

Chapter IV

Results

This chapter deals with the data provided by the questionnaire respondents. The research objectives formulated in chapter one served to organize the presentation of the results drawn from the study. The analysis of results is divided into four main areas:

Areas	Aspects Analyzed
4.1 An Analysis of Second Year Student Questionnaires	4.1.1 Personal Information 4.1.2 Objective needs in studying Nursing English 4.1.3 Problems in studying Nursing English 4.1.4 Subjective needs in studying Nursing English
4.2 An Analysis of Third Year Student Questionnaires	4.2.1 Personal Information 4.2.2 Objective needs in applying Nursing English acquired to studying nursing courses 4.2.3 Problems in applying Nursing English acquired to studying Nursing courses 4.2.4 Subjective needs in studying Nursing English
4.3 An Analysis of Nurse Questionnaires	4.3.1 Personal Information 4.3.2 Objective needs in using Nursing English acquired in the context of nursing work 4.3.3 Problems in using Nursing English acquired in the context of nursing work 4.3.4 Subjective needs in studying Nursing English
4.4 Comparisons of Subjective Needs of the Three Groups of Subjects in Studying Nursing English	4.4 Subjective needs in studying Nursing English based on the three groups of subjects' responses

4.1 An Analysis of Second Year Student Questionnaires

4.1.1 Personal Information

Based on the questionnaire responses, all the subjects were second year students studying AE 204, the third fundamental Nursing English course for second year nursing students. It was found that 75% of the subjects had studied English since grade 5, and It is significant to note that 94.6% of the subjects studied in a science program in high school.

4.1.2 Objective Needs in Studying English

Degree of Necessity	percent	Frequency	Mean	SD
1. Extremely Necessary	23.2	13	2.01	0.72
2. Very Necessary	53.6	30		
3. Necessary	21.4	12		
4. Not Very Necessary	1.8	1		
5. Not Necessary at All	0	0		

Table 2: Second Year Student Need for English in daily life

Remarks: Mean Levels: 1.00-1.49= Extremely Necessary; 1.50-2.49= Very

Necessary; 2.50-3.49= Necessary; 3.50-4.49= Not Very Necessary; and
4.50-5.00= Not Necessary at All

The information obtained from item one was used to determine the subjects' level of need for English in their daily life, which the subjects were asked to rate on a scale of five. The mean of the subjects' rating was computed, and it was found that most of the subjects thought that English was very necessary (mean = 2.01).

Skills	Mean	SD	Interpretation
Outside of Class			
1. Listening skills	3.19	0.86	Sometimes
2. Speaking skills	4.12	0.74	Occasionally
3. Reading skills	3.25	0.76	Sometimes
4. Writing skills	3.35	0.86	Sometimes
Inside the Class			
1. Listening skills	2.23	0.95	Often
2. Speaking skills	2.50	0.87	Sometimes
3. Reading skills	2.14	0.81	Often
4. Writing skills	1.98	0.82	Often

Table 3: The Frequency of Subjects' Practice of English

Remarks: Mean Levels: 1.00-1.49= Very Often; 1.50-2.49= Often; 2.50-3.49= Sometimes; 3.50-4.49= Occasionally; and 4.50-5.00= Rarely

In terms of practicing language skills outside of English class, the listening skills were ranked the highest (mean = 3.19), while the speaking skills were ranked the lowest (mean = 4.12). On the other hand, a mean of 1.98 indicates that the subjects practiced writing skills the most in the English class, while practicing speaking skills is the least (mean = 2.50).

Sub-Skills of Listening	Mean	SD	Interpretation
1. Listening to nursing terms	4.28	0.94	Often
2. Listening to general vocabulary	3.51	0.63	Often
3. Listening to conversational dialogues from cassettes in class	2.21	1.18	A little
4. Listening to conversational dialogues and stories in the language lab	2.85	1.10	Occasionally

Table 4: Need for Listening Skills

Based on the above statistics, it was found that the listening skill needed most in studying Nursing English was listening to nursing terms (mean = 4.28). However, the mean of 2.21 indicates that what the subjects needed least was to listen to conversational dialogues and stories in classroom.

Sub-Skills of Speaking	Mean	SD	Interpretation
1. Describing people and places	2.87	1.29	Occasionally
2. Communicating with patients	3.78	1.17	Often
3. Making polite requests	3.37	0.90	Occasionally
4. Practicing conversational dialogues using nursing terms	4.08	0.95	Often
5. Having a discussion based on an article read	2.96	1.17	Occasionally
6. Narrating events	2.39	1.07	A little
7. Giving class presentations	2.73	1.13	Occasionally

Table 5: Need for speaking Skills

According to Table 5, overall, the subjects needed speaking skills occasionally in studying Nursing English. When comparing all the sub-skills of speaking with one another, it is evident that the subjects most needed to practice conversational dialogues using nursing terms (mean = 4.08). Following this descending level of need are communicating with patients (mean = 3.78), and making polite requests (mean = 3.37). Narrating events was the least needed skill in studying Nursing English (mean = 2.39).

Sub-Skills of Reading	Mean	SD	Interpretation
1. Using context clues	3.85	0.98	Often
2. Skimming reading selections	3.66	0.88	Often
3. Scanning reading selections	3.71	0.98	Often
4. Reading for finding facts such as reading nurse notes	4.10	0.94	Often
5. Finding main ideas	4.28	0.73	Often
6. Reading in order to classify information	3.87	0.97	Often
7. Making inferences	3.01	1.12	Occasionally
8. Predicting outcomes	3.67	0.85	Often
9. Critical reading	2.94	1.15	Occasionally

Table 6: Need for Reading Skills

Overall, Table 6 shows a high need for reading skills in studying Nursing English. The reading skills most in demand, as shown by the mean of 4.28, was finding main ideas. This was followed by the need for reading and finding out facts (mean = 4.10), and reading in order to classify information (mean = 3.87). The least needed skills, making inferences and critical reading (means = 3.01, and 2.94 respectively) are clearly indicated.

Sub-Skills of Writing	Mean	SD	Interpretation
1. Grouping sentences in a paragraph using transitions	3.35	0.81	Occasionally
2. Selecting appropriate vocabulary to fit the context	3.91	0.85	Often
3. Organizing ideas when writing a paragraph	3.62	0.86	Often
4. Describing people and places	3.33	0.88	Occasionally
5. Narrating events	2.89	1.02	Occasionally
6. Writing a summary	4.14	0.74	Often
7. Explaining a process	3.55	1.06	Often
8. Writing a cause and effect essay	3.64	1.03	Often
9. Writing nurse notes	4.28	1.00	Often

Table 7: Need for Writing Skills

Based on the statistics, the subjects needed to use writing skills often. Writing nurse notes was ranked the most needed writing skill (mean = 4.28), followed by writing a summary (mean = 4.14), and selecting appropriate vocabulary to fit the context (mean = 3.91). Narrating events was ranked the least needed writing skill (mean = 2.89).

