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A Correlational Study on the Teaching Methodologies and the Competencies of Graduates in a Private University in the Philippines

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ABSTRACT

Teaching and learning methodologies are significant factors in building students' competency after college life, making them a good contender in the labor market. The study determined the impact of the varied methodologies in teaching and learning on the graduates' competency. The 181 graduate respondents participated in the survey on a snowball method in data gathering. Frequency and simple percentage, weighted mean, Chi-Square Test of Independence, and One-way ANOVA were used to treat and interpret the data. The findings revealed that, in a pervasive way, the teaching and learning methodologies among faculties embodied in the flipped classroom, project-based learning, cooperative learning, problem-based learning, and competency-based learning in the Department were perceived by the graduates. By this instance, further findings revealed a significant relationship with adopting these varied methodologies and its influence on the graduates' competency in oral/written communications, teamwork/ collaboration, information/ technology application, leadership, and professionalism/ work ethic. The study concluded that a more substantial imposition of teaching and learning methodologies to the students' could greatly emphasize graduates' professionalism, leadership, communication, collaboration, and knowledge in information technology. Furthermore, the influence of flipped classrooms, project-based learning, cooperative learning, problem-based learning, and competency-based learning in the teaching and learning experiences in the Department provides a good impact on their competency as a graduate. These

practices indicate a strong alignment between the institution's interests which focuses on producing competent and innovative graduates that are efficient and effective in the labor market.

Keywords **—** Business and accountancy, teaching methodologies, competencies, non-experimental descriptive- correlational, Mandaue City, Philippines

INTRODUCTION

One of the primary difficulties connected to competence development and graduate employability identified in the review is the mismatch between university graduates' competencies and employers' needs in Asian countries. Higher education institutions are worried about employing techniques to improve skills for graduate employability (Ho, 2015). Graduate employability and competency development depend on a strong sense of creativity and cooperative practices in higher education worldwide (Abelha et al., 2020).

Moreover, graduate work-readiness challenges in three Asia Pacific economies (Malaysia, Indonesia, and Australia) also had trouble attracting graduates with the necessary qualifications, talents, and personal qualities (Dhakal et al., 2018). Based on a review, it is posited that graduate work-readiness challenges can be effectively addressed by Human Resource professionals in partnership with other key stakeholders, including Higher Education Institutions (Verma et al., 2018).

In the Philippines, Higher Education Institutions have been worried about improving the varied teaching and learning methodologies to cater to most graduates' desires just as information, traits, and abilities that any informed individual should hope to have when graduating (Abas & Imam, 2016). According to Chan et al. (2017), the development of generic competencies in higher education curriculum involves several unresolved issues, including institutional and curriculum support, generic competency conceptualization, teaching pedagogy and assessment, and teachers' and students' perceptions. Moreover, employers are looking for students to have the subject knowledge to compete with current industrial expectations and additional abilities to deal with corporate battles and obstacles (Eldeen et al., 2018).

It becomes fundamental for advanced education establishments to react to the eccentric work market and cause equal changes to satisfy their central goal. One coordinated approach to stay up with this season of enlivening change is for HEIs to give the alumni roads to acquire specific overall abilities and characteristics that

will make them equipped in the labor market (Lowden et al., 2011). According to Pazil and Razak (2019), to generate job-ready graduates, higher education institutions must rethink their teaching and learning methodologies to build the soft skills required by the job market.

With the issues, concerns identified in connection to this study. A review with the National Association of Colleges and Employers (NACE) has featured vocation abilities and professional preparation determining the competencies a graduate must possess. In a push to help schools and colleges work with their understudies in manners that support an effective change from the academic climate to the work environment (Darling-Hammond et al., 2007).

However, one critical issue of success in most graduates is their ability to use knowledge, skills, and values appropriate for their profession, meet employer objectives and contribute to the overall attainment of institutional goals in their field of activity (Abas & Imam, 2016). Additionally, varied teaching and learning methodologies in the school play an important role in establishing these competencies that were not clearly emphasized and with no alignment (Asonitou & Hassall, 2019). As a result, the current study attempted to fill these research gaps by adding to the body of knowledge on employability, skills, and graduates' contextual performance.

