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Acceptability of the Proposed Competency-Based Curriculum and Instruction Model to Further Improve the Quality of Nursing Education

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Nursing education in the 21st century faces several challenges, including a changing healthcare environment and rapid advances in medical knowledge and technology. To keep pace with these challenges, the researchers offer the Competency-Based Model Nursing Curriculum and Instruction Model to enhance the teaching and learning of nursing education. This study aims to determine the acceptability of this Model among nursing educators after identifying the issues and concerns they encountered in implementing the current nursing education curriculum. The study is a combination of a descriptive and normative study since it used the curriculum content and instructional approach analysis in nursing education as the focal point of the academic investigation where the sixteen (16) college administrators and sixty-three (63) clinical instructors were made participants in the study. Both groups of respondents perceived a high level of acceptability of the proposed competency-based nursing curriculum and instruction, as evidenced by the obtained composite means of X = 4.44 (college administrators) and X = 4.21 (clinical instructors) or an overall composite value of X = 4.32, indicating a high level of acceptance. Predominantly, both expressed significant differences in assessing the acceptability of the proposed Model. However, they strongly agreed that the work-setting scenario (z = -0.144), identification of student competencies (z = 1.480), and designing evaluation tools (z = -1.034) were addressed and given much focus in the proposed Model.

Keywords: nursing education, nursing curriculum, quality education, competency-based curriculum

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INTRODUCTION

A fundamental component of the educational system is the curriculum, which contains the benchmarks that students are expected to meet (Akınoğlu, 2017). This statement led to the conclusion that the curriculum is the sum of every experience or educational program created by the educational institutions for students (Andrian et al., 2018)

Over the years, higher education has seen major changes, moving away from the traditional curriculum that was subject-centered, teacher-oriented, and didactic towards a curriculum that is more learner-centered, learner-oriented, flexible, interactive, integrated, competency-based, outcome-based, and gives students ownership of their learning.

As with other fields of higher education across the world, nursing education has also gone through significant curricular changes with the claim to improve learning, quality of education delivery, and patient outcomes. The primary goal of a nursing education program is to produce clinically competent nurses who can make significant contributions to the delivery of high-quality safe nursing care while adapting to changing practice environments (Forsberg et al., 2011; Tseng et al., Landeen et al., 2016).

The National Advisory Council on Nurse Education and Practice (NACNEP, 2010) agrees that continuous curricular modifications are necessary for higher education to align learning with rapidly changing professional practice. Curriculum, faculty, and resources have been substantially correlated with the quality of nursing education programs. These resources, including instructional materials and facilities, are necessary for educators to provide nursing education (Chaatit et al., 2015).

Tanner (2010) offers three suggestions for reforming nursing education: using standard prerequisites, competency-based curriculum design, and resource sharing; convening expert panels to create a model prelicensure curriculum; and investing in a national initiative to develop new strategies such as requiring a postgraduate residency program.

In this regard, understanding the curriculum of development in nursing education promotes an awareness of the issues and concerns within nursing education. It also binds together and encourages shared understanding of the various pathways within nursing education while promoting community among nursing students, nurse educators, and nurses regarding the complexities encompassing instructional arrangements for nursing practice (Roux & Halstead,2008). Hence, the need to understand the content and processes involved in the preparation of nursing students for contemporary nursing practice to minimize and respond to significant issues and concerns of the nursing program.In the Philippine setting, the nursing profession has become the focus of issues and concerns in Philippine higher education (Masselink & Lee, 2010) and was considered extremely sensitive due to the high number of trained registered nurses exported abroad (Castro-Palaganas et al., 2017; Uy, 2016)

A few of these issues and concerns include: the low quality of nursing graduates; fast mobility of nurses; increased enrolment; the deteriorating performance of many nursing

schools as evidenced by the low turn-out of successful passers in the nurse licensure examinations; the proliferation of nursing schools; lack of qualified and competent human resources (both in quantity and quality), inadequate physical resources and opportunities for a related learning experience (RLE); the relevant and responsive curriculum, and others, are problems that the country's educational system needs to address (Ordonez & Ordonez, 2009; Cabanda, 2017; Bautista et al., 2019).

Despite these issues and concerns, there is still a growing population of nursing students because of the demand for the healthcare workforce in the global market. As a result, nursing education has boomed in recent years, with nursing schools increasing from 240 in 2002 to 470 in 2006 (Lorenzo et al., 2007). Consequently, many educators and policymakers are concerned that a decline in the quality of education has accompanied the growth in the number of nursing.

Vigilant to uphold the quality of nursing education, the Commission on Higher Education (CHED) has issued several memos directed toward enhancing nursing education policy and practice. The latest one was issued in 2017- the CHED Memorandum Order No. 15, Series of 2017, which establishes the rules, standards, and guidelines for the Bachelor of Science in Nursing (BSN) Program and implements the "shift from competency-based standards to outcomes-based education. The curriculum employs an outcomes-based education, a student-centered teaching-learning approach that focuses on the accomplishment of learning outcomes by nursing students as they go through the levels of nursing education. Higher Education Institutions (HEIs) in the country have the academic freedom to tailor their nursing curricula to their unique contexts and missions. However, they must demonstrate that doing so contributes to achieving the required minimum professional nursing outcomes.

