



THE IMPACT OF TEACHING AND LEARNING METHODOLOGIES IN THE COLLEGE OF NURSING GRADUATES' COMPETENCY: A TRACER STUDY FOR THE S.Y. 2019-2022

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ABSTRACT

Nursing graduate competency is the ability to complete a task efficiently or successfully. However, it is a brief one that does not fully accommodate definitions. The vast majority would likely concur that competency is a positive trait to something an individual needs a more significant amount. In any case, an individual cannot make somebody more able just by giving them something like information. There is no supernatural competency pill. The term competency should be used and applied to the work setting in a broad scope of relevant circumstances and correct teaching and learning methodologies in any higher educational institution (Dede, 2010). With these concerns, it should be inculcated in most nursing graduates' capacity to apply competently the information, skills, and values that match the needs of their profession, satisfy the demands of the employer, and contribute to the overall attainment of institutional goals in their field of endeavor (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 as to the most suitable teaching and learning methodologies to enforce competent graduates. Thus, the present study tried to address this research gap to add more to a body of knowledge on employability, skills, and the graduates' contextual performance.

Keywords: Nursing, teaching methodologies, competencies, non-experimental descriptive-correlational, tracer study, Mandaue City, Philippines

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INTRODUCTION

Nursing graduate competency is the ability to complete a task efficiently or successfully. The term competency should be used and applied to the work setting in a broad scope of relevant circumstances and correct teaching and learning methodologies in any higher educational institution (Dede, 2010).

With this emphasis on competency, Higher Education Institutions that use outcome-based education (OBE) instruction and teachers that use a variety of approaches and strategies in teaching and learning have shown a significant increase in student competency during instruction and performance afterward (An, 2014). Moreover, an active learning strategy is meant for helping undergraduate students to gain competency (Shin et al., 2015). Based on the Guidelines for the Implementation of CMO no 46 s. 2012, shifting from competency-based standards to outcomes-based education is a trend nowadays. This standard clearly defines the necessary competencies of Bachelor of Science in Nursing (BSN) graduates. This so-called CMO #15 (2017), elaborated on the Policies, Standards, and Guidelines for the Bachelor of Science in Nursing (BSN) Program (Licuanan, 2017). In particular, students need a continuous/intensified curriculum that fosters their communicative competencies, such as oral/written communication, teamwork/ collaboration, information/ technology application, leadership, and professionalism/ work ethic (Kang et al., 2021). One coordinated approach to stay up with this season of enlivening change is for HEIs to give their graduates roads to acquire specific overall abilities and characteristics that will make them equipped with the genuine requests of the universe of work (Abas & Imam, 2016).

Theisen & Sandau, (2013), identified the crucial nursing graduates' competencies that are lacking such as communication, leadership, organization, critical thinking, specific situations, and stress management. There were several strategies targeted to improve the transition of new graduates. Schools of nursing should add communication strategies to their current focus on critical thinking, clinical reasoning, and simulation scenarios and include situation-specific skills such as end-of-life scenarios. Based on the Philippine Qualifications Framework and its standards, the graduates of the Bachelor of Science in Nursing (BSN) program achieve a specific level of knowledge, skills, attitude, and a certain degree of independence (Atty. Manzala, 2013).

With these concerns, it should be inculcated in most nursing graduates' capacity to apply competently the information, skills, and values that match the needs of their profession, satisfy the demands of the employer, and contribute to the overall attainment of institutional goals in their field of endeavor (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 as to the most suitable teaching and learning methodologies to enforce competent graduates. Thus, the present study tried to address this research gap to add more to a body of knowledge on employability, skills, and the graduates' contextual performance.

FRAMEWORK

The current research is tailored to the theory of Competency (Kruger and Dunning, 1999). The concept recommends that the understudies' abilities in some random area might be related to their capacity to self-evaluate their abilities, and besides, that understudies who have a lower level of abilities may not, truth be told, perceive that they have such a shortfall.