By the presented conditions, the academe enabling business management discipline researchers will determine the impact of the varied methodologies in teaching and learning in the College of Business and Accountancy to the graduates' competency S.Y. 2018-2019. By the examination directed, the analysts will have the choice to propose an intervention plan. This assessment expects the benefit of the College of Business and Accountancy. Additionally, this touches on the researchers' direct examination to distinguish necessary change and mediation to enhance the Department's teaching and learning experience.

FRAMEWORK

This examination is secured on Competency theory, which recommends that understudies' abilities in some random area might be related to their capacity to self-evaluate their range of abilities.

Furthermore, besides, that understudies who have low-level abilities may not, truth be told, perceive that they have such a shortfall (Azemikhah, 2006). Conversely, the competency hypothesis predicts that understudies with significant data education abilities are bound to scrutinize their performance capacity. In

contrast, understudies with a low degree of abilities are bound to overestimate their capacity.

As Savickas et al. (2009) indicated, it focuses on individuals' possibility to participate in exercises to create or show their abilities. On the off chance that somebody effectively plays out a difficult errand and gets acclaim from family or companions for it, at that point, they will encounter faith in their ability in that accomplishment space physical, psychological or social.

Financial changes in the nation and the worldwide work market disclose the expanding prerequisites to youthful subject matter experts. There are new necessities to the alumni's model and nature, new ways to deal with their seriousness and proficiency. 21st-century colleges should graduate arranged subject matter experts, who can adjust to the work market and are prepared for new changes, for self-instruction, which thus decides the importance and capacity of advanced education not "forever," yet "during the entire life." A subjectively new mission, the targets, and substance of present-day instruction in the new conditions is expected to be centered around the central information, however on the work market, and the development of essentially situated abilities and skills (Makulova et al., 2015).

Social Learning Theory developed by Bandura further supplement the above theory. It is a cognitive process set on changes in beliefs, concepts, and knowledge and improves professional and personal learning through participation in the actual work environment (Falk & Kim, 2019). It underscores the significance of noticing, demonstrating, and copying others' practices, perspectives, and passionate responses. Social learning theory considers how environmental and cognitive factors influence human learning and behavior (McLeod, 2016). Hypothesis added a social component, contending that individuals can learn new data and practices by watching others. Known as observational learning, this sort of learning can clarify different practices, including those that other learning hypotheses cannot represent. Bandura's hypothesis moves past conduct speculations, which recommend that all practices are learned through molding, and intellectual speculations, which consider mental impacts (Cherry, 2019).

As Bandura indicated, learning would be complicated, also perilous if individuals needed to depend exclusively on the impacts of their activities to illuminate what to do. Luckily, most human conduct is adapted observationally through displaying: from noticing others, one structure thought of how new practices are performed, and on later events, this coded data fills in as a guide for activity. Constructivism Theory believes that people are responsible

for comprehending the world and using what they know based on previous experiences in linking new information to these experiences. People use these experiences and new information to construct their meaning (Bruner, 2019).

Constructivism is not a new way to deal with learning. Like most other learning hypotheses, constructivism has various roots in this century's philosophical and mental viewpoints, unequivocally advancing (Simonson et al., 2006). As of late, nonetheless, constructivism has gotten a "hot" issue as it has gotten expanded consideration in various orders, including instructional plans (Karagiorgi & Symeou, 2005).

Constructivism is a hypothesis that compares taking in with making importance as a matter of fact (Ertmer & Newby, 2013). Constructivism is viewed as a part of cognitivism (both consider learning a psychological movement). It separates itself from customary intellectual speculations in various manners. Most intellectual therapists consider the psyche a reference device to this present reality; constructivists accept that the brain channels contribution from the world to create its one-of-a-kind reality (Barell, 2010). Constructivism crosses the two classes by underscoring the communication between these two factors. The constructivist position accepts that move can be encouraged by the association invalid errands moored in significant settings. Since comprehension is "listed" by experience (similarly as word implications are attached to clear cases of utilization), the validity of the experience gets essential to the person's capacity to utilize thoughts (Ertmer & Newby, 2013).

OBJECTIVES OF THE STUDY

The study determined the varied methodologies in teaching and learning in the College of Business and Accountancy on the graduates' competency S.Y. 2018-2019. It identifies the respondents' profile about gender, course major, employment status, and work nature. It also determines the extent of faculty adoption of varied methodologies in teaching and learning in terms of a flipped classroom, project-based learning, cooperative learning, problem-based learning, and competency-based learning. Furthermore, it seeks to identify the extent of graduates' competency in oral/written communication, teamwork/collaboration, information/ technology application, leadership, and professionalism/ work ethic. The study served as the basis for formulating an action plan intended to enhance the Department's teaching and learning experience.

