



NOW NORMAL ASSESSMENT ON THE STATUS OF THE PROGRAM IMPLEMENTATION OF THE COLLEGE OF NURSING USING SIX SIGMA FRAMEWORK

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ABSTRACT

This study aimed to assess the program implementation of the College of Nursing as to Related Learning Experience (RLE), Admission and Retention Program, and Instruction using the Six Sigma Framework. The respondents of the study were the 202 students of Bachelor of Science in Nursing. This study utilized a descriptive-inferential research design. The major findings revealed that as a crucial component of the nursing training, the students were required to do clinical duties or hospital exposure and the students were consistently monitored and evaluate them if they are qualified to the next level. Also, the findings implies that there was an introduction of what to learn and objectives to meet and there was a baseline assessment that can be utilized to evaluate written and oral exams of the students. Furthermore, there is a significant difference on the assessment of the two groups of respondents on the status of program implementation of the College of Nursing relative to Related Learning Experience, and Instruction and there is significant difference on the assessment of the student- respondents on the status of program implementation of the College of Nursing when grouped according to their profile relative to year level.

Key words: *Program implementation, Related Learning Experience, Admission and Retention Program, Instruction, Six Sigma Framework*

INTRODUCTION

Nursing instructors must teach students to practice safely in a complex context. Nursing students must master many components of the nursing role in order to practice effectively, including communication, reasoning in clinical situations, management, data analysis, collaboration, and nursing skills. All of these components are required for the development of a safe practitioner, which is the primary purpose of nursing education.



Quality education in nursing can be achieved if nursing professors have a balanced experience in both theory and clinical domains. As a result of this extensive knowledge, nursing students may be able to adapt the theories and lessons learned in simulation laboratories to the delivery of health care in everyday life.

The Philippine nursing program mandates that a trainee earn a Bachelor of Science in Nursing degree over a four-year period. Any institution that offers a degree program in higher education should be recognized by the Commission on Higher Education (CHED). The goal of the Bachelor of Science in Nursing program is to offer a thorough education through professional courses that emphasize nursing concepts and are complemented by Related Learning Experiences. The professional nurse who completes the program is expected to deliver safe, quality, and holistic care to individuals of various ages, genders, and health-illness statuses, families at-risk, and groups of people.

Nevertheless, a Bachelor of Science in Nursing (BSN) degree and passing the Philippine Nurse Licensure Examination are prerequisites for employment as a professional in the Philippines (PNLE). With the necessary knowledge, skills, and disposition to fulfill their responsibilities, nursing students can be trained to become professionals with the help of the Bachelor of Science in Nursing curriculum. For nursing students to become registered professionals, pass their licensing exams, and deliver competent and high-quality nursing care to patients, they most likely need to receive the greatest education and training available.

Increasing the number of students graduating from the College of Nursing at Medical Colleges of Northern Philippines is critical. The department maintains strict academic standards and programs to guarantee that nursing students continue through the curriculum, achieve academic achievement, and pass the licensure examination. Students who are not fully prepared or those who have yet acquire the necessary abilities for success may struggle to progress and as a result, may fail academically. When a student fails to qualify for the required academic performance level, he or she is dismissed from the program for nursing and must reapply to remain in the program.

Academic performance and program implementation, as evaluated by continual evaluation and examination scores, is one of the primary purposes of the College of Nursing in Medical Colleges of Northern Philippines. However, colleges and universities across the world are grappling with the problem of how to improve their educational, success, and eventually, retention of students during the course of their education. The purpose of this study was to assess the status of program implementation at the College of Nursing using the DMAIC model; toward the enhancement of academic performance, accomplishment, and retention among undergraduate nursing students at Medical Colleges of Northern Philippines - College of Nursing.

METHODOLOGY



This chapter presents the research design, study participants, data collection tool, data collection process, and statistical methods that would be employed. These would provide guidance to the researchers as they gathered the information needed to address the study questions.

Research Design

The researchers used descriptive-inferential to assess the status of the program implementation of the college of nursing as to Related Learning Experience (RLE), Admission and Retention Program, and Instruction and to test the difference on the program implementation of the college of nursing with grouped according to profile.

