

## **INTEGRATING NURSING CONTEXT AND TECHNOLOGY USAGE FOR ENGLISH SPEAKING EMPOWERMENT**

**YOHANES HERI PRANOTO**

*Musi Charitas Catholic University, Palembang, South Sumatera  
e-mail: [heri\\_pranoto@ukmc.ac.id](mailto:heri_pranoto@ukmc.ac.id)*

### **Abstract**

English for specific purposes (ESP) must be taught to meet particular needs of non-English language students (Hutchinson & Waters, 1987, p.21). It gives direct suggestion that learning process should be designed in such way not only to meet the learning objectives of the students but also to give the students meaningful and enjoyable learning experiences (Crawford, 2013, p.181). The condition becomes more challenging when the ESP teachers are only having English language background. It implies that learning context, which meets the students' needs, should be carried out in learning process along with the suitable and enjoyable learning strategies where the students can feel the pleasure instead of pressure. By considering the three steps of ESP course designing suggested by Nitu (2002, p.154), this paper aims at proving the effectiveness of integrating the students' learning contexts and the students' pleasure to empower the students' speaking performance in Health Science Faculty of Musi Charitas Catholic University Palembang. This study belongs to experimental research with pre- and post-design. By the end of the study, it was proven that integrating the nursing field context and the usage of technology in the classroom can help the students improve their English speaking skills. For evidential information, some videos of learning process are presented.

**Keywords:** *nursing context, technology, speaking skills*

### **1. Introduction**

Technology development in nursing science gives challenges for any nursing science educational institutions in Indonesia to boost the quality of their nursing students. The quality comes from many aspects of the students, not only nursing skills but also other skills which the students are expected to be able to compete in this globalization era (MacKay & Mountford, 1978; Hutchinson & Waters, 1987). The other skills commonly cover the ability of using technology, having good character, solving problems, and also using a foreign language actively (Kay, 2010; Lam, 2014).

Why English for Nursing? Phillipson (1992, p.6) argued that globalization has made English spoken all over the world to communicate in business, technology, education, entertainment, medical, and sports. It emphasizes that English language is used widely over the world.

Why should it be English Speaking? Mitra (2014, p. 130) in his research entitled *The role of need analysis in teaching ESP for nursing* tried to rank the four skills in terms of their importance for nurses in a hospital in Surabaya. Her 2014 study gained that “Speaking was ranked as the most important skill by (95%) of respondents followed by Reading at 50%, Writing at 25%, and Listening at 20% (p.132).

Other evidence is derived from BNP2TKI’s data. TIM BNP2TKI (2012) reported that the most problem of Indonesian nursing staffs when they work abroad did not lie on their skills but meanly on the English language competency as the means of communication. Similarly, Suwandono (2006) and Marwati (2010) summed up that the most problem of Indonesian nurses was on the ability on English speaking and writing.

What is happening in the real teaching and learning at Health Science Faculty of Musi Charitas Catholic University Palembang? Firstly, it is very important to get to know the viewpoints of the faculty about the importance of English mastery. The faculty has regulated the importance of English in its academic guidelines book as the main additional competence (STIKes Perdhaki Charitas Palembang - Fakultas Ilmu Kesehatan, 2012, p. 52). The second program, of four programs, of English courses for nursing students focuses on speaking. The second reason of it is that the most problem of the students in that class is (how) to formulate sentences and to speak about certain topic especially about medical field context in general and nursing field context in specific.

Hereby, this study aims at empowering the students’ speaking skills through integrating nursing field context and the technology usage. Other focus to discuss is on discerning the aspects that improve well by having this treatment – referring to Experimental Research - in the classroom.

## **2. Method**

This study belongs to quantitative research. One characteristic of quantitative method is “collecting numeric data from a large number of people

using instruments with preset questions and responses” (Creswell, 2012, p. 13).

The numeric data were shown by the instruments, i.e. test and questionnaire.

Experimental Research, Between-Group Design, Quasi-Experimental Research Design, and Pre- and Post-test Design were implemented in this study.

