

K to 12 Academic Strands And Nursing Licensure Examination of Batch 2022 Graduates of Isabela State University – Echague: A Comparative Study

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Abstract: *In 2013, the K-12 program was implemented to align the Philippine educational system with the global educational standards. It guarantees that Senior High School graduates will be able to obtain information, skills, attitude, and competencies required to attend college or seek an employment. With this, the Commission on Higher Education (CHED) instructed Higher Education Institutions (HEIs) to align its curriculum with the changes made in accordance with the K-12 education. This program includes the Science, Technology, Engineering and Mathematics (STEM) strand which was tagged as a prescribed strand to enter medical-related and other science courses such as BS Nursing. Despite this, the ISU-Echague College of Nursing still admits enrollees from other strands and implement a selective retention strategy. Herewith, the researchers compared the graduates' performances on the Philippine Nurses Licensure Examination (NLE) last November 2022 according to their respective K-12 strands. There were 129 graduates from ISU-Echague who took the NLE. The researchers used descriptive correlational design to ascertain the relationship between board exam takers' performances and their K-12 strands. Results revealed that there is no significant difference and relationship between the different K – 12 strands to the board takers' performances in the Nursing Licensure Examination.*

Keywords: Nursing Licensure Examination, K to 12 Strands, Board Performance, Nursing Graduates, respondents, relationship, difference

I. INTRODUCTION

Education is a preeminent fuel that drives the country's development and one of the catalysts for eradicating poverty, improving health, ameliorating the economy, and suppressing the underwhelming data on illiteracy in a country. It opens doors of opportunities in shaping a person's aspiring career or prosper an individual's growth. Indeed, it is a possession that is beyond comparison to any affluence or luxury in life due to its extensive possibilities that could accord with the individual's endeavor.

Yap (2011) stated that the Philippines was the last country in Asia and one (1) of the only three (3) countries in the world that implements a 10-year pre-university program. However, with the everchanging demand of the global economy, everyone now demands a high-quality education. In line with this, the Philippine government engaged in the continuous improvement of the educational system through the implementation of the K-12 education.

On May 15, 2013, President Benigno Aquino III signed the K-12 education system into law with the Enhanced Basic Education Act of 2013 (Republic Act 10533) that aimed to produce more proficient graduates with basic skills for lifelong education and employment. Furthermore, it fostered the mutual recognition of Filipino learners and professionals in other nations since they were able to master the skills and learn the core competencies required to satisfy the expectations of the global economy. In line with this new education system implemented, it added two more

years of high school education called the Senior High School from Grade 11 to Grade 12. Students entering Senior High School can either select their own track or strand based on their areas of interest or choose to pursue work for the remaining two years of senior high school. These tracks include Technical-Vocational and Livelihood (TVL), Sports, Arts and Design and Academic that comprise of (STEM); Accountancy, Business, and Management (ABM); Humanities and Social Sciences (HUMSS); and General Academic Strand (GAS).

While the opposition was fairly vocal in their primary concerns since 2011 in the adoption of the educational system in the country– that is, the new system will only add burden to Filipino families and the government is not yet ready, the Department of Education (DepEd) claims that giving students two more years of basic education helps all Filipinos living in the Philippines, not just the younger generation.

In compliance with the implementation of the K-12 education system, schools and universities, including the Isabela State University-Echague (ISU-E), gave credence to this recently aroused curriculum. According to Cullamat (2016), the Science, Technology, Engineering, and Mathematics (STEM) strand prepared and geared the students for taking many science subjects in college, specifically the Bachelor of Science in Nursing. Nevertheless, it does not guarantee that a student will acquire a slot. During admissions in the College of Nursing (CON), SHS graduates from different strands are given equal opportunity to be admitted given they comply with all the requirements required by the university and college.

The Bachelor of Science in Nursing (BSN) is a four-year degree program that includes general education, major, and professional nursing courses. It revolves around four main components, namely: health promotion, disease prevention, risk reduction, and health restoration. Aside from lectures, clinical classes and related learning experiences have been embedded in this program to provide focus on various nursing principles. Hence, they are primed to conduct health assessments, deliver patients with preoperative, intraoperative, and postoperative care, and perform life-saving procedures.

