presents the relevance and appropriateness of industrial technology graduates' acquired skills from the University in 2016-2017.

Table 3. Relevance and Appropriateness of Industrial Technology Graduates' Acquired Skills from the University in 2016-2017

Skills	Relevance			Appropriateness		
	Mean	*VI*	*Rank*	*Mean*	*VI*	*Rank*
Knowledge and Technical	3.32	HR	2	3.42	MA	1.5
Communication	3.45	HR	1	3.42	MA	1.5
Human Relation	3.29	HR	3	3.24	A	3
Research	3.12	R	6	3.23	A	4.5
Problem Solving	3.18	R	4	3.23	A	4.5
Information Technology	3.15	R	5	3.21	A	6
Composite Mean	**3.25**	**Highly Relevant**		**3.29**	**More Appropriate**	

Table 4 presents the relevance and appropriateness of industrial technology graduates' acquired competencies from the University in 2015-2016.

Table 4. Relevance and Appropriateness of Industrial Technology Graduates' Acquired Competencies from the University in 2015-2016

Competencies	Relevance			Appropriateness		
	Mean	*VI*	*Rank*	*Mean*	*VI*	*Rank*
NC I-III	4.00	HR	1	4.00	MA	1
Civil Service	3.25	HR	2	3.18	A	2
PRC/LET	1.78	LR	3	1.63	NA	3
Composite Mean	**3.01**	**Relevant**		**2.94**	**Appropri ate**	

Table 5 presents the relevance and appropriateness of industrial technology graduates' acquired competencies from the University in 2016-2017

Table 5. Relevance and Appropriateness of Industrial Technology Graduates' Acquired Competencies from the University in 2016-2017

Competencies	Relevance			Appropriateness		
	Mean	VI	Rank	Mean	VI	Rank
NC I-III	4.00	HR	1	4.00	MA	1
Civil Service	3.25	HR	2	3.18	A	2
PRC/LET	1.78	LR	3	1.63	NA	3
Composite Mean	**3.01**	**Relevant**		**2.94**	**Appropri ate**	

Table 6 presents the relevance and appropriateness of industrial technology graduates' extent of use acquired skills from the University in 2015-2016 and 2016-2017.

Table 6. Extent of Use of Acquired Skills from the University

Skills	2015-2016			2016-2017		
	Mean	*VI*	*Rank*	*Mean*	*VI*	*Rank*
Knowledge and Technical	3.24	R	2.5	3.42	GE	1.5
Communication	3.28	GE	1	3.42	GE	1.5
Human Relation	3.24	SE	2.5	3.21	SE	5
Research	3.23	SE	5	3.22	SE	4
Problem Solving	3.23	SE	5	3.24	SE	3
Information Technology	3.23	SE	5	3.20	SE	6
Composite Mean	**3.24**	**Some Extent**		**3.29**	**Great Extent**	

Table 7 presents the relevance and appropriateness of industrial technology graduates' extent of use acquired competencies from the University in 2015-2016 and 2016-2017.

Table 7. Extent of Use of Acquired Competencies from the University

Competencies	2015-2016			2016-2017		
	Mean	*VI*	*Rank*	*Mean*	*VI*	*Rank*
NC I-III	3.47	GE	1	3.48	GE	1
Civil Service	3.45	GE	2	3.44	GE	2
PRC/LET	2.23	LE	3	2.17	LE	3
Composite Mean	**3.05**	**Some Extent**		**3.03**	**Some Extent**	

Discussion

In 2015-2016, it can be found in the table that the graduates perceived that communication skills ranked first as highly relevant with the mean score of 3.45 as it is and the knowledge and technical skills are more appropriate that both have mean score of 3.42. It indicates that communication skills are highly important as they believed that before their entry in particular job or employment, their communication skills are required especially when they need to prepare and write thier application letter with resume as well as when they are called for written examination and eventually for their job interview. Technical skills are the knowledge and abilities needed to perform specific tasks, as graduates can be more practical and often relate their skills to mechanical, information technology, mathematical, and other scientific tasks (Doyle, 2018).

As can also be gleaned in the table, the graduates believed that research skills are relevant which ranked sixth as the lowest with a mean of 3.12; followed by information technology skills as relevant which ranked fifth with a mean of 3.15 respectively. It can be noted that although least in the items, but have been believed to be relevant in their current field of work.

Their communication skills also vary according to their attitudes and behavior (Aceron, 2015a). Thus, the composite mean of 3.25 indicates that all the skills acquired from the university are highly relevant.

As to appropriateness, the technology and technical skills and the communication skills are believed to be more appropriate with both mean score of 3.42 as rank first. The graduates found them more appropriate since their field of work in their present status requires them to possess the qualities of being technologists and technicians, as well as their ability to communicate well, both written and oral.