4.1.3 Problems in Studying Nursing English

This section contains statistical data on problems in using English skills in studying Nursing English. The presentation of the statistical data is divided into four areas corresponding to the four main English skills.

Sub-Skills of Listening	Mean	SD	Interpretation
1. Listening to nursing terms	3.50	0.91	Many problems
2. Listening to general vocabulary	3.41	0.94	Often have problems
3. Listening to conversational dialogues from cassettes in class	3.41	1.19	Often have problems
4. Listening to conversational dialogues and stories in the language lab	3.50	1.06	Many problems

Table 8: Problems in Using Listening Skills

Based on the above statistics, it is evident that the subjects' problems in using listening skills did not vary widely, although the subjects had more problems in listening to nursing terms, and conversational dialogues and stories in the language lab than in listening to general vocabulary and conversational dialogues from cassettes in class.

Sub-Skills of Speaking	Mean	SD	Interpretation
1. Describing people and places	3.64	0.90	Many problems
2. Communicating with patients	3.67	0.95	Many problems
3. Making polite requests	3.38	0.89	Often have problems
4. Practicing conversational dialogues using nursing terms	3.76	0.99	Many problems
5. Having a discussion based on an article read	3.91	0.88	Many problems
6. Narrating events	3.71	1.02	Many problems
7. Giving class presentations	3.66	1.03	Many problems

Table 9: Problems in Using Speaking Skills

Table 9 indicates that the subjects had many problems in using all of the speaking skills except making polite requests (mean = 3.38). The skill with which the subjects had the most problems was having a discussion based on an article

read (mean = 3.91), followed by practicing conversational dialogues using nursing terms (mean = 3.76), and narrating events (mean = 3.71).

Sub-Skills of Reading	Mean	SD	Interpretation
1. Using context clues	3.69	0.93	Many problems
2. Skimming reading selections	3.76	0.99	Many problems
3. Scanning reading selections	3.78	1.00	Many problems
4. Reading for finding facts such as reading nurse notes	3.53	0.87	Many problems
5. Finding main ideas	3.67	1.04	Many problems
6. Reading in order to classify information	3.80	0.90	Many problems
7. making inferences	3.96	0.91	Many problems
8. Predicting outcomes	3.71	0.92	Many problems
9. Critical reading	4.12	0.96	Many problems

Table 10: Problems in Using Reading Skills

Based on the above table, it is very evident that the subjects have many problems in using all of the above reading skills in studying Nursing English. Although the subjects had the least problems with number of reading for finding out facts such as reading nurse notes (mean = 3.53), the separation between this and practicing critical reading indicated as the most problematic by the mean of 4.12 is relatively minimal. After critical reading, making inferences and reading in order to classify information (mean = 3.96 and 3.80 respectively) are identified in descending order of sub-skill problems.

Sub-Skills of Writing	Mean	SD	Interpretation
1. Grouping sentences in a paragraph using transitions	3.75	0.83	Many problems
2. Selecting appropriate vocabulary to fit the context	3.66	0.85	Many problems
3. Organizing ideas when writing a paragraph	3.82	0.81	Many problems
4. Describing people and places	3.25	0.83	Often have problems
5. Narrating events	3.48	0.80	Often have problems
6. Writing a summary	3.76	0.93	Many problems
7. Explaining a process	3.85	0.84	Many problems
8. Writing a cause and effect essay	3.98	0.82	Many problems
9. Writing nurse notes	3.75	0.95	Many problems

Table 11: Problems in Using Writing Skills

The results of the above statistics reveal myriad problems in practicing writing skills overall. The mean of 3.98 indicates that the subjects had the most problems writing a cause and effect essay. The next are explaining a process (mean = 3.85), and organizing ideas when writing a paragraph (mean = 3.82). The subjects had fewest problems describing people and places the least (mean = 3.25).

4.1.4 Subjective Needs in Studying Nursing English

The presentation of the statistical data is divided into seven areas which are (1) teachers and teaching methods, (2) materials, (3) testing and evaluation, (4) skills to be emphasized, (5) preferred number of English courses required, hours of teaching, and studying time, (6) preferred content, (7) and suggestions on the program.

Teachers and Teaching Methods	Mean	SD	Interpretation
1. Thai Nursing English teacher to speak English the whole class period	2.78	1.09	Occasionally
2. Thai Nursing English teacher to speak English most of the class period	3.60	1.07	Often
3. Thai Nursing English teacher to use Thai as a medium of instruction	2.25	1.21	A little
4. Teacher to review the previous lesson before teaching a new lesson	3.89	0.96	Often
5. Teacher to divide students into small groups for doing class activities	3.32	1.02	Occasionally
6. Teachers to team-teach in class	2.51	1.09	Occasionally

Table 12: Subjective Needs for Teachers and Teaching Methods

Based on the statistics, the subjects preferred to have Thai Nursing English teacher speak English most of the class period (mean = 3.60). The subjects would also like their teacher to review the previous lesson before teaching a new lesson (mean = 3.89). Doing small group class activities was ranked near the bottom of the scale as was team-teaching (mean = 2.51).

Materials	Mean	SD	Interpretation
1. Teacher to use technological teaching aids such as overhead projectors, videos, cassettes, a computer, a CD ROM, and/or access to the Internet	3.57	1.07	Often
2. Teacher to use available realia such as medical and nursing instruments as teaching aids	4.19	0.84	Often
3. Students to use language lab more often	3.96	0.99	Often
4. Teacher to compile documents from several texts to teach from in class	4.23	0.91	Often

Table 13: Subjective Needs for Materials

The statistics reveal that the subjects often have subjective needs for teaching and studying materials. The subjects preferred the use of available realia as teaching aids by teacher over the use of technological teaching aids (mean = 4.19). The mean of 4.23 also shows that the subjects would like the teacher to compile excerpted materials from several texts to teach from in class. Additionally, the subjects would prefer to use the language lab more often (mean = 3.96).

