Identifying Core Learning Needs for English for Nursing Purposes

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Abstract

The purpose of this study is to explore the core learning needs being met from English exercises that are most helpful for Taiwanese nursing preprofessionals and in-service full-time nurses. The study focuses on the learning exercises that are most useful in the workplace, lists the five exercises used most and least frequently in school, compares exercises in terms of different proficiency levels, and refines the most important training components as common core learning needs for preprofessionals and in-service nurses. Subjects were randomly selected, and 60 female nursing majors were surveyed in a questionnaire about 18 learning exercises most teachers use in the classroom. Data was interpreted using a one-way analysis of variance. Then an a posteriori comparison was performed for those items reaching significance to gather advanced information on where the significance originates from. Based on the findings, the following common core learning needs have been identified: cultural notes for nursing, building medical vocabulary, and short expressions and medical information. The intended result of this study is to apply general English exercises such as vocabulary introduction, sentence patterns, and situational expressions to English for medical purposes exercises such as cultural notes for nursing, improving medical vocabulary, and reading medical journals for the benefit of both English for nursing purposes teachers and learners.

Keywords: core learning need, nursing student, learning exercise

1. Introduction

An English for specific purposes (ESP) instructor usually looks at practical purposes for language learning, designs learning exercises, and prepares material for learners belonging to a particular profession with special needs. Thus, ESP courses have more vocational considerations than general or English as a foreign language courses. Since the course participants in this study are assuming that they will all be employed in the nursing field or already have work experience in hospitals, needs analysis for the group is informed by a pre-course survey, which identifies a participant's English level, target needs, learning needs, and objective and subjective needs. All of these factors illustrate the complexity of the issue. However, it will likely be problematic if teachers and learners attempt to include all learning desires in course or activity design. For instance, most nursing students and in-service nurses want to master their communication skills and ability to write nursing notes in English but few have real opportunities to polish these skills. This situation causes more emphasis to be placed on the short-term considerations of a course rather than any long-term learning goals (Hall, 2005; Yang, 2005). Similarly, even though some researchers have tried to explain in their studies how student learning can be tailored to meet ESP needs and how students are communicating in English, these researchers do not discuss how the lessons learned are applied across professional boundaries or explain why students have to communicate in English after completing their education (Al-Roomy, 2017). ESP teachers play an important role in helping learners dictate their identities by using ESP for long-term learning goals instead of short-term ones (Belcher & Lukkarila, 2011). With this point of view in mind, it is essential to analyze the core learning needs associated with English exercises to help determine the long-term learning needs of Taiwanese nurses.

The primary purpose of this study is to explore the needs of Taiwanese nursing preprofessionals and in-service nurses when it comes to applying learning exercises in the workplace. This research focuses on the importance and frequency of applying learning exercises in their current and future jobs. In brief, this study attempts to answer the following research questions:

1) What are the five learning exercises used most and least frequently by the learners in this study?

2) Does the overall application of exercises vary across different proficiency levels in the workplace?

3) Which learning exercises are viewed by the preprofessional and in-service nurses as important training tools for their current and future jobs?

2. Literature Review

In order to gain more insights on the study of modules for needs analysis in ESP programs and specifically identify useful learning exercises for the workplace, this section will review studies of and theories about needs analysis that has been applied first in an ESP setting and then in a course's network.

2.1 Subjective Needs Versus Objective Needs

Most nursing students in Taiwan have career goals of working in medical institutions before or after graduation. Regarding their English skills, nursing students are unlikely to have a firm grasp of what they already know and what they still need to learn based on their internship experiences or initial entry into the workplace. A needs assessment bridges this gap between what learners already know and what they need to know (Graves, 2001). In order to accurately identify any gaps in knowledge, course designers and instructors should explore what learners already know and they need to learn further when it comes to both general and specific English language use.

Munby (1978) proposed an early model for needs analysis. It starts with participants communicating their learning needs and then separates those needs into several sections: the participant's identity and language, a needs profile, a meaning processor, language skills selection, linguistic encoding, and a target communicative competence. Studying how participants express meaning and their language skills helps us identify their subjective needs and demonstrates how communication needs are determined by sociocultural situations and then converted into semantic and pragmatic content that uses specific language skills to realize the conditions (Munby, 1978). In addition, Hutchinson and Waters (1987) claim learners' subjective needs or wants should not be neglected because subjective needs are good stimulation for their learning motivations.