It can also be reflected that all the English courses that required them to explore and equip themselves in communication proved to have great effect or impact on their career and job as industrial technology graduates. Surprisingly, the industrial technology graduates believed that their communication skills greatly bring them into more opportunities which is in contrast to the construct of Castillo, Sapungan, Aceron, Katigbak, and Villanueva (2018) that the "concern over the pressing problem on communication skill is evident among Filipino students and graduates as also supported by other observations and studies" (p.1).

Although lowest in rank, information technology skills are found to be appropriate with a mean of 3.21. This means that the College of Industrial Technology courses and professors, specifically, those in I.T related courses have provided them the appropriate tools and skills necessary for their works and professional career.

The composite mean of 3.29 shows that all the skills listed in the scope of study, have been believed to be more appropriate. It can also be found that skills are related to the behavior of the graduates that significantly influences their work—choice and preferences as behavior is defined as the action of all beliefs, understanding, choices, and feelings of individuals (Aceron, Del Mundo, Restar, & Villanueva. 2018).

Based on the analysis of the results, the study implies that the Industrial Technology courses, with instruction delivery of the department greatly influenced the graduates to have been more equipped with the skills they have acquired as they also proved that their skills acquired from the university as a whole prepared them into their professional career and employment. It also implies that the skills acquired by the graduates are manifested to how the instruction are delivered and how the department maintains the quality of their teachers, curriculum, and facilities.

In 2016-2017, it can be found in the table that the graduates perceived that communication skills ranked first as highly relevant with the mean score of 3.46; followed by the knowledge and technical skills which found to be more appropriate with mean score of 3.44. It indicates that communication skills are highly important as they believe that before their entry in particular job or employment, their communication skills are required especially when they need to prepare and write their application letter with resume as well as when they are called for written examination and eventually for their job interview. In the same manner, their acquired techniques in interactional talk have provided them more job opportunities, and later become appointed to higher positions as they have the ability to essentially organize their thoughts in the contexts (Aceron, 2015b).

As can also be gleaned in the table, the graduates believe that human relation skills which ranked third with a mean of 3.43; problem solving skills as fourth with a mean of 3.40 respectively. It can be noted that although least in the items, but have been believed to be that information technology skills are relevant in their current field of work as indicated in the mean score of 3.23. It can also be supported that aside from problem solving skills and information technology skills. Human relation skills are expected among the workers as they have the ability to interact in a healthy way with other people to build positive relationship (Kokemuller, 2018).

The composite mean of 3.32 indicates that the skills acquired from the university have be found to be highly relevant in different ways as industrial technology graduates, particularly in their first to present employment.

As to appropriateness, graduates perceived that communication skills ranked first as highly relevant with the mean score of 3.43; followed by the knowledge and technical skills which found to be more appropriate with mean score of 3.42. It indicates that communication skills are highly important as they believe that before their entry in particular job employment, their communication skills are required specially when they need to prepare and write thier application letter with resume as well as when they are called for written examination and eventually for their job interview. In fact, Sapungan, Aceron, Lat, and Angeles (2019) empahzised that "Communication skills have been a great concern in industry" (p.1).

The composite mean of 3.01 indicates that the graduates believe that their competencies acquired from the university is relevant as they used them in their first and present work. Laguador and Ramos (2014) stated that the Higher Education Institutions must provide to their students the competencies like technical skills with relevant knowledge in research, communication, computer, leadership, and entrepreneurial. Moreover, work attitude and behavior of the employees are also important aspects of employment skills that should always be integrated in all curricula such as valuing commitment, loyalty, high sense of professionalism with moral integrity, as well as the significance of being result-oriented, trainable, proactive individuals.

With regard the appropriateness, NC I-III is also perceived to be more appropriate with a mean of 4.00; followed by Civil Service as appropriate with a mean of 3.18; and last is the PRC or LET as not appropriate with a mean of 1.68.

The composite mean of 2.94 indicates that the competencies acquired from the university have been appropriate as they found them necessary and suits or compatible to what they had gone through in different industries, and in their present work.

The study implies that the acquired competencies from the university are relevant and appropriate to their needs, as their work and performance significanlty influenced by what they have learned, acquired, and perform with positive attitudes and behavior.

Although lowest in rank, information technology skills are found to be appropriate with a mean of 3.21. This means that the College of Industrial Technology courses and professors, specifically, those in I.T related courses have provided them the appropriate

tools and skills necessary for their works and professional career.

The composite mean of 3.34 shows that all the skills listed in the scope of study, have been believed to be more appropriate.