Testing and Evaluation	Mean	SD	Interpretation
1. Teachers to give a participation grade to students who actively participate in class	4.03	0.95	Often
2. Teacher to explain the grading criteria for each test	3.98	0.93	Often
3. Students to have bi-weekly quizzes to review the lesson studied	3.55	0.91	Often
4. Teacher to decrease the percentage value of midterm and final grades and increase the percentage value of assignment grades	4.01	1.02	Often
5. Teacher to have students do peer-group evaluations	3.87	0.93	Often

Table 14: Subjective Needs for Testing and Evaluation

Based on the results, it is clear that the subjects expressed a high preference for all the testing and evaluation formats, suggested by the questionnaires, in particular giving a participation grade to students (mean = 4.03), and increasing the percentage value of assignment grades (mean = 4.01). An explanation of grading criteria for a test (mean = 3.98), peer-group evaluations (mean = 3.87), and bi-weekly quizzes complete the rankings in descending order of preference (mean = 3.55).

Skills to be Emphasized	Mean	SD
1. Listening skills	2.91	0.85
2. Speaking skills	3.26	0.92
3. Reading skills	3.03	1.11
4. Writing skills	3.14	1.03

Table 15: Subjective Needs for Skills to be Emphasized

Remarks: Mean levels: 1 = Least emphasized; 2 = Emphasized; 3 = More emphasized; 4 Most emphasized

The above analysis indicates that the subjects preferred speaking to be most emphasized in the Nursing English curriculum followed by writing, reading, and as indicated by a mean of 2.91, listening skills

Preferred Number of English Courses Required, Hours of Teaching, and Studying Time	Frequency	Percent
Courses - 3 courses	26	46.4
- 4 courses	17	30.4
- More than 4 courses	13	23.2
Hours - 3 hours per week	39	69.6
- 4 hours per week	13	23.2
- More than 4 hours per week	4	7.1
Time - 8.00-10.00 AM.	30	53.6
- 10.00-12.00 AM.	13	23.2
- 13.00-15.00 PM.	12	21.4
- 15.00-17.00 PM.	1	1.8

Table 16: Subjective Needs for Number of English Courses Required, Hours of Teaching, and Studying Time

An analysis of the preferred number of English courses to be offered for Nursing students reveals that most of the subjects would like to have three courses

in the Nursing English curriculum (46.6%). Furthermore, 69.6% of the subjects felt they preferred three hours of English class per week. 53% would prefer to study Nursing English in the morning, especially between 8.00-10.00 AM. Only one person preferred studying at 15.00-17.00 PM.

Course Content	Frequency	Percent
1. General English content	3	5.4
2. Nursing English content	12	21.4
3. A combination of General English and Nursing English	41	73.2
4. English for Science	0	0

Table 17: Subjective Needs for English Course Content

In terms of subjects' preferred English content, 73.2% of the subjects would like a combination of nursing English and general English content. No respondents preferred English for science content.

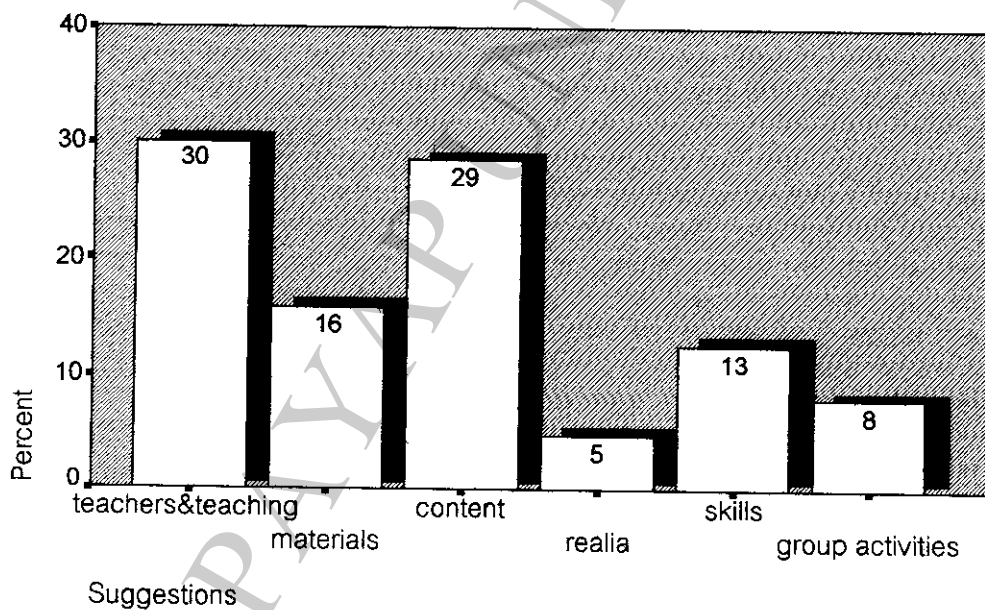


Figure1: Second Year Student Suggestions for the Program

The bar graph shows that most of the responses (30.2%) related to teachers and teaching methods. The subjects preferred both Thai and foreign teachers to teach Nursing English. They also suggested that they would like English teachers expert in Nursing to teach them. 28.6% of the responses related to content; some of the subjects stated that they preferred to have nursing theories in the Nursing English curriculum, and more nursing terms to study. 16% of the responses concerned teaching and studying materials. Some of the subjects would like to have language games in class. Finally, the subjects recommended more group activities and a greater use of realia (7.9 and 4.8%). The subjects also stated that they preferred the curriculum to emphasize all skills (12.9%). 27.6% did not respond to the open-ended question on suggestions.

4.2 An Analysis of Third Year Student Questionnaires

4.2.1 Personal Information

Based on the questionnaire responses, all the subjects were third year nursing students who passed AE 204, the third fundamental English course for second year nursing students. 66.7% of the subjects had studied English since they were in grade 5 while 98.2% studied in a science program in high school.

4.2.2 Objective Needs in Applying Nursing English Acquired to Studying Nursing Courses

Degree of Necessity	percent	Frequency	Mean	SD
1. Extremely Necessary	19.3	11	1.92	0.56
2. Very Necessary	66.7	38		
3. Necessary	12.3	7		
4. Not Very Necessary	0	0		
5. Not Necessary at All	0	0		

Table 18: Third Year Student Need for English in their daily life

Remarks: Mean Levels: 1.00-1.49= Extremely Necessary; 1.50-2.49= Very Necessary; 2.50-3.49= Necessary; 3.50-4.49= Not Very Necessary; and 4.50-5.00= Not Necessary at All

The information obtained from item one was used to determine the subjects' need for English in daily life which the subjects were asked to rate on a scale of five. The mean of the subjects' rating indicated that the subjects thought English was very necessary (mean = 1.92).