METHODOLOGY

Research Design

The researcher used the non-experimental descriptive-correlational method to determine the impact of the varied methodologies in teaching and learning in the College of Business and Accountancy on the graduates' competency S.Y. 2018-2019.

Research Site

The researcher conducted the study in the University of Cebu Lapu – Lapu and Mandaue campus originated at the College of Business and Accountancy Department. The College offers Accountancy and Business administration Programs. Additionally, online Social Media Platforms will be used to further reach out the survey instrument to intended graduate – respondents.

Respondents

The researcher formulated an aggregate of 181 alumni respondents for the S.Y. 2018-2019. Slovin's equation was used to decide the investigation's example size on the snowball inspecting strategy in information gathering.

Instrumentation

The researcher uses the Survey Questionnaire derived according to the National Association of Colleges and Employers (NACE). The survey would give the analysts clear access and reaction from the respondents. The instrument is divided into three sections; the beginning portion is the respondent's demographic. The following section is the extent of faculty adoption of varied methodologies in teaching and learning. The third section pertains to the extent of graduates' competency attainment.

Treatment of Data

Frequency and simple percentage, weighted mean, Chi-Square Test of Independence, and One-way ANOVA were used to treat the collected information.

Table 1. No. of Graduate-respondents for the S.Y. 2018-2019

Course Majors	f	Percentage
BSBA-MA	77	42.41
BSBA-FM	31	17.14
BSBA-MM	49	27.10
BSBA-HRDM	24	13.36
Total	181	100.00

Table 1 shows graduates' quantity - respondents for the S.Y. 2018-2019 utilizing snowball examining as the information gathering method.

Data Gathering

To achieve the assessment study, the following procedures will be observed. Letter of guide coordinated toward the Dean of CBA Department for data gathering, referencing that they consent to lead the examination. An alternate letter of request was similarly transported to the University Registrar to identify the list of graduates from 2018 to 2019. The surveys will be administered through Google structure as the key instrument.

RESULTS AND DISCUSSION

This part presents the consequences of the data accumulated. The first part gives information on the extent of the adoption of varied teaching and learning methodologies. The next part pertains to the extent of attainment of Graduates' competencies.

Table 2. The Extent of Adoption on Varied Methodologies in Teaching and Learning

Variables	Mean	Interpretation	Rank
Flipped Classroom			
The students' performed oral discussions on a specific topic through reporting.	3.62	Great Extent	1
Student engagement on a specific topic through personal experiences.	3.57	Great Extent	2
The students were assigned an activity to work on at home and present their output in class.	3.46	Great Extent	3

Variables	Mean	Interpretation	Rank
The students mainly generated ideas and examples'.	3.35	Great Extent	4
The students' were indulged in research activities.	3.29	Great Extent	5
Aggregate Mean	3.46	Great Extent	
Project-Based Learning			
Creation of a framework or a model that summarizes the relevant ideas on their given topics.	3.60	Great Extent	1
Students develop projects that respond to real-life problems.	3.55	Great Extent	2
Production of Research-based outputs	3.49	Great Extent	3
Indulged in the creation of an answer on a particular issue/ problem inside a company	3.46	Great Extent	4
Indulged in company-based output/ projects.	3.25	Moderate Extent	5
Aggregate Mean	3.47	Great Extent	
Cooperative Learning			
Students' were assigned specific topics by the group to present.	3.66	Great Extent	1
Each member in the group was assigned a specific task to perform.	3.64	Great Extent	2
Brainstorming was done to initiate the collaboration of ideas and opinions inside the class.	3.60	Great Extent	3
Students collaborate with their group in the attainment of an output.	3.36	Great Extent	4
The group did Research-based outputs.	3.34	Great Extent	5
Aggregate Mean	3.52	Great Extent	
Problem-Based Learning			
The students were asked a question that needed to be answered personally.	3.64	Great Extent	1
Students' were tasked to identify specific social issues and instructed to create a solution using the integration of information from class discussion and own perception.	3.58	Great Extent	2
The students were given a case study to solve based on the concepts discussed in class.	3.55	Great Extent	3