There has been no published or documented study that assessed the experiences of nursing faculty in their implementation of the CHED's revised BSN curriculum, nor has any researcher in the Philippines proposed a teaching and learning model for nursing education.

Committed to the cause of quality nursing education, the researchers, as nurse practitioners and clinical instructors, initially undertook a study that identified the issues and concerns and their level of seriousness as encountered by nursing colleges in implementing the CHED's revised nursing education curriculum. In response to the challenge, the researcher benchmarked on the different models and came out with a proposed Competency-Based Nursing Curriculum and Instruction, a framework of hopes will further enhance the delivery of the revised nursing curriculum and instruction, which has become not only locally, but globally controversial.

Therefore, the purpose of this study is to determine the acceptability of the proposed Competency-Based Nursing Curriculum and Instruction Model among nursing school administrators and faculty. The researchers are confident that the proposed Model for nursing educators and nursing clinical experts, including students, will greatly enhance the competency and effectiveness in the teaching of nursing education, not only because of its special features but also because of the quality of the curricular and instructional

strategies that will strongly enhance the colleges' nursing education achievement of quality learning outcomes.

The Proposed Competency-Based Nursing Education Curriculum and Instruction Model

Anchored on Spady's (2014) essential principles of curriculum development focusing on the totality of the education system; the researchers proposed the Competency-Based Nursing Education Curriculum and Instruction Model to cover the ground between the aims of the System – the Curriculum; and what happens in classrooms – the Instruction.

The outcomes in this Model are a sub-set of the desired graduate outcomes specified in the strategic plans. The Model is an outgrowth of the surveys that evaluated the revised nursing curriculum and the development of capabilities that all major undergraduate nursing programs are expected to nurture and are essential for all nursing graduates. In addition, the strategic plan takes a broader ambit by considering the whole person development to which the Colleges' General Education and other aspects of institutions' life make a significant contribution.

The following are the mechanics of how teachers can nurture their students through facets of the curriculum and learning requirements and the environment they can utilize.

Curriculum and Instruction

The researchers, guided by the revised policies and standards for the Bachelor of Science in Nursing (BSN) Program, and the results of the issues and concerns on the surveys conducted have become their bases for proposing the Competency-Based Nursing Curriculum and Instruction for Colleges of Nursing in the Philippines.

Expectedly, the nursing curriculum does not only rationalize the program requirements but also is expected to provide relevant and quality health services to all.

Nurses are expected to assume a caring role in promoting and restoring health, preventing diseases, alleviating suffering, and assisting patients towards a peaceful death when recovery is not possible. They are also to collaborate with other members of the health team and other sectors to achieve the delivery of efficient, quality healthcare. To effectively carry out these tasks, they need to work and network with individuals, families/ significant others, communication, and society to ensure active participation in the delivery of holistic healthcare.

The core values guide the proposed Model as a significant component of the BSN program: Love of God; and Caring as the core of nursing using the five C's: Caring, Competence, Confidence, Conscience, and Commitment to the culture of excellence, discipline, integrity, and professionalism.

As the Model is geared toward Competency-Based, the researchers deemed it proper to use the teaching-learning process concentrating on theoretical/ didactic and experiential approaches, especially skills laboratory when nursing students enrolled in their Related Learning Experience (RLE) subject since this requires clinical and Skills Laboratory

curriculum and instruction activities that will develop the nursing process competencies of the students in different health situations.

In coming up with the proposed Nursing Curriculum and Instruction Model, it is crucial to consider the following key areas of the core competency standards:

Subjects	**No. of Units**
A. General Education	From 87 to 93
B. Professional Courses	From 115 to 121
Total	From 202 to 204
C. Related Learning Experience (RLE)	2346 hours
D. Laboratory Courses/ Units	540 hours
E. Guidelines for Implementing Related Learning Experiences (RLE)	

Courses	**Skills Lab**	**Clinical**	**RLE Contact Hours (1 credit unit = 51 hours)**
Health Assessment	1	0	51
Community Health Nursing	.5	1.5	102
Nursing Research I	1	0	51
Nursing Research II	2	0	102
Nursing Care Management 100	2	0	102
Nursing Care Management 101	1	3	2045
Nursing Care Management 102	1	5	306
Nursing Care Management 103	1	5	306
Nursing Care Management 104	1	3	204
Nursing Care Management 105	0	2	102
Nursing Care Management 106	2	3	255
Nursing Care Management 107	2	3	153
Intensive Nursing Practicum	2	8	408
	12.5	**33.5**	**2,436 hours**

Guidelines for Implementing Related Learning Experiences (RLEs)

The Bachelor of Science in Nursing (BSN) curriculum is competency-based and community-focused. The teaching-learning process includes both theoretical/didactic and experiential/RLE components. Clinical and skills laboratories include Related Learning Experiences (RLEs). The RLE activities are carefully selected to improve competencies in a variety of health situations by applying the nursing process. Hence, the challenges are heavily reliant on the faculty's readiness and capacity to organize learning experiences in the classroom or in other health scenarios (CMO 14, 2009).