Skills	Mean	SD	Interpretation
1. Listening skills	2.57	0.92	Sometimes
2. Speaking skills	2.94	0.99	Sometimes
3. Reading skills	2.19	0.95	Often
4. Writing skills	2.31	0.96	Often

Table 19: The Frequency of Subjects' Use of English Skills in Studying Nursing Courses

Remarks: Mean Levels: 1.00-1.49= Very Often; 1.50-2.49= Often; 2.50-3.49= Sometimes; 3.50-4.49= Occasionally; 4.50-5.00= Rarely

In using English skills in studying nursing courses, reading skills were ranked most used (mean = 2.19), followed by writing skills (mean = 2.31). Speaking skills was ranked least used (mean = 2.94).

Sub-Skills of Listening	Mean	SD	Interpretation
1. Listening to nursing terms	4.22	0.75	Often
2. Listening to general vocabulary	3.59	0.82	Often
3. Listening to seminars	2.63	0.89	Occasionally
4. Listening to lectures	2.66	0.89	Occasionally

Table 20: Need for Listening Skills in Studying Nursing Courses

Based on the above statistics, the listening skill most needed in studying nursing courses is listening to nursing terms (mean = 4.22). The use of listening skill when having seminars was considered the least necessary (mean = 2.63).

Sub-skills of Speaking	Mean	SD	Interpretation
1. Using nursing terms	4.17	0.73	Often
2. Using general vocabulary	3.52	0.82	Often
3. Seminars	2.59	0.88	Occasionally
4. Answering questions in class	2.98	0.83	Occasionally
5. Discussions	2.40	0.84	A Little
6. Presentations	2.70	0.90	Occasionally

Table 21: Need for Speaking Skills in Studying Nursing Courses

Table 21 indicates the subjects' varied use of speaking skills. Respondents most needed to use nursing terms (mean = 4.17) followed by a need for general vocabulary (mean = 3.52). Discussion skill emerged as the least needed speaking skill in studying nursing courses (mean = 2.40).

Sub-Skills of Reading	Mean	SD	Interpretation
1. Reading nursing terms	4.38	0.72	Often
2. Reading general vocabulary	3.59	0.88	Often
3. Reading English journals	3.01	1.11	Occasionally
4. Reading English texts	2.86	1.07	Occasionally
5. Reading medical and nursing manuals	3.61	1.00	Often
6. Reading test questions	3.07	1.20	Occasionally
7. Reading sentences from slides and educational materials	3.40	1.11	Occasionally
8. Reading nurse notes	4.12	0.75	Often
9. Searching for data off the Internet	2.50	1.36	Occasionally

Table 22: Need for Reading Skills in Studying Nursing Courses

As in Table 22, the reading skills most necessary concerned reading nursing terms (mean = 4.38). Reading nurse notes and reading medical and nursing manuals (means = 4.12, and 3.61 respectively) were also very important. The use of reading skills to search data off the Internet was the least necessary (mean = 2.50).

Sub-Skills of Writing	Mean	SD	Interpretation
1. Writing nursing terms	4.42	0.70	Often
2. Writing general vocabulary	3.61	0.84	Often
3. Writing reports	3.12	1.00	Occasionally
4. Writing test answers	2.96	1.06	Occasionally
5. Writing summaries of discussions and seminars	2.35	1.02	A little
6. Writing nurse notes	4.24	0.63	Often

Table 23: Need for Writing Skills in Studying Nursing Courses

The above statistics reveal that the subjects had a wide range of need for writing skills in studying nursing courses. Writing nursing terms was rated most

needed (mean = 4.42) followed by writing nurse notes (mean = 4.24). The skill least needed was writing summaries of discussions and seminars (mean = 2.35).

4.2.3 Problems in Applying Nursing English Acquired in Studying Nursing Courses

This section contains statistical data on problems in applying English skills in studying nursing courses. The presentation of the statistical data is divided into four areas corresponding to the four main English skills.

Sub-Skills of Listening	Mean	SD	Interpretation
1. Listening to nursing terms	3.12	0.82	Often have problems
2. Listening to general vocabulary	3.12	0.46	Often have problems
3. Listening to seminars	3.54	0.82	Many problems
4. Listening to lectures	3.55	0.93	Many Problems

Table 24: Problems in Applying Listening Skills in Studying Nursing Courses

Based on the statistical data, the subjects had the most problems with listening to lectures (mean = 3.55), followed by listening to seminars (mean = 3.54). Listening to nursing terms and general vocabulary generated number of problems the least (means = 3.12 and 3.12).

Sub-skills of Speaking	Mean	SD	Interpretation
1. Using nursing terms	3.15	0.81	Often have problems
2. Using general vocabulary	3.24	0.66	Often have problems
3. Seminars	3.47	0.88	Often have problems
4. Answering questions in class	3.10	0.83	Often have problems
5. Discussions	3.40	0.94	Often have problems
6. Presentations	3.39	0.96	Often have problems

Table 25: Problems in Applying Speaking Skills in Studying Nursing Courses

The Table shows that the subjects consistently experienced problems with all speaking skills although speaking in seminars was the most problematical (mean = 3.47). Having discussions was second (mean = 3.40), while answering questions in class caused fewest problems (mean = 3.10).

Sub-Skills of Reading	Mean	SD	Interpretation
1. Reading nursing terms	3.01	1.09	Often have problems
2. Reading general vocabulary	2.93	0.88	Often have problems
3. Reading English journals	3.68	0.96	Many problems
4. Reading English texts	3.89	1.01	Many problems
5. Reading medical and nursing manuals	3.70	0.94	Many problems
6. Reading test questions	3.47	0.98	Often have problems
7. Reading sentences from slides and educational materials	3.22	0.88	Often have problems
8. Reading nurse notes	2.98	0.97	Often have problems
9. Searching for data off the Internet	3.67	1.24	Many problems

Table 26: Problems in Applying Reading Skills in Studying Nursing Courses

The above table indicates that the subjects had most problems with reading English texts when studying nursing courses (mean = 3.89). Problems in reading medical and nursing manuals, and reading English Journals (means = 3.70 and 3.68 respectively) were also significant. Reading general vocabulary posed the least (mean = 2.93).

Sub-Skills of Writing	Mean	SD	Interpretation
1. Writing nursing terms	3.05	0.97	Often have problems
2. Writing general vocabulary	2.98	0.83	Often have problems
3. Writing reports	3.22	1.00	Often have problems
4. Writing test answers	3.19	1.00	Often have problems
5. Writing summaries of discussions and seminars	3.68	1.12	Many problems
6. Writing nurse notes	2.94	0.95	Often have problems

Table 27: Problems in Applying Writing Skills in Studying Nursing Courses

Subjects often had problems overall in applying writing skills in studying nursing courses. The mean of 3.68 indicates that the subjects had the most problems writing summaries of discussions and seminars, followed by writing reports (mean = 3.22). Writing nurse notes was the least problematic (mean = 2.94).