In ISU-E, there are sixteen (16) undergraduate nursing professional subjects that need to be taken and passed for the whole duration of the program. These include the following: Fundamentals of Nursing Practice, Health Assessment; Community Health Nursing I; Community Health Nursing II; Care of Mother, Child, Adolescent (Well Clients); Care of Mother, Child, Adolescent (Acute and Chronic); Nursing Research I; Nursing Research II; Medical-Surgical Nursing I; Medical-Surgical Nursing II; Psychiatric Nursing; Care of Clients with Life Threatening Conditions, Acutely Ill/Multi-Organ Problems, High Acuity and Emergency Situation, Acute and Ill; Nursing Leadership and Management; Care of the Older Adult; Intensive Nursing Practicum; and Disaster Nursing.

After obtaining a degree in Nursing, graduates are given the opportunity to take the Nursing Licensure Examination (NLE) – the most notable prerequisite to finally practicing the nursing profession. This aims to test the board exam takers' level of nursing competency in accordance with Republic Act No. 9173 also known as the "Philippine Nursing Act of 2022". It is composed of five (5) different subjects with 500 items in multiple choice questions. These are the Community Health Nursing, Care of Healthy/At Risk Mother and Child, Care of Clients with Physiologic and Psychosocial Alterations (Part A), Care of Clients with Physiologic and Psychosocial Alterations (Part B), and Psychosocial Alterations (Part C). To pass the said licensure examination, the examiner must obtain a score not less than 60% for each subject and a general average score of not lower than 75% in order to pass the exam.

The ISU-E CON students, who took the Nursing Licensure Exam (NLE) this November 12–13, 2022, were the ideal subjects for this research in comparing their performance on the NLE to their respective SHS stand. Majority of the students who graduated from CON in the year 2022 belonged to the first batch of graduates under the K-12 curriculum.

On November 30, 2022, the Professional Regulation Commission (PRC) released the results for the November 2022 Nursing Licensure Examination (NLE). The ISU-E College of Nursing made remarkable history as it produced 126 newly registered nurses (125 first takers and 1 retaker) out of its 140 takers (136 first takers and 4 retakers). This was the first time that the ISU-E CON sent more than 100 takers. Based on the results of the said examination, a total of 91.91% of first-time takers passed, with an overall school performance of 90%. With this, the institution was considered one of the best-performing schools in Region 2 in the said year surpassing the performance of the ISU-E CON over the past five (5) years, excluding the year 2020 due to the increased cases of the COVID-19 virus. In the years 2018, 2019 and 2020, ISU-E garnered an institutional passing rates of 41.18% (national passing rate of 39.98%), 70.00% (national passing rate of 55.20%), and 45.45%, (national passing rate of 51.45%), respectively.

In order to determine whether there were significant comparisons in the results of K–12 graduates from STEM and non-STEM strands in relation to their licensure examination performances, the researchers conducted this study at Isabela State University - Main Campus. Moreover, this aimed to provide information to readers about the applicability of K–12 Academic Strands/Track to higher education. The research result obtained in this study would be of great basis for the institution, particularly to the College of Nursing, as to what K–12 strand they may focus on during college admissions.

In addition, the study sought to contribute to the development of effective methods and interventions that may be used to improve the nursing curriculum and the readiness of students in taking the NLE through establishing a link between NLE and K-12 strands, as well as, its adherence to the institution’s curriculum to Sustainable Development Goals (SDG), specifically in nurturing and providing students with a Quality Education (SDG No. 4).

II. METHODS

The researchers utilized descriptive correlational study design to ascertain whether there is a relationship between the graduates’ performance in the NLE and their respective K-12 strands. The study was conducted at Isabela State University – Echague College of Nursing in San Fabian, Echague, Isabela. The 129 Bachelor of Science in Nursing graduates of batch 2022 who took the November 2022 Licensure Examination were determined as the respondents of this study selected using purposive sampling. The list of graduates was obtained with the guidance of the research adviser, in collaboration with the College Secretary, in the College of Nursing office. Among these, only 126 respondents responded to the questionnaire sent by the researchers with a 97.67% response rate. The researchers utilized various online platforms, including but not limited to Google Forms and Facebook Messenger. The researchers observed utmost confidentiality in accordance with the Data Privacy Act or Republic Act 10173 by obtaining a letter of consent which was then agreed upon by the respondents with regard to the processing of their data. The survey questionnaires contained series of questions related to the objectives setforth in this study. No coercions happened in the conduct of this study.