Considerations were made when developing the proposed formula for calculating the cost of RLE per student. These are (a) BSN Curriculum Rules and Standards, as well as the mandated RLE units and hours; (b) Faculty preparation and competence (CMO 14, 2009).

The following should be considered:

1. A class is composed of 48 – 50 students.

Faculty-student Ratio for RLE (clinicals in hospitals/ community settings) per semester and year level shall be:

- *2nd Year Level* - 1:8 students to a group (1st & 2nd Semester)
- *3rd Year Level* - 1:10-12 students to a group (1st & 2nd Semester)
- *4th Year Level* - 1:12-15 students to a group (1st & 2nd Semester)

2. Relate Learning Experiences (RLEs) hours required for the whole program = 2,436 hours
3. The basis for Computation to Determine RLE Fee:

Number of hours assigned to faculty X hourly rate = RLE Fee
The hourly rate shall be specified in the Guidelines
for Affiliation promulgated by the Department of Health

4. Computation of RLE Hours: 1 unit = 52 hours

METHOD

Study Design and Respondents

The descriptive normative research method was used as the research design of this study. In addition, the researcher used a research design that constituted the research triangulation for quantitative analysis of the data gathered.

Two (2) groups of research participants were involved in the study, the college administrators or the nursing deans/heads and coordinators and the nursing faculty/clinical instructors from the selected nursing colleges in the Philippines. A total of seventy-nine clinical instructors (16) and college administrators (63) were purposely selected as the focal point of this academic investigation. The sample size of the two groups of research participants was determined using the purposive sampling method.

Table 1 shows the distribution of study respondents, with 16 or 20.25 percent being college administrators and 63 or 79.75 percent being clinical instructors, a total of 79 respondents.

Table 1
Respondents of the study

Groups of Respondents	F	%
College administrators	16	20.25
Clinical instructors	63	79.75
Total	79	100.00

Study Instrument and Data Gathering Procedure

The survey questionnaire and interview schedule were developed after extensive preparation and validation by nurses who are both practitioners and experts in the field. The researchers used the triangulation technique in descriptive research design, such as

documentary analysis, feedback from the initial survey/interview with the college administrators, and clinical instructors from the selected nursing institutions.

For documentary analysis, a review of literature and documents about nursing education curriculum and instruction from the different nursing colleges, locally and internationally, were studied and analyzed. The contents of each document were read and analyzed to strengthen the researcher's background information about issues and concerns and the status of the implementation of CHED's revised nursing curriculum. The analysis of the constructs as described and outlined in the survey questionnaire was used in the study. In addition, they matched and referenced the relevance with course expectancies and ultimately formed the basis for qualitative discussion of survey results.

Similarly, college administrators and clinical instructors of the selected nursing colleges were interviewed before and after the survey and while writing the first draft of the data analysis. Feedback from the interview was used in the qualitative interpretation of data as the basis for the proposed Competency-Based Nursing Curriculum and Instruction (CBCI) Model.

Two sets of survey questionnaires with similar content were fielded after deciding on the sample sizes of the groups of research participants. They were collated, tabulated, scored, and treated using appreciated statistical tools vis-à-vis the statement of the problem.

Since the item uses the 5-point continuum, the responses are scored using the weighted mean to determine the typicality of the feedback. The computed means were interpreted according to the assigned interpretations.

All respondents in the study were informed that their participation was entirely voluntary. They were also assured that their own identity and the name of the college or institution for which they were working would be kept private. Finally, the researchers obtained ethical clearance from the Ethics Review Committee and signed informed consent from the respondents.

Statistical Treatment of Data

The data through the use of the questionnaires were tabulated, evaluated, analyzed and interpreted using appropriate statistical tools which are herein discussed.

Frequency Distribution – It is defined as the arrangement of data of data which shows the frequency of different values or group of values of variables.

1. **Percentage –** Determining the profile of the respondents.

   Weighted Mean – The Likert Method of Scaling Techniques assigns a scale to each of the five options. The weighted mean points for each item was obtained by multiplying the scale value of responses by the total number of responses indicating it. The total weighted point for each value weighted means of each item was obtained by dividing the total weighted point by the total number of respondents.

The study was evaluated using the following scale:

Scale	Range	Verbal Interpretation
5	4.50 – 5.00	Very Highly acceptable
4	3.50 – 4.49	Highly acceptable
3	2.50 – 3.49	Moderately acceptable
2	1.50 – 2.49	Less acceptable
1	1.00 – 1.49	Very least acceptable

2. T-Test - This was used to compare the assessments of the two (2) groups of respondents: college administrators and nursing faculty/clinical instructors of the selected colleges of Nursing.

The above statistical tests will be processed using the Statistical Package for the Social Sciences (SPSS) software.

FINDINGS

Nine (9) areas of concern, like work-setting scenarios, specification of nursing roles, specification of professional responsibilities and tasks, identification of professional and student competencies, and designing the institutional plan, the evaluation tools, and the specific components of curriculum content were critiqued and analyzed. Two (2) major groups of respondents assessed the proposed nursing curriculum and instructional acceptability.

