Motivation, Barriers, and Self-Efficacy in Digital Technology among Nurse Educators in Selected Higher Education Institutions in Calabarzon, Philippines

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ABSTRACT

This study determined the motivation, barriers, and self-efficacy on digital technology among nurse educators in the selected HEIs in CALABARZON, Philippines. Socio-cultural, training and professional development, attitude, leadership and administration, and pedagogy influenced the motivation in digital technology among nurse educators. On the other hand, lack of internet service, requiring more time to fully integrate technology in teaching, lack of adequate and necessary training, unclear implication of technology in professional practice, and lack of competence in adopting technology hindered their digital technology integration. Self-efficacy is facilitated by easy access to resources from the online library, the capability to meet deadlines, the capacity to efficiently learn to use a new type of digital technology, and being able to carry out their ethico-legal responsibilities regarding their role as teachers. Motivation and barriers are interrelated variables that influence digital technology use and integration among nurse educators. Barriers and self-efficacy have a high positive relationship. Nurse educators must be provided with continued support and training as they adapt to the education landscape, as they embrace the instructional challenges brought about by digital technology in the 21st century classroom.

Keywords: Barriers**,** Digital technology, Motivation, Nurse Educators, Self- efficacy

INTRODUCTION

The world health crisis in January 2020 (Department of Health Memorandum Order No. 2020-0055) brought unprecedented disruptions to the education sector, resulting in an urgent paradigm shift in teaching modalities that forced the immediate and unexpected suspension of face-to-face classes due to lockdown and quarantine protocols. In response to this, the Philippines made an innovative shift in the teaching-learning process, responsive to the needs of students to access quality education through a flexible learning modality that allows flexibility in time, place, and audience, including the use of technology as a tool. However, the faculty members lack acceptance and participation in technology integration, and they fail to integrate technology into instruction in ways that make a difference in student learning, resulting in gaps in how faculty members embrace technology. Hence, this research assessed the motivation, barriers, and self-efficacy among nurse educators.

Research Population and Sample

This study involved 108 nurse educators from public and private HEIs in CALABARZON. This study did not include support staff or adjunct instructors during clinical rotation in the hospital. A descriptive-correlational design was used in this study. A purposive sampling technique was used in selecting nurse educator respondents who satisfied the set criteria: (1) full-time or part-time faculty in the college of nursing; (2) utilized digital technology in teaching; (3) with at least one year of teaching experience, and (4) who consented to be respondents of this study. A researcher-devised, pilot-tested structured questionnaire was used with an internal consistency of 0.91, Cronbach's alpha.

RESULTS AND DISCUSSION

Table 1. Summary of Values Showing the Frequency and Percentage Distribution of the Nurse Educator Respondents According to Demographic Profile

Demographic Variables	Frequency	Percentage (%)
36-46 years old	39	36
Female	83	77
Master's Degree	64	56
11-15 years	35	32
Laptop	59	55
Wireless (through Wi-Fi)	65	60

There were 108 nurse educators who participated in the study. Most of the respondents (f= 39; 36%) were between ages 36 to 46 years old, female (f= 83; 77%), have Master's Degree (f=64; 56%), with 11-15 years of teaching experience, use laptop (f=59;55%) as their primary device in teaching, and have wireless internet service (f = 65; 60%).

Table 2. Summary of Values and Verbal Interpretation in the Assessment of the Nurse Educator Respondents on the Motivation in Digital Technology in Selected Public and Private Higher Education Institutions in CALABARZON, Philippines

Variables	Mean	Verbal Interpretation
Leadership and Administrative Support	2.86	Agree
Training and Professional Development	3.04	Agree

Accessibility and Availability of Resources	2.24	Disagree
Attitude	3.03	Agree
Pedagogy	2.68	Agree
Socio-cultural	3.05	Agree
Overall Mean	**2.81**	**Agree**

The overall mean (M=2.81) reveals that the respondents generally 'agree' that socio-cultural (M=3.05), training and professional development (M=3.04), attitude (M=3.03), leadership and administration(M=2.86), and pedagogy (M=2.68) influenced their motivation in digital technology. However, they 'disagree' that the accessibility and availability of resources (M=2.24) impacted their motivation for using digital technology.