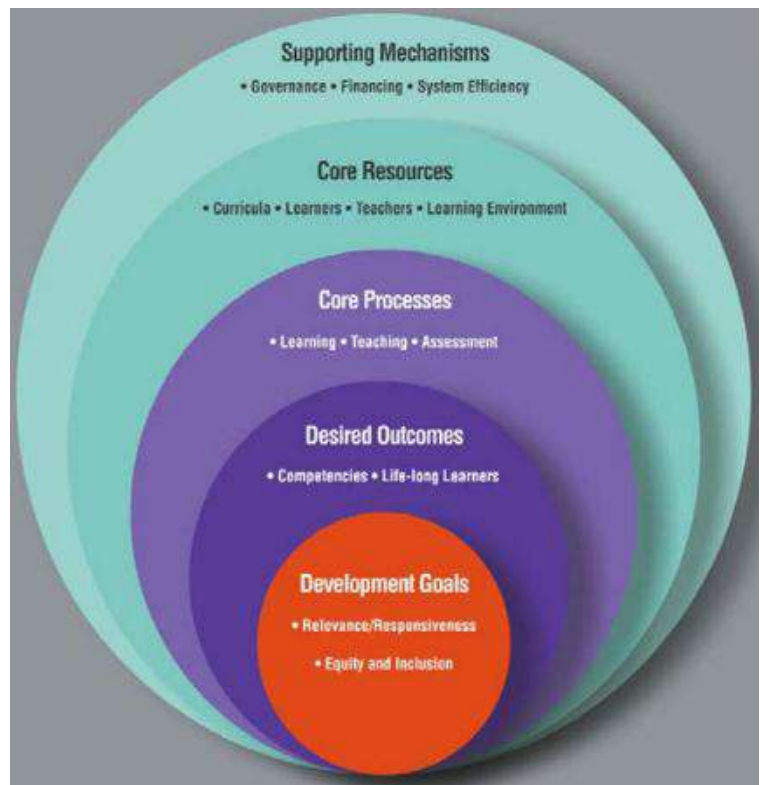
Social Learning Theory developed by Bandura further supplements the above theory. It is a cognitive process set on changes in beliefs, concepts, and knowledge and improves professional and personal learning through participation in the actual work environment (Falk & Kim, 2019). Social learning theory considers how environmental and cognitive factors influence human learning and behavior (McLeod, 2016). As Bandura (1977) indicated, learning would be challenging and perilous if individuals depended exclusively on the impacts of their activities to illuminate them on what to do (Bruner, 2019).

More importantly, this study is anchored in the General Education Quality Analysis/Diagnosis Framework (GEQAF) as led by UNESCO. This framework adopts a comprehensive and systematic approach to education. It acknowledges the reality that accountability to deliver quality education and to effectively facilitate learning lies at all levels and in all aspects of an education system (GEQAF, 2012) (Figure 1)

Figure 1. General Education Quality Analysis Framework

The Nursing Core Competency Standards of 2012, stated the major roles of professional nurses and emphasizes client care, research, and leadership and management that can upgrade to advanced nursing practice like critical care, psychiatric nursing, emergency nursing, etc.

(NATIONAL NURSING CORE COMPETENCY STANDARDS,2012). Also according to the CMO No.15 Series of 2017, key competencies in nursing include safety, evidence-based practice (EBP), ethical-legal, collaborative, and techno-intelligent care, etc (Licuanan, 2017). By the study directed, the researchers will propose an action plan intended to strengthen the department's effort in providing efficient and effective teaching and learning practices beneficial to the University of Cebu



Lapulapu and Mandaue College of Nursing (UCLM-CN). A conceptual framework was formulated as collated from the different theoretical backgrounds and applied to the current study (Figure 2)