The following are the results of the conduct of the surveys:

Work-setting Scenario

A review of Table 2 on the distribution of responses to the respondents' assessment of work-setting scenarios showed that both the college administrators and clinical instructors perceived highly the acceptability of the work-setting scenario analysis that generated data and projections on the Philippine Health Picture and the socio-economic-political-cultural context of nursing practice as the basis for selection of appropriate clinical and community practicum experiences in Related Learning Experience (RLE). This work-setting scenario generated a value of X = 4.26 and was ranked two by the college administrators but one by the clinical instructors. The college administrators ranked one based on the specification of roles and responsibilities with X = 4.31. However, they were only ranked two by the clinical instructors, with X = 4.15.

The overall obtained means of X=4.24 by the former; and X=4.27 by the latter are values that fall under the high acceptable level.

Table 2
Assessment of the acceptability of the proposed competency-based nursing curriculum and instruction model among the selected colleges of nursing in the Philippines: Work-setting scenario

Work-setting Scenario	N = 16 College Administrators		N = 63 Clinical Instructors		N = 79 OVERALL		
	WA	VI	WA	VI	WA	VI	Rank
1. Bases of Specification of Roles and Responsibilities	4.31	HA	4.15	HA	4.23	HA	2
2. Bases for Selection of Appropriate Clinical and Community Practicum Experiences (a Related Learning Experiences (RLE)	4.17	HA	4.36	HA	4.26	HA	1
Overall Mean	4.24	HA	4.27	HA	4.25	HA	

Legend:

VHA	=	Very highly acceptable …….	4.50 – 5.00
HA	=	Highly acceptable ……..	3.50 – 4.49
MA	=	Moderately acceptable …….	2.50 – 3.49
LA	=	Less acceptable ……	1.50 – 2.49
VLA	=	Very least acceptable ……	1.00 – 1.49

Specification of Nursing Roles

Table 3 focuses on the aspects of the roles and responsibilities of future nursing students in modifying or managing the current and future projections of the Philippine health scenario independently or in collaboration with others.

Gleaned from the table, the college administrators highly perceived the acceptability of this aspect, as evidenced by an obtained value of X = 4.37 in nurse practitioners in the hospital or community settings; nurse leader/managers, and beginning nurse researchers, where this aspect was equally rated at a high level of acceptance as further supported by obtained means of X = 4.31 each.

The clinical instructors, likewise, highly perceived the proposed competency-based curriculum and instruction model in the aspect of specialization of nursing roles in beginning nurse researchers with X = 4.15; in nurse practitioners in the hospital or community settings with X = 4.13, and in nurse leader/manager with X = 3.95.

In sum, the overall obtained means of X = 4.33 and X = 4.07 by the first and latter groups constitute a strong agreement that they both highly perceive the acceptability of the nursing roles in the proposed curriculum and instruction model.

Table 3
Assessment of the acceptability of the proposed competency-based nursing curriculum and instruction model among the selected colleges of nursing in the Philippines: Specification of nursing roles

Specification of Nursing Roles	N = 16 College Administrators		N = 63 Clinical Instructors		N = 79 OVERALL		
	WA	VI	WA	VI	WA	VI	Rank
1. Nurse Practitioners in the Hospital or Community Settings	4.37	HA	4.13	HA	4.25	HA	2
2. Nurse Leader / Manager	4.31	HA	3.95	HA	4.13	HA	3
3. Beginning Nurse Researcher	4.31	HA	4.15	HA	4.23	HA	1
Overall Mean	4.31	HA	4.07	HA	4.20	HA	

Legend:

VHA	=	Very highly acceptable …….	4.50 – 5.00
HA	=	Highly acceptable ……..	3.50 – 4.49
MA	=	Moderately acceptable …….	2.50 – 3.49
LA	=	Less acceptable ……	1.50 – 2.49
VLA	=	Very least acceptable ……	1.00 – 1.49

Professional Responsibilities

This aspect of the proposed nursing curriculum relates to the responsibilities related to the identified nursing roles.

In an evaluation of Table 4, the college administrators considered all of the four (4) professional responsibilities to be very highly acceptable as supported by obtained means in utilizing the nursing process in the care of individuals, families, and population groups and the community in evaluating the progress of client condition and outcomes of care with X = 4.84; in assessing with the clients their condition to identify existing and potential problems; in ensuring a well-organized and accurate recording and reporting system; and in sharing leadership and relating effectively with others in work situations related to nursing and health with X = 4.69 each, and were ranked 1 and 2.5, respectively. In addition, quite a number of them also assessed the acceptability status of plans and implemented with the client appropriate interventions/programs/activities for identified problems and promoted personal and professional growth for themselves and others with X = 4.50, each, respectively.

Adversely, the assessments of the clinical instructors revealed strong mutual and consistent evaluation of the professional responsibilities requirements since all the obtained values were clustered under the high acceptance level, from X = 4.25 in utilizing the nursing process in the care of individuals, families, and population groups; and the community in evaluating the progress of client condition and outcomes of care, to X = 4.13 in sharing leadership/relating effectively with others in work situations related to nursing and health, ranked 1 to 6 respectively.

The overall obtained values of X=4.64 on a very high level of acceptability reveals and X = 4.17 on a high level of assessment which showed differing views of both respondents and reflected disagreement.

From this pool of data, it can be inferred that the college administrators notably were able to define the professional responsibilities required of them to carry out professionally in the performance of their job, which was also in agreement with Conde et al. findings (2014).