This study utilized IBM SPSS Statistics in interpreting the gathered data. Moreover, descriptive statistics was used in order to organize, interpret, and communicate the data, namely: frequency, percentage, and mean. This study also used Chi-Square Test, a nonparametric test of statistical significance in comparing frequencies observed in the study with expected frequencies to see whether K-12 strands and Nursing Licensure Examination performance were significantly different. Additionally, One-way ANOVA was used to compare the means between the groups to determine whether any of those means were statistically different from each other and it tests the null hypothesis.

III. PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA

The data that have been evaluated with SPSS version 16.0 are presented in this chapter. Moreover, it reveals the findings of the study which answer the problems presented earlier in Chapter 1 that researchers sought to find for answers. Through the use of various statistical tests, analyzed data were gathered followed by either accepting or rejecting the claims or hypotheses. The analyses of the data are then further explained in this chapter through discussions of the results found together with specific related literatures or studies which either supports or contradicts the claim and other supporting given information and proofs in the tool employed.

Table 1. Profile of the Respondents (n=126)

	FREQUENCY	PERCENT
SEX		
Male	22	17.50
Female	104	82.50
TOTAL	126	100.00
TYPE OF HIGH SCHOOL		
Public	67	53.20
Private	59	46.80
TOTAL	126	100.00

It depicted on the Table 1 how the respondents were distributed by **Sex**. In this study, females comprise the majority of the respondents with 104 or 82.50 percent, meanwhile, 22 or 17.50 percent of them are males. Moreover, the table 1 displayed the distribution of the respondents' **High School Type**. Respondents who graduated from public school makes up the majority of this study with 67 or 53.20 percent. On the other hand, 59 or 46.80 percent among the respondents graduated in private schools.

Table 2. Distribution of Respondents by Strands (n=126)

K-12 STRAND	FREQUENCY	PERCENT
STEM	68	54.00
ABM	11	8.70
GAS	33	26.20
HUMSS	6	4.80
TOTAL	126	100.00

It showed on the Table 2 the distribution of respondents' profiles according to their **K-12 Strand**. It shows STEM respondents represent the majority of the participants with a frequency of 68 or a percent of 54. Succeeded by GAS which has a frequency of 33 or a percent of 26.20. Respondents from ABM have a frequency of 11 or 8.70 percent. Meanwhile, HUMSS has the least respondents with a frequency of 6 or a percent of 4.80. The total frequency is 126 with a percentage of 100.00.

Table 3. Distribution of Respondents by Board Rating in NLE per Nursing Practice

Table 3.1 Nursing Practice I (Basic Foundation of Nursing and Professional Nursing Practice)

RATING	FREQUENCY	PERCENT
85-92	63	50.00
77-84	59	46.80
69-76	4	3.20
Total	126	100.00
MEAN SCORE = 84.23		

Table 3.2 Nursing Practice II (Community Health Nursing and Care of the mother and Child)

85-92	26	20.60
77-84	92	73.00
69-76	8	6.30
Total	126	100.00
MEAN SCORE = 81.48		

Table 3.3 Nursing Practice III (Care of Clients with Physiologic and Psychosocial Alterations (Part A))

85-92	7	5.60
77-84	83	65.90
69-76	25	19.80
61-68	8	6.30
50-60	3	2.40
Total	126	100.00
MEAN SCORE = 77.38		

Table 3.4 Nursing Practice IV (Care of Clients with Physiologic and Psychosocial Alterations (Part B))

85-92	6	4.80
77-84	91	72.20
69-76	24	19.00
61-68	4	3.20
50-60	1	0.80
Total	126	100.00
MEAN SCORE = 78.05		

Table 3.5 Nursing Practice V (Care of Clients with Physiologic and Psychosocial Alterations (Part C))

85-92	4	3.20
77-84	91	72.20
69-76	24	19.00
61-68	5	4.00
50-60	2	1.60
Total	126	100.00
MEAN SCORE = 77.78		

The distribution of the respondents' ratings was shown in the Table 3.1 for **Nursing Practice I** or Basic Foundation of Nursing and Professional Nursing Practice. Majority from the respondents got ratings of 85 to 92 accounting a frequency of 63 and a percentage of 50. While respondents who got ratings of 77 to 84 have a frequency of 59 and a percentage of 46.80. However, least from the respondents got the ratings of 69 to 76 having a frequency of 4 and a percentage of 3.20. The total frequency is 126 with a percentage of 100.00. As a result, Nursing Practice 1 accounting a mean score of 84.23.

