

Instructional Media in Nursing Education in State Universities and Colleges in Region VIII: A Basis for Developing an E-Learning Platform

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ABSTRACT

The majority of nursing instructors were middle aged and already mature nursing instructors. They are master's degree holders, hence are educationally qualified to handle nursing subjects. The majority are more than ten years in teaching and therefore have gained enough experience in experimenting with different teaching methods.

The majority had limited number of seminars and trainings probably because they were not given the opportunity to attend seminar/trainings which are financially shouldered by the school. The majority claimed that they are knowledgeable in using instructional media.

Most of the nursing institutions in Region VIII have level 1 and 2 accreditation. This implies that nursing schools have been working towards higher accreditation level. However, there is still a need for them to continue working towards academic excellence. Most have good performance in the nurse licensure examination. This shows that these schools are turning out graduates who have the capability to become registered nurses. Nursing institutions in Region VIII are not so populated, hence there is a good chance that their students are closely supervised in their studies. The number of instructors in the nursing schools does not exceed 20. This may be because these schools are not so big, besides the fact that there is a limited number of students. Most of the schools have students who performed well in board examination. However, there is still a need to improve the performance of their future graduates to make them centers of academic excellence in nursing. Only one school has no Instructional Development Board and no computer center. This probably because the school is too small with very limited enrolment to

afford putting up an Instructional Development Board and a computer center.

Keywords: *Age, Assesment, E-Learning, E-Learning Platform*

1. INTRODUCTION

The introduction of computer technology paved the way for the use of instructional media in education.

Instructional media (IM) aid teaching and learning. They raise learning from verbalization to practical aspects. Instructional media make teaching and learning interesting, easy, and amusing, thus making learning more effective (Clark and Start, 2007).

Instructional media make students understand more easily. When the teacher makes use of working models it makes the teacher's task easier and more effective. Olaide (2010) has highlighted the impact of instructional materials that teachers use to improve students' understanding and perception of the subject. The IM bring clarity and create recognition that allow students to have a realistic hands on and increased knowledge of the subject. They enhance learning, improve the competence of learners, and make learning more meaningful to students.

In the Philippines, teaching and learning through the use of instructional media facilitates, stimulates, and aids students to take active interest in any topic introduced by the teacher. The instructional materials have emotional impact on the students and affect their attitude towards what is presented as a topic to study by the teacher. They provide both the teacher and the students with relevance and meaningful source of information.

Philippine nurses are in high demand globally due the standardized and unified BSN curriculum. This

globalized demand is driving the academe to come up with new programs that also fit the modern age and needs. This poses a threat to the image of Philippine nursing board, in relation to the country's economic status as a third- world country. In addition, this also exacerbates the quality of the nursing and health service in the country.

An appalling statistics is the decrease in the number of passers in the Nursing board examination. From 54% in 2001, it steadily declined to 46% in the following year, and in 2003 it further dropped to 43%. One probable reason for this is there was a decline in the quality of nursing instruction. Nursing schools have the responsibility to improve the quality of nursing education.

According to Divinagracia (2015), the long journey to overhaul nursing education in our country has to start now. She contends that the challenge economic motivation and quality patient care should be balanced so that the quality of the educators in the different programs could further improve.

One reason why instructional media may be useful in enhancing teaching-learning process is the fact that classroom contact with the students is too limited that sometimes not all of the important concepts are thoroughly discussed. With the use of e-media in instruction, the time allotted for the subjects may be extended since the students would be able to learn their lessons, to take quizzes, perform their assignments, and the like through the internet at home after class hours.

As observed by the researcher, in a preliminary assessment, only four Universities in Region VIII offer Bachelor of Science in Nursing, namely: Eastern Samar State University, Visayas State University, Samar State University, and University of Eastern Philippines. As to whether e-learning platform is essential in learning to enhance and improve nursing instruction delivery and management still remains to be seen and proven. Hence, the researcher was prompted to conduct this study in her desire to determine the effect of instructional media on nursing education in these aforementioned universities which will serve as a basis for the development of an e-learning platform for all SUCs in Region VIII.