The willingness to accept the technology is crucial in adapting to innovation since learning and integrating digital technologies in pedagogy take a lot of time and energy and is not an easy task (Fawaz et al., 2018), which may lead to limited use, less engagement and infusion, and concerns of lack of skills and limited time for training among the faculty (Coultman, 2015). Hence, nurse educators must be supported in the incorporation of technology in their teachings, be provided with a constructive work environment, as well as to be assisted by information and technology staff to improve their acceptance and support ongoing technology use (Huddle, 2019; Gonen & Lev-Ari, 2016), making them more motivated to teach and to learn new technology resulting to effective use of technology in the classroom (Chua et al., 2020).

Table 3. Summary of Values Showing the Mean and Verbal Interpretation in the Assessment of the Nurse Educator Respondents on the Barriers in Digital Technology in Selected Public and Private Higher Education Institutions in CALABARZON, Philippines

Variables	Mean	Verbal Interpretation
Institutional	2.77	Agree
Individual	2.66	Agree
Proficiency	2.65	Agree
Technological	3.03	Agree
Domestic and Community	2.41	Disagree
Overall Mean	**2.70**	**Agree**

The overall mean (M=2.70) suggests that the respondents generally 'agree' that technological (M=3.03), institutional (M=2.77), individual (M=2.66), and proficiency (M=2.65) are hindrances to digital technology use and integration. However, domestic and community (M=2.41) is not considered a barrier.

The lack of vision, leadership among administrators, financial resources, curriculum, infrastructure, professional development training, and assessment tools, as well as the experience of organizational fatigue and unrealistic expectations and timelines, as well as the unexpected condition of integrating technology in the classroom, create a culture of apathy among nurse educators (Blackburn, 2019; Brown, 2019). Likewise, the lack of time, knowledge, self-confidence, logistical issues, and lack of preparation among faculty members are hindrances to technology integration (Ramnarine-Singh, 2014).

Table 4. Summary of Values Showing the Mean and Verbal Interpretation in the Assessment of the Nurse Educator Respondents on the Self-Efficacy in Digital Technology in Selected Public and Private Higher Education Institutions in CALABARZON, Philippines

Variables	Mean	Verbal Interpretation
Institutional	2.54	Agree
Individual	2.93	Agree
Proficiency	2.56	Agree
Technological	2.77	Agree
Domestic and Community	2.39	Disagree
Overall Mean	**2.64**	**Agree**

The overall mean (M=2.64) suggests that the respondents agree that individual (M=2.93), technological (M=2.77), proficiency (M=2.56), and institutional (M=2.54) influence the nurse educators' self-efficacy in digital technology. However, they disagree that domestic and community aspects (M=2.39) are not influencers of self-efficacy.

Another important dimension in technology use is the nurse educator's beliefs about their own capability. Accordingly, being guided by peers or colleagues, the support of the school and administrators, and the provision of professional learning opportunities impact technology integration in the classroom; hence, training and development should be consistently implemented and embody the shared vision of the institution, with the nurse educators having the choice in their professional learning opportunities. This improves the faculty's professional productivity as well as promotes the students' learning and engagement (Coultman, 2015).

Table 5: Correlational Analysis on the Significant Relationship between Motivation and Barriers in Digital Technology as Assessed by the Nurse Educator Respondents in Selected Public and Private Higher Education Institutions in CALABARZON, Philippines

Variables	Computed r	Degree of Relationship	*p*-value	Interpretation
Motivation To Barriers in Digital Technology	-.279**	Negligible negative correlation	.003	with significant correlation

Pearson- r correlational with a computed r = -.279, *p*-value = .003 <0.05 denotes that there is a statistically significant correlation between motivation and barriers in digital technology, which resulted in the interpretation of a negative, negligible correlation, indicating a definite but small relationship between motivation and barriers in digital technology use among the nurse educators. Despite the small relationship between these two variables, it can be inferred that the level of motivation somehow impacts the barriers to technology integration.

Hence, it is important for school leaders and administrators to increase the nurse educators' enabling capacity, resource capitalization, installation and provision of access to technological equipment, and feedback mechanisms on the impact of technology in education (Penaflor-Espinosa, 2016). Likewise, faculty members who have a positive view of the use of technology are motivated to teach and to learn the new technology. In like manner, having a supportive working environment may improve faculty members' effectiveness in the use of technology in the classroom (Chua et al., 2020). These barriers of technology can only be eliminated when there is a common understanding and agreement by the school administrators, faculty, students, and all stakeholders involved in the teaching-learning process (Joseph, 2012).