The distribution of the respondents' ratings was shown in the Table 3.2 for **Nursing Practice II** or Community Health Nursing and Care of the mother and Child. Respondents who got ratings of 85 to 92 accounting a frequency of 26 and a percentage of 20.60. While majority of the respondents who got ratings of 77 to 84 acquired a frequency of 92 and a percentage of 73. However, least from the respondents got the ratings of 69 to 76 having a frequency of 8 and a percentage of 6.30. The total frequency is 126 with a percentage of 100.00. As a result, Nursing Practice 2 accounting a mean score of 81.48.

The distribution of the respondents' ratings was shown in the Table 3.3 for **Nursing Practice III** or Care of Clients with Physiologic and Psychosocial Alterations (Part A). Respondents who got ratings of 85 to 92 accounting a frequency of 7 and a percentage of 5.60. While majority of the respondents who got ratings of 77 to 84 acquired a frequency of 83 and a percentage of 65.90. Respondents who got ratings of 69 to 76 have a frequency of 25 and a percentage of 19.80. Respondents who got ratings of 61-68 have a frequency of 8 and a percentage of 6.30. Meanwhile, least from the respondents who got ratings of 50 to 60 have a frequency of 3 and a percentage of 2.40. The total frequency is 126 with a percentage of 100.00. As a result, Nursing Practice 3 accounting a mean score of 77.38.

The distribution of the respondents' ratings was shown in the Table 3.4 for **Nursing Practice IV** or Care of Clients with Physiologic and Psychosocial Alterations (Part B). Respondents who got ratings of 85 to 92 accounting a frequency of 6 and a percentage of 4.80. While majority of the respondents who got ratings of 77 to 84 acquired a frequency of 91 and a percentage of 72.20. Respondents who got ratings of 69 to 76 have a frequency of 24 and a percentage 19.00. Respondents who got ratings of 61-68 have a frequency of 4 and a percentage of 3.20. Meanwhile, least from the respondents got ratings of 50 to 60 having a frequency of 1 and a percentage of 0.80. The total frequency is 126 with a percentage of 100.00. As a result, Nursing Practice 4 accounting a mean score of 78.05.

The distribution of the respondents' ratings was shown in the Table 3.5 for **Nursing Practice V** or Care of Clients with Physiologic and Psychosocial Alterations (Part B). Respondents who got ratings of 85 to 92 accounting a frequency of 4 and a percentage of 3.20. While majority of the respondents who got ratings of 77 to 84 acquired a frequency of 91 and a percentage of 72.20. Respondents who got ratings of 69 to 76 have a frequency of 24 and a percentage 19.00. Respondents who got ratings of 61-68 have a frequency of 5 and a percentage of 4.00. Meanwhile, least from the respondents got ratings of 50 to 60 having a frequency of 2 and a percentage of 1.60. The total frequency is 126 with a percentage of 100.00. As a result, Nursing Practice 5 accounting a mean score of 77.78.

Table 4. Distribution of Respondents by General Weighted Average (GWA)

RATING	FREQUENCY	PERCENT
85-90	6	4.80
80-84	64	50.80
75-79	48	38.10
60-70	8	6.30
Total	126	100.00
MEAN SCORE = 79.81		

As shown on the Table 4 the distribution of respondents' **General Weighted Average**, this gives an overview on the overall performance of respondents during the NLE. On the first row, it depicts that respondents who got ratings of 85 to 90 have a frequency of 6 with a percentage of 4.80, respondents who got ratings of 80 to 84 have a frequency of 64 and a percentage of 50.80, respondents who got ratings of 75 to 79 have a frequency of 48 an a percentage of 38.10, respondents who got ratings of 60 to 70 have a frequency of 8 and a percentage of 6.30. The total frequency is 126 with a percentage of 100.00. As a result, the majority of this study's rating range is from 80 to 84 with mean score of 79.81.