Respondents of the Study

The population of the study covers 202 students of the College of Nursing in Medical Colleges of Northern Philippines. Stratified sampling technique was used in the selection of the respondents of the study in the students in which the researchers divide the population of the respondents into homogeneous subpopulation or strata. Since every member of the population in the study should be exactly one stratum. The College of nursing has four levels, the strata used to have samples from each year level. Meanwhile, total enumeration was used to select the respondents in the faculty. The researchers divided the population into subgroups to make sure that the subgroups are well represented leading us to making precise conclusions. The total respondents of the study are based on the sample pooled from the population of College of Nursing.

Data Gathering Tool

The structured questionnaire was utilized to collect the data required for the investigation. The researchers read a variety of publications, including scholarly books, journals, and master's theses, before creating the questionnaire. These materials were used to gather data for the current study, including information about the respondent profile and an evaluation of the College of Nursing's program implementation with regard to Related Learning Experience (RLE), Admission and Retention Program, and Instruction. There are two parts to the questionnaire. In the first, respondents are asked to provide their demographic profile by selecting the boxes next to the categories that most closely reflect their profile, such as year level, sex, and age. The second section evaluated the Related Learning Experience (RLE), Admission and Retention Program, and Instruction program implementation status at the College of Nursing.

Data Gathering Procedure

To facilitate the gathering of the data needed, the following were undertaken by the researchers:



First, the researchers sought permission first from the school President to allow them to administer the questionnaire through a request letter signed and noted by the researchers and thesis advisers respectively.

Second, the questionnaire and one-on-one interview was administered to the respondents in order to gather the pertinent data needed in the study.

Third, the respondents' responses in the questionnaire and in the interview were collected, after which appropriate scoring tools was employed for further analysis and interpretation.

Lastly, sought help from professionals and the research adviser to properly interpret and analyze the data gathered.

Data Analysis

The analysis of the data that would be collected was done using the following statistical instruments:

First, the profile factors of the respondents were analyzed using frequency and percentage counts.

Second, the Related Learning Experience (RLE), Admission and Retention Program, and Instruction program implementation status at the College of Nursing were evaluated using weighted means.

Third, the significant difference in the faculty and student assessments of the College of Nursing's program implementation status was examined using the independent sample t-test.

Finally, when the respondents' replies were grouped based on their profile factors, One-way ANOVA (Analysis of Variance) was utilized to examine any significant differences.

RESULTS AND FINDINGS

TABLE 1.1. DISTRIBUTION OF THE PROFILE OF THE STUDENT- RESPONDENTS IN TERMS OF AGE

CATEGORY	FREQUENCY	PERCENTAGE
19-20	165	81.7
21-22	37	18.3
TOTAL	202	100.00

The table 1.1 shows the frequency and percentage of the respondents in terms of age. Out of 202 respondents, 165 or 81.7 percent are within the age range of 19-20 and 37 or 18.3 percent are within



the range 21-22. This means that majority of the respondents belong to ages 19-20 since most of them belong to 2nd and 3rd year.

TABLE 1.2. DISTRIBUTION OF THE PROFILE OF THE STUDENT- RESPONDENTS IN TERMS OF SEX

CATEGORY	FREQUENCY	PERCENTAGE
MALE	37	16.3
FEMALE	175	83.7
TOTAL	202	100.00

The table 1.2 shows the frequency and percentage of the respondents in terms of sex. Out of 202 respondents 175 or 83.7 percent are females, while 37 or 16.3 percent are males. This means that majority of the respondents enrolled in the college of nursing are mostly females.

TABLE 1.3. DISTRIBUTION OF THE PROFILE OF THE STUDENT- RESPONDENTS IN TERMS OF YEAR LEVEL

CATEGORY	FREQUENCY	PERCENTAGE
SECOND YEAR	97	48.0
THIRD YEAR	67	33.2
FOURTH YEAR	38	18.8
TOTAL	202	100.00

Table 1.3 presents the frequency and percentage of respondents according to year level. 38, or 18.8%, are fourth year responders, compared to 97, or 48.0 percent, second year responses out of 202. It follows from this those sophomores make up the majority of the responses.