4.2.4 Subjective Needs in Studying Nursing English

The presentation of the statistical data is divided into seven areas which are (1) teachers and teaching methods, (2) materials, (3) testing and evaluation, (4) skills to be emphasized, (5) preferred number of English courses required, hours of teaching, and studying time, (6) preferred content, and (7) suggestions on the program.

Teachers and Teaching Methods	Mean	SD	Interpretation
1. Thai Nursing English teacher to speak English the whole class period	2.78	1.09	Occasionally
2. Thai Nursing English teacher to speak English most of the class period	3.49	1.07	Occasionally
3. Thai Nursing English teacher to use Thai as a medium of instruction	2.17	1.05	A little
4. Teacher to review the previous lesson before teaching a new lesson	4.12	0.84	Often
5. Teacher to divide students into small groups for doing class activities	3.14	1.15	Occasionally
6. Teachers to team-teach in class	2.49	1.26	A little

Table 28: Subjective Needs for Teachers and Teaching Methods

Based on the statistics, the subjects preferred to have their Thai Nursing English teacher speak English most of the class period as indicated by a mean of 3.49. Furthermore, the subjects would like their teacher to review the previous lesson before teaching a new lesson (mean = 4.12). Doing small group activities was ranked occasionally (mean = 3.14), while the mean of 2.49 reveals that team-teaching was of little interest to the subjects.

The results here indicate a high preference for the testing and evaluation formats suggested, with the exception of the bi-weekly quizzes (mean = 3.38). The testing and evaluation format most preferred is the teacher's explaining the grading criteria for each test (mean = 4.15). Increasing the percentage value of assignment grades (mean = 4.01) was the next highest preference.

Skills to be Emphasized	Mean	SD
1. Listening skills	3.15	0.99
2. Speaking skills	3.21	1.03
3. Reading skills	3.07	0.94
4. Writing skills	3.14	1.16

Table 31: Subjective Needs for Skills to be Emphasized

Remarks: Mean levels: 1 = Least emphasized; 2 = Emphasized; 3 = More emphasized; 4 Most emphasized

The above analysis indicates a preference for speaking as the most emphasized skill in the Nursing English curriculum. Less emphasized were listening and writing, while a mean of 3.07 showed the least preference for an emphasis on reading skills.

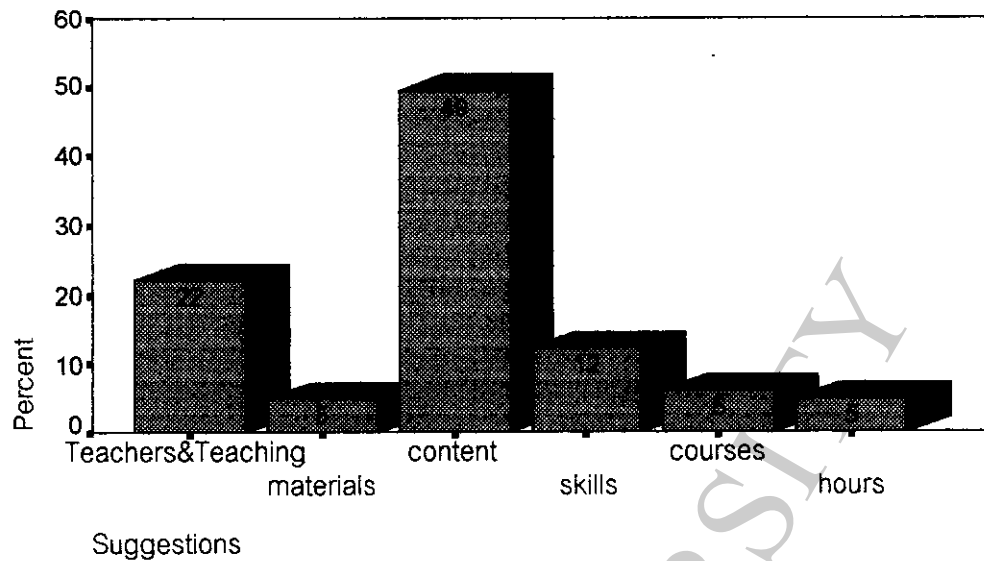


Figure 2: Third Year Student Suggestions for the Program

The bar graph shows that most of the responses related to content, with subjects recommending more nursing vocabulary and conversation practice. 22.2% of the responses related to teachers and teaching methods: the subjects would like to have more interactions between the teacher and students in class; they also preferred expert nursing English teachers who would employ new teaching methods to teach writing nurse notes. 12.35% of the responses concerned with teaching and studying materials. The respondents suggested a greater emphasis on listening and speaking skills in order to communicate with foreigners. A small number of the subjects (6.2%) would like to have nursing English courses offered for the third and fourth year nursing students. Finally, there are a few suggestions on materials and number of English hours. The subjects suggested that they would like English teachers to teach by using English songs and movies. A language lab and Internet access on the Keawnewarat campus for the exclusive use of nursing students would also mentioned. Additionally, it was suggested that nursing students be required to study more than three hours of English class per week.

4.3 An Analysis of Nurse Questionnaires

4.3.1 Personal Information

All questionnaire respondents were nurses who graduated from Payap University's faculty of Nursing between 1995-1997. Most of the subjects (41.0%) had studied English in grade 5, while 97.4% studied in a science program in high school. The subjects work in 14 departments at McCormick hospital.

Departments	Frequency	Percentage
1. Private Ward	12	15.4
2. Accident Ward	3	3.8
3. Men's Surgical Ward	4	5.1
4. Obstetric Ward	3	3.8
5. Dialysis Unit	1	1.3
6. Operating Room	1	1.3
7. Pediatric Ward	7	9.0
8. Coronary Care Unit	9	11.5
9. Medical Ward	12	15.4
10. Intensive Care Unit	8	10.3
11. Nursing Office	4	5.1
12. Outpatient Department	6	7.7
13. General Ward	5	6.4
14. Obstetric Ward (Private)	3	3.8

Table 34: Nurses' Departments

4.3.2 Objective Needs in Using Nursing English Acquired in the Context of Daily Work

Degree of Necessity	percent	Frequency	Mean	SD
1. Extremely Necessary	49.4	38	1.51	0.52
2. Very Necessary	49.4	38		
3. Necessary	1.3	1		
4. Not Very Necessary	0	0		
5. Not Necessary at All	0	0		

Table 35: Need of Nurses for English in Daily Work

Remarks: Mean Levels: 1.00-1.49= Extremely Necessary; 1.50-2.49= Very Necessary; 2.50-3.49= Necessary; 3.50-4.49= Not Very Necessary; and 4.50-5.00= Not Necessary at All

The information obtained from item one was used to determine the subjects' need to use English in their daily work which they were asked to rate on a five point scale. The computation of the mean showed that the subjects thought English was very necessary (mean =1.51).