Table 5. Difference in the Board Ratings when grouped according to Profile (Gender)

GENDER	Critical Value	Chi-Square Test Statistic	Degrees of Freedom	p-Value	Interpretation
NP1	152.0939	12.8482	125	1	Not Significant
NP2	152.0939	11.58504	125	1	Not Significant
NP3	152.0939	14.50547	125	1	Not Significant
NP4	152.0939	12.23905	125	1	Not Significant
NP5	152.0939	12.44444	125	1	Not Significant

Significant if p-Value is less than or equal to the level of significance (0.05)
Not Significant if p-Value is greater than or equal to the level of significance (0.05)

As shown on the Table 5 the Difference in the Board Ratings when grouped according to gender. Moreover, it depicts that the respondents' board ratings from NP1, NP2, NP3, NP4, and NP5 on the NLE have no significant difference when grouped according to their gender.

Table 6. Difference in the Board Ratings when grouped according to Profile (School Graduated)

GENDER	Critical Value	Chi-Square Test Statistic	TestDegrees Freedom	ofp-Value	Interpretation
NP1	152.0939	12.8482	125	1	Not Significant
NP2	152.0939	11.58504	125	1	Not Significant
NP3	152.0939	14.50547	125	1	Not Significant
NP4	152.0939	12.23905	125	1	Not Significant
NP5	152.0939	12.44444	125	1	Not Significant

Significant if p-Value is less than or equal to the level of significance (0.05)
Not Significant if p-Value is greater than or equal to the level of significance (0.05)

As shown on the Table 6 the Difference in the Board Ratings when grouped according to respondents' school graduated during their SHS. Moreover, it depicted that the respondents' board ratings from NP1, NP2, NP3, NP4, and NP5 on the NLE have no significant difference when grouped according to their school graduated during their SHS.

Table 7. Difference in the Board Ratings when grouped according to K-12 strand

AREA	K-12 Strand					F	Sig.	Interpretation
	STEM	GAS	HUMSS	ABM	TVL			
NP1	84.18	84.45	84.83	82.82	85.25	0.67 ^{ns}	0.62	Not Significant
NP2	81.68	81.30	83.17	80.36	80.88	0.82 ^{ns}	0.51	Not Significant
NP3	78.01	76.70	77.17	76.82	75.75	0.52 ^{ns}	0.72	Not Significant
NP4	78.56	78.12	78.67	75.36	76.88	1.04 ^{ns}	0.39	Not Significant
NP5	78.10	77.55	78.67	75.45	78.63	0.74 ^{ns}	0.57	Not Significant
GWA (NLE)	80.14	79.65	80.50	78.16	79.48	0.72 ^{ns}	0.58	Not Significant

Legend: ns – not significant

As shown on the Table 5 the Difference in the Board Ratings when grouped according to K-12 strand, this gives an overview on the overall performance of respondents grouped according to their K-12 strand during the NLE.

On the first row, NP1, STEM got the percentage of 84.18, GAS got the percentage of 84.45, HUMS got the percentage 84.83, ABM got the percentage 82.82, TVL got the percentage 82.25. On the second row, NP2, STEM got the percentage of 81.68, GAS got the percentage of 81.30, HUMS got the percentage 83.17, ABM got the percentage 80.36, TVL got the percentage 80.88. On the third row, NP3, STEM got the percentage of 78.01, GAS got the percentage of 76.70, HUMS got the percentage 77.17, ABM got the percentage 76.82, TVL got the percentage 75.75. On the fourth row, NP4, STEM got the percentage of 78.56, GAS got the percentage of 78.12, HUMS got the percentage 78.67, ABM got the percentage 75.36, TVL got the percentage 76.88. On the fifth row, NP5, STEM got the percentage of 78.10, GAS got the percentage of 77.55, HUMS got the percentage 78.67, ABM got the percentage 75.45, TVL got the percentage 78.63 on the sixth row area, GWA (NLE) , STEM got the percentage of 80.14, GAS got the percentage of 79.65, HUMS got the percentage 80.50, ABM got the percentage 78.16, TVL got the percentage 79.48. Therefore, with the findings shown on the Table 5, the researchers conclude that there is no significant difference in the board rating grouped according to K-12 Strand, since the p-value is greater than the chosen significance level ($\alpha = 0.05$).