Brindley (1989) and Berwick (1989) suggest that teachers should identify objective needs such as learning attitudes, learning style, learning motivation, individual personality, the learner's desires and expectations, and the learner's awareness while also taking a variety of affective and cognitive variables into account. From this point of view, a learner's cognitive variables can be interpreted as objective variables for personal language use and proficiency, while affective variables represent subjective targets learners want to reach from the course.

Brindley (1989) also made a needs assessment model for a learner-centered approach. This model provides the type of information teachers need in a learner-centered system for adult second language learning. His model starts with the identification of the learner's goals and moves on to identify specific language and life goals. As far as language goals are concerned, communicative networks are designed to better understand the learner's language background, and these networks are put in place before a class so that the course designer knows a given learner's cognitive competence. This model relies on objective needs with the following functions in mind: (a) writing personal data, (b) listing patterns of language use, and (c) showing language proficiency and language problems. As far as life goals are concerned, learning needs depend on what social roles learners play, and their needs will show their subjective concerns in a course. These subjective needs involve learners' affective needs, wants, expectations, and learning styles.

Brindley's model was generalized for needs analysis so that objective needs can interact with subjective needs to better realize what learners can do and what they need to know and learn. However, there is another method to needs assessment that should be reviewed. Dudley-Evans and St. John (1989) proposed gathering the following pieces of information as an ESP approach to identifying learner needs: (a) learners' personal information, (b) language components about the target situations, (c) professional information about the learners, (d) learner deficiencies, (e) learner needs from the course, (f) language learning needs, and (g) the method of communication needed in the target situations. The first three items cover personal background and language use while the last four address what learners want to learn and how to apply language in a particular situational environment.

Using both Brindley's model and Dudley-Evans and St. John's ESP approach will assure various needs form important points of connections during the curriculum design process. They also serve as the basis for instructors to determine what materials to use, what teaching approaches to apply, and how to create assessments.

2.2 A Network for Learner Needs

Joyce (1992) made an exercise on the network of communication according to a needs analysis for vocational

proficiency. The procedure for making a needs network is as follows:

1) Analyze learner needs in relation to workplace situations and texts,

2) Decide what common texts will be covered in the course,

3) Reveal the needs analysis and resulting decisions to the learners, and

4) Explore areas of commonality and make a course outline matching the learner needs.

The purpose of this network is to explore the situations in which learners will need to cope with and control their English speaking and writing in the workplace. However, this network can also be used as a needs analysis tool to highlight which texts or activities should be included in a course.

2.3 Designing an English for Specific Purposes Program Based on Mixed Needs

Chen (2005) conducted both core course and ongoing needs analysis for an ESP program. Using a questionnaire, interviews, and a pre-course test, Chen identified participant background, target needs, learning needs, and objective and subjective needs. The target needs of this program were very language- and content-centered, which means they are especially relevant in situations where highly developed language skills need to be applied in the workplace. However, it should be acknowledged that individuals have their own general and specific needs.

2.4 Needs Analysis for Taiwanese Nursing Students

Yang and Su (2003) conducted a study to ascertain the English language needs of nursing students and in-service full-time nurses. After their analysis of nursing student expectations and the actual use of English and the communicative needs of in-service nurses, they found that a nurse's main concerns are limited vocabulary and poor English grammar. In addition, both study groups prefer to cover topics such as communication with patients, reading skills for basic nursing knowledge, and writing skills for charts and nursing notes. This finding could help English teachers better understand the learning difficulties and language needs of Taiwanese nursing students.