Table 4
Assessment of the acceptability of the proposed competency-based nursing curriculum and instruction model among the selected colleges of nursing in the Philippines: Professional responsibilities

Professional Responsibilities	N = 16 College Administrators		N = 63 Clinical Instructors		N = 79 OVERALL		
	WA	VI	WA	VI	WA	VI	Rank
1. Utilizes the nursing process in the care of individuals, families and population groups, and the community:							
• Assesses with the client his/her condition to identify existing and potential problems	4.69	VHA	4.15	HA	4.41	HA	3
	4.50	VHA	4.15	HA	4.33	HA	5.5
• Plans and implements with the client appropriate interventions/programs activities for identified problems	4.84	VHA	4.25	HA	4.54	VHA	1
• Evaluates the progress of the client condition and outcomes of care							
2. Ensures a well-organized and accurate recording and reporting system	4.69	VHA	4.23	HA	4.46	HA	2
3. Shares leadership/relates effectively with others in work situations related to nursing and health	4.62	VHA	4.13	HA	4.37	HA	4
4. Promotes personal and professional growth for self and others	4.50	VHA	4.15	HA	4.33	HA	5.5
Overall Mean	4.64	VHA	4.17	HA	4.41	HA	

Legend:

VHA	=	Very highly acceptable …….	4.50 – 5.00
HA	=	Highly acceptable ……..	3.50 – 4.49
MA	=	Moderately acceptable …….	2.50 – 3.49
LA	=	Less acceptable ……	1.50 – 2.49
VLA	=	Very least acceptable ……	1.00 – 1.49

Specification of Professional Tasks and Competencies

As illustrated in Table 5, five (5) areas are covered under professional tasks and competencies in the proposed Competency-Based Nursing Curriculum and Instruction, and these are assessed to:

- *Specification of Professional Tasks*

Under this subarea, the college administrators assessed this to a very high level of acceptability in skill and knowledge needed to perform the skills, generating a mean of X = 4.50 each and only a high level in attitude (X = 4.25). They also perceived the applicability in identifying student terminal competencies in critical thinking on each nursing process competency as very high, X = 4.62. In the identification of professionalism competencies, X = 4.50. However, only a high level in identifying student terminal competencies in the content matrix and major foci for each course at each year level over the four-year program, X = 4.37, respectively.

On the part of the clinical instructors, they expressed a high level and acceptability in all aspects of the tasks, from the highest, obtained means of X = 4.30 in critical thinking on each nursing process competency, X = 4.27 each in knowledge; and identification of professional competencies, to the specification of professional tasks in attitude with X = 4.10.

- *Identification of Professional Competencies*

In this subarea, the respondents expressed conflicting assessments, ranging from very high by the college administrators (X = 4.50) to high level (X = 4.27) by the clinical instructors, respectively.

Overall, the obtained means of X = 4.47 (college administrators) and X = 4.21 (clinical instructors) are values that assess the implementation of the professional tasks and competencies at a high level.

Identification of Student Terminal Competencies

Identification of student terminal competencies has two (2) aspects and was assessed at two (2) levels of assessment by the college administrators: from a very high level of acceptability from terminal competencies in critical thinking on each nursing process competency by type of client by role in systematically facilitated through this multi-course sequential learning approach guided by the content matrix with X=4.62; and high in the content matrix and major foci for each course at each year level in the four-year program that specifies the "what" and "how" of concept content integration: the content grades; and the faculty requirements with X=4.37.

The faculty group only highly evaluated these aspects in critical thinking on each nursing competency by type of client role (X = 4.30) and in the content matrix and major foci for each course (X = 4.15), which values are under the high level of acceptability.

Overall, the obtained values of X = 4.47 by the college administrators and X = 4.20 by the clinical instructors manifest strong shared assessments that these aspects of professional tasks and competencies are highly acceptable and will enhance the implementation of the proposed competency-based nursing curriculum.

Table 5
Assessment of the acceptability of the proposed competency-based nursing curriculum and instruction model among the selected colleges of nursing in the Philippines: Specification of pprofessional tasks and competencies

Specification of Professional Tasks and Competencies	N = 16 College Administrators		N = 63 Clinical Instructors		N = 79 OVERALL		
	WA	VI	WA	VI	WA	VI	Rank
1. Specification of Professional Tasks	4.50	VHA	4.17	HA	4.33	HA	4
• Skills	4.56	VHA	4.27	HA	4.41	HA	2
• Knowledge • Attitude	4.25	HA	4.10	HA	4.17	HA	6
Submean	4.44	HA	4.18	HA	4.31	HA	
2. Identification of Professionalism Competencies	4.50	VHA	4.27	HA	4.39	HA	3
3. Identification of Student Terminal Competencies	4.37	HA	4.15	HA	4.26	HA	2
*3.1*The content matrix and major foci for each course at each year level over the four-year program *3.2*Critical thinking on each nursing process competency	4.62	VHA	4.24	HA	4.46	HA	1
Submean	4.50	VHA	4.50	VHA	4.37	HA	
Overall X	4.47	HA	4.21	HA	4.34	HA	

Legend:

VHA	=	Very highly acceptable …….	4.50 – 5.00
HA	=	Highly acceptable ……..	3.50 – 4.49
MA	=	Moderately acceptable …….	2.50 – 3.49
LA	=	Less acceptable ……	1.50 – 2.49
VLA	=	Very least acceptable ……	1.00 – 1.49

Designing Institutional Plan and Evaluation Tools

Under this area requirement of the proposed competency-based curriculum, as presented in Table 6, the groups of respondents were assessed under two (2) levels of assessment: very high to high.