Table 8. Relationship between Board Ratings and K-12 Strand

AREA	Test of Relationship		Interpretation
	χ^2	Sig.	
NP1	9.34 ^{ns}	0.314	Not Significant
NP2	3.13 ^{ns}	0.926	Not Significant
NP3	11.42 ^{ns}	0.783	Not Significant
NP4	17.40 ^{ns}	0.360	Not Significant
NP5	15.83 ^{ns}	0.464	Not Significant
GWA	6.26 ^{ns}	0.902	Not Significant

Legend: ns – not significant

As shown on the Table 8 the relationship in the Board Ratings when grouped according to respondents' K- 12 strands. Moreover, it depicted that the respondents' board ratings from NP1, NP2, NP3, NP4, and NP5, and their GWA on NLE have no direct association or relationship when grouped according to their K-12 strands.

IV. CONCLUSION

The respondents' K-12 academic strand made no significant impact in their Nursing Licensure Examination performance based on their GWA and scores in the five (5) Nursing Practices. Moreover, regardless of the academic strand the respondents pursued in their Senior High School years, there were no results found that it had significant relationship, in any manner, to their performance in the said licensure examination. Furthermore, on the basis of the findings of the study revealed, the following conclusions were drawn based on the specific objectives aforementioned in Chapter 1:

There were no significant differences between the respondents' board ratings and profile variables.

Among the five (5) Nursing Practices, majority of the respondents obtained a low score on the Care of Clients with Physiologic and Psychosocial Alterations Part A (NP3).

There was no significant relationship between the board exam performance and their K-12 strands

There was no significant difference on the respondents' performance when grouped according to their K-12 strands

REFERENCES

- [1]. Almerino, P. M., Ocampo, L. A., Abellana, D. P. M., et.al (2020c). Evaluating the academic performance of K to 12 students in the Philippines: A Standardized Evaluation approach. *Education Research International*, 2020, 1-8
<https://doi.org/10.1155/2020/8877712>
- [2]. Blomgren, C. (n.d.). Addressing the K-12 Open Educational Resources Awareness Niche: a virtual conference response.
<https://eric.ed.gov/?q=+academic+performance+of+k+to+12&pg=4&id=EJ1333472>
- [3]. Brew, E., Nketiah, B., & Koranteng, R. T. B. (2021). A Literature Review of Academic Performance, an Insight into Factors and their Influences on Academic Outcomes of Students at Senior High Schools. *OALib*, 08(06), 1-14.
<https://doi.org/10.4236/oalib.1107423>
- [4]. BS in Nursing in the Philippines. (n.d.-b). <https://www.finduniversity.ph/majors/bs-in-nursing-philippines/>
- [5]. Butcon, V. E. R., Pasay-An, E., etal (2021). Assessment of determinants predicting success on the Saudi Nursing Licensure Examination by employing artificial neural network. *PubMed*, 10,396.
https://doi.org/10.4103/jehp.jehp_652_20
- [6]. CORE - Aggregating the world's open access research paper. (n.d.). <https://core.ac.uk/outputs/402105197>
- [7]. Glasgow, M. E. S., Dreher, H. M., & Schreiber, J. B. (2019). Standardized testing in nursing education: Preparing students for NCLEX-RN and practice. *Journal of Professional Nursing*, 35(6), 440-446.
<https://doi.org/10.1016/j.profnurs.2019.04.012>
- [8]. K12 Chapter 2 RRL. (n.d.). Scribd. <https://www.scribd.com/document/408165481/K12-Chapter-2-RRI>
- [9]. Oducado, R. M. F., & Penuela, A. C. (2014). Predictors of academic performance in professional nursing courses in a private nursing school in Kalibo, ...ResearchGate.
https://www.researchgate.net/publication/271585724_Predictors_of_Academic_Performance_in_Professional_Nursing_Courses_in_a_private_Nursing_School_in_Kalibo_Aklan_Philippines
- [10]. PricewaterhouseCoopers. (n.d.). Digital innovation in private K-12 wducation in Malaysia.PwC.
<https://www.pwc.com/my/en/perspective/deal-strategy/200626-pwc-blog-digital-innovation-malaysia-private-K-12-education.html>
- [11]. Philippine Nursing Licensure exam: preparation and updates. (2023, January 24). [\(n.d.\). https://www.1nurse.com/blog/story/2023/01/24/philippine-nursing-licensure-exam-preparation-and-updates/?Thesis](https://www.1nurse.com/blog/story/2023/01/24/philippine-nursing-licensure-exam-preparation-and-updates/?Thesis). (n.d.). <https://www.slideshare.net/yethan/thesis-24524096>