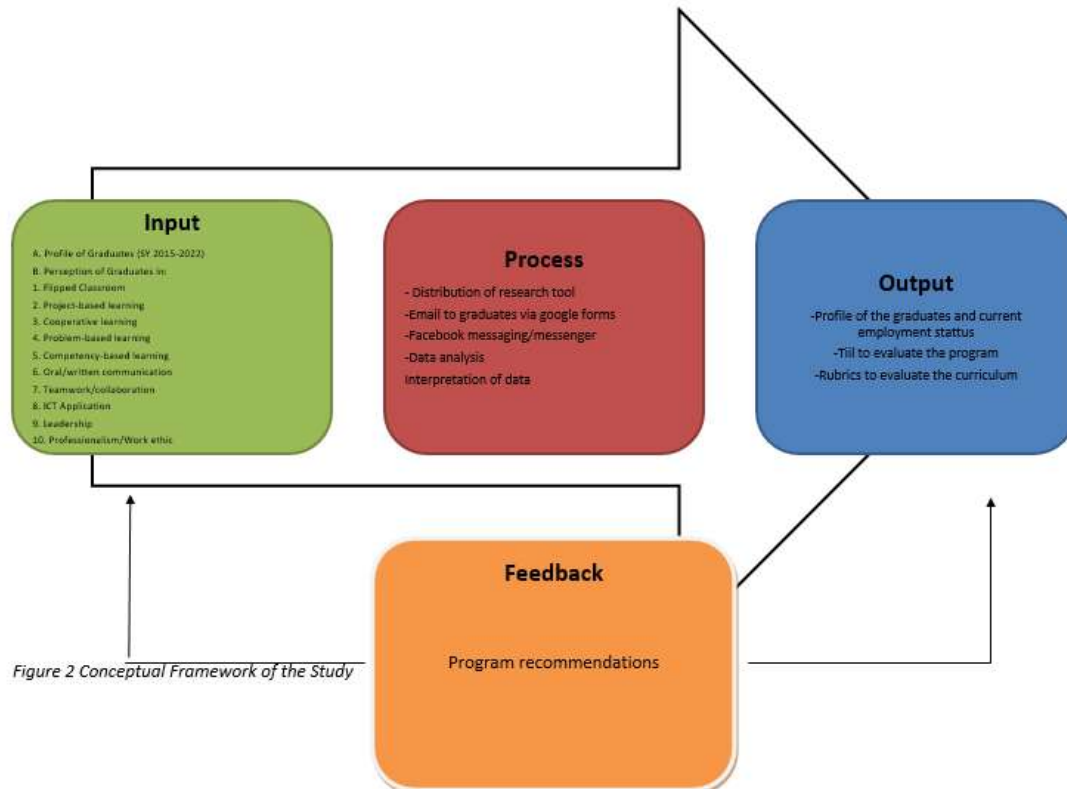


Figure 2 Conceptual Framework of the Study

OBJECTIVES OF THE STUDY

The study determined the impact of the varied methodologies in teaching and learning among UCLM alumni's competency for the S.Y. 2019-2022. Further, the study identified the alumni's perception of the extent of faculty adoption of varied teaching and learning methodologies in a flipped classroom, project-based learning, cooperative learning, problem-based learning, and competency-based learning. Moreover, it identified the extent of alumni's 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 to strengthen the college of nursing in delivering and giving efficient and effective teaching and learning experience for nursing students.

METHODOLOGY

The investigation utilized the non-experimental descriptive-correlational method for research to determine the impact of the varied methodologies in teaching and learning in the College of Nursing on the alumina's competency for the year duration 2019-2022. The study was conducted in the UCLM-CN. Additionally, online Social Media Platforms were utilized to gather data from as many respondents as possible. The investigation study formulated an aggregate of 80 (n=80) alumni respondents for the years 2019-2022. Sloven's equation was used to Slovens formula

for respondent distribution will determine the researchers' sample size on the snowball sampling technique in information gathering. A researcher-made Survey Questionnaire derived from the National Association of Colleges and Employers (NACE) was employed and designed in Google forms to gather pertinent data. The beginning portion is the respondent's demographic profile. The following section is the extent of faculty adoption of varied methodologies in teaching and learning as perceived by the alumna. The third section pertains to the extent of graduates' competency attainment. Frequency and simple percentage, weighted mean, Chi-Square Test of Independence, and One-way ANOVA were used to treat the collected information.