Variables	Mean	Interpretation	Rank
The students were asked to create a conceptual framework to given a problem scenario.	3.40	Great Extent	4
Students' were engaged in finding an answer to a research problem.	3.34	Great Extent	5
Aggregate Mean	3.50	Great Extent	
Competency-Based Learning			
Students' assessment in oral recitation through the use of rubrics.	3.59	Great Extent	1
Students' reporting was evaluated through the use of a rubric.	3.40	Great Extent	2
Sharing of ideas and opinions through personal skills.	3.39	Great Extent	3
Students' made to answer questions based on their personal/ work experience.	3.38	Great Extent	4
The abilities of the student relevant to a specific topic were highly acknowledged during class discussion.	3.38	Great Extent	4
Aggregate Mean	3.43	Great Extent	

Table 2 depicts the level of usage of varied methodologies in teaching and learning in the flipped classroom, project-based learning, cooperative learning, problem-based learning, and competency-based learning.

As to flipped classrooms, the indicator in which the students performed oral discussion on a specific topic through reporting got the highest mean of 3.62 and was interpreted as *Great Extent.* On the other hand, indulging in research activities got the lowest mean of 3.29 and was also a *Great Extent.* The interpretation implies that faculties practiced the methodologies in using flipped classes in the Department.

In the investigation of Garza (2014), flipped study hall instructing has arisen in an assortment of instructive settings. It gives numerous points of interest to understudies and endeavors the affordances of current innovation.

As to project-based learning, the indicator that creates a framework or a model that summarizes the relevant ideas on their given topics got the highest mean of 3.60, it was interpreted as *Great Extent*, while Indulging in a company-based output/ projects got the lowest mean of 3.25 and also interpreted as *Great Extent*. It implies that the methodologies in using flipped classes were practiced and perceived by the graduates. According to Shin (2018), project-based learning

is an instructional method demonstrated to be successful because it permits understudies to assume a functioning part in their learning cycle. By partaking in a venture-based learning model, understudies can build their insight and consider their learning projects, bringing about expanded inspiration and self-adequacy (Marda, 2019).

Concerning cooperative learning, the indicator which students' were assigned specific topics by the group to present got the highest mean of 3.66 and was interpreted as *Highly Practiced*. On the other hand, Research-based outputs were done by the group received the lowest mean of 3.34 and also interpreted as *Highly Practiced*. It means that the faculties did methodologies in using cooperative learning in the Department. Cooperative learning includes understudies cooperating to accomplish shared objectives or complete gathering undertakings. It is used to advance accomplishments in perusing and composing, applied improvement in science, critical thinking in math, and more significant reasoning and thinking (Gillies, 2014).

As to problem-based learning, the indicator in which the students were asked a question that needs to be answered personally recorded the highest mean of 3.64 and interpreted as *Great Extent.* While students' engaged in finding an answer to a research problem got the lowest mean of 3.34 and also interpreted as *Great Extent*. It implies that methodologies in problem-based learning were practiced and perceived by the graduates. This type of teaching, according to Hmelo-Silver (2004), is helpful in learning. Understudies participate in self-coordinated learning and afterward apply their new information to the issue and ponder what they realized and the viability of the techniques utilized. The instructor demonstrates to encourage the learning interaction instead of giving information.

As to competency-based learning, the indicator in which Students' assessment uses rubrics in oral recitation got the highest mean of 3.59 and was interpreted as *Great Extent.* On the other part, the student's abilities relevant to a specific topic were highly acknowledged during class discussion, got the lowest mean of 3.38, and were interpreted as *Great Extent.* It means that methodologies involve in competency-based learning were practiced by the Department. The learning pathways presently do not lead consequently to conventional foundations of advanced education. All things being equal, they lead most straightforwardly to learning open doors in which capabilities are characterized unequivocally, and conveyance alternatives vary. This new worldview will eventually reclassify the staff, foundations, and accreditors (Voorhees, 2001).