According to the first group (college administrators), they perceived this area as very highly acceptable. Accordingly, they assigned the highest value in the specification of instructional functions to systematically ensure a variety of teaching-learning experiences to maximize student participation and opportunities to practice behavior that is to be learned with X = 4.61; and in the description of appropriate teaching-learning strategies to develop in sequence the following intermediate competencies: classroom or laboratory-based experiences; and in terminal competencies, supervised client-based experiences in clinical or field practice (RLE) with X = 4.50 each, and were ranked 1 to 2.5, respectively.

However, on the part of the latter, or clinical instructors, they all highly assessed the acceptability of the institutional plan, from X = 4.36 in the description of appropriate

teaching-learning strategies to X = 4.21 in specifications of instructional functions and were ranked 1 to 3, respectively.

Under the same table, the aspect of designing the evaluation tools to determine achievement of learning outcomes, the college administrators perceived it as highly acceptable on the aspect of specifying the evaluation method/s and tool/s, such as those for determining intermediate competencies with X = 4.43 and was ranked 1, and highly in the area of specific actions of instruction functions with X = 4.45 and was ranked 1, also, respectively.

Nonetheless, both groups of respondents highly assessed the design of evaluation tools to determine the achievement of learning outcomes at a high acceptability level. Both areas generated X = 4.36 in specific tools/indicators to determine the achievement of terminal competencies and X = 4.27 in specifying the evaluation methods/tools, respectively.

In the final evaluation, the overall obtained values of X = 4.49 by the college administrators and X = 4.31 by the clinical instructors, which obtained values manifest once more solid agreement that the design of the proposed institutional plan and evaluation tools are highly acceptable.

Table 6
Assessment of the acceptability of the proposed competency-based nursing curriculum and instruction model among the selected colleges of nursing in the Philippines: Designing the iinstitutional plan and evaluation tools

Designing the Institutional Plan and Evaluation Tools	N = 16 College Administrators		N = 63 Clinical Instructors		N = 79 OVERALL		
	WA	VI	WA	VI	WA	VI	Rank
A. Designing the Instructional Plan	4.50	VHA	4.36	HA	4.43	HA	2
1. Intermediate competencies	4.50	VHA	4.30	HA	4.40	HA	3
2. Terminal competencies							
3. Specifications of instructional functions	469	VHA	4.21	HA	4.45	HA	1
Submean	4.56	VHA	4.29	HA	4.42	HA	
B. Designing the Evaluation Tools							
1. Specific tools/indicators to determine achievement of terminal competencies	4.25	HA	4.36	HA	4.30	HA	2
2. Specify the evaluation method/s and tool/s	4.59	VHA	4.27	HA	4.43	HA	1
Submean	4.42	HA	4.32	HA	4.37	HA	
Overall X	4.49	HA	4.31	HA	4.40	HA	

Legend:

VHA	=	Very highly acceptable …….	4.50 – 5.00
HA	=	Highly acceptable ……..	3.50 – 4.49
MA	=	Moderately acceptable …….	2.50 – 3.49
LA	=	Less acceptable ……	1.50 – 2.49
VLA	=	Very least acceptable ……	1.00 – 1.49

Specific Components of Curriculum Content

Table 7 exhibits the seven (7) specific components of the proposed competency-based nursing curriculum and instruction. A scrutiny of the distribution of the obtained means revealed that both respondents evaluated the areas covered as highly acceptable, except for the nurse's role, which was rated very high by the college administrators, which yielded X = 4.50 and was ranked 1.

Using the overall ranking, both ranked one and perceived very highly and highly acceptable the roles of nurses (X = 4.50 by the former and X = 4.30) with an overall mean of X = 4.40; ranked 2 in goals of care (X = 4.37, and X = 4.17); ranked 5.5 in concepts of health and illness and types of client (X = 4.22), each; and nursing leadership, management, research and practice, and nursing electives (X = 4.19 and X = 4.25), further exhibited by the composite mean of X = 4.25, respectively.

Although each group viewed the proposed competency-based curriculum and instruction differently, both strongly agreed that this proposal is highly acceptable if implemented in their respective institutions since it hopes to influence and shape today's world on the need to come up with a more responsive and relevant nursing curriculum that will embody the ideals of the core of learning, leadership, and dedication to health and well-being of both the local and global communities.