Table 1 # of respondents

Academic Year	f	Percentage
2015-2022	80	80.00
Total	80	1.0

Table 1 shows alumnus quantity - respondents for the S.Y. 2015-2022 utilizing snowball examination as the information gathering method.

RESULTS AND DISCUSSION

The results and discussion portion reflect the consequences of the data accumulated. The first part gives information on adopting varied teaching and learning methodologies. The next part pertains to the extent of attainment of Graduates' competencies. Additionally, it highlights the narrative comparison of the College of Nursing Program results.

Legend:

*GE- Greatly Extensive

*ME- Moderately Extensive

Table 2 Extent of Adoption of Varied Methodologies

Indicators	Mean	Interpretation	Rank
A. Flipped Classroom			
<ul style="list-style-type: none"> The students were assigned an activity to work on at home and present their output in class. 	3.53	GE	1
<ul style="list-style-type: none"> Student engagement on a certain topic through personal experiences. 	3.41	GE	2
<ul style="list-style-type: none"> The students' performed oral discussions on a certain topic through reporting. 	3.38	GE	3
<ul style="list-style-type: none"> The students were indulged in research activities. 	3.38	GE	3
<ul style="list-style-type: none"> Ideas and examples were mostly generated by the students'. 	3.30	GE	4
Aggregate Mean	3.40	GE	
B. Project-Based Learning			

The impact of teaching and learning methodologies in the college of nursing graduates' ...

• Indulged in the creation of an answer to a certain issue/ problem inside a company	3.33	GE	1
• Indulged in company-based output/ projects.	3.29	GE	2
• Creation of a framework or a model that summarizes the relevant ideas on their given topics.	3.24	ME	3
• Production of Research-based outputs	3.18	ME	4
• Students develop projects that respond to real-life problems	3.11	ME	5
Aggregate Mean	3.23	ME	
C. Cooperative Learning			
• Research-based outputs were done by a group.	3.45	GE	1
• Each member of the group was assigned a specific task to perform.	3.43	GE	2
• Students were assigned specific topics by a group to present.	3.41	GE	3
• Brainstorming was done to initiate collaboration of ideas and opinions inside the class.	3.41	GE	3
• Students collaborate with their group in the attainment of an output.	3.41	GE	3
Aggregate Mean	3.42	GE	
D. Problem-Based Learning			
• The students were asked a question that needs to be answered personally.	3.45	GE	1
• Students were tasked to identify certain societal issues and instructed to create a solution using the integration of information from class discussion and their perceptions.	3.43	GE	2
• Students were engaged in finding an answer to a research problem.	3.35	GE	3
• The students were given a case study to solve based on the concepts discussed in class.	3.33	GE	4
• The students were asked to create a conceptual framework given a problem scenario.	3.31	GE	5
Aggregate Mean	3.37	GE	
E. Competency-Based Learning			
• Students are made to answer questions based on their personal/ work experience.	3.40	GE	1
• The abilities of the student relevant to a certain topic were highly acknowledged during class discussion.	3.35	GE	2
• Students' reporting was evaluated through the use of a rubric.	3.34	GE	3
• Sharing of ideas and opinions through personal skills.	3.30	GE	4
• Students' assessment in oral recitation through the use of rubrics.	3.29	GE	5
Aggregate Mean	3.34	GE	

Table 3 Summarized Data on the Extent of Adoption of Varied Methodologies in Teaching and Learning

Variables	Mean	Interpretation	Rank
• Project-Based Learning	3.42	GE	1
• Cooperative Learning	3.40	GE	2
• Flipped Classroom	3.37	GE	3
• Competency-Based Learning	3.34	GE	4
• Problem-Based Learning	3.23	ME	5
Overall Aggregate Mean	3.35	GE	