The other major concern for this study was the fact that speaking and listening skills were regarded as the most important factors by both nursing students and in-service nurses. Given that most of the students and nurses do not work in an English-speaking country, they are less likely to listen to and communicate in English in the workplace. Yang's (2005) study reinforced this notion, and Yang also mentioned that there are very few opportunities for students to communicate with native speakers or other foreign medical staff. In fact, Hall (2005) commented that ESP courses should be designed according to whether English for nursing purposes (ENP) students are practicing their profession in an English-speaking country. He added that most people who only study a foreign language in a formal environment will never become fluent speakers, while those who spend some time in the target language community (a situation where the target language is used as the normal approaches of communication) will learn how to speak a foreign language fluently. Hence, language is a powerful tool in establishing a learner's identity, and this identity can be developed and constructed to create connections with community members because what we say and write will demonstrate who we are and the image we wish to establish (Wenger, 1998; Hyland, 2010, 2011; Hyland & Tse, 2012).

Yang (2005) further points out that the biggest problem of ESP is that the use of English for any purpose is minimal or occurs in short durations outside the classroom. Hall (2005) draws a conclusion for practicing ESP in Taiwan: Based on observations of the implementation of ESP in Taiwan, it is suggested that the development of ENP courses take a very narrow view to satisfy students' immediate need to be able to read academic texts on medical topics. A separate tailored course can be designed to focus on reading skills and strategies. Although both preprofessionals and in-service full-time nurses need ENP, the learning process can be further divided specifically to English for academic purposes for nursing student and English for occupational purposes for practicing nurses. Time constraints and tight budgets especially necessitate making choices to prioritize short-term considerations over long-term ones.

Although Hall proposed this narrow view of course planning for English as foreign language contexts, he also points out that there are still several reasons to be cautious when we consider students' long-term career needs. That is, too narrow a focus on specialized needs does not necessarily benefit student learning goals. In other words, needs assessment should not be a static tool in course design and instead needs to be quite dynamic or flexible internally and externally since there are various constraints on learner wants, environmental factors, and the status of English in society.

3. Method

3.1 Subjects

The subjects in this study were randomly selected and included 60 female nursing majors from a 2-year program and a 5-year program. English for nurses is an optional course in these programs and is targeted toward those who desire to improve their English for their current and future jobs. The students in the 2-year program have worked in hospitals for more than 5 or 10 years. Most of them serve as professional nurses, while some of them serve as head nurses in different departments. As for the students in the 5-year program, they have studied English for the past 4 years and have had several practical training opportunities in hospitals and clinics.

3.2 Survey Creation

The researcher documented the 18 learning exercises that most teachers used in their classes and categorized them into four skills that represented distinct features for the survey. The researcher developed the questionnaire employed for data collection. Subjects were instructed to study the 18 types of learning exercises before taking the survey. They were required to answer questions on the importance of using these exercises based on a 5-point scale ranging from one ("never or almost never important to me") to five ("always or almost always important to me"). The questionnaire was written in both Chinese and English. It was divided into three sections, and the terms used with the learning exercises were all gathered from their study material. Section one contained five questions to collect basic information concerning a subject's English proficiency, place of work, and work experience. Section two included 18 learning exercises grouped into 4 categories as shown below. Section three involved two questions and asked the subjects to choose the five learning exercises used most and least frequently during their training period.

I.   Listening Exercises

1)   Listen to audio or radio

2)   Listen to the instructor's lecture on the text

3)   Watch English TV programs or DVDs

II.   Speaking Exercises

1)   Answer questions on current or practical experiences

2)   Repeat after the instructor or read aloud

3)   Role-play for certain nursing topics

III. Reading Exercises 1 (Text reading)

4)   Reading comprehension (true/false; multiple choice)

5)   Journal reading

6)   Cultural notes for nursing

IV.   Reading Exercises 2 (Vocabulary)

7)   Vocabulary introduction (general and medical)

8)   Vocabulary exercises (cloze; match)

9)   Building medical vocabulary (affixes, roots, suffixes, and word formation)

V.   Reading Exercises 3 (Phrases, grammar, and syntax)

10)   Phrases and usage of text

11)   Sentence patterns and grammar

12)   Short expressions and medical information

VI.   Writing Exercises

13)   Written form of reading comprehension

14)   Translation exercises

15)   Essay writing for related topics

Through a pilot study, the questionnaire was tested and revised by 10 preprofessionals and 10 professional nurses with very close statuses to the participants in this study.