Skills	Mean	SD	Interpretation
1. Listening skills	1.74	0.90	Often
2. Speaking skills	1.93	0.95	Often
3. Reading skills	1.73	0.83	Often
4. Writing skills	1.62	0.77	Often

Table 36: The Frequency of Subject Use of English Skills in Daily Work

Remarks: Mean Levels: 1.00-1.49= Very Often, 1.50-2.49= Often, 2.50-3.49= Sometimes, 3.50-4.49= Occasionally, 4.50-5.00= Rarely

In using English skills in daily work, the writing skills were used most often (mean =1.62), followed by the reading skills (mean =1.73). The speaking skills were ranked least (mean =1.93).

Sub-Skills of Listening	Mean	SD	Interpretation
1. Listening to foreign patients during a conversation	3.56	1.19	Often
2. Listening to doctor and nurse communications while using medical equipment	3.98	0.87	Often
3. Listening to medical and nursing lectures and seminars	3.37	0.92	Occasionally
4. Listening to doctors' orders about giving patients medications	3.98	1.01	Often

Table 37: Need for Listening Skills in Daily Work

From Table 37, the subjects needed most to listen to doctor and nurse communications while using medical equipment, as well as doctors' orders about giving patients medications (mean = 3.98). The skills needed the least concerned listening to medical and nursing lectures and seminars (mean = 3.37).

Sub-skills of Speaking	Mean	SD	Interpretation
1. Speaking with foreign patients	3.46	1.21	Occasionally
2. Speaking with doctors about patient symptoms using technical terms	3.92	0.76	Often
3. Speaking at medical and nursing conferences and seminars	3.26	0.90	Occasionally
4. Speaking with personnel in other departments using technical terms	3.52	0.89	Often

Table 38: Need for Speaking Skills in Daily Work

The above statistics reveal that the skill most needed is speaking with doctors about patient symptoms using technical terms (mean = 3.92). The mean of 3.26 indicates that the subjects needed to speak at medical and nursing conferences and seminars the least.

Sub-Skills of Reading	Mean	SD	Interpretation
1. Reading medical and nursing articles	3.35	1.08	Occasionally
2. Reading nurse notes	4.16	0.80	Often
3. Reading patient reports	3.88	0.80	Often
4. Reading lists of medications to be given to patients	4.11	0.80	Often
5. Reading instructions concerning medications	4.03	0.72	Often
6. Reading medical and nursing equipment instructions	3.98	0.80	Often
7. Reading abbreviations used in the medical and nursing field	4.07	0.74	Often

Table 39: Need for Reading Skills in Daily Work

Overall, the subjects needed to use reading skills often except for reading medical and nursing articles which they rated as occasional (mean = 3.35). The skill most often used is reading nurse notes (mean = 4.16) with reading lists of medications to be given to patients, and reading abbreviations used in the medical and nursing field (means = 4.11, and 4.07 respectively) close behind.

Sub-Skills of Writing	Mean	SD	Interpretation
1. Writing nurse notes	4.09	0.82	Often
2. Writing patient symptom reports	3.97	0.80	Often
3. Filling out nurse job descriptions	3.48	0.90	Occasionally
4. Writing abbreviations used in the medical and nursing field	3.83	0.81	Often
5. Writing reports on seminars which used nursing terms	2.98	0.89	Occasionally

Table 40: Need for Writing Skills in Daily Work

From Table 40, the mean of 4.09 indicates that the subjects needed to write nurse notes most often, and writing patient symptom reports was ranked second (mean = 3.97). However, writing reports using nursing terms on seminars using nursing terms is needed least (mean = 2.98).

4.3.3 Problems in Applying Nursing English Acquired in Studying Nursing Courses

This section contains statistical data on problems in using English skills in daily work. The presentation of the statistical data is divided into four areas corresponding to the four main English skills.

Sub-Skills of Listening	Mean	SD	Interpretation
1. Listening to foreign patients during a conversation	3.53	0.86	Many problems
2. Listening to doctor and nurse communications while using medical equipment	2.53	0.75	Often have problems
3. Listening to medical and nursing lectures and seminars	2.91	0.90	Often have problems
4. Listening to doctors' orders about giving patients medications	2.44	0.80	Occasional problems

Table 41: Problems in Using Listening Skills in Daily Work

Based on the statistics, the subjects' needs in using listening skills vary overall. The subjects had many problems when listening to foreign patients during a conversation (mean = 3.53), while they had the fewest problems listening to doctors' orders about giving patients medications (mean = 2.44).

Sub-skills of Speaking	Mean	SD	Interpretation
1. Speaking with foreign patients	3.62	0.92	Many problems
2. Speaking with doctors about patient symptoms using technical terms	2.65	0.69	Often have problems
3. Speaking at medical and nursing conferences and seminars	2.91	0.80	Often have problems
4. Speaking with personnel in other departments using technical terms	2.46	0.94	Occasional problems

Table 42: Problems in Using Speaking Skills in Daily Work

Based on the above results, it is noted that the subjects had the most problems speaking with foreign patients (mean = 3.62). In contrast, speaking with personnel in other departments using technical terms was rated as causing occasional problems (mean = 2.46).

Sub-Skills of Reading	Mean	SD	Interpretation
1. Reading medical and nursing articles	3.25	1.02	Often have problems
2. Reading nurse notes	2.21	0.83	Occasional problems
3. Reading patient reports	2.34	0.89	Occasional problems
4. Reading lists of medications to be given to patients	2.45	0.92	Occasional problems
5. Reading instructions concerning medications	2.56	0.93	Often have problems
6. Reading medical and nursing equipment instructions	2.61	0.88	Often have problems
7. Reading abbreviations used in the medical and nursing field	2.54	0.82	Often have problems

Table 43: Problems in Using Reading Skills in Daily Work

The above statistics show that the subjects did not have many problems in using reading skills in daily work. The most problems arose with reading medical and nursing articles (mean = 3.25) followed by reading medical and nursing equipment instructions, and reading instructions concerning medications (means = 2.61, and 2.56 respectively). The skills which the subjects had the fewest problems occurred in writing nurse notes (mean = 2.21).