The interpretation in table 3 implies that the University has a curriculum that corresponds to the needs of the industry. The primary component of the curriculum, which is the flipped classroom, has been proven to be effective and is reflected by the responses of the students. It has been proven that flipped classroom in nursing education increases performance (Barranquero-Herbosa et al., 2022) and showed a positive impact on students' learning motivation (Fan et al., 2020). Current evidence suggests that the flipped classroom approach in health professions education yields a significant improvement in student learning compared with traditional teaching methods (Busebaia & John, 2020; Hew & Lo, 2018)

Table 4 Extent of Attainment on Graduates Competency

Indicators	Mean	Interpretation	Rank
A. Oral/ Written Communications			
• Graduates' were Able to provide clarity of roles and functions among subordinates	3.44	GE	1
• Able to hold meetings with necessary and meaningful agenda	3.41	GE	2
• Graduates' got the opportunity to present a topic.	3.40	GE	3
• Able to make oneself be understood	3.38	GE	4
• Graduates' were able to communicate fairly with their subordinates.	3.38	GE	4
Aggregate Mean	3.40	GE	
B. Teamwork/ Collaboration			
• Conducted research with group members.	3.50	GE	1
• Collaborated with organizations for growth and development	3.46	GE	2
• Able to have positive interpersonal	3.46	GE	2

relationships among subordinates			
• Able to adapt to new sets of environments and people.	3.44	GE	3
• Presented topics by group efficiently and effectively.	3.43	GE	4
Aggregate Mean	3.46	GE	
C. Information/ Technology Application			
• Able to adapt and utilize social media business platforms	3.10	ME	1
• Able to adopt a Management Information System and audit Information system	3.09	ME	2
• Got the chance to establish their E-commerce businesses	3.05	ME	3
• Able to identify and use telecommunications equipment efficiently	3.04	ME	4
• Utilization of innovation in technology to aid decision making	2.90	ME	5
Aggregate Mean	3.04	ME	
D. Leadership			
• Being influential among subordinates.	3.45	GE	1
• Able to lead by heart not by fear.	3.40	GE	2
• Able to communicate instructions clearly and positively to subordinates.	3.39	GE	3
• Able to accept criticism and be optimistic about goals and objectives.	3.39	GE	3
• Able to create changes inside the organization positively.	3.39	GE	3
Aggregate Mean	3.40	GE	
E. Professionalism/ Work Ethic			
• Able to do a certain job efficiently and effectively.	3.58	GE	1
• Being on time.	3.55	GE	2
• Portrays good mannerisms and right conduct inside the office.	3.54	GE	3
• Able to follow rules and regulations manifested in an organization.	3.53	GE	4
• Dress up according to occasion and formality.	3.49	GE	5
Aggregate Mean	3.54	GE	

Table 5 Summarized Data on the Extent of Attainment on Graduate's Competency

Variables	Mean	Interpretation	Rank
• Professionalism/ Work Ethic	3.55	GE	1
• Teamwork/ Collaboration	3.46	GE	2
• Leadership	3.39	GE	4
• Oral/ Written Communications	3.46	GE	2
• Information/ Technology Application	3.45	GE	3
Overall Aggregate Mean	3.46	GE	

As reflected in the in Table 5 Professionalism/ Work ethic ranks 1st in the list with a mean score of 3.55. They can perform apply in their workplaces the core value of punctuality, ethics, obedience, and professionalism. The rapid changes in value systems of society caused nursing to encounter more ethical and philosophical challenges in providing care to its patients and clients (Eid et al., 2018). The healthcare system is experiencing major structural changes that affect every segment and every profession directly or indirectly involved in the healthcare system (Yoder, 2017). Teamwork and collaboration rank 2nd with a mean score of 3.46 and are interpreted as greatly extensive. Graduates/alumni perceive teamwork as an important element in the workplace. The nursing profession views it as an inter-professional practice, which is a result of the quality of interaction among professionals from different areas and involves the recognition and handling of conflicts (de Souza et al., 2016). Several articles show that a lack of teamwork among nursing staff affects care delivery and unit operations (Jones & Moore, 1992; Kalisch & Begeny, 2005). Oral and written communication is considered important by the graduates/alumni with a mean score of 3.46. In clinical settings, these skills for nurses are critical in the delivery of essential health services and are core to strengthening the health system. (Burlew, 1981; Communication et al., n.d.; Kourkouta & Papathanasiou, 2014).