Based on the analysis of the results, the study implies that the Industrial Technology courses, with instruction delivery of the department greatly influenced the graduates to have been more equipped with the skills they have acquired as they also proved that their skills acquired from the university as a whole prepared them into their professional career and employment. It also implies that the skills acquired by the graduates are manifested to how the instruction are delivered and how the department maintains the quality of their teachers, curriculum, and facilities.

In 2015-2016, it can be noticed that the graduates believe that NC I-III is highly relevant with a mean of 4.00; followed by the Civil Service as highly relevant with a mean of 3.25; and last is the PRC or LET as least relevant with a mean of 1.78.

In this situation, since the program of the College of Industrial Technology in the university is non-board, students and graduates have been encouraged to take the National Certification (NC) assessement from Level I to III. When the students and graduates pass the training skills, they will be certified as NC I-III holders and technicians. Most of the training assessments have been initiated by the university in cooperation with the Technical Education Skills Development Authority (TESDA), government agency which is tasked to manage and supervise technical education and skills development in the Philippines.

It can be gleaned that NC I-III is believed to be most appropriate which ranked first with a mean of 4.00. It means that students and graduates are aware of the standards and requirements of their degree program taken. Students and graduates were motivated to undergo and pass the national certification as the department has been always with them during their application and training assessment. Another preference of the students and graduates are taking the Civil Service eligibility as appropriate which ranked second with a mean of 3.18. This means that they have other options on how to prepare themselves in their career and opportunities. Lastly, is the PRC/LET which obtained a mean of 1.63 as not appropriate in their degree earned, although there were some who took a LET after having qualified and passed the units of education program. Few of them took a LET exam as they found that teaching may provide them a career opportunity.

In 2016-2017, it can be noticed that the graduates believe that NC I-III is highly relevant with a mean of 4.00; followed by the Civil Service as highly relevant with a mean of 3.25; and last is the PRC or LET as least relevant with a mean of 1.78.

The composite mean of 3.01 indicates that the graduates believe that their competencies acquired from the university is relevant as they used them in their first and present work.

With regard the appropriateness, NC I-III is also perceived to be more appropriate with a mean of 4.00; followed by Civil Service as appropriate with a mean of 3.18; and last is the PRC or LET as not appropriate with a mean of 1.63.

The composite mean of 2.94 indicates that the competencies acquired from the university have been appropriate as they found them necessary and suits or compatible to what they had gone through in different industries, and in their present work.

The study implies that the acquired competencies from the university are relevant and appropriate to their needs, as their work and performance significanlty influenced by what they have learned, acquired, and perform with positive attitudes and behavior. Caraig (2018) emphasized that the university has an important role to conduct an industry mapping to ensure the needs, skills and competencies of the graduates are aligned with the requirements of the company and business establishments. Then, he recommended that the university shall maintain and sustain the competency standards for each major as part of the performance appraisal report and to evaluate the performance of the students and graduates in general.

In 2015-2016 as found in the table, the graduates who are now at work in their respective and current employers revealed that they use their communication skills in some extent as indicated in the mean score of 3.28; they also believed that they use their knowledge and technical skills and the human relation skills in some extent as indicated in the mean score of 3.24. It can be explained that the graduates found that their communication skills, knowledge and technical skills, and human relation skills become their tools before the start

of their work, and in their actual performance in their respective employers. Very particular skills are found to have direct connections to their field as technologists, technicians, and engineers.

But even lowest in the items, the graduates believed that they use information technology, research, and problem-solving skills in some extent as indicated in the mean score of 3.23. These are all important interelated skills that they can use when performing certain tasks or jobs in their companies or institutions.

The composite mean of 3.24 shows that the graduates are equipped in some extent with the skills that they use in their current employment. This also means that the students and graduates have expected to possess and use them in their career, work, or employment. This is supported by the study of Abas and Imam (2016) that being more competent in thinking and problem-solving skills may provide the employees with more benefits in perfoming contextual behavior. They added that personal management skills significantly affect the employees' contextual behavior as competence in personal adaptability and learning continuously contributory across all elements of contextual performance. Moreover, teamwork skills particularly the skills on working with others influence the quality of contextual performance, where problem-solving and communication skills are applied other than their information and technology skills. Further, graduates' competence in employability skills could give them due advantage in their respective work settings.

Another academic year 2016-2017, the graduates who are also at work in their respective and current employers revealed that they use their communication skills and knowledge technical skills in great extent as indicated in the mean score of 3.42. This means that as industrial technology graduates, their knowledge technical skills and communication skills had been much considered by the college curriculum and program as well as the instruction delivery process. Very distinct features of the graduates to possess the main component skills as they go through their works and major of specializations. Apparently, Aceron and Leong (2018) revealed that a "very high level of knowledge of both language and technical skills is evident in their ease of understanding and communication of ideas and thoughts effectively and appropriately" (p.129).