Table 7
Assessment of the acceptability of the proposed competency-based nursing curriculum and instruction model among the selected colleges of nursing in the Philippines: specific Components of curriculum contents

Specific Components of Curriculum Contents	N = 16 College Administrators		N = 63 Clinical Instructors		N = 79 OVERALL		
	WA	VI	WA	VI	WA	VI	Rank
1. Concepts of Health and Illness	4.31	HA	4.13	HA	4.22	HA	5.5
2. Roles of Nurse	4.50	VHA	4.30	HA	4.40	HA	1
3. Types of Client	4.31	HA	4.13	HA	4.22	HA	5.5
4. Goals of Care	4.37	HA	4.23	HA	4.30	HA	2
5. Kinds of Prevention	4.19	HA	4.27	HA	4.23	HA	4
6. Nursing Process	4.31	HA	4.17	HA	4.27	HA	3
7. Nursing Leadership, Management, Research and Practices, and Nursing Electives	4.19	HA	4.15	HA	4.17	HA	7
Overall	4.31	HA	4.20	HA	4.25	HA	

Legend:

VHA	=	Very highly acceptable …….	4.50 – 5.00
HA	=	Highly acceptable ……..	3.50 – 4.49
MA	=	Moderately acceptable …….	2.50 – 3.49
LA	=	Less acceptable ……	1.50 – 2.49
VLA	=	Very least acceptable ……	1.00 – 1.49

Significant Differences in the Assessments of the College Administrators and Clinical Instructors on the Acceptability of the Proposed Competency-Based Nursing Curriculum and Instruction

To address the cited specific questions raised, the SPSS, a computer-assisted statistical package, was used to compute the z-test to determine whether a significant difference exists between the descriptive data on the assessments of college administrators and clinical instructors and to determine which specific variables provided the best prediction for determining the acceptability of a proposed competency-based nursing curriculum and instruction.

The results of the application of t-statistics are summarized in Table 8 using the nine (9) major components of the proposed Model.

Further scrutiny of the tables to verify the findings from the application of the z-test on the following aspects, which obtained z-values that go beyond the significant level or no significant level at df = 77 and .05 alpha level, shows that the research hypotheses (Ho) are rejected in six (6) areas in:

Specification of Nursing Roles

After computing for the sums of means of X = 4.070 (college administrators) and X = 4.30 (clinical instructors), the application of t results in a value of z = -3.965, which is much greater (>) than its critical z = 0.008 against z = 2.132 (one-tail); and 0.017 vs. z = 2.776 (two-tail), which values were beyond the significant level. Hence, reject the null Ho raised at df=77 and .05 alpha level.

Specification of Professional Responsibilities

The same application of the z-test likewise yields z = -8.668, which z-value is much higher (>) than its critical z = 2.132 at z = 1.812 (one-tail) and z = 5.794 vs. 2.228. Therefore, reject null Ho.

Specifications of Professional Tasks

This area equally generates z = -4.444 vs. 0.006 and 0.013, which values were found in the rejection region that null Ho is once more rejected at the same df and alpha level.

Specification of Professional Competencies

This area likewise results in z = -4.444, which is a value that goes beyond the significant level using a sample-assuming equal variance. The tabular values are much higher (>) than the obtained z; therefore, reject null Ho.

Designing the Institutional Plan

This equally yields z = 6.553 generated from sums of means of X = 4.270 (institutional administrators) and X = 4.500 (clinical instructors), therefore rejecting the null Ho.

Designing the Institution Specific Components of Curriculum Content

Like the preceding obtained values, the application of the t-statistics also results in z = -3.730, which value is found in the rejection region that the research Ho raised is also rejected at the same df and .05 alpha level.

On the contrary, three (3) of the components of the proposed competency-based nursing curriculum were assessed highly so that the findings on the application of z-statistics find their obtained values in the acceptance region on:

Work-setting Scenario

The work-setting scenario has resulted in z = -0.144, which value did not reach the significant level at 0.1446 vs. 2.132 (one-tail) and 0.893 vs. 2.776 (two-tail) that the research hypothesis (Ho) is accepted at df = 77 and the .05 alpha level.

Identification of Student Competencies

The same application of the z-test has also resulted in z = -1.480, which is much lower than its tabular z at a one/two-tail value. Hence, these values have given sufficient evidence to accept the null Ho.

Designing Evaluation Tools

Using the same research tool, the result of the variance and when further pursued, has come up with z = -1.040, which value failed to meet the significant level at z = -0.204 vs. 2.920 (one-tail); and 0.408 vs. 4.303. Therefore, accept the null Ho at df = 77 and .05 alpha levels.

This empirical data predominates, indicating considerable variations in assessments and limitations regarding the acceptability of the proposed competency-based nursing curriculum and instruction.

The presence of the substantive values in many aspects justifies that the groups of respondents still have doubts about the proposed Model. However, they are consistent in their assessments of the need to address the issues, gaps, and concerns raised by the curriculum and instructional approach guided by their respective institutions' mission, goals, and objectives.