The basic schema of the study is explained as follows:

E	=	O1	X	O2
C	=	O3	--	O4

- = Experiment Group
- C= Control Group
- O1= Pre-test for Experimental Group
- O2=Post-test for Experimental Group
- O3= Pre-test for Control Group
- O4= Post-test for Control Group
- X= Treatment for Experimental Group
- = No treatment

*Population and Sample*

There were 110 students as the population of the study, due to the data on the third semester students of two nursing study programs of Health Science Faculty Palembang in academic year 2013-2014. The data were presented in the following table:

**Table 1. The Third Semester Students in Academic Year 2013-2014**

No.	Study Program	Class	Male	Female	Total
1	Strata I Nursing Science	IA	9	29	38
		IB	8	28	36
2	Diploma III Nursing Science	IA	8	25	33
		IB	7	25	32
Total			2	107	139

There were some reasons on selecting those students as the population of the research. Firstly, they had a chance to practice in hospital in semester IV where the study was done. Second, they were Graduate Program, where they were required not only to build the nursing skills, but also to improve their scientific competences, as the curriculum concerns on (TIM KBK AIPNI, 2010).

*Sample*

The sample of the study was the students of Strata I Nursing Science Study Program. Those students were selected due to the difference on the graduates' competences; Diploma III Nursing Science focuses on the vocational nursing competences and has a paper for final paper, while Strata I Nursing Science focused on academic nursing competences where thesis is as the final project. In addition, Strata I Nursing Science purposely carried out the role of being a researcher based on the nursing disciplines. This role was supposed to be different from the role from Diploma III.

Another condition of selecting Strata I Nursing Science Study Program as the sample was the fact that the fourth semester students were already divided into two classes, Class IA and Class IB. It really gave a help to arrange the teaching schedule easily with the secretariat of the study program.

Since this study belongs to quasi-experimental research, the sample needed to be divided into two groups, one for experiment and another for control. In order to decide which class or which students belong to each group, the average score of the pre test about writing and the average score of the English score in the previous semester of the students were required.

*Technique and Procedure of Learning*

There are some teaching-learning steps in the procedure.

**Table 2 Teaching and Learning Procedure**

No.	Step(s)	Instrument(s)
1	Pre-Test	Speaking Test
2	Modeling (Crystal, 2003) 1) Reading : Procedure Text 2) Listening : Giving Suggestions	Teaching Materials 1) "Hand Washing" 2) "How to stay healthy"
3	Drafting : "How to make Soursop Leaves Tea"	Writing Draft
4	Post-Test	Speaking Test
5	Questionnaire	Questionnaire sheet

### 3. Results and Discussion

The pre- and post-test were given to the students in both control and experiment group. Besides, the purposed questionnaire was distributed to the experiment group after the treatment.

#### *Speaking Test Results*

The test instrument in this study was used to measure the students' writing skill. In this study, the speaking skills were assessed through a speaking test rubric adapted from Rahman (2010). There were two test results; one result was from the control group and another was from experimental group. Since those two groups had pre-test and post-test, there were two results for each group, which were pre-test result and post-test result.

#### *Pre-test and Post-test Results of the Students in the Control Group*

The following table showed the frequencies of the pre-test and post-test score of control group. The frequency indicates the comparison between the students' score before and after the class.

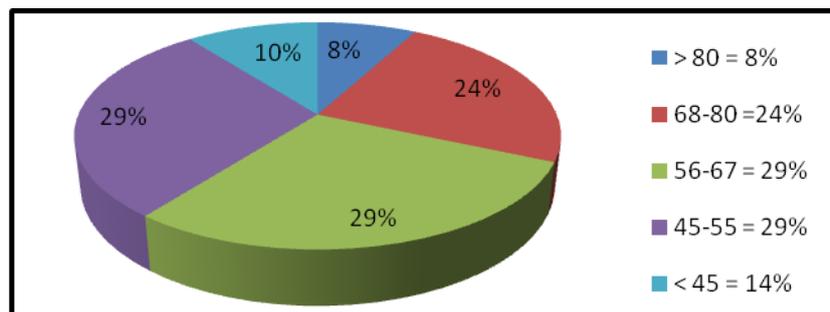
**Table 3. Frequencies of the Pre-test and Post-test Score of the Control Group**

Score	Symbol	Description	Pre-Test	Post-Test
			Frequency	Frequency
> 80	A	Very Good	3	5
68 – 80	B	Good	9	10
56 – 67	C	Fair	11	14
45 - 55	D	Poor	11	9
< 45	E	Very Poor	4	0

On the pre-test, there were 4 students of the control group got score under 45, which was very poor score. After the class, or on the post-test, no students got E. It means that there was not student who got score under 45. On the pre-test, 11 students got D, or between 45 to 55. After the class, it decreased into 9 students only. Then, the post-test found that there were 11 students who got C and it increased after the treatment.