2. OBJECTIVES OF THE STUDY

This study aimed to determine the effect of instructional media on nursing instruction in the state

universities and colleges in Region VIII, a basis for development of an e-learning platform.

Specifically, this study:

1. Identified the profile of the respondents, in terms of:
 - 1.1. Personal profile of Nursing Instructors
 - 1.1.1. Age,
 - 1.1.2. highest educational attainment,
 - 1.1.3. length of teaching,
 - 1.1.4. number of seminars/trainings attended related to instructional media, and
 - 1.1.5. level of knowledge of the use of the different instructional media;
 - 1.2. Institutional profile
 - 1.2.1. level of accreditation
 - 1.2.2. number of students
 - 1.2.3. number of instructors
 - 1.2.4. performance in Board Examination
 - 1.2.5. presence/absence of a university instructional development board
 - 1.2.6. presence/absence of computer centers;
2. Determined the extent of use of instructional media as assessed by:
 - 2.1. nursing instructors
 - 2.2. students;
3. Determined the impact of using educational media in the area's nursing instruction in terms of:
 - 3.1. Spoken communication,
 - 3.2. intellectual capacity,
 - 3.3. cognitive approaches,
 - 3.4. motor skills, and
 - 3.5. attitude;
4. Identified the issues respondents had while accessing nursing educational material, and
5. Proposed for the development of an e-learning platform based on the findings of the study.

3. METHODOLOGY

This study was conducted in the state universities and colleges in Region VIII (Eastern Visayas).

Eastern Visayas is one of the 18 regions of the Philippines, designated as Region VIII. It is composed of three main islands, Samar, Leyte, and Biliran. The region has six (6) provinces: namely, Biliran, Leyte, Northern Samar, Samar, Eastern Samar, and Southern Samar. It also has 5 cities, namely: Baybay, Catabogan, Borongan, Ormoc, Biliran, and Tacloban, where the Eastern Visayas Regional Center

(EVRC) is located. As of 2010, the region has a population of 4,101,322.

To assess the impact of instructional media on nursing instruction in the State Universities and colleges in Region VIII as basis for developing an e-learning platform, the descriptive-correlational method was utilized in this study.

As a descriptive research its primary goal is to assess a sample at one specific point in time without trying to make interference or casual statements. In general, there are three primary reasons to conduct descriptive studies: (1) to identify areas for further research; (2) to help in planning resource allocation; (3) to provide informal information about a condition (Aquino, 2003).

This design was employed using survey method to determine the respondents' socio-demographic profile, the different instructional media used by the respondents, the extent of use of instructional media on nursing instruction, and the problems encountered by the nursing instructors in using instructional media.

The correlation design was used because it tried to test the hypotheses on the relationships. Accordingly, David (2005) stated that this kind of method of the variables is used to describe the tendency for corresponding observation in two or more series to

vary from the average of their respective series that is to have relative positions. This method of research creates a purposive process of gathering, analysing, classifying and tabulating data about prevailing conditions, practices, trends, and relationships to make adequate and accurate interpretation of data with the aid of statistical methods.

The researcher first secured the list of all instructors and students of nursing schools in four (4) SUCs offering bachelor's degree in nursing.

To observe courtesy and protocol, the researcher asked permission from the respective University Presidents to allow nursing instructors and students to participate in the study.

Then the Deans of College/School of Nursing were notified and were furnished copies of the written consent signed by the University Presidents before the survey questionnaire are administered.

The researcher conducted the survey and personally distributes the instruments to the respondents. A three-week period was allotted in gathering the necessary information in the study.

After a few days, all copies distributed were retrieved by the researcher and the accomplished questionnaires were tabulated for easy reference in the administration of statistical treatment and analysis.

4. RESULTS AND DISCUSSION

Table 1.1 presents the profile of the respondents in terms of age, highest educational attainment, length of teaching service, and number of seminars/trainings attended.