Table 8
Significant difference in the assessments of the college administrators and clinical instructors on the acceptability of the proposed competency-based nursing curriculum and instruction

Variables	X		Computed z-value	Critical z-value		*Remarks/ Interpretation
	College Administrators	Clinical Instructors		P(z<=z) One-tail	P(z<=z) Two-tail	
Work-setting Scenario	4.240	4.250	-0.144	0.446 vs. 2.132	0.893 vs 2.776	N.S.: Accept null Ho
Specification of Nursing Roles	4.070	4.330	-3.965	0.008 vs. 2.132	0.017 vs 2.776	S.: Reject null Ho
Professional Responsibilities	4.170	4.640	-8.668	2.897 vs. 1.812	5.794 vs 2.228	S.: Reject null Ho
Specification of Professional Tasks	4.180	4.443	-4.444	0.006 vs 2.132	0.013 vs 2.777	S.: Reject null Ho
Identification of Professional Competencies	4.270	4.500	6.553	0 vs 2.920	0 vs 4.303	S.: Reject null Ho
Identification of Student Competencies	4.225	4.500	-1.480	0.138 vs 2.920	0.277 vs 4.303	S.: Accept null Ho
Designing the Institutional Plan	4.290	4.537	-3.730	0.010 vs 2.132	0.020 vs 2.776	S.: Reject null Ho
Designing the Evaluation Tools	4.315	4.415	-1.040	0.204 vs 2.920	0.408 vs 4.303	N.S.: Accept null Ho
Designing the Specific Components	4.197	4.309	-2.187	0.025 vs 1.782	0.049 vs 2.177	S.: Reject null Ho

Legend:
α = 0.5 alpha level
df = 77
N.S. = Not Significant
S = Significant
df = degree of freedom

CONCLUSION, DISCUSSION AND RECOMMENDATIONS

The proposed Competency-Based Nursing Curriculum and Instruction is offered to improve the quality of nursing education in the Philippines. Its special features include the rationalization of the revised policies and standards prescribed by the Commission on Higher Education (CHED) (2017) with minor improvements in the areas of subject contents and units in General Education, Professional Courses, RLE and Laboratory Courses and Units. Curriculum Planning Model is also included together with the Nursing Instructional Model where it rationalized and established the different teaching-learning practices defined in terms of quality of the inputs and that of the outputs, to nurture the desired outcomes. The foreign and local studies of Siriani (2012); Jenkin's (2012), Erickson's (2014), Scott et al (2012), Aikenet al (2012), and equally, the landmark study of Ramirez (2014) and Lim et al (2012) on the nursing education and nursing competencies have served as added framework to the study.

In this study, the results show that both groups of respondents perceived the high level of acceptability of the Proposed Competency-Based Nursing Curriculum and Instruction Model using the nine (9) areas of curricular requirements as evidenced by the obtained composite means of X=4.44 (college administrators); and X=4.21 (clinical instructors) or an overall composite value of X=4.32 or high level of acceptance. It can be deduced that this aspect of the requirement is acceptable within the requirements of the CHED and that the data was in support of Richardson et al.'s (2013) study on the assessment of the nursing curriculum using the indicators in terms of the objectives, instruction, faculty, and administrative support as a requirement of work-setting scenario.

In the final point, these groups of respondents expressed strong and shared outlook as to the acceptability of the proposed Competency-Based Nursing Curriculum and Instruction Model; still, there are identified aspects of the curriculum and which need review and re-evaluation to achieve better acceptance of the proposed course/program.

Predominantly, both expressed significant differences in how they assessed the acceptability of the proposed Model, however, they strongly agreed the work-setting scenario (z=-0.144); identification of student competencies (z=1.480); and designing evaluation tools (z=-1.034) were addressed and given much focused in the proposal. This finding is also consistent with the study of Tanner (2010), where he suggested 3 critical questions that curricula design must address: what must be taught, how to teach it effectively and efficiently, and where teaching and learning should take place to achieve the best results.In their review of the challenges facing nursing education, Hegarty et al. (2009) reiterated the need for educators to think forward in their nursing curriculum by considering the increasing complexity of the health-care environment and the high-level care required for acutely ill patients with complicated illnesses.

Based on the salient findings and conclusions drawn, the researcher recommends the following:

1) The proposed Competency-Based Curriculum and Instruction must be re-evaluated and reviewed for relevance, responsiveness, and acceptability. Despite the issues and concerns encountered, the related-learning-experience (RLE) and other added subjects' requirements should be considered and given much focus in the light of the revised CHED Memorandum on implementing the Nursing Curriculum.
2) To carry out the academic initiatives of the institutions, a pro-active and multi-disciplinary approach should be taken, especially in the hiring and recruitment of faculty who will handle nursing education subjects. Sets of criteria should be used to hire only the most qualified faculty using excellence in knowledge, skills, and attitudes; pioneering and committed, experienced, and updated; and possessing the major global instructional skills in using English communication, computer, and research skills, in addressing the need for them to be more competent and globally competitive.
3) There is a need for HEIs institutions to rethink the adoption of their CBE instruction assessment methods from a quantitative and analytic mindset to one that uses assessment tasks qualitatively and holistically since these approaches will be beneficial in providing feedback to both teachers and students on how well they deliver quality instruction; and how they put the knowledge, skills, and attitudes learned to work, solve

problems, and operate more effectively in their particular context on the proposed approach and procedures that provide adequate plans of actions to better affect the teaching-learning environment to achieve desired outcomes.

LIMITATIONS

There are limitations which came out after the conduct of the surveys, and to address further the issues and concerns and come up with a very highly responsive and relevant nursing program, the researcher recommends the replication of the study using other schools in the other provinces/regions to confirm the findings of the empirical investigation. The views and perceptions of the respondents from the selected Nursing colleges may not represent the general perceptions of the schools of nursing in the Philippines.

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