



Developing Skill-Based Materials for Helping D3 Nursing Students Go International

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There are a lot of opportunities for nurses to pursue their career or to continue their study abroad. However, many of them are afraid of taking this chance for many reasons, including the lack of English skills. This study aims to bridge the gap between the English language materials that does not suit the needs and demands of D3 Nursing to go international. The research method used is Research and Development. The process of material development is based on the development phase of the Skill-Based Approach by Hutchinson & Water. The subjects of the study were 15 Indonesian D3 nursing students. Mixed method was employed as the data analysis technique. The result of this study is six units materials accompanied with syllabus and lesson plans. The materials were good according to the experts' validation and it significantly affected the students' work-related language skill .

Keywords: nurses, materials, ESP

INTRODUCTION

The need for nurses abroad significantly increases every year. The head of the National Agency for Placement and Labor Protection Indonesia (BNP2TKI) states that every year there is always a demand for nurses from Libya, Qatar, UAE, Kuwait, Taiwan, Saudi Arabia, Japan and Abu Dhabi. Unfortunately, we can only meet 36% of all the request was due to several constraints [BNP2TKI \(2015\)](#). One of the obstacles is the lack of English skills of the nursing graduates, so they are not ready to work abroad.

Based on that fact, English for Specific Purposes (ESP) as a subject in universities has an important role to overcome this problem. According to [Dudley-Evans et al. \(1998\)](#), the characteristics of English for Specific Purposes (ESP) are (1) ESP based on student needs, (2) methodology and activities of ESP are tailored to the field being taught, and (3) ESP activity is focused on grammar, vocabulary, discourse, and language functions in accordance with the context. ESP approach provides its own advantages. Through the needs analysis undertaken as the first stage in ESP, learning becomes more effective and efficient and the material delivered based on the context that students will face in the future [Kusni \(2013\)](#).

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Needs analysis is gathering information about the material needed by student nurses to relate to their needs at the time they work abroad. In terms of fulfilling the job market for nurses abroad, it is also very important to get information from alumni who have become nurses to ensure the useful curriculum and material they have learned and what material needs to be added related to their work [Saragih \(2014\)](#). He mentioned also that the students need not only material to support their career in the future, but also the ability to communicate related to listening and speaking.

There are several studies related to developing material. In the field of nursing, [Tyas \(2015\)](#) did research on nursing vocational school. he found out that the target need of the tenth graders of Nursing are being to be in advanced level of English to support their future job and being able to communicate well in English. [Saragih \(2014\)](#) mentioned that there are some communicative skills needed by nursing students, for example giving suggestion, answering telephone, talking with patients, and explaining about the benefits and how to use medicine. Research on syllabus for ESP also resonances the same findings about the importance of need analysis [Dedi \(2017\)](#), [Susandi and Krishnawati \(2016\)](#)

The present study, then, is interested in developing skill-based materials to bridge the gap between the students' need and the lack of availability of such materials, which can facilitate them to learn English related to study and work-related language skills. A skill-based approach originally used widely in the Latin American region. The basic assumption of this approach is in every aspect of communication always involve certain skills or strategies. This approach starts with identification of situations, necessary skill analysis, syllabus and material writing, and evaluation [Hutchinson and Waters \(1987\)](#). This kind of approach can result more effective materials or lessons since it is based on the lists of skills needed by the students.

Based on the explanation above, there are several research questions as the focus of the present study: (1) What are the English language skills needed by nurses who want to work overseas? (2) How do skill-based materials improve the competitiveness of nursing D3 students in meeting the demand of international work force? (3) How is the response, practicality, and effectiveness of teaching materials in improving English competence of D3 nursing students to be able to compete in the international job market?

Based on the research questions above, the purposes of this study are: (1) to analyze the needs of D3 nursing students in learning English based on information obtained by four sources, namely: students, alumni, nursing majors, English teacher and BP3TKI; (2) Developing material based on the results of the above needs analysis so that the material produced corresponds to the needs of the students' future job; and (3) Analyze the response, practicality, and effectiveness of teaching materials that have been developed so as to produce ready-to-use material, practical, and effective both for teachers and D3 nursing students.