Table 1.1 Profile of the Respondents in Terms of Age, Highest Educational Attainment, Length of Teaching and Number of Seminars/Trainings Attended

RESPONDENTS' PROFILE	FREQUENCY	PERCENTAGE
AGE		
45 and above	1	3.3
40-44	10	33.3
35-39	12	40.0
30-34	6	20.0
25-29	1	3.3
TOTAL	30	100.0
HIGHEST EDUCATIONAL ATTAINMENT		
Earned Master's Units	5	16.7
Master's Degree	14	46.7
Earned Doctoral Units	7	23.3
Doctor's Degree	4	13.3
TOTAL	30	100.0

LENGTH OF TEACHING SERVICE		
20 and above	4	13.3
15-19	5	16.7
10-14	9	30.0
5-9	10	33.3
0-4	2	6.7
TOTAL	30	100.0
NUMBER OF SEMINARS/TRAININGS ATTENDED		
1	11	36.6
2	5	16.7
3	7	23.3
4	5	16.7
5	2	6.7
TOTAL	30	100.0

Age

Twelve or 40.0 percent of the respondents had ages ranging from 35 to 39 years and 10 or 33.3 percent, were 40-44 years. However, only one or 3.3 percent was within the age range of 25-29 and 45 and above. It can be inferred that the majority of the respondents are mature enough to make decisions for them.

Highest Educational Attainment

As to educational attainment, 14 or 46.7 percent were Master's degree holders, while 7 or 23.3 percent were working for a doctoral degree. However, 4 or 13.3 percent were Ph.D. holders. It can be deduced that the faculty members handling nursing subjects in the schools covered in the study had upgraded their academic qualifications by taking graduate courses.

Length of Teaching Service

As to the length of teaching service, 10 or 33.3 percent had 5-9 years of teaching experience, while 9 or 30.0 percent had been teaching for 10-14 years. However, 2 or 6.7 percent had teaching experience of four years and below. The data show that the teacher-respondents had been teaching for quite a number of years and, therefore, had enough teaching experience.

Number of Seminars/Trainings Attended

Regarding the number of seminars/trainings attended on instructional media, 11 or 36.6 percent had attended a seminar once, while 2 or 6.7 percent had attended a seminar five times. This indicates that most of the teacher-respondents had not been updating themselves through seminars. It is because they had no interest to update their knowhow on instructional media or the schools where they were employed did not provide financial support for the training for their faculty.

Level of Knowledge of Nursing Instructors

Table 1.2 presents the level of knowledge of nursing instructors. As shown in the table, the instructor-respondents reported that they were either very knowledgeable or knowledgeable in using the different electronic and interactive, electronic and non-interactive, and non-electronic and non-interactive devices in teaching nursing subjects, with a number of them claiming that they were very much knowledgeable in using some of the gadgets. This finding contradicted the problems they reported that they lack the technical skills in using electronic devices due to lack of training. This indicates, the respondents need to have more advanced training on instructional technology in order to be very much knowledgeable in utilizing the different available gadgets.