TABLE 2.1. ASSESSMENT OF THE RESPONDENTS IN THE PROGRAM IMPLEMENTATION OF THE COLLEGE OF NURSING AS ASSESSED BY THE RESPONDENTS IN TERMS OF RELATED LEARNING EXPERIENCE



STATEMENTS	MEAN	DESCRIPTION
1. RLE establishes the health care abilities of nursing students by putting the ideas, knowledge, and learning that were obtained during class discussions to use.	3.60	STRONGLY AGREE
2. As a crucial component of the nursing training, the students were required to do clinical duties or exposure.	3.73	STRONGLY AGREE
3. The purpose of the RLE is to determine the level of nursing students' competencies and skills in applying nursing procedures in various health situations.	3.61	STRONGLY AGREE
4. The nursing students receive enough practical experience to enable them to acquire all the necessary skills for efficient practice.	3.62	STRONGLY AGREE
5. Always monitoring of the performance of the nursing students if they were able to practice their knowledge in actual.	3.36	STRONGLY AGREE
CATEGORICAL MEAN	3.59	STRONGLY AGREE

The table 2.1 shows the program implementation of the College of Nursing in terms of Related Learning Experience with the categorical mean of 3.59 or "Strongly Agree". This implies that the respondents must learn to perform head-to-toe patient assessments. This includes communicating verbally with patients, getting ready and administering medication, accurately documenting care, providing patient education and emotional support, and giving care that is both culturally competent and considerate of each patient's individual viewpoints. According to a white paper published by the American Association of Colleges of Nursing (AACN, 2020), practical job experience equips nursing students for a diverse patient-care environment in a variety of settings. The fact that no two days are the same in the wide field of nursing is the cause of this. There are several specializations, care settings, roles, and other things. Nursing students gain an immense amount of knowledge by means of clinical practice prior to fully entering the professional field. With a mean score of 3.74 and an interpretation of "Strongly Agree," the statement "As a crucial component of the nursing training, the students were required to do clinical duties or exposure" is the most favorable, while the statement "Always monitoring of the performance of the nursing students if they were able to practice their knowledge in actual" has the lowest mean of 3.36 and is interpreted as "Strongly Agree." This also implies that the goal of the RLE is to measure the degree of nursing students' competences and skills in implementing nursing procedures in various health situations.

**TABLE 2.2. ASSESSMENT OF THE RESPONDENTS IN THE PROGRAM IMPLEMENTATION OF THE COLLEGE OF NURSING AS ASSESSED BY THE RESPONDENTS IN TERMS OF ADMISSION AND RETENTION PROGRAM**

STATEMENTS	MEAN	DESCRIPTION
1. The admission and retention program are based on the obtained grades or average of the students.	3.58	STRONGLY AGREE
2. Nursing programs employ a variety of admission criteria from which to select students, including overall GPA and scores from written and oral examination, etc.	3.69	STRONGLY AGREE
3. Student's performance was examined and see to it from the criteria for the admission and retention.	3.55	STRONGLY AGREE
4. Qualifying and remedial examinations were given and teachers integrate the lessons and provide evaluation.	3.73	STRONGLY AGREE
5. The students were consistently monitored and evaluate them if they are qualified to the next level.	3.39	STRONGLY AGREE
CATEGORICAL MEAN	3.59	STRONGLY AGREE

The table 2.2 shows the program implementation of the College of Nursing in terms of Admission and Retention with the categorical mean of 3.59 or “Strongly Agree”. This implies that a crucial element impacting pupils' achievements is their involvement in educational activities linked to their academic pursuits. The National Library of Medicine (2020) states that having highly qualified nurses on duty is one of the fundamental prerequisites of healthcare systems to address the different demands of patients. Accordingly, two essential responsibilities of nursing degree programs are preparing nursing students for the safe and effective treatment of patients in the future and producing competent nurses. A first step toward that aim is for nursing educators to use creative teaching strategies to actively engage nursing students in learning activities in instructional and clinical settings. The statement “Qualifying and remedial examinations were given, and teachers integrate the lessons and provide evaluation” achieved the highest mean of 3.73 or “Strongly Agree” while, “The students were consistently monitored and evaluate them if they are qualified to the next level” has the lowest mean of 3.39 or “Strongly Agree”. This indicates that determining the most effective teaching methods to maintain and encourage nursing students' involvement in classroom and clinical settings has never



been easy for nurse educators. Therefore, offering a range of tactics for preserving and boosting nursing students' academic interest is crucial.