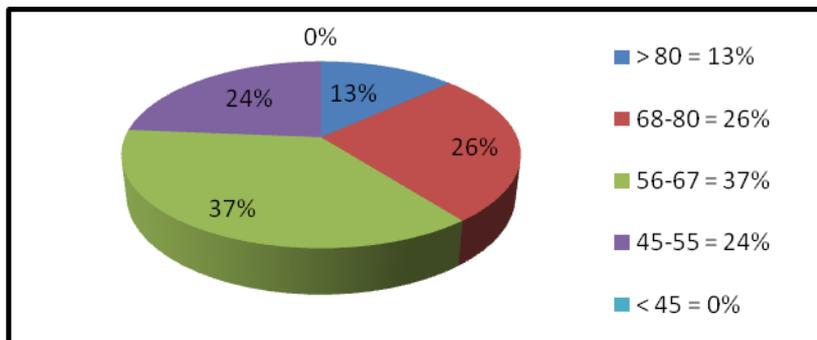
On the pre-test, there were only 3 students who got very good score or A, while after the class, the frequency improved to 5. The last, from the data of the pre-test, there were 9 students who got good score, or the score above 80. Otherwise, on the post-test, there were 10 students got B, or good score.

From the data above, the percentages of the score could be drawn. The following chart would like to describe the percentage of the students' score.



**Chart 1. Percentage of Pre-Test Result of Control Group**

The following chart shows the data percentage of the post-test of the control group.



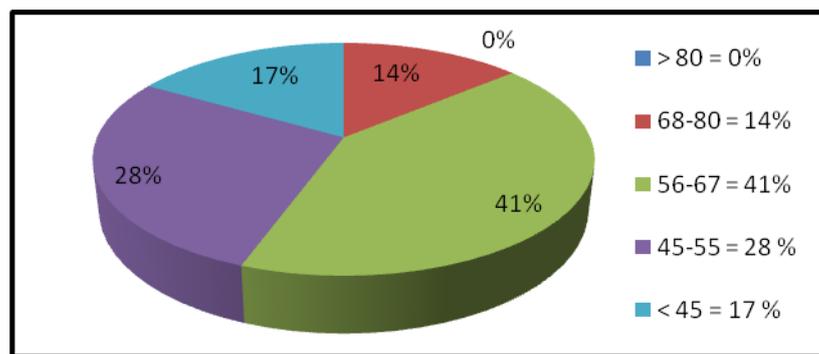
**Chart 2. Percentage of Post-Test Result of Control Group**

The students in the control group showed better score after the class rather than before the class. The following table was the frequency of the pre-test and post-test results of the students in the experimental group.

**Table 4. Frequencies of Pre-test and Post-test Score of the Experimental Group**

Score	Symbol	Description	Pre-Test	Post-Test
			Frequency	Frequency
> 80	A	Very Good	0	10
68 – 80	B	Good	5	15
56 – 67	C	Fair	15	8
45 - 55	D	Poor	10	3
< 45	E	Very Poor	6	0

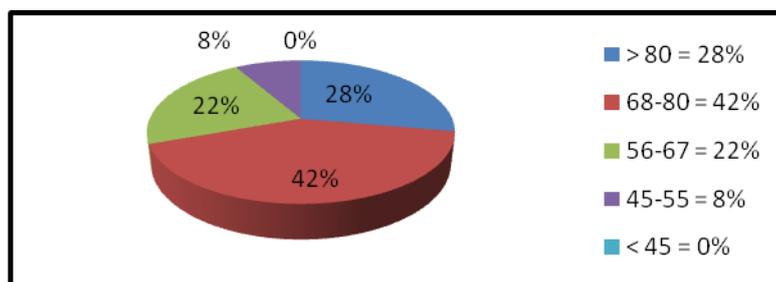
The following charts and the descriptions show the percentage of the score in the experimental group before and after the treatment.