Table 1.2 Level of Knowledge of Nursing Instructors

Instructional Media	Knowledge in using the Instructional Media	
	Average Responses	Interpretation
	Instructors	
Electronic and Interactive		
Smart phones	4.4	Very Much Knowledgeable
Group webpages	3.9	Very Knowledgeable
E-Learning Authoring Tools	4.3	Very Much Knowledgeable
Computer Mediated Instruction	4.3	Very Much Knowledgeable
Streamed Videos (Youtube, Teacher tube, skype, adobe connect)	4.1	Very Knowledgeable
Social Networks (Twitter and Facebook)	3.9	Very Knowledgeable
Internet Based Learning Management System	4.0	Very Knowledgeable
Learning Content Management System	4.1	Very Knowledgeable
Computers	4.3	Very Knowledgeable
Electronic and Non-interactive		
Digital Camera	4.1	Very Knowledgeable
Slides	4.4	Very Much Knowledgeable
Videos and DVDs	4.3	Very Knowledgeable
Cassette Tapes and CDs	4.4	Very Knowledgeable
LCD Projectors	4.1	Knowledgeable
Audio signals	4.3	Very Much Knowledgeable
Digital Audio	3.9	Knowledgeable
Broadcast Lectures	4.1	Very Knowledgeable
Non-electronic and non-interactive		
Live Lectures	4.3	Very Knowledgeable
Work Sheet	4.0	Very Knowledgeable
Interactive White Board Tools	3.9	Knowledgeable
Photographs	4.1	Very Knowledgeable
Diagrams	3.8	Knowledgeable
Displays	4.2	Very Knowledgeable
Models	3.9	Knowledgeable
Filmstrip	3.9	Knowledgeable
Charts	4.1	Very Knowledgeable
Flashcard	3.8	Knowledgeable
Graphs	3.6	Knowledgeable
Map	4.4	Very Knowledgeable
News Letter	4.1	Very Knowledgeable
Flipchart	4.0	Very Knowledgeable
Posters	4.2	Very Much Knowledgeable
Grand Mean	4.1	

Institutional Profile of the Institution

Table 1.2 presents the institutional profile of the school respondents.

Table 1.2 Profile of the Respondents Institutions

INSTITIONAL PROFILE	FREQUENCY	PERCENTAGE
LEVEL OF ACCREDITATION		
Level I	2	50.0
Level II	2	50.0
TOTAL	4	100.0
NUMBER OF STUDENTS		
125 and above	1	25.0
100-124	1	25.0
75-29	1	25.0
50-74	1	25.0
TOTAL	4	100.0
NUMBER OF INSTRUCTORS		
16-20	2	50.0
11-15	1	25.0
6-10	1	25.0
TOTAL	4	100.0
PERFORMANCE IN BOARD EXAMINATION		
85-89	2	50.0
80-84	1	25.0
75-79	1	25.0
TOTAL	4	100.0
PRESENCE/ABSENCE OF UNIVERSITY INSTRUCTIONAL DEVELOPMENT BOARD		
Present	3	75.0
Absent	1	25.0
TOTAL	4	100.0
PRESENCE/ABSENCE OF COMPUTER CENTERS		
Present	3	75.0
Absent	1	25.0
TOTAL	4	100.0

Level of Accreditation

Regarding the level of accreditation, 2 or 50.0 percent were on level 1, and 2 or 50.0 percent also were on level 2. It can be inferred that the institutions were working to be accredited; however, there is still a need to continue working for a higher-level accreditation.

Number of Students

As to the number of students, the four schools had varying number of students: one school had 125 and more students, one had 100 to 125 students, one had 75 to 29 students, and one had 50 to 74 students. It can be deduced that the institution-respondents were not well populated in terms of the number of students enrolled. Hence, there is a chance that the students were well supervised in their studies by the faculty.

Number of Instructors

Regarding the number of instructors, 2 or 50.0 percent had 16-20 instructors; while one or 25.0 percent had 6-10 one had 11-15 instructors. This shows that two schools had few number of instructors. It may be because they had few students enrolled.

Performance in Board Exam

Regarding the performance in Board exams, 2 or 50.0 have performance rating between 85-89, while one school had performance rating of 75-79 and another one had 80-84 performance rating. The sample schools need to strive more to improve their performance in board examinations.

Presence/absence of University Instructional Development Board

Three schools or 75.0 percent had Instructional Development Boards, while only one or 25.0 had no instructional development board. This shows that the three schools were aware of the need for instructional development, a proof that they were striving for excellence in education.

Presence/Absence of Computer Centers

As to the presence/absence of computer centers, 3 or 75.0 percent had computer centers, while only one or 25.0 had no computer center. It shows that the three school-respondents with computer centers are aware of the importance of using computer technology in enhancing teaching-learning process. The sole school without computer center should endeavour to provide a computer center if it wants to attain excellence in education.