TABLE 2.3. ASSESSMENT OF THE RESPONDENTS IN THE PROGRAM IMPLEMENTATION OF THE COLLEGE OF NURSING AS ASSESSED BY THE RESPONDENTS IN TERMS OF INSTRUCTION

STATEMENTS	MEAN	DESCRIPTION
1. There is an introduction of what to learn and objectives to meet.	3.64	STRONGLY AGREE
2. There is a baseline assessment that can be utilized to evaluate post-improvement outcomes like written and oral exams.	3.25	STRONGLY AGREE
3. There is an analysis of examination results and overview of examination results.	3.56	STRONGLY AGREE
4. There is always a given test to the students for them to improve their knowledge in nursing.	3.52	STRONGLY AGREE
5. The teachers assess if there has been measurable improvement and whether the changes made have served to accomplish the learning goals.	3.34	STRONGLY AGREE
CATEGORICAL MEAN	3.46	STRONGLY AGREE

The table 2.3 shows the program implementation of the College of Nursing in terms of Instruction with the categorical mean of 3.46 or “Strongly Agree”. This implies that the process of evaluating instruction entails gathering data from a range of sources in order to enhance the efficiency of the teaching-learning process for nursing students. The main objective of any institution or teacher administering tests and assessments to their pupils, according to Yorko (2019), is to learn more about what the students have comprehended. Examining and rating students' work aids instructors in making judgments about their performance. They are able to determine the students' progress levels. The statement “There is an introduction of what to learn and objectives to meet” obtained the highest mean of 3.64 or “Strongly Agree” while, the statement “There is a baseline assessment that can be utilized to evaluate written and oral exams” has the lowest mean of 3.25 or “Strongly Agree”. When an evaluation is done effectively, it produces results that are credible, legitimate, and suggest paths for future improvement. Additionally, in order to prevent nursing students from falling irreversibly behind in their



studies, remedial instruction should begin as soon as learning issues or low attendance are identified. Corrective instruction can mitigate problems before they arise.

TABLE 3.1. THE DIFFERENCE IN THE TWO GROUPS OF RESPONDENTS' ASSESSMENTS OF THE STATUS OF THE COLLEGE OF NURSING'S PROGRAM IMPLEMENTATION

PROGRAM IMPLEMENTATION	RESPONDENTS	MEAN	T-VALUE	P-VALUE	DECISION
RELATED LEARNING EXPERINCE	STUDENT	3.5653	3.701	.000	SIGNIFICANT
	FACULTY	3.7739			
ADMISSION AND RETENTION	STUDENT	3.5881	.054	.957	NOT SIGNIFICANT
	FACULTY	3.5913			
INSTRUCTION	STUDENT	3.4158	8.503	.000	SIGNIFICANT
	FACULTY	3.8522			

Table 3.1 displays the disparity between the two respondents' assessments of the College of Nursing's program implementation status. The data indicates a statistically significant difference between the respondents' assessments of the College of Nursing's program implementation status with respect to Related Learning Experience and Instruction, which leads to the rejection of the null hypothesis at the 0.05 level of significance. This indicates that opinions regarding the College of Nursing's program implementation status among students and faculty vary. The research by Parvan et al. (2021) also supports this. The study "Attitude of nursing students following the implementation of comprehensive computer-based nursing process in medical surgical internship: a quasi-experimental study" states that in order to develop, adapt, and use the nursing process software, nursing authorities must consider evolving policies in the clinical and educational substructure of nursing. The provision of educational and clinical technological equipment, regular stakeholder evaluations of the software, and encouragement of its usage are all essential stages towards operationalizing the research findings for the null hypothesis.

TABLE 4.1. DIFFERENCE ON THE ASSESSMENT OF THE STUDENT-RESPONDENTS ON THE STATUS OF PROGRAM IMPLEMENTATION OF THE COLLEGE OF NURSING BASED ON THEIR PROFILE VARIABLES



PROFILE VARIABLES	PROGRAM IMPLEMENTATION			
		RELATED LEARNING EXPERIENCE	ADMISSION AND RETENTION	INSTRUCTION
AGE	f-value	2.33	.586	.224
	p-value	.021	.558	.823
SEX	f-value	.477	.311	1.269
	p-value	.634	.756	.206
YEAR LEVEL	f-value	21.124	51.335	91.034
	p-value	.000	.000	.000

Table 4.1 displays the variation in the student respondents' assessments of the College of Nursing's program implementation status based on their profile variables. The data showed that, when the student respondents were grouped by profile relative to year level, there was a significant difference in their assessments of the College of Nursing's program implementation status. Consequently, the null hypothesis was rejected at the 0.05 level of significance. This suggests that the year-level respondent profile has an impact on the College of Nursing's program implementation status with regard to Related Learning Experience (RLE), Admission and Retention, Program, and Instruction.