3.3 Survey Procedure

Before the questionnaire was administrated, a brief explanation of the study's purpose was provided to the participants. In section two of the survey, subjects were told to respond in terms of how important they considered each learning exercise to be for their current or future jobs instead of responding according to their emotional needs. The motive was to distinguish between their objective and subjective needs in the results. In section three, subjects were told to choose the five learning exercises used most and least frequently in the related courses.

3.4 Data Analysis

In order to identify the five learning exercises used most and least frequently by the learners during their training period, the subjects' responses were counted for each of the learning exercises. Moreover, the arithmetic mean for the application of the four categories of learning exercises in the workplace was calculated and ranked for preprofessionals and in-service nurses in order to compare the variation between different proficiency levels. Another way of identifying the most and least valuable learning exercises to their work was to look at any significant variations in the means for the learning exercises (the independent variable). A one-way analysis of variance (ANOVA) was employed, and the significance level was set to .05. If the results were significant, then the Tukey method (or HSD method) was used for a posteriori comparison. The results and analysis section presents the statistical results and provides a discussion of how they impact the three research questions.

4. Results

4.1 What Are the Five Learning Exercises Used Most and Least Frequently by the Learners in This Study?

In the survey, preprofessional and in-service nurses were instructed to choose the five learning exercises that they used most and least frequently in a school or private setting. The learners answered based on exercises they had completed through English courses for nurses, general English courses, or advanced English courses they had taken at school or through work done in private with their teachers. Table 1 shows the different topics each group focused on. Preprofessionals (or nursing students) completed more exercises aimed at learning basic medical terms and general English learning, such as reading text aloud and listened to the instructor, watched DVDs, and participated in role-playing. In-service nurses, on the other hand, focused more on watching DVDs, listening to audio/radio, reading journals, and studying common phrases and sentence structure.

Table 1. Most frequent exercises for preprofessional and in-service nurses

Rank	Preprofessionals (No.)	In-Service Nurses (No.)
1	Building medical vocabulary (24)	Watch English TV programs or DVDs (21)
2	Repeat after the instructor or read aloud (21)	Listen to audio or radio (19)
3	Listen to the instructor's lecture on the text (18)	Journal reading (18)
4	Watch English TV programs or DVDs (16)	Phrases and usage of text (16)
5	Role-play for certain nursing topics (15)	Sentence patterns and grammar (15)

Table 2 lists the five learning exercises used least frequently by the learners during their training period. It is quite obvious that most of the writing exercises were used less by both groups. In contrast with Table 1, Table 2 indicates a phenomenon in listening activities where preprofessionals listened to their instructors more often than they did audio/radio, while in-service nurses appear to listen to audio/radio more often than their instructors.

Table 2. Least frequent exercises for preprofessional and in-service nurses

Rank	Preprofessionals (No.)	In-Service Nurses (No.)
1	Essay writing for related topics (27)	Essay writing for related topics (21)
2	Written form of reading comprehension (21)	Written form of reading comprehension (18)
3	Translation exercises (15)	Cultural notes for nursing (17)
4	Answer questions on current or practical experiences (14)	Translation exercises (15)
5	Listen to audio or radio (12)	Role-play for certain nursing topics (13)

4.2 Does the Overall Application of Exercises Vary Across Different Proficiency Levels in the Workplace?

Table 3 shows that both groups hold the same opinions concerning Reading Exercises 1 and 2, which were ranked as the most useful learning exercises in the workplace. However, the two groups show differences in opinion on Listening and Speaking Exercises. Preprofessionals regard both Speaking (mean 11.3) and Listening Exercises (mean 10.7) as being important, while in-service nurses prefer Speaking Exercises (mean 12.1) over Listening Exercises (mean 10.5). Thus, in-service nurses indicate that Speaking Exercises are more useful and helpful than Listening Exercises in the workplace, and they value Speaking Exercises more than preprofessionals. Both groups specifically view speaking activities such as answering questions on current or practical experiences, reading aloud, and role-playing (means of 11.3 for preprofessionals and 12.1 for in-service nurses) as important training in their workplaces.