Extent of Use of Instructional Media

Table 2 presents the frequency distribution on the extent of use of instructional technology assessed by the nursing students and instructors.

Table 2.1 Extent of Use of Educational Media of Nursing Students and Instructors

Instructional Media	Use of Instructional Media			
	Average Responses		Grand Mean	Interpretation
	Students	Instructors		
Electronic and Interactive				
Smart phones	4.4	4.4	4.4	Always
Group webpages	4.2	3.9	4.1	Often
E-Learning Authoring Tools	4.1	4.3	4.2	Always
Computer Mediated Instruction	4.1	4.3	4.2	Always
Streamed Videos (Youtube, Teacher tube, skype, adobe connect)	4.3	4.1	4.2	Always
Social Networks (Twitter and Facebook)	4.3	3.9	4.1	Often
Internet Based Learning Management System	4.3	4.0	4.1	Often
Learning Content Management System	3.9	4.1	4.0	Often
Computers	4.1	4.3	4.2	Always
Electronic and Non-interactive				
Digital Camera	4.1	4.1	4.1	Often
Slides	4.3	4.4	4.3	Always
Videos and DVDs	3.9	4.3	4.1	Often
Cassette Tapes and CDs	4.4	4.4	4.4	Always
LCD Projectors	4.0	4.1	4.0	Often
Audio signals	4.2	4.3	4.2	Always
Digital Audio	4.1	3.9	4.0	Often
Broadcast Lectures	4.3	4.1	4.2	Always
Non-electronic and non-interactive				
Live Lectures	4.4	4.3	4.3	Always
Work Sheet	4.1	4.0	4.0	Often
Interactive White Board Tools	3.9	3.9	3.9	Often
Photographs	3.8	4.1	3.9	Often
Diagrams	3.8	3.8	3.8	Often
Displays	4.1	4.2	4.1	Often
Models	4.2	3.9	4.0	Often
Filmstrip	3.6	3.9	3.7	Often
Charts	3.9	4.1	4.0	Often
Flashcard	3.9	3.8	3.8	Often
Graphs	4.1	3.6	3.8	Often

Map	4.0	4.4	4.2	Always
News Letter	4.2	4.1	4.1	Often
Flipchart	4.1	4.0	4.0	Often
Posters	4.4	4.2	4.3	Always
Grand Mean			4.1	

Electronic and Interactive

The majority of both nursing students and instructors indicated that they always used educational technology, such as, smartphones, E-learning authoring tools, computer mediated instruction, streamed videos, teacher tube and computer. However, most of them claimed that they often use group webpage, social networks, internet-based learning and learning content management system. This indicates that the exposure of students to electronic educational media is adequate, perhaps on a daily basis. However, they claimed that they had lesser exposure to interactive educational media since they used these not on a daily basis.

Level of Knowledge in Using Educational Media

Regarding the knowledge in using educational media, the majority of the instructors and students who served as respondents claimed that they were very much knowledgeable in using Smart phones, computer mediated instructions, while they reported much knowledgeable in using electronics and interactive technology. It shows that the students and their instructors had adequate knowhow in using educational media as a method of teaching and learning. However, there seems to be a need to use interactive media always for more effective instruction and learning.

Electronic and Non-interactive

The majority of the students and instructors reported that they often used digital camera, slides, videos and DVDs, cassette tapes, LCD projectors, audio signals, digital audio and broadcast lectures in the teaching-learning process. This implies that the respondents used electronic and non-interactive method most of the time in the learning-teaching process.

Non-electronic and Non-interactive

As to the non-electronic and non-interactive method, the majority of both instructors and students indicated that they always utilized the white board tools, while they often used the live lectures and work sheets. Likewise both instructors and students always used newsletter flipchart and posters, while they often use photographs, diagrams, displays, models, filmstrip chart, flashcards, graphs and map. This implies that teachers still use the white board tools everyday in the classroom. It is because it is the most ready and easy tool to use in imparting lessons.