PROPOSED PLAN OF ACTION TO ENHANCE THE PROGRAM IMPLEMENTATION BASED ON THE DATA FROM THIS STUDY

Title of the Program: Program implementation of the College of Nursing **Duration of the Program:** Year Round

Rationale

To implement a nursing course, we would need to consider several key components, including Related Learning Experience (RLE), Admission and Retention Program, and Instruction. Provide a thorough curriculum that addresses all of the fundamental subjects covered in nursing education, such as pharmacology, patient care, clinical skills, and nursing theory. Consider about including the newest medical technology and evidence-based practice in the curriculum. Find competent, experienced nursing professors who can coach and instruct students with competence. To keep



faculty members abreast of the most recent developments in nursing pedagogy and practice, offer chances

for continuous professional development. Establish partnerships with healthcare facilities to provide students with hands-on clinical experiences. Design a system for student placement and supervision to ensure that they receive adequate exposure to diverse patient populations and clinical settings. Make sure that the nursing program adheres to all accreditation standards established by pertinent accrediting organizations. It could be necessary to go through a formal accreditation process and match the curriculum to particular criteria. Acquire the tools required to support the delivery of the nursing course, including clinical equipment, teaching materials, and simulation laboratories. Provide an inviting setting in the classroom where students feel encouraged to participate and learn from one another. Create reliable assessment tools to assess program efficacy and student learning outcomes. Sustaining the caliber of the nursing program requires ongoing assessment and development. It's important to note that the implementation of a nursing course may vary based on the educational institution, local regulations, and specific program goals. Working closely with stakeholders, including faculty, students, healthcare organizations, and regulatory bodies, is crucial for a successful implementation.

General Objectives

To improve the program implementation of the College of Nursing

Specific Objectives	Activities	Target Output	Evidence
To improve the program implementation of the College of Nursing	Seminar, in-service training, varied activities	Improved Curriculum Design, Faculty Recruitment and Training, Resources and Facilities as well as Assessment and Evaluation	RLE establishes the health care abilities of nursing students by putting the ideas, knowledge, and learning that were obtained during class discussions to use.



			Improve students' performance

SUMMARY OF FINDINGS

The majority of respondents are female and in their second year of study, with ages ranging from 19 to 20. "Strongly Agree" is the category mean for Related Learning Experience. With the highest mean, "As a crucial component of the nursing training, the students were required to do clinical duties or exposure," is a statement that the students strongly agree with. On the other hand, the lowest mean is "Always monitoring of the performance of the nursing students if they were able to practice their knowledge in actual." The category mean in the Admission and Retention Program is "Strongly Agree." The statement that has the greatest mean, "Qualifying and remedial examinations were given and teachers integrate the lessons and provide evaluation," is one that the students strongly agree with, whereas the statement that has the lowest mean, "The students were consistently monitored and evaluated them if they are qualified to the next level." Lastly, "Strongly Agree" is the categorical mean for the Instruction. The statement that has the greatest mean and is translated as "Strongly Agree" from the students is "There is an introduction of what to learn and objectives to meet." On the other hand, the statement that has the lowest mean is "There is a baseline assessment that can be utilized to evaluate written and oral exams."

Comparing the assessment differences between the two groups of respondents reveals a significant difference in their evaluations of the College of Nursing's program implementation status with regard to Related Learning Experience (RLE), Admission and Retention, and Instruction.

The data indicates that there is a significant difference in the student respondents' assessments of the College of Nursing's program implementation status when grouped by profile as opposed to year level. This is based on a comparison of the student respondents' assessments and the program's implementation status.

CONCLUSIONS

Based on the study's findings, it can be said that instructors possess a greater degree of clinical and hospital expertise than teaching experience, and they are proficient in understanding curriculum and



instructional design. This suggests that teacher preparation and their involvement in class planning and curriculum development are crucial.

RECOMMENDATIONS

Based on the findings and conclusions of this study, the following recommendations are presented.

1. It is highly recommended that program heads and academic leaders of the allied medical programs conduct interviews, self-assessments, and classroom observations in order to regularly monitor program implementation for both teachers and students.
2. The educational program's execution and coherence should be improved by the school administration.
3. The school has to have effective communication between its internal and external management teams, sufficient situational awareness on the part of the pupils, and appropriate management of both facilitators and inhibitors in the classroom.

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