**Chart 3. Percentage of Pre-Test Result of Experimental Group**

The chart above showed that before the treatment, most of the students, 41% of the total students got C. The second big percentage lied on those who got D, which was around 28%. Meanwhile, 17% students got E and the rest, 14% of the students, got B. The data showed that the total students who got A was 0%.

After the treatment, the score improved well. The following chart elaborates the score percentage of the experimental group after the treatment.



**Chart 4. Percentage of Post-Test Result of Experimental Group**

The chart above seemed to give obviously the improvement of the result of the students' speaking after the treatment. It clearly showed that most of the total students, 42% of the total students in the experimental group got B. Then, there were 28% of the total students got A. Meanwhile, less than 30% of the students got C and D.

*Statistical Analysis Results*

There were two kinds of analysis, i.e. paired sample t-Test and independent sample t-Test analysis. Paired sample t-Test was used to find out whether or not there was a significant difference after the students in the experimental group were taught through the use of nursing context and technology usage. Meanwhile, the independent sample t-Test was to find out whether there was a significant difference in writing skills between the students who were taught through the integrated activities of nursing context and technology use and those who were not.

Paired sample t-Test was used to compare the results of pre-test and post-test both in the experimental group and in the control group. The table below asserts the summary of paired sample t-Test statistical analysis.

**Table 5. Summary Statistics of Paired Sample t-Test**

Variable	Class	Sig. (2-tailed)	Mean
Speaking Skill	Experimental	0.000	33.1245
	Control	0.000	25.7356

The results of paired sample t-Test in the experimental class showed that the significant level was 0.000 or  $P < 0.05$  in two tailed testing. The data stressed that there was a significant difference in writing skill before and after the experimental group was taught by the use of nursing care reporting as implemented contextual learning.

Meanwhile, the following was the summary statistics of the independent sample t-Test. The detailed independent t-Test was attached in Appendix XVII.

**Table 6. Summary Statistics of Independent Sample t-Test**

Variables	P < 0.05	Mean Difference
Speaking	0.000	11.5824

The table of the independent samples t-Test above shows that the mean difference of the post-tests of each group was 11.5824. Meanwhile, the significant level was  $P 0.000 < 0.05$  in two tailed testing. As a result, there was a significant difference between those two groups.

#### *Questionnaire Result and Other Findings*

##### *English Speaking skill and its importance*

This part of the questionnaire is mainly to gather information on the necessity to mastering English Speaking skills. The findings show that more than 90% of the students agree English Speaking skill is the most skill to enhance during the time they learn the language. Some reasons of its importance are that Speaking is the measurable indicator on how to assess the students' English productive skill. As it is compared to another productive skill, which is Writing, they mostly (90%) said that Speaking is quite easier. The reasons behind this statement might lay on the character that Speaking as the spoken form of language does avoid spelling and, for another reason, strict grammar and structure.

##### *Speaking aspects improved*

The second focus in the questionnaire is to assess the students' English speaking aspects which improve better. The findings show there are some speaking skills components the students improve well. Most of the students

responded that the usage of technology which are integrated with nursing context help them in building creativity and anxiety (89%) and grammar or sentencing (83%). Otherwise, some students are helped at learning words stress and articulation (31%).

*Pleasure or Pressure*

The next question emphasizes on evaluating the learning process of integrating of nursing field context and the technology usage for the English speaking skill empowerment. More than 84% of the students state that the activities are likely to be contextual. This setting can help them in enhancing their enthusiasm and anxiety to doing the instructions during the class. Otherwise, some students (10%) still have problem with their own ways of learning.

*English for nursing purposes and technology brought in the classroom*

This session is to find out their further responses on the implementation of this treatment – referring to Experimental Research. The students argue that having video taking in the classroom gives them the experience on not only how to get deal with cameras, audio recording, and even self confidence, but also on how to get familiar with video editing. This experiences where are combined with English nursing context can arouse the eagerness to learn English more and the literacy on technology.

#### 4. Conclusion and Remark

In brief, it generally indicates that the use of the technology, which is integrated with nursing field context, can effectively empower the student's English speaking skills. This implementation can help the students in some ways: in enhancing the students' anxiety towards English learning, in building their English basic grammar, structure, and patterns which are frequently used among medical workers especially nurses, and, last but not least, in their role performance in their daily life especially in how to use technology and in how to have better English communicative competences.

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