Sub-Skills of Writing	Mean	SD	Interpretation
1. Writing nurse notes	2.67	0.85	Often have problems
2. Writing patient symptom reports	2.66	0.78	Often have problems
3. Filling out nurse job descriptions	2.65	0.80	Often have problems
4. Writing abbreviations used in the medical and nursing field	2.59	0.76	Often have problems
5. Writing reports on seminars which used nursing terms	2.87	0.79	Often have problems

Table 44: Problems in Using Writing Skills in Daily Work

The subjects consistently had problems in using writing skills. Most problematical are writing reports using nursing terms from seminars (mean = 2.87), and writing nurse notes (mean = 2.67). Writing medical and nursing abbreviations posed the least number of problems (mean = 2.59).

4.3.4 Subjective Needs in Studying Nursing English

The presentation of the statistical data is divided into seven areas which are (1) teachers and teaching methods, (2) materials, (3) testing and evaluation, (4) skills to be emphasized, (5) preferred number of English courses required, hours of teaching, and studying time, (6) preferred content, (7) and suggestions on the program.

Teachers and Teaching Methods	Mean	SD	Interpretation
1. Thai Nursing English teacher to speak English the whole class period	2.96	1.22	Occasionally
2. Thai Nursing English teacher to speak English most of the class period	3.66	1.21	Often
3. Thai Nursing English teacher to use Thai as a medium of instruction	1.88	0.91	A little
4. Teacher to review the previous lesson before teaching a new lesson	3.98	1.00	Often
5. Teacher to divide students into small groups for doing class activities	3.87	0.96	Often
6. Teachers to team-teach in class	3.03	1.26	Occasionally

Table 45: Subjective Needs for Teachers and Teaching Methods

Based on the statistics, the subjects preferred that their Thai Nursing English teacher speak English most of the class period as indicated by a mean of 3.66. The subjects would also like the nursing English teacher to review the previous lesson before teaching a new lesson (mean = 3.98). Doing small group activities was ranked often (mean = 3.87). Finally, team-teaching would be occasionally preferred by the subjects (mean = 3.03).

Materials	Mean	SD	Interpretation
1. Teacher to use technological teaching aids such as overhead projectors, videos, cassettes, a computer, a CD ROM, and/or access to the Internet	4.35	0.88	Often
2. Teacher to use available realia such as medical and nursing instruments as teaching aids	4.51	0.71	Very Often
3. Students to use language lab more often	4.42	0.73	Often
4. Teacher to compile documents from several texts to teach from in class	4.52	0.69	Very often

Table 46: Subjective Needs for Materials

The above statistics indicates a high subjective need for teaching and studying materials. The respondents would like the teacher to use available realia in class rather than technological teaching aids (mean = 4.51). Also, the mean of 4.52 reveals that the subjects would prefer that the teacher to compile documents from several texts. Additionally, subjects supported the use of the language lab (mean = 4.42).

Testing and Evaluation	Mean	SD	Interpretation
1. Teachers to give a participation grade to students who actively participate in class	4.02	0.89	Often
2. Teacher to explain the grading criteria for each test	4.17	0.75	Often
3. Students to have bi-weekly quizzes to review the lesson studied	3.98	0.86	Often
4. Teacher to decrease the percentage value of midterm and final grades and increase the percentage value of assignment grades	3.74	0.84	Often
5. Teacher to have students do peer-group evaluations	3.79	0.84	Often

Table 47: Subjective Needs for Testing and Evaluation

The statistics reveal a high level of support for all of the above testing and evaluation formats, with particular preference indicated for teacher explanation of grading criteria for each test (mean = 4.17). Subsequently, giving a participation grade to students (mean = 4.02) was highly rated. Subjects preferred doing peer-group evaluations least (mean = 3.74).

Skills to be Emphasized	Mean	SD
1. Listening skills	3.44	0.86
2. Speaking skills	3.50	0.99
3. Reading skills	3.23	0.94
4. Writing skills	3.16	1.08

Table 48: Subjective Needs for Skills to be Emphasized

Remarks: Mean levels: 1 = Least emphasized; 2 = Emphasized; 3 = More emphasized; 4 Most emphasized

Respondents preferred to have speaking skills emphasized the most in the Nursing English curriculum. Less emphasized are listening and reading skills, while the mean of 3.16 shows a preference for writing skills to be least emphasized.

Preferred Number of English Courses Required, Hours of Teaching, and Studying time	Frequency	Percent
Courses - 3 courses	6	7.7
- 4 courses	27	34.6
- More than 4 courses	44	56.4
Hours - 3 hours per week	10	12.8
- 4 hours per week	37	47.4
- More than 4 hours per week	31	39.7
Time - 8.00-10.00 AM.	47	60.3
- 10.00-12.00 AM.	18	23.1
- 13.00-15.00 PM.	3	3.8
- 15.00-17.00 PM.	9	11.5

Table 49: Subjective Needs for Number of English Courses Required, Hours of Teaching, and Studying Time

The statistics on the preferred number of English courses to be offered for nursing students reveals that most of the subjects would like to study more than four nursing English courses (56.4%). 47.4% of the subjects felt they would like four hours of English class per week. Additionally, most of the subjects would like to study English in the morning, especially at 8.00-10.00 AM. (60.3%).

Course Content	Frequency	Percent
1. General English content	3	3.8
2. Nursing English content	5	6.4
3. A combination of General English and Nursing English	65	83.3
4. English for Science	2	2.6
5. Other	3	3.8

Table 50: Subjective Needs for English Course Content

83.3% of the subjects would like a combination of general English and nursing English. 3.8% of the subjects would like a combination of nursing English and English for science and technology, or a combination of general English, nursing English, and English for science and technology. Only 2.6% of the subjects preferred the English for science content.