The 3rd component is Information/Technology Application which has a mean score of 3.45. The rapid growth and development of technology in all aspects of life and even in nursing practice. Nursing information system development such as the impact on the workload, planning, and working methods of communicating between multiple jobs care organizations to meet the challenges associated with it(Bhattacharjee, 2015). Finally, is all about the concept of Leadership (3.39). Nurses require leadership skills and competencies to partner with physicians and other healthcare professionals, both within and outside of their institution. Nurses play a vital role in transforming healthcare (Aldridge, 2018).

Table 6. Significant Relationship of the variables ($\alpha = 0.05$)

Variables	Computed Chi-Square	df	Critical Value	Significance	Result
A. Flipped Classroom					
• Oral/ Written	315.503 ^a	12	147.674	Significant	Ho Rejected

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Communications		1			
• Teamwork/ Collaboration	222.872 ^a	11 0	135.48	Significant	Ho Rejected
• Information/ Technology Application	273.679 ^a	14 3	171.907	Significant	Ho Rejected
• Leadership	321.786 ^a	13 2	159.814	Significant	Ho Rejected
• Professionalism/ Work Ethic	175.852 ^a	99	123.225	Significant	Ho Rejected
B. Project-Based Learning					
• Oral/ Written Communications	231.502 ^a	12 1	147.674	Significant	Ho Rejected
• Teamwork/ Collaboration	215.936 ^a	11 0	135.48	Significant	Ho Rejected
• Information/ Technology Application	242.434 ^a	14 3	171.907	Significant	Ho Rejected
• Leadership	243.812 ^a	13 2	159.814	Significant	Ho Rejected
• Professionalism/ Work Ethic	180.950 ^a	99	123.225	Significant	Ho Rejected
C. Cooperative Learning					
• Oral/ Written Communications	236.598 ^a	12 1	147.674	Significant	Ho Rejected
• Teamwork/ Collaboration	289.065 ^a	11 0	135.48	Significant	Ho Rejected
• Information/ Technology Application	248.508 ^a	14 3	171.907	Significant	Ho Rejected
• Leadership	355.439 ^a	13 2	159.814	Significant	Ho Rejected
• Professionalism/ Work Ethic	229.390 ^a	99	123.225	Significant	Ho Rejected
D. Problem-Based Learning					
• Oral/ Written Communications	312.699 ^a	99	123.225	Significant	Ho Rejected
• Teamwork/ Collaboration	310.947 ^a	90	113.145	Significant	Ho Rejected
• Information/ Technology Application	179.447 ^a	11 7	143.246	Significant	Ho Rejected
• Leadership	272.469 ^a	10 8	133.257	Significant	Ho Rejected
• Professionalism/ Work Ethic	190.759 ^a	81	103.01	Significant	Ho Rejected
E. Competency-Based Learning					

• Oral/ Written Communications	236.598 ^a	12 1	147.674	Significant	Ho Rejected
• Teamwork/ Collaboration	289.065 ^a	11 0	135.48	Significant	Ho Rejected
• Information/ Technology Application	248.508 ^a	14 3	171.907	Significant	Ho Rejected
• Leadership	355.439 ^a	13 2	159.814	Significant	Ho Rejected
• Professionalism/ Work Ethic	229.390 ^a	99	123.225	Significant	Ho Rejected

Table 6 shows the Chi-Square results of the study. This test is done to determine whether there is an association between the variables and check for statistical relevance. In general, the chi-square values of the variables in are much larger than the critical value. Therefore, the null hypothesis (Ho) is rejected, and accept the alternate hypothesis (Ha).