On the basis of the grand mean of 4.1, it is inferred that the student and instructor respondents often used electronic and non-interactive, non-electronic and

interactive, and non-electronic and non-interactive educational-learning media.

The findings of this study are in agreement with the study done by Phosuwan, Sepeerrak, and Veraroon (2013) in that instructional media were often used by nursing instructors.

5. CONCLUSIONS

The majority of the instructor respondents were middle aged, were master's degree holders, had more than ten years teaching experience, had attended a limited number of seminars and trainings on instructional media and claimed that they were knowledgeable in using instructional media.

The majority of the school-respondents had accreditation levels 1 and 2, 50.0percent had more than 100 students, had more than 16 nursing instructors, had good performance in board examinations, and had university instructional development board and computer center.

Regarding the use of instructional media, the majority of the teacher-respondents often used electronic and interactive gadgets in teaching nursing subjects. However, the majority had also claimed to often use non-electronic and non-interactive equipment.

The majority of the instructor-respondents strongly agreed that the use of instructional media had a positive effect on nursing instruction.

Most of the instructor-respondents considered varied problems in the use of instructional media; foremost of which are lack of managerial and technical skills in use of instructional media and lack of students' motivation to learn.

As to the relationship between the profile of the respondents and the extent of use of instructional media in nursing instruction, it was found that age,

educational attainment, length of service and number of seminars/trainings attended, and level of knowledge of the use of instructional media were significantly related to the extent of use of instructional media.

Regarding the relationship between institutional profile and the extent of use of instructional media, it was determined that the level of accreditation, number of students, number of instructors, performance in board examinations, presence of instructional development board and university computer centers are significantly related to the extent of use of instructional media in nursing education.

Conclusions and Implications

The majority of nursing instructors were middle aged and already mature nursing instructors. They are master's degree holders, hence are educationally qualified to handle nursing subjects. The majority are more than ten years in teaching and therefore have gained enough experience in experimenting with different teaching methods.

The majority had limited number of seminars and trainings probably because they were not given the opportunity to attend seminar/trainings which are financially shouldered by the school. The majority claimed that they are knowledgeable in using instructional media.

Most of the nursing institutions in Region VIII have level 1 and 2 accreditation. This implies that nursing schools have been working towards higher accreditation level. However, there is still a need for them to continue working towards academic excellence. Most have good performance in the nurse licensure examination. This shows that these schools are turning out graduates who have the capability to become registered nurses. Nursing institutions in Region VIII are not so populated, hence there is a good chance that their students are closely supervised in their studies. The number of instructors in the nursing schools does not exceed 20. This may be because these schools are not so big, besides the fact that there is a limited number of students. Most of the schools have students who performed well in board examination. However, there is still a need to improve

the performance of their future graduates to make them centers of academic excellence in nursing. Only one school has no Instructional Development Board and no computer center.

This probably because the school is too small with very limited enrolment to afford putting up an Instructional Development Board and a computer center.

The majority of the nursing instructors in Region VIII are encountering problems in the use of instructional media which they consider to be serious. This contradicts the claim of the respondents that they are knowledgeable in using instructional media. Maybe the instructors wanted to have more training in the use of instructional media or perhaps their demand for more advanced training is not being attended to by their schools.

The personal profile of the nursing instructors in Region VIII, such as age, highest educational attainment, length of teaching experience, level of knowledge in using instruction media, and number of seminars/training attended are significantly related to the extent of use of instructional media.

The institution profile of the nursing institutions in Region VIII, which includes level of accreditation, number of students, number of instructors, performance in board examinations, presence/absence of university development board and computer centers are significantly related to the extent of use of instructional media.

It may be implied that the higher the accreditation level of the school is, the greater is the extent of use of instructional media. Likewise, the more number of students and instructors, the greater is the extent of use of instructional media. It may also be implied that the more frequent use of instruction media influenced the better performance of the graduates in the board examinations. And finally, the presence of a computer center in the school facilitates the instructors' and students' use of instructional media, especially if the center has adequate number of equipment and gadgets to accommodate more instructors and students.