Table 3. Valuable learning exercises in the workplace for preprofessional and in-service nurses

Rank	Preprofessionals (No.)	Mean	In-Service Nurses (No.)	Mean
1	Reading Exercises 3: Phrases, grammar, and syntax	13	Reading Exercises 3: Phrases, grammar, and syntax	12.8
2	Reading Exercises 2: Vocabulary	11.6	Speaking Exercises	12.1
3	Speaking Exercises	11.3	Reading Exercises 2: Vocabulary	11.4
4	Listening Exercises	10.7	Reading Exercises 1: Text reading	11.3
5	Reading Exercises 1: Text reading	10.5	Writing Exercises	10.6
6	Writing Exercises	10.1	Listening Exercises	10.5

Compared with other activities, writing exercises were ranked as being less useful (means of 10.1 for preprofessionals and 10.6 for in-service nurses). According to the results, in-service nurses have less opportunities to write in the workplace even though they may at times be asked to write nursing notes. Writing exercises included in general English course materials, such as making sentences, answering questions, written forms of reading comprehension, translation exercises, and writing short essays may not attract student attention and keep students motivated, which may cause students to be only casually engaged and result in instructor frustration. This phenomenon likely occurs because most nursing courses seldom place writing skills in nursing contexts, and the drilling of basic English skills such as grammar, vocabulary, and phrases fails to keep students engaged (Mitchell, 2018). In other word, improving writing exercises and emphasizing the nursing profession by focusing on goals such as mastering the writing patterns for specific genres in academic writing (Hwang & Lin, 2010) could be better for implementing writing exercises at the advanced English level.

Transforming writing activities into nursing-related activities would allow them to fit practically into the workplace. Yang (2003) found through a survey of in-service full-time nurses that they favored writing material related to nursing charts, nursing notes, and nursing diagnosis. Furthermore, not all writing activities need to be in written form. Some could be performed in listening and speaking form to enhance student attention and deeper reflection on any lessons learned. In fact, although writing records is a routine activity for nurses, it is not necessary for either preprofessionals or in-service nurses to write nursing charts in English. In a hospital setting, only certain medical terms will need to be written in English. Thus, these writing exercises could be optional in most workplaces.

4.3 Which Learning Exercises Are Viewed by Preprofessional and In-Service Nurses as Important Training Tools for Their Current and Future Jobs?

Based on the findings in Table 3, Reading Exercises 1, Reading Exercises 2, and Speaking Exercises were the three most useful categories for application in the workplace. However, it is necessary to apply a one-way ANOVA for more detailed information about the significance of all the categories. In summary, Table 4 shows the findings of the ANOVA analysis based on statistical calculations. Only Reading Exercises 1 (Text reading), Reading Exercises 2 (Vocabulary), and Reading Exercises 3 (Phrases, grammar, and syntax) show any significance for application in the workplace. An a posteriori comparison (the Tukey method or HSD method) will be made for these significant categories in order to gather more insights about where their significance comes from.

Table 4. ANOVA analysis for the importance of applying six types of learning exercises in the workplace

Category	Msb	Msw	F	Significance
Listening Exercises	.3169	.7772	.4075 [n.s.]	$P < .05$
Speaking Exercises	1.0500	.8298	1.2654 [n.s.]	
Reading Exercises 1	10.8500	.6740	15.9794*	
Reading Exercises 2	3.7167	.8693	4.2748*	
Reading Exercises 3	2.1500	.6018	3.4790*	
Writing Exercises	.8667	.5483	1.5807 [n.s.]	

$$F_{.95\,(2,\,57)} = 3.162$$

Since Reading Exercises 1 is significant as a category of learning activities in the workplace, Tables 5 and 6 provide more details on the two most significant combinations of exercises: journal reading and cultural notes for nursing yields 7.0537, reading comprehension (true/false; multiple choice) and cultural notes for nursing yields 6.7824, and reading comprehension and journal reading yields 0.2713. Therefore, the last combination does not seem to mean much to students. In fact, $\psi 7.8$ does not reach the significance threshold, which means both preprofessionals and in-service nurses closely agree about the merits of doing reading comprehension and journal reading, while the cultural notes for nursing in $\psi 8.9$ and $\psi 7.9$ noticeably impacted the results for each combination and helped it reached significance. The results show that the activity of cultural notes for nursing is commonly valued in career training for the nursing profession.