Table 6. Correlational Analysis on the Significant Relationship between Motivation and Self-efficacy in Digital Technology as Assessed by the Nurse Educator Respondents in Selected Public and Private Higher Education Institutions in CALABARZON, Philippines

Variables	Computed r	Degree of Relationship	*p*- value	Interpretation
Motivation To Self-efficacy in Digital Technology	-.013**	Negligible negative correlation	.896	with no significant correlation

Pearson- r correlational analysis with a computed r = -.013, *p*-value = .896>.05 denotes that there is a negligible negative but statistically no significant correlation between motivation and self-efficacy among the nurse educators. This result may be attributed to the small sample size. Further, there is not sufficient evidence to support the existence of a linear relationship between the two variables.

Studies show that personality characteristics, including attitude, knowledge, competence, and self-efficacy beliefs related to learning, influence the use of digital technology. Educators who have high levels of self-efficacy are more confident in using new teaching approaches, and they view technology as an effective way to guide students to learn and perceive technology as a useful means to support their teaching (Ayala & Lev-Ari, 2016; John, 2013). However, the mere existence of technological resources is not an assurance that nurse educators will be motivated to adapt their practices to utilize technology in their teachings. In fact, self-efficacy and attitude toward digital technology have an important effect on their motivation and interest in teaching using technology as a tool (Suana et al., 2019)

Table 7. Correlational Analysis on the Significant Relationship between Barriers and Self-efficacy in Digital Technology as Assessed by the Nurse Educator Respondents in Selected Public and Private Higher Education Institutions in CALABARZON, Philippines

Variables	Computed r	Degree of Relationship	*p*-value	Interpretation
Barriers To Self-efficacy in Digital Technology	.887**	High positive correlation	.000	with significant correlation

Pearson- r correlational analysis with a computed r = .887, *p*-value = .000<.05, denotes that there is a significantly high positive correlation between barriers and self-efficacy among nurse educators. In general, the results suggest that self-efficacy is positively related to the barriers to technology use in the classroom. This result, which shows a strong positive link between barriers and self-efficacy, is explained in Bandura's Self- efficacy theory, postulating that self-efficacy (belief in one's ability) influences how individuals approach challenges (Lopez-Garrido, 2025). Hence, high self-efficacy fosters determination against barriers, while low self-efficacy leads to avoidance. Furthermore, the Self-efficacy Framework justifies how perceived obstacles, such as a lack of technological proficiency, can decrease self-efficacy, but strong self-efficacy helps mitigate these effects.

As such, self-efficacy varies from one individual to another and from one situation to another. This finding of a high positive relationship between barriers and self-efficacy can be further explained by the sudden shift of most of the educational institutions to flexible learning as they adapt to the unexpected and emerging need to use technology as a primary tool in teaching. The nurse educators were forced to adapt to this sudden paradigm shift, so despite the presence of a multitude of barriers, they find ways to immediately adjust so that they can deliver the required learning to their students, acquiring the belief in their capability to use technology in the classroom, leading to an increased technological self-efficacy. Instead of viewing it as a problem, it became an opportunity for growth and new learning. Hence, it is safe to say that the higher the self-efficacy, the more nurse educators believe that they can achieve their task on digital technology integration despite the encountered barriers. Furthermore, an individual's belief in their own ability to succeed in specific situations (self-efficacy) is a key predictor of their motivation, behavior, and technological resilience.

CONCLUSIONS AND RECOMMENDATIONS

Motivation and barriers among nurse educators are interrelated variables that influence digital technology use and integration among nurse educators. Hence, Higher Educational Institutions (HEIs) should consider digital technology as an integral element in the outcome-based teaching-learning process in nursing education, not only in improving the competencies but also to strengthen the positive attitudes and confidence of the nurse educators to embrace technology in their teaching, which is paramount to a successful implementation and integration of digital technology as a tool. Furthermore, the HEIs should consider allocation of sufficient budget and investment to support capacity-building programs through procurement of more digital technologies, excellent access to internet service, training programs, and include domestic and community aspect such as the availability of digital gadgets and internet connectivity to assist in the adoption and integration of digital technology among the nurse educators especially those who are working

from home. It is also vital that school administrators consider these major constructs in assessing, monitoring, and evaluating the nurse educators' attitude, proficiency, and capacity to use technology in the classroom. Hence, the results of the study can give some insights into how these three major variables of motivation, barriers, and self-efficacy are constructed and what can be done to facilitate the use, adoption, and integration of digital technology in the teaching-learning process. In addition, future researchers may delve into the experiences of nurse educators in adapting and integrating technology in the teaching-learning process and what strategies they employ to address the encountered barriers in technology, utilizing a qualitative approach.