CONCLUSION

This research examined the impact of teaching and learning methodologies on the college of nursing graduates' competency. As reflected in the results of the study, the nursing curriculum and the varied teaching-learning methodologies made an impact on their competency as nurses in the clinical field. The nursing curriculum is following CMO No.15 Series of 2017, where the key competencies in nursing include safety, evidence-based practice (EBP), ethical-legal, collaborative, and techno-intelligent care, etc. The current curriculum can assist nursing instructors in properly establishing relevant learning outcomes and providing directions in creating a learning plan. These important variables like communication, teamwork/collaboration, information/ technology application, leadership, and professionalism/work ethics can be used to develop educational strategies concerning nursing students in all nursing subjects and prepare them in the clinical setting. The findings can be helpful to nursing instructors to be more efficient and effective. It can be concluded that there is a 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. The more emphasis on teaching methods the higher percentage of the competent student. This study recommends that the curriculum be developed further, embedding and applying the principles of the 2012 NCCS and providing more competence to the graduates.

LITERATURE CITED

1. Abas, M. C., & Imam, O. A. (2016). Graduates' Competence in Employability Skills and Job Performance. *International Journal of Evaluation and Research in Education (IJERE)*. Vol.5, No.2, June 2016, pp. 119~125. Retrieved from <https://bit.ly/39HT6L3>
2. Bandura. A. (1977). *Social learning theory*. Prentice-Hall, New Jersey. Retrieved from <https://bit.ly/3t7I9dl>

3. Barman, A., & Konwar, J. (2011). Competency-based curriculum in higher education: A necessity grounded by globalization. *Romanian Journal for multidimensional education*, 3(6), 7-15.
4. Barman, A., & Konwar, J. (2011). Competency-based curriculum in higher education: A necessity grounded by globalization. *Romanian Journal for multidimensional education*, 3(6), 7-15.
5. Bruner J. (2019). *Constructivist Theory (Jerome Bruner)*. Retrieved from <https://bit.ly/2GEj7N9>
6. Crosling, G., Heagney, M., & Thomas, L. (2009). Improving student retention in higher education. *Australian Universities Review*, 51(2), 9-18.
7. Dede, C. (2010). Comparing frameworks for 21st-century skills. *21st-century skills: Rethinking how students learn*, 20(2010), 51-76.
8. Falk, R. A. & Kim, S. S. (2019). *The War System: An Interdisciplinary Approach*. Routledge, 52 Vanderbilt Avenue, New York, NY 10017. Retrieved from <https://bit.ly/3j4rMcL>
9. Kang, K., Lee, M., & Cho, H. (2021). Interpersonal skills mediate the relationship between
10. communicative and clinical competencies among nursing students: A descriptive study. *Nurse Education Today*, 99, 104793.
11. Kruger, J., and D. Dunning. 1999. "Unskilled and Unaware of It: How Difficulties in Recognizing One's Incompetence Lead to Inflated Self-assessments." *Journal of Personality and Social Psychology* 77: 1121–34. Retrieved from <https://bit.ly/39EL8Cg>
12. McLeod, S. A. (2016). *Bandura - social learning theory*. Simply Psychology. Retrieved from <https://bit.ly/3cmFVka>
13. Shin, H., Sok, S., Hyun, K. S., & Kim, M. J. (2015). Competency and an active learning program in undergraduate nursing education. *Journal of Advanced Nursing*, 71(3), 591-598.
14. Theisen, J. L., & Sandau, K. E. (2013). Competency of new graduate nurses: A reof their weaknesses and strategies for success. *The Journal of Continuing Education in Nursing*, 44(9), 406-414.
15. 2012 NATIONAL NURSING CORE COMPETENCY STANDARDS. (2012). In *Professional Regulatory Board of Nursing* (Vol. 7, Issue 1, pp. 1–13 <https://doi.org/10.1029/2008GB003237>
16. Aldridge, M. (2018). Leadership and Management in Professional Nursing Practice. *Leadership and Management Competence in Nursing Practice*.
17. Atty. Manzala, T. (2013). *Philippine Qualifications Framework (PQF)*. 1–32. http://ceap.org.ph/upload/download/20138/2723637531_1.pdf
18. Barranquero-Herbosa, M., Abajas-Bustillo, R., & Ortego-Maté, C. (2022). Effectiveness of flipped classroom in nursing education: A systematic review of systematic and integrative reviews. *International Journal of Nursing Studies*, 135. <https://doi.org/10.1016/j.ijnurstu.2022.104327>
19. Bhattacharjee, S. (2015). Role of information technology in nursing. *Research Journal of Science & IT Management*, 36(4), 440–444.
20. Burlew, C. (1981). Communication and nursing. *The Australian Nurses" Journal*, 11(2), 41 42.
21. Busebaia, T. J. A., & John, B. (2020). Can flipped classrooms enhance class engagement and academic performance among undergraduate pediatric nursing students? A mixed-methods study. *Research and Practice in Technology Enhanced Learning*, 15(1), 1–16. <https://doi.org/10.1186/s41039-020-0124-1>
22. Communication, D., Development, C., & Communication, D. (n.d.). *WRITTEN, ORAL &*