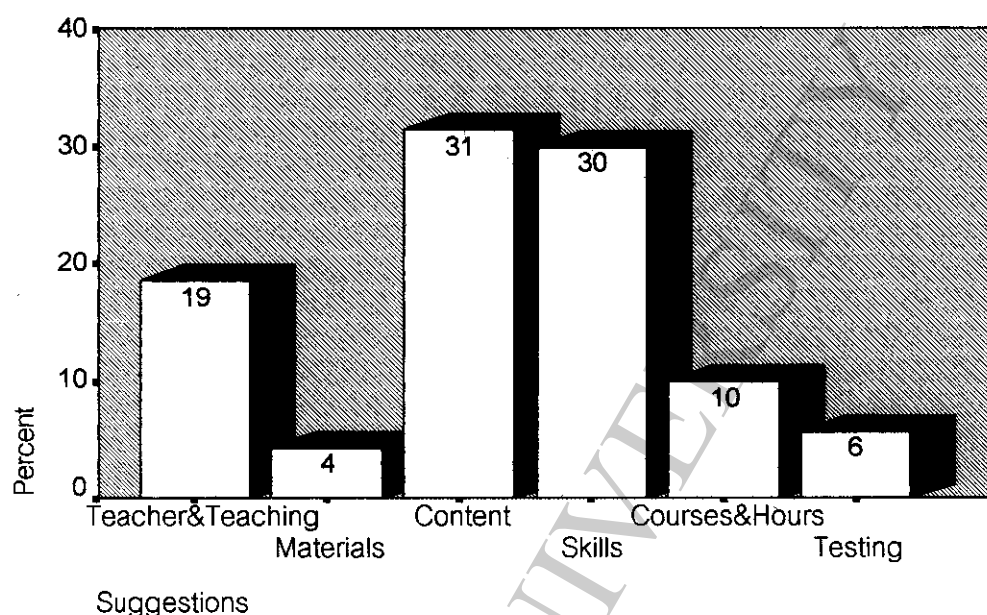


Figure 3: Nurse Suggestions for the Program

The bar graph shows that most of the responses related to content. The subjects would like the nursing related content to be modernized. They also preferred having class role plays in which the content relates to situations at the hospital. 30% of the responses related to skills. The subjects would like more practice of listening and speaking skills. 18.6% of the responses concern teachers and teaching methods. The subjects would like either expert Thai or foreign teachers to teach nursing terms. 10% of the subjects preferred more English courses and class hours. In terms of testing and evaluations, the subjects would like to have a test at the end of each lesson and interview tests. They also suggested that the teacher gives a participation grade as an evaluation of student performance in class. Finally, a greater use of realia, cassettes for listening practice, and writing exercises were highly recommended.

4.4 Comparisons of Subjective Needs of the Three Groups of Subjects in Studying Nursing English

This section contains comparisons of statistical data on subjective needs in studying Nursing English of the second year and third year nursing students and the McCormick nurses. The presentation of the comparisons is divided into 5 areas which are (1) teachers and teaching methods, (2) materials, (3) testing and evaluation, (4) skills to be emphasized, and (5) preferred number of English courses required, hours of teaching, studying time, and content.

Teachers and Teaching Methods	F.	LSD
1. Thai Nursing English teacher to speak English the whole class period	0.5896	Not significant
2. Thai Nursing English teacher to speak English most of the class period	0.6717	Not significant
3. Thai Nursing English teacher to use Thai as a medium of instruction	0.1005	N with 2yNs
4. Teacher to review the previous lesson before teaching a new lesson	0.4329	Not significant
5. Teacher to divide students into small groups for doing class activities	0.0002 *	3yNs and 2yNs with N
6. Teachers to team-teach in class	0.0131 *	3yNs and 2yNs with N

Table 51: A Comparison of Subjective Needs for Teachers and Teaching Methods

Remark: * = Having a significant level of <0.05 .

The one-way analysis of variance points out that the subjective needs for teacher and teaching methods of the three groups of subjects are significantly different at the 0.05 level in doing small group activities in class and team-teaching by teacher. The LSD shows that pairs of the three groups are significantly different

in items 3,5, and 6. The nurses' preference for the teacher to use Thai as a medium of instruction is significantly different from that of the second year nursing students'. The second year and third year nursing students' opinions on doing small group activities and team-teaching are also significantly different from the nurse group.

Materials	F.	LSD
1. Teacher to use technological teaching aids such as overhead projectors, videos, cassettes, a computer, a CD ROM, and/or access to the Internet	0.0000 *	2yNs with 3yNs and N
2. Teacher to use available realia such as medical and nursing instruments as teaching aids	0.0569	2yNs with N
3. Students to use language lab more often	0.0033 *	2yNs with 3yNs and N
4. Teacher to compile documents from several texts to teach from in class	0.0969	2yNs with N

Table 52: A Comparison of subjective Needs for Materials

The above statistics indicate that the three groups of subjects differentiated their subjective needs for materials significantly at the 0.05 level in the areas of the teacher's use of technological teaching aids and the students' use of language lab. When making a comparison between pairs of the three groups of subjects, the second year and third year nursing student preference for the technological teaching aids and using language lab is significantly different from the nurses'. The second year nursing student preference for teacher's use of available realia and excerpted materials from several texts to teach from in class is significantly different from the nurse group.

Testing and Evaluation	F.	LSD
1. Teachers to give a participation grade to students who actively participate in class	0.2118	Not significant
2. Teacher to explain the grading criteria for each test	0.3606	Not significant
3. Students to have a bi-weekly quizzes to review the lesson studied	0.0005 *	3yNs and 2yNs with N
4. Teacher to decrease the percentage value of midterm and final grades, and increase the percentage value of assignment grades	0.1368	Not significant
5. Teacher to have students do peer-group evaluations	0.8216	Not significant

Table 53: A comparison of Subjective Needs for Testing and Evaluation

The one-way analysis of variance reveals that the preference of the three groups for having bi-weekly quizzes is significantly different at the 0.05 level. It is also found that the second and third year nursing students' preference for the bi-weekly quizzes is significantly different for the nurse group.

Skills to be Emphasized	F.	LSD
1. Listening skills	0.0033 *	2yNss with N
2. Speaking skills	0.1905	Not significant
3. Reading skills	0.4642	Not significant
4. Writing skills	0.9872	Not significant

Table 54: A comparison of Subjective Needs for Skills to be Emphasized

Table 54 indicates that the three groups of subjects' preference for listening skills to be emphasized is significantly different at the 0.05 level. The LSD shows that the second year nursing students differs significantly from the nurse group in terms of the preference for the listening skills to be emphasized.

Preferred Number of English Courses Required, Hours of Teaching, Studying Time, and Course Content	F.	LSD
1. Number of English courses to be offered	0.0000 *	Not significant
2. Number of teaching hours per week	0.0000 *	Not significant
3. Studying time	0.0121 *	3yNs with N and 2yNs
4. Preferred English course content	0.0169 *	2yNs with N

Table 55: A Comparison of Subjective Needs for Number of English Courses Required, Hours of Teaching, Studying Time, and Course Content

Based on the statistics, the groups differed significantly at the 0.05 level, one from the others, for the number of English courses required, hours of teaching, studying time, and course content. The LSD reveals that the third year nursing students have significantly different preference for studying time from the nurses and second year nursing students. The second year nursing students are significantly different from the nurses in terms of the English content preferred.