Survey Questionnaire

I.   **MOTIVATION IN DIGITAL TECHNOLOGY.** Put a check (/) in the column that describes your level of barriers in pedagogical technology using the following scale below as a guide. 1 – Strongly Disagree   2 – Disagree   3 – Agree   4 – Strongly Agree

	1	2	3	4
A. Leadership and Administrative Support				
1. The school administrators are open and supportive of technology integration in the classroom and clinical instruction				
2. The nursing curriculum allows enough time to integrate technology.				
3. The school has devices to ensure security and internet safety to protect the personal information of users.				
4. There are technical staff and IT personnel available to assist whenever I have difficulty using new technology or help troubleshoot the problem I encounter with technology.				
5. There is an assigned laboratory custodian with proper training on technology use to ensure a fully-functioning, well-maintained technological equipment and tools.				
B. Training and Professional Development				
6. The nursing faculty are encouraged to attend trainings and seminars related to technology adoption and integration.				
7. The school administrators make sure that the faculty are equipped with training before using a certain technology tool (models, mannequins, digital equipment).				
8. All faculty have regular, updated, adequate, and relevant training in technology adoption and integration.				
9. All faculty are oriented on the use of new technology.				
10. Incentives are given to nursing faculty who regularly attend trainings, such as promotion, and or days off.				
C. Accessibility and Availability of Resources				
11. The nursing department has adequate equipment, such as laptops, computers, or smart TVs, that I can use in my instruction.				
12. Models, mannequins, and other digital equipment are updated, available, and well-functioning.				
13. Software is accessible and adapts with nursing curriculum.				
14. Internet connectivity is high and can be used anytime by the teachers and students during class periods.				
15. Classroom and laboratory rooms are suitable for technology integration.				
D. Attitude				
16. I enjoy and feel comfortable integrating technology in my class.				
17. Technology integration facilitates student-centered learning and improves the critical thinking skills of my students.				
18. New ideas and learning from the use of technology excite me, making me more engaged with my instruction.				
19. I am willing to learn and open to the idea of integrating technology in my class to improve my teaching strategies.				
20. Sharing technology use, tips, and demonstrations empowers me to integrate technology into their classrooms				
E. Pedagogy				
21. Technology improves my efficiency in preparing and communicating my lessons with students; hence, I can finish my class without delay.				
22. I am equipped with the necessary knowledge and skills on technology-supported pedagogy, which I practice in my class.				
23. Use of technology facilitates classroom management, making my students more interested and engaged in the lessons.				
24. I am proficient in the integration of technology into the teaching process.				
25. An effective way of technology integration ensures the visualization of concepts and motivates students in the classroom.				
F. Socio-cultural				
26. I am provided the opportunity to voice my concerns and opinions about integrating technology into the curriculum.				
27. I have the freedom to use technology for school group projects, communicate with parents, ad supporting my peers.				
28. My colleagues use technology in their instruction.				
29. Parents are supportive of the use of technology as a pedagogical tool.				
30. Talking with faculty privately, pairing teachers with fellow faculty who successfully integrated technology, and visiting faculty in classrooms by the Dean help me with technology integration.				