Table 3. The extent of Attainment on Graduates Competency

Variables	Mean	Interpretation	Rank
Oral/ Written Communications			
Able to make oneself be understood	3.60	Great Extent	1
Graduates' were Able to provide clarity of roles and functions among subordinates.	3.56	Great Extent	2
Graduates' were able to communicate fairly with their subordinates.	3.54	Great Extent	3
Able to hold meetings with necessary and meaningful agenda	3.37	Great Extent	4
Graduates' got the opportunity to present a topic.	3.35	Great Extent	5
Aggregate Mean	3.48	Great Extent	
Teamwork/ Collaboration			
Collaborated with organizations for growth and development	3.58	Great Extent	1
Presented topics by group efficiently and effectively.	3.43	Great Extent	2
Conducted researches with group members.	3.41	Great Extent	3
Able to adapt to new sets of environments and people.	3.41	Great Extent	3
Able to have positive interpersonal relationships among subordinates	3.40	Great Extent	4
Aggregate Mean	3.45	Great Extent	
Information/ Technology Application			
Able to adapt and utilize social media business platforms	3.36	Great Extent	1
Utilization of innovation in technology to aid decision making	3.35	Great Extent	2
Able to identify and use telecommunications equipment efficiently	3.35	Great Extent	2
Able to adopt a Management Information System and audit Information system	3.32	Great Extent	3
Got the chance to establish their E-commerce businesses	3.06	Moderate Extent	4
Aggregate Mean	3.29	Great Extent	

Variables	Mean	Interpretation	Rank
Leadership			
Able to communicate instructions clearly and positively to subordinates.	3.65	Great Extent	1
Able to accept criticism and be optimistic about goals and objectives.	3.65	Great Extent	1
Able to lead by heart, not by fear.	3.62	Great Extent	2
Able to create changes inside the organization positively.	3.62	Great Extent	2
Being influential among subordinates.	3.61	Great Extent	3
Aggregate Mean	3.63	Great Extent	
Professionalism/ Work Ethic			
Dress up according to occasion and formality.	3.68	Great Extent	1
Ready to keep the principles and guidelines showed in an association.	3.67	Great Extent	2
Portrays good mannerism and proper conduct inside the office.	3.66	Great Extent	3
Able to do a specific job efficiently and effectively.	3.65	Great Extent	4
Being on time.	3.62	Great Extent	5
Aggregate Mean	3.66	Great Extent	

Table 3 shows the Extent of Attainment on Graduates Competency in terms of; Oral/written communication, team collaboration, information/ technology application, leadership, and professionalism/work ethics.

As to oral/written communication, the indicator that can make oneself be understood got the highest mean of 3.60 and interpreted as *Great Extent.* However, the Graduates' who presented a topic got the lowest mean of 3.35 and was also interpreted as *Great Extent.* It implies that the perception of oral/ written communication as one of the competencies was evident among graduates. According to Clokie and Fourie, 2016), the establishment of communication education methodologies bridges the gap between graduates' communication skills and employers' bet in hiring people in the organization. Moreover, nearby businesses greatly esteem correspondence abilities while selecting new alumni and explicit relational abilities to reflect course content (Mason et al., 2009).

As to teamwork/collaboration, indicators that collaboration with organizations for growth and development got the highest mean of 3.58 and interpreted as *Great Extent*. On the other hand, they had positive interpersonal relationships

among subordinates, got the lowest mean of 3.40, and were interpreted as *Great Extent*. It means that the perception of graduates on teamwork/collaboration was extensive. Working with individuals who think in an unexpected way (and maybe even challenging to team up with) has its advantages. During the creative collaboration, understudies become more acquainted with one another as well as themselves. They can investigate their abilities, proficiency, and responses to asks. They can think about their reaction to investigates, to the critical factor of time and obligation. They can reexamine their basic reasoning and dynamic abilities (Dobos, 2017).

As to information/ technology application, an indicator that can adapt and utilize social media business platforms got the highest mean of 3.36 and interpreted as *Great Extent.* Simultaneously, the chance to establish own E-commerce business got the lowest mean and was also interpreted as *Great Extent*. It means that competence in information/technology application is perceived by the graduates extensively. As indicated by Maksimović and Dimić (2016), the need and the significance of utilizing ICT readiness in educating and learning acknowledgment is a significant piece of the alumni's expert turn of events. It is signifying that in each part of individual vocations, there is consistently a need to improve capacities, including innovation and advancement.

As to leadership, an indicator that communicated instructions clearly and positively to subordinates got the highest mean of 3.65 and was interpreted as *Great Extent.* On the other hand, being influential among subordinates got the lowest mean of 3.61 and was also interpreted as *Great Extent.* It implies that all aspects of leadership competence were perceived by the graduates extensively. As per Sparks and Gentry (2008), authority skills lead to workers' creativity, the primary perspective across every administrative level and association.