Although lowest in the items, the graduates believe that they use information technology skills with a mean of 3.20; human relation skills with a mean of 21; and research skills with a mean of 3.22 respectively in some extent. They also believe that these are all important interelated skills that they can use when performing certain tasks or jobs in their companies or institutions. Information technology skills are expected among IT professionals in terms of computer skills which include particular programming languages, data, or networking skills (Pour, 2009).

The composite mean of 3.29 shows that the graduates are equipped in great extent with the skills that they use in their current employment. This also means that the students and graduates have expected to possess and use them in their career, work, or employment. In the study of Baughman (2012), it was revealed that aside from the knowledge, skills, and competence acquired from the classroom settings, industry immersion or project mentor experience, related to on-the-job training was found to be the most helpful to their professional career development.

The study implies that the skills have been acquired from the university provide opportunities and job employment among industrial technology graduates. It can also be implied that since all academic institutions are mandated to meet the new set of standards, i.e., meeting and undergoing accreditations, implementation and practices of outcomes-based education to cater the demands of 21st century education, teaching and learning.

In 2015-2016, it can be observed in the table that the graduates believe that they use in great extent the NC I-III they acquired from the university in their current employment as indicated in the mean score of 3.47. The learning, skills, and practical operations are combined components for their acquisition of competencies, relevant for their career and field of work. Considering the nature of the training course program, Higher Educational Institutions (HEIs) in the Philipppines provides an opportunity among students to acquire practical knowledge, skills, and desirable attitudes and values in reputable establishments and industries in the country (CHED, 2009).

It is followed by Civil Service with the mean score of 3.45, which means that the graduates use it in great extent in their current employment. Evidently, PRC or LET have been

considered in a limited extent with a mean score of 2.23. This means that although, there are some graduates who shifted from industrial work into teaching career, the over-all graduates mostly preferred to work in their degree earned and in line with their field of specializations. Just few of them took other units after having an experience in the industries, for them to enter into teaching career.

The composite mean of 3.05 indicates that the graduates use the competencies, national certifications, trainings, and technical skills certification, civil service eligibility, or other eligibility in some extent. This means that the university had also provided the graduates the said competencies that they can use in their job or work in different industries. Ang (2015) emphasized that in order "to gain employment in today's challenging economic situations, fresh graduates' hard skills need to complemented by a good blend of employability skills".

As to 2016-2017, it can be observed in the table that the graduates believe that they use in great extent the NC I-III they acquired from the university in their current employment as indicated in the mean score of 3.48. The learning, skills, and practical operations are combined components for their acquisition of competencies, relevant for their career and field of work.

It is followed by Civil Service with the mean score of 3.44, which means that the graduates use it in great extent in their current employment. Evidently, PRC or LET have been considered in a limited extent with a mean score of 2.17. This means that although, there are some graduates who were traced to shift from industrial work into teaching career, the over-all graduates mostly preferred to work in their degree earned and in line with their field of specializations. Just few of them took other units after having an experience in the industries, for them to enter into teaching career.

The composite mean of 3.03 indicates that the graduates use the competencies, national certifications, trainings, and technical skills certification, civil service eligibility, or other eligibility in some extent. This means that the university had also provided the graduates the said competencies that they can use in their job or work in different industries. It can be found that the acquisition of knowledge, skills, and competencies can be measured through passing and acquiring national certification and professional eligibility.

CONCLUSIONS AND SUGGESTIONS

This research paper concludes that industrial technology graduates' acquired skills and competencies from the university are all *relevant* and *appropriate* both in academic year 2015-2016 and 2016-2017; that they use their acquired skills and competencies appropriately and effectively in *some to great extent* in their current employment.

Since this research paper covered the graduates from 2015-2016 to 2016-2017, the skills and competencies included in the curriculum were not yet aligned to the 21st century approaches and to the transitional approaches known as K-12 curriculum, this paper calls for further investigation about the 2018 and present curriculum to find whether the skills and competencies are aligned to the needs and demands of the present industries, not only in the Philippines, but also in the global markets. This paper also calls for further study on the employment rate and status of the graduates from 2013 to 2017 that would serve as basis for curriculum design and inclusion of the needed skills and competencies that different industries are looking for. For Laguador and Ramos (2014), involvement of the industry-partners in revising the curriculum is very much needed to provide their viewpoints and preferences which are being considered noteworthy confirmation of the efforts of the university in developing relevant knowledge, values, and skills to the graduates anchored in the Bloom's Taxonomy Learning Domains.

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