Taiwan has stepped into a multiethnic society. The patient population is becoming increasingly heterogenous due to multicultural and demographic changes in the region. For example, there are more foreign spouses and long-term immigrants, especially from Southeast Asia, and all these factors will have a serious impact on Taiwanese society and the health-care system. Communication is an especially important aspect of medical care. Good communication can be established though effective language use between doctors and patients. A lack of awareness about different cultures or culture shock can cause misunderstandings (Woloshin, Bickell, Schwatz, Gany, & Welch, 1995), emotional depression (Robbins, 2001), and even lead to a large increase in the number of hospital visits due to communication barriers in medical treatment. These negative consequences can lower patient satisfaction, cause unnecessary medical disputes, and result in more medical costs. The above findings demonstrate the importance of cultural awareness in today's society.

Table 5. ANOVA analysis for reading exercises 1

Variance	SS	df	Ms	F
Reading Exercises 1 (between)	21.7	2	10.85	$P < .05$
Error (within)	38.7	57	.6790	
Total	60.4	59		

$$F_{.95\,(2,\,57)} = 3.162$$

Table 6. A posteriori comparison for reading exercises 1

Item	Exercise	Mean	Standard Error	q
$\psi_{7.8}$	1. Reading comprehension;	3.20	.1843	.2713 [n.s.]
	2. Journal reading	3.15		
$\psi_{8.9}$	1. Journal reading;	3.15		7.0537*
	2. Cultural notes for nursing	4.45		
$\psi_{7.9}$	1. Reading comprehension;	3.20		6.7824*
	2. Cultural notes for nursing	4.45		

$$q_{.95\,(3,\,57)} = 3.406$$

Reading Exercises 2 includes vocabulary introduction (general and medical), vocabulary exercises (cloze;

matching), and building medical vocabulary (affixes, roots, suffixes, and word formation). The analysis presented in Tables 7 and 8 is centered on the significance (4.0768) that comes from the combination of vocabulary exercises (cloze; 3.35) and building medical vocabulary (affixes, roots, suffixes, and word formation; 4.20). The results show that students especially valued building medical vocabulary compared with cloze activities, which reflects the etymological benefits of ENP training and learning.

Likewise, the statistical analysis shows the insignificance of ψ10.11 and ψ10.12, so we might predict that the activity of general vocabulary introduction (ψ10) could be emphasized less in career training. From this result, the issue arises of whether vocabulary introduced and taught to students in an ENP course will remain relevant for their long-term needs. A lot of students commonly complain that they are required to memorize vocabulary for short-term requirements, which means the vocabulary will likely be forgotten after quizzes and tests and will not be used at all in practice.

Table 7. ANOVA analysis for reading exercises 2

Variance	SS	df	Ms	F
Reading Exercises 2 (between)	7.4333	2	3.7167	4.2748*
Error (within)	49.5500	57	.8693	
Total	56.9833	59		

$$F_{.95\,(2,\,57)} = 3.162$$

Table 8. A posteriori comparison for reading exercises 2

Item	Exercise	Mean	Standard Error	q
$\Psi_{10.11}$	1.Vocabulary introduction (general and medical);	3.90	.2085	2.6379 [n.s.]
	2. Vocabulary exercises (cloze)	3.35		
$\Psi_{11.12}$	1. Vocabulary exercises (cloze);	3.35		4.0768*
	2. Building medical vocabulary (affixes, roots, suffixes, and word formation)	4.20		
$\Psi_{10.12}$	1. Vocabulary introduction;	4.20		1.4389 [n.s.]
	2. Building medical vocabulary	3.90		

$$q_{.95\,(3,\,57)} = 3.406$$

For students in health-care-related departments, the English used in medical vocabulary and writing and in reading medical records is much more difficult than the English used in daily life or sightseeing. In Taiwan's health-care environment, medical admission notes, administration records, nursing card-filling systems, examination results, and physician's prescriptions are all written in English medical terms. While learners may be able to guess at the meaning of unfamiliar English words used in general contexts, the same cannot be said for English medical terms. There is a very real struggle to effectively acquire and use medical terms in English.

Chen and Chiou (2010) say that using different teaching strategies can help nursing students overcome the setbacks of learning medical terms. However, improving interactivity and providing feedback with a large vocabulary set in a big classroom in itself already poses a great challenge to any educator. In recent years, games have become core parts of useful and helpful teaching strategies in higher and adult education classrooms.