Regarding professionalism/ work ethics, dressing up according to occasion and formality got the highest mean of 3.68, which was interpreted as *Great Extent*. While being on time got the lowest mean of 3.62 and also interpreted as *Great Extent.* It implies that professionalism is significantly manifested among graduates. As Van Prooijen and Ellemers (2014) indicated, individuals, are pulled into groups and associations with positive highlights. Such highlights can allude to the capability and accomplishments of the association or its virtues and moral lead. This ability's temperance causes graduates to be more appealing to businesses and in expanded social highlights.

Table 4. Significant Relationship between the Extent of Adoption of Teaching and Learning Methodologies and the Extent of Contribution of these Practices to the Attainment of Graduates Competency ($\propto = 0.05$)

Variables	Computed Chi-Square	df	Critical Value	Significance	Result
Flipped Classroom					
Oral/ Written Communications	214.489[a]	9	16.919	Significant	Ho Rejected
Teamwork/ Collaboration	249.964[a]	6	12.592	Significant	Ho Rejected
Information/ Technology Application	323.554[a]	9	16.919	Significant	Ho Rejected
Leadership	138.428[a]	6	12.592	Significant	Ho Rejected
Professionalism/ Work Ethic	217.932[a]	6	12.592	Significant	Ho Rejected
Project-Based Learning					
Oral/ Written Communications	310.457[a]	9	16.919	Significant	Ho Rejected
Teamwork/ Collaboration	134.162[a]	6	12.592	Significant	Ho Rejected
Information/ Technology Application	193.765[a]	9	16.919	Significant	Ho Rejected
Leadership	207.457[a]	6	12.592	Significant	Ho Rejected
Professionalism/ Work Ethic	174.811[a]	6	12.592	Significant	Ho Rejected
Cooperative Learning					
Oral/ Written Communications	175.568[a]	6	12.592	Significant	Ho Rejected
Teamwork/ Collaboration	143.033[a]	4	9.488	Significant	Ho Rejected
Information/ Technology Application	186.741[a]	6	12.592	Significant	Ho Rejected
Leadership	166.496[a]	4	9.488	Significant	Ho Rejected
Professionalism/ Work Ethic	252.577[a]	4	9.488	Significant	Ho Rejected

Variables	Computed Chi-Square	df	Critical Value	Significance	Result
Problem-Based Learning					
Oral/ Written Communications	282.129[a]	6	12.592	Significant	Ho Rejected
Teamwork/ Collaboration	132.710[a]	4	9.488	Significant	Ho Rejected
Information/ Technology Application	160.251[a]	6	12.592	Significant	Ho Rejected
Leadership	191.274[a]	4	9.488	Significant	Ho Rejected
Professionalism/ Work Ethic	229.039[a]	4	9.488	Significant	Ho Rejected
Competency-Based Learning					
Oral/ Written Communications	211.330[a]	9	16.919	Significant	Ho Rejected
Teamwork/ Collaboration	255.065[a]	6	12.592	Significant	Ho Rejected
Information/ Technology Application	217.173[a]	9	16.919	Significant	Ho Rejected
Leadership	207.716[a]	6	12.592	Significant	Ho Rejected
Professionalism/ Work Ethic	148.893[a]	6	9.488	Significant	Ho Rejected

Table 4 shows the Significant Relationship between the Extent of Adoption of Teaching and Learning Methodologies and the Extent of Contribution of these Practices to the Attainment of Graduates Competency. The data shows a statistically significant relationship between all the teaching and learning methodologies indicators and the graduates' competency. It implies that the more substantial imposition of varied teaching and learning methodologies can significantly affect the graduates' attainment of competency outcomes. Capability advancement is expected of graduates at work, which proposes that colleges enhance their understudies. They add an incentive by guaranteeing that their education methods and learning and appraisal decidedly upgrade the skills of their understudies, which are significant in the work market (Velasco, 2014).