II.   BARRIERS IN DIGITAL TECHNOLOGY. Put a check (/) in the column that describes your level of barriers in pedagogical technology using the following scale as a guide. 1 – Strongly Disagree   2 – Disagree   3 – Agree   4 – Strongly Agree

Institutional	1	2	3	4
1. Pedagogical technology is not readily available in my institution.				
2. Facilities in my institution are inadequate for the implementation of pedagogical technology.				
3. Digital technology is not feasible in my own workplace setting because of poor internet service				
4. Digital technology requires a big investment, which my institution just cannot afford.				
5. There is not enough manpower with expertise to run digital technology in my institution				
Individual				
6. I do not have ample time to undergo training for digital technology.				
7. I am not willing to adopt change or entertain new technology.				
8. I lack the expertise in integrating technology in my classroom.				
9. I needed more time or a longer time to prepare a technology-integrated lesson.				
10. I do not have sufficient time to fully learn and apply digital technology in my classroom.				
Proficiency				
11. I lack the expertise in troubleshooting technical glitches or problems, so I need to wait for the technical staff to do it for me.				
12. I am quite isolated from knowledgeable colleagues with whom I can rely for assistance.				
13. I do not see everyone being supportive of the implementation of digital technology in the classroom.				
14. I have great reservation on having full coordination and collaboration with pedagogical technology				
15. I am not provided with the necessary training on how to deal with pedagogical technology.				
Technological				
16. The implications of digital technology in my professional practice are not clear.				
17. I cannot imagine the relevance of digital technology in my professional advancement.				
18. I have computers, but they are old, slow, and incompatible with new educational software.				
19. I do not believe that digital technology can make a big difference in enhancing the teaching-learning environment.				
20. I am not equipped with the technical competencies to adopt digital technology in my teaching strategies.				
Domestic and Community				
21. I have very limited space at home, which is not conducive to learning using digital technology.				
22. I have limited access to a computer because of gadget sharing with other members in the household.				
23. I have problems with the quality of internet connectivity and power supply at home.				
24. I experience limited opportunities to interact with family and colleagues because of my online schedule.				
25. I am prone to added financial distress in coping with the demands of the online learning platform, as I need to upgrade my gadget/computer.				

III.   SELF- EFFICACY IN DIGITAL TECHNOLOGY. Put a check (/) in the column that describes your assessed self-efficacy in digital technology using the following scale as a guide. 1 – Strongly Disagree   2 – Disagree   3 – Agree   4 – Strongly Agree

Institutional	1	2	3	4
1. I can navigate online course materials in a timely and effective manner.				
2. I can communicate effectively with technical support via e-mail, mobile phone, or live online chat.				
3. I can access and use the library's online resources without difficulty.				
4. I can manipulate instructional technology equipment without fear of being held responsible if it breaks, becomes damaged, or torn.				
5. I have mastery of the use of digital technology.				
Individual				
6. I can communicate with my students via digital platforms (email, Google Meet, Zoom, Skype, etc.).				
7. I can manage my time effectively using digital technology.				
8. I promptly ask questions in the appropriate forum when a problem arises (e-mail, discussion board, etc.)				
9. I meet deadlines with very few reminders from my coordinator and or Dean of the College of Nursing.				
10. I follow a step-by-step plan for completing all required work on time.				

Proficiency					
11. I can troubleshoot technical difficulties on my own.					
12. I can navigate all the features of the digital platform my institution uses.					
13. I can use synchronous technology to communicate with my students and co-faculty.					
14. I can easily and efficiently learn to use a new type of digital technology.					
15. I have sufficient experience in real classroom environments.					
Technological					
16. I use my knowledge of the subject matter, teaching- learning strategies, and technology to facilitate the students' learning in virtual environments.					
17. I incorporate digital learning strategies with the use of technological tools and resources to develop the knowledge, skills, and attitudes of my students.					
18. I exhibit knowledge, skills, and work processes as an innovative professional in a global and digital society.					
19. I can exhibit my ethical and legal responsibilities in an evolving digital culture in my professional practice as a nursing educator.					
20. I continuously improve my practice by promoting and demonstrating the effective use of digital tools and resources.					
DOMESTIC AND COMMUNITY					
21. I have adequate time at home to learn, practice, and further my skills in digital technology, even with the current teaching demands that I have.					
22. I am provided with digital tools (laptops, USBs, internet connection) by my institution, so there is no need for me to purchase them on my own.					
23. I have access to and utilize multiple forms of advanced digital technology at home (smart phones, iPhones, iPads, tablets, or iPods).					
24. I have computers and or digital gadgets at home which are new, fast, reliable, and compatible with new educational software.					
25. The fast and reliable internet connectivity in my home allows me to navigate and communicate efficiently with my students.					