- DIGITAL COMMUNICATION ABILITIES Definition Control of Language, Syntax, and Mechanics WRITTEN, ORAL & DIGITAL COMMUNICATION ABILITIES Dimension Proficient-4 Competent-3 Developing-2 Novice-1 Content Development and Organization.*
23. de Souza, G. C., Peduzzi, M., da Silva, J. A. M., & Carvalho, B. G. (2016). Teamwork in nursing: Restricted to nursing professionals or an interprofessional collaboration? *Revista Da Escola de Enfermagem*, 50(4), 640–647. <https://doi.org/10.1590/S0080-623420160000500015>
 24. Eid, A., Ahmed, M., Safan, S., & Mohamed, S. (2018). Nursing professionalism: A concept analysis. *Menoufia Nursing Journal*, 3(2), 63–69. <https://doi.org/10.21608/menj.2018.121319>
 25. Fan, J. Y., Tseng, Y. J., Chao, L. F., Chen, S. L., & Jane, S. W. (2020). Learning outcomes of a flipped classroom teaching approach in an adult-health nursing course: a quasi-experimental study. *BMC Medical Education*, 20(1), 1–11. <https://doi.org/10.1186/s12909-020-02240-z>
 26. GENERAL EDUCATION QUALITY ANALYSIS / DIAGNOSIS FRAMEWORK (GEQAF). (2012). *GENERAL EDUCATION QUALITY ANALYSIS / DIAGNOSIS FRAMEWORK (GEQAF)*. February.
 27. Hew, K. F., & Lo, C. K. (2018). Flipped classroom improves student learning in health professions education: A meta-analysis. *BMC Medical Education*, 18(1), 1–12. <https://doi.org/10.1186/s12909-018-1144-z>
 28. Jones, S., & Moore, G. (1992). The importance of teamwork in industry. *Engineering Management Journal*, 2(3), 104–108. <https://doi.org/10.1049/em:19920024>
 29. Kalisch, B. J., & Begeny, S. M. (2005). Improving nursing unit teamwork. *Journal of Nursing Administration*, 35(12), 550–556. <https://doi.org/10.1097/00005110-200512000-00009>
 30. Kourkouta, L., & Papathanasiou, I. (2014). Communication in Nursing Practice. *Materia Socio Medica*, 26(1), 65. <https://doi.org/10.5455/msm.2014.26.65-67>
 31. Licuanan, P. B. (2017). *CMO-15-s-2017.pdf* (pp. 1–63). <https://ched.gov.ph/wp-content/uploads/2017/10/CMO-15-s-2017.pdf>
 32. Piscotty, R. J., Kalisch, B., & Gracey-Thomas, A. (2015). Impact of Healthcare Information Technology on Nursing Practice. *Journal of Nursing Scholarship*, 47(4), 287–293. <https://doi.org/10.1111/jnu.12138>
 33. Yoder, L. (2017). Professionalism in nursing. *MEDSURG Nursing*, 26(5), 293–294. <https://doi.org/10.36348/sjnhc.2020.v03i09.001>