Table 5. Significant Difference on the Extent of Adoption of Teaching and Learning Methodologies when grouped by the Extent of Contribution of these Practices to the Attainment of Graduates Competency (df = 3; ∝ = 0.05)

Grouped by	F-value	P-value	Significance	Result
Flipped Classroom				
Oral/ Written Communications	96.05	0.000	Significant	Ho Rejected
Teamwork/ Collaboration	798.03	0.000	Significant	Ho Rejected
Information/ Technology Application	315.27	0.000	Significant	Ho Rejected
Leadership	115.38	0.000	Significant	Ho Rejected
Professionalism/ Work Ethic	166.28	0.000	Significant	Ho Rejected
Project-Based Learning				
Oral/ Written Communications	147.10	0.000	Significant	Ho Rejected
Teamwork/ Collaboration	96.66	0.000	Significant	Ho Rejected
Information/ Technology Application	120.30	0.000	Significant	Ho Rejected
Leadership	143.35	0.000	Significant	Ho Rejected
Professionalism/ Work Ethic	97.01	0.000	Significant	Ho Rejected
Cooperative Learning				
Oral/ Written Communications	156.13	0.000	Significant	Ho Rejected
Teamwork/ Collaboration	308.73	0.000	Significant	Ho Rejected
Information/ Technology Application	382.36	0.000	Significant	Ho Rejected
Leadership	331.34	0.000	Significant	Ho Rejected
Professionalism/ Work Ethic	324.64	0.000	Significant	Ho Rejected
Problem-Based Learning				
Oral/ Written Communications	250.58	0.000	Significant	Ho Rejected
Teamwork/ Collaboration	220.70	0.000	Significant	Ho Rejected
Information/ Technology Application	180.65	0.000	Significant	Ho Rejected

Grouped by	F-value	P-value	Significance	Result
Leadership	193.36	0.000	Significant	Ho Rejected
Professionalism/ Work Ethic	128.61	0.000	Significant	Ho Rejected
Competency-Based Learning				
Oral/ Written Communications	91.54	0.000	Significant	Ho Rejected
Teamwork/ Collaboration	838.92	0.000	Significant	Ho Rejected
Information/ Technology Application	302.43	0.000	Significant	Ho Rejected
Leadership	186.41	0.000	Significant	Ho Rejected
Professionalism/ Work Ethic	199.14	0.000	Significant	Ho Rejected

Table 5 shows the Significant Difference in the Extent of Adoption of Teaching and Learning Methodologies grouped by the Extent of Contribution of these Practices to the Attainment of Graduates Competency. The data shows that the indicators in varied teaching and learning methodologies significantly contribute to the graduates' competencies. It implies that not all methodologies are in equal contribution to the attainment of competencies among the graduates.

CONCLUSIONS

Teaching and learning methodologies are significant factors in building students' competency after college life. Employability can be easier to attain if the proper foundation of competence metrics is already manifested in teaching and learning methodologies among teachers. The findings revealed that, in a pervasive way, the teaching and learning methodologies among faculties embodied in a flipped classroom, project-based learning, cooperative learning, problem-based learning, and competency-based learning in the Department were perceived by the graduates. By this instance, further findings revealed a significant relationship with adopting these varied methodologies and its influence on the graduates' competency in oral/written communications, teamwork/ collaboration, information/ technology application, leadership, and professionalism/ work ethic. Moreover, there is a significant difference in the contribution of these teaching and learning methodologies attaining of graduates' competency. The study concluded that a more substantial imposition of teaching and learning methodologies to

the students' could greatly emphasize graduates' professionalism, leadership, communication, collaboration, and knowledge in information technology. Furthermore, the influence of flipped classrooms, project-based learning, cooperative learning, problem-based learning, and competency-based learning in the teaching and learning experiences in the Department provides a good impact on their competency as a graduate. These practices indicate a strong alignment between the institution's interests which focuses on producing competent and innovative graduates that are efficient and effective in the labor market.

TRANSLATIONAL RESEARCH

The results of this investigation could be translated into a conceptual framework that identifies the significant Relationship between teaching and learning methodologies and its contribution towards student competencies. Other schools could also use the framework to sustain their existing education framework in producing competent graduates. Moreover, communities can also access it as a manual to start the initiation regarding the aspects and foundations of teaching and learning.

RECOMMENDATION

The researchers proposed an intervention plan based on the investigation results to further craft sustainability on the faculties' existing teaching and learning methodologies. The institution must also provide faculty training involving innovations in teaching methodologies to boost the instructors' sustainability mindset and competence. Teaching methodologies and research agendas must be created to increase graduates' capability in research field endeavors. Further research is also recommended to identify the relevance of this study to the future courses of action intended to provide sustainability among understudies.

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