REFERENCES

1. 2020 Higher Education Facts and Figures. CHED. (2021, January 20). https://ched.gov.ph/2020-higher-education-facts-and-figures/.

2. Abrahams, D. A. (2010). Technology adoption in higher education: a framework for identifying and prioritizing issues and barriers to adoption of instructional technology. Journal of Applied Research in Higher Education, 2(2), 34–49. https://doi.org/10.1108/17581184201000012

3. Appiah, S. (2020). Quality of nursing education programme in the Philippines: Faculty Members' Perspectives. BMC Nursing, 19(1). https://doi.org/10.1186/s12912-020-00508-9

4. Baticulon, R. E., Sy, J. J., Alberto, N. R. I., Baron, M. B. C., Mabulay, R. E. C., Rizada, L. G. T., … Reyes, J. C. B. (2021, February 24). Barriers to Online Learning in the Time of COVID-19: A National Survey of Medical Students in the Philippines. Medical Science Educator. https://link.springer.com/article/10.1007/s40670-021-01231-z.

5. Birisci, S. & Kul, U. (2019). Predictors of Technology Integration Self-Efficacy Beliefs of Preservice Teachers. Contemporary Educational Technology. Volume 10 Issue 1, https://doi.org/10.30935/cet.512537

6. Blackburn, S. (2019, November 15). The 11 barriers to technology adoption. District Administration. https://districtadministration.com/computer-technology-in-schools-barriers-to-technology-integration/.

7. Chua, E. R., Solon, J. P. T., Moreno, R. P., Palmario, G. B., Miranda, R. D., & Sibbaluca, B. C. (2020). The Status of the Implementation of the e-learning classroom in selected higher education institutions in Region IV-A amidst the COVID-19 crisis. Journal of Critical Reviews, 7(11), 253–258. https://doi.org/10.31838/jcr.07.11.41

8. Coultman, Jacinth, "Motivating Higher Education Faculty for Technology Integration: A Private College's Approach" (2015). Walden Dissertations and Doctoral Studies. 490. https://scholarworks.waldenu.edu/dissertations/490

9. Dinc, E. (2019). Prospective Teachers' Perceptions of Barriers to Technology Integration in Education. Contemporary Educational Technology, 10(4), 381–398. https://doi.org/10.30935/cet.634187

10. Fleagle, C. L. (2012). Identifying faculty motivations to increase technology use in pedagogy at a midwestern university. Iowa State University Digital Repository. https://lib.dr.iastate.edu/etd/12321/.

11. Huddle, C. (2019, September 21). Benefits, concerns, and prospective use of technology ... https://cjni.net/journal/?p=6340.

12. Kotcherlakota, S., Kupzyk, K. A., & Rejda, P. (2017). Years of Experience as a Predictor of Nurse Faculty Technology Use. Journal of Nursing Education, 56(2), 115–119. https://doi.org/10.3928/01484834-20170123-09

13. Lloyd, S. A., Byrne, M. M., & McCoy, T. S. (2020). Faculty Perceived Benefits and Barriers of Online Teaching among Nursing Faculty in Tamil Nadu. International Journal of Nursing Education, 8(1), 1–12. https://doi.org/10.37506/ijone.v12i4.11240

14. Lopez-Garrido, G. (2025, May 1). Self-efficacy: Bandura's theory of motivation in psychology. Simply Psychology. https://www.simplypsychology.org/self-efficacy.html

15. Mercader, C., & Gairín, J. (2020). University teachers' perception of barriers to the use of digital technologies: the importance of the academic discipline. International Journal of Educational Technology in Higher Education, 17(1), 1–14. https://doi.org/10.1186/s41239-020-0182-x

16. Moralista, R. B., & F. Oducado, R. M. (2020). Faculty Perception Toward Online Education in a State College in the Philippines during the Coronavirus Disease 19 (COVID-19) Pandemic. Universal Journal of Educational Research, 8(10), 4736–4742. https://doi.org/10.13189/ujer.2020.081044

17. Nagel, D. (2017, February 15). The 6 Major Barriers to Technology Adoption in Higher Ed. Campus Technology. https://campustechnology.com/articles/2017/02/15/6-major-barriers-to-technology-adoption-in-higher-ed.aspx.