A task-based game is an affordable activity and can easily be implemented. Medical or nursing teachers can use technology or self-design material to create games that enable students to self-assess their learning while interacting with their peers. This method not only enhances the learner's interest in picking up vocabulary but also creates a joyful learning environment. Embedding the game element in the teaching process can make evaluation of medical terms fun and reduce student anxiety levels (Schlegel & Selfridge, 2014; Schofield, Chandratilake, & Nishigori, 2017; Hsieh, Chang, & Wu, 2018).

Table 9. ANOVA analysis for reading exercises 3

Variance	SS	df	Ms	F
Reading Exercises 3 (between)	4.30	2	2.1500	3.4790*
Error (within)	34.30	57	.60183	
Total	38.60	59		

$F_{.95 (2, 57)} = 3.162$

Table 10. A posteriori comparison for reading exercises 3

Item	Exercise	Mean	Standard Error	q
$\Psi_{13.14}$	1. Phrases and usage of text;	4.25	.1735	1.4410 n.s.
	2. Sentence patterns and grammar	4		
$\Psi_{14.15}$	1. Sentence patterns and grammar;	4		3.7464*
	2. Short expressions and medical information	4.65		
$\Psi_{13.15}$	1. Phrases and usage of text;	4.25		2.3055 n.s.
	2. Short expressions and medical information	4.65		

$q_{.95 (3, 57)} = 3.406$

Reading Exercises 3 includes phrases, grammar, syntax, and important short expressions. The significance of Reading Exercises 3 comes from the following two exercises: "sentence patterns and grammar" and "short expressions and medical information" (3.7464). The other two combinations of exercises, "phrases and usage of text and "sentence patterns and grammar" (1.4410), and "phrases and usage of text" and "short expressions and medical information" (2.3055), reflected no significance in opinion for either student group. Whether they are preprofessionals or in-service nurses, learners are still relying on an instructor's help to make sense of short expressions and medical information in order to acquire more medical and professional knowledge.

5. Conclusions

This study explored the core learning needs associated with the application of English exercises in the workplace by Taiwanese nursing preprofessionals and in-service nurses. As suggested in the results of the survey, reading exercises can be placed as a top priority over the other types of exercises. Based on the findings, the common core learning needs include journal reading, cultural notes for nursing, building medical vocabulary, sentence patterns and grammar, and short expressions and medical information. These learning exercises might also be called objective needs because they deal with general aspects of the English language and medical information in English. In addition, speaking, listening, and writing exercises could satisfy a learner's subjective needs, lead to improvement in English proficiency, and even enhance the learner's interest in ENP. The above conclusions should be taken into consideration and used as references for teachers dealing with college or junior college students.

Language teaching activities have far-reaching effects on the TESOL experience and are a crucial factor in course design. It is easy to see that many students prefer to satisfy their subjective needs of improving their speaking competence rather than prioritize their objective goals. But what if students treat English as one of many subjects and find that it serves little communicative function in an internship at a hospital or at the workplace after they have finished their education? How much effort should instructors put into encouraging students to use their English on a regular basis or long-term basis? Most ESP instructors find it challenging to support student learning motivation by building social contacts with foreign speakers and creating foreign language environments, yet these outside experiences are better than traditional classroom teaching. After all, experiences in the workplace community will have a significant influence on getting students to pay attention in their ENP courses, especially when students are serving in the large medical system (Lu, 2016).

The situation regarding writing in English in medical institutions can be viewed in a similar vein. Based on the actual use of English for nurses in Taiwan, the learner's subjective needs and wants can serve as good stimulation and motivation (Hutchinson & Waters, 1987). On the one hand, although the participants care about enhancing their overall language skills, their various objective and subjective needs should be narrowed down to common core learning needs for practical purposes. On the other hand, specific needs play a supporting role in

course design to make learners more aware of what they already know and what they still need to learn. This study provides a better solution for course design that highlights a set of core learning needs for nurses instead of attempting to integrate all learning exercises into course design; this approach is especially useful given time constraints and limited budgets. After all, losing the main focus of learning might damage a learner's confidence and the quality of the end result.

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