18. Oermann, M. H. (2015). Technology and Teaching Innovations in Nursing Education. Nurse Educator, 40(2), 55–56. https://doi.org/10.1097/nne.0000000000000139

19. Ott, J. L. (2016, November 30). A Study on the Impact of Teacher Attitude/Efficacy on the Use of Classroom Technology. ProQuest LLC. https://eric.ed.gov/?id=ED580183.

20. Penaflor-Espinosa, M. J. B. (2016). "Technology Integration in Nursing Education

21. (Tine): A Proposed Intervention Program. International Journal of u- and e- Service, Science and Technology, Vol 10 No7, 167–178. doi: 10.14257/ijunesst.2017.10.7.16

22. Ramnarine-Singh, S. (2014). Integration of Technology into a Nursing Curriculum Using a Mixed Method Approach. ScholarWorks. https://scholarworks.waldenu.edu/dissertations/508/.

23. Redman, K. (2019). Don't just blame the teacher when the system is at fault, says UNESCO https://en.unesco.org/news/dont-just-blame-teacher-when-system-fault-says-unesc

24. Republic Act No. 10931: GOVPH. Official Gazette of the Republic of the Philippines. (2017, August 3). https://www.officialgazette.gov.ph/2017/08/03/republic-act-no-10931/.

25. Roney, L. N., Westrick, S. J., Acri, M. C., Aronson, B. S., & Rebeschi, L. M. (2017). Technology Use and Technological Self-Efficacy Among Undergraduate Nursing Faculty. Nursing Education Perspectives, 38(3), 113–118. https://doi.org/10.1097/01.nep.0000000000000141

26. Sert, N., & Boynueğri, E. (2017). Digital technology use by the students and English teachers, and self-directed language learning. World Journal on Educational Technology: Current Issues, 9(1), 24–34. https://doi.org/10.18844/wjet.v9i1.993

27. Singh, F., & Masango, T. (2020). Information Technology in Nursing Education: Perspectives of Student Nurses. The Open Nursing Journal, 14(1), 18–28. https://doi.org/10.2174/1874434602014010018

28. Singhavi, C., & Basargekar, P. (2019). Barriers Perceived by Teachers for Use of Information and Communication Technology (ICT) in the Classroom in Maharashtra, India. International Journal of Education and Development Using Information and Communication Technology, 15(2), 62–78.

29. Slutsky, A. (2016). (dissertation). Factors influencing teachers' technology self-efficacy. Garner-Webb University. Retrieved from https://core.ac.uk/download/pdf/84457941.pdf

30. Soden, B. (2019, June 11). Encouraging Teacher Technology Use. Encouraging Teacher Technology Use | Education World. https://www.educationworld.com/a_tech/tech159.shtml.

31. Stone Group. (2020, October 5). 5 things you can do to motivate your teachers to use technology. Stone Group. https://www.stonegroup.co.uk/insights/5-things-to-motivate-teachers-use-technology/.

32. Suana, W., Riyanda, A. R., & Putri, N. M. (2019). Internet Access and Internet Self-efficacy of High School Students. Journal of Educational Science and Technology (EST), 5(2), 110. https://doi.org/10.26858/est.v5i2.8397

33. Tarman, B., Kilinc, E., & Aydin, H. (2019, December 1). Barriers to the Effective Use of Technology Integration in Social Studies Education. Contemporary Issues in Technology and Teacher Education. https://www.learntechlib.org/primary/p/184930/.

34. Thakkar, S. R. (2018). Impact of Technology Availability and Self-Efficacy on E-learning Usage. International Journal for Research in Applied Science and Engineering Technology, 6(4), 2956–2960. https://doi.org/10.22214/ijraset.2018.4492

35. Tweed, Stephanie Renee, "Technology Implementation: Teacher Age, Experience, Self-Efficacy, and Professional Development as Related to Classroom Technology Integration" (2013). Electronic Theses and Dissertations. Paper 1109. https://dc.etsu.edu/etd/1109

36. Williams-Buffonge, N.-A. G. (2021). Caribbean Lecturers ' Self-Efficacy and Their Perceived Barriers to Technology Adoption (dissertation). Walden University, Minneapolis, Minnesota.

37. Williamson, K. M., & Muckle, J. (2018). Students' Perception of Technology Use in Nursing Education. CIN: Computers, Informatics, Nursing, 36(2), 70–76. https://doi.org/10.1097/cin.0000000000000396.