METHODS

This study aims to develop syllabus and learning materials English for skills-based nursing department (skill-based syllabus and materials). Based on this goal then the proper design to use is Research and Development. [Latief \(2011\)](#) mentions that R & D is research that aims to develop products such as media, modules, syllabi, textbooks, and so on. There are three learning tools developed, namely syllabus, lecturer manual, and book for students.

[Borg and Gall \(1983\)](#) model was used as the R & D cycle. This model has 10 development steps, namely: (1) needs analysis, (2) & (3) planning and developing preliminary product, (4) preliminary field testing, (5) main product revision, (6) main field testing, (7) validation of operational product revision, (8) operational field testing, (9) final product revision and (10) dissemination and implementation). This model was adapted by eliminating a step, which is preliminary field testing because of the time restriction to complete the research. In addition, the expert validation also should be given before the field testing because in the authors' opinion, the product in the field testing should be a good product and not just a draft.

The instruments of data collection were five: interview, questionnaire, validation checklist, observation, and test (pretest and post test). The interview aimed to collect the data from respondents, such as BP3TKI, the head of D3 Nursing, the alumni and the English teacher. It was conducted respectively for a month with specific purpose for every respondent. The interview with two employees from the BP3TKI was intended to get the data about what skills required to be eligible to pursue a career abroad. Then, the interview with the head of D3 Nursing was focused to better understand the curriculum and the objectives of teaching English in the nursing departments. The researchers also asked the alumni who have worked abroad to get the data related to what skills should be taught in the English class based on their experiences. Last, the English teacher was interviewed to know the present teaching materials used, the students' common problems in the classroom, and his suggestions for the future materials.

The questionnaire was employed to gather two kinds of data: 18 questions to gather the students' needs, wants, and lacks and 6 questions for their responses toward the materials developed. Next, the validation checklist for expert's validation contained several items to assess content, vocabulary and grammar, exercise and activities, and context. There was also has the comment section in which the experts could write his/her suggestions. Observation was utilized to record what happened during the field test so the strengths and weaknesses of the product could be noticed. It was carried out for three meetings. Last, a job interview test, the students had to deal with a job interview test to measure the students' before (pretest) and after ability (post test) so the effectiveness of the materials could be proved. The questions were focused on job interview questions such as telling about themselves, their previous education/work experiences, their strength and weaknesses, etc.

The final product of the present research was in form of lesson materials for students and lesson plans for teachers. Therefore, the final product of this study is expected to be ready-used materials which can be utilized by any English teachers who are interested in teaching ESP for Nursing especially for study abroad or working abroad preparation.

RESULTS AND DISCUSSION

The data collection of the study was gathered by interviewing key persons, conducting need assessment from the students, and evaluating the students' language ability. There were several interviews conducted during the study from two officers of BP3TKI (Center for Placement and Protection Services for Indonesian Workers), the head of Nursing Diploma Program, two alumni, and the English teacher in Nursing Diploma Program. The summary of the interview was as follows: (1) the purpose of English language learning in Nursing Diploma Program major is to equip nursing students with two skills namely general English skills and Nursing English; (2) English language learning is given for 5 semesters spread in 5 subjects; (3) students are expected to be able to use appropriate English in the context of nursing; (4) writing skills and critical thinking are difficult skills to teach; (5) material related to work preparation is still not so focused; (6) availability facilities such as laptops, LCD projectors, active speakers, language labs and Wi-Fi hotspots are a must to teach English; and (7) students also get the TOEFL test periodically from the Language Center in the institution but the results are still not satisfactory.

The next is need assessment using questionnaire to 15 (fifteen) students. The results are: (1) material development is needed considering that many students need English for the benefit of their plan to work abroad; (2) Material needs to put pressure on strengthening speaking skills by focusing on developing direct communication (face-to-face meeting) language skills for the purpose of social interaction, talking to yourself / in public. In addition, reading skills are also needed because many students feel lacking in this section; (3) materials such as writing scientific papers, presentations, making job applications, CVs, resumes, job interviews, international tests are desirable material as well as needed by students to prepare them to work abroad; (4) role play and presentation are learning activities that are favored by students so that they must be considered as learning activities and material preparation; and (5) teaching materials can be presented in the form of videos, journals and online material, as well as examples of forms, job applications, and others.

We conducted job interview to the students as a pretest. Based on the pretest result, the students' ability was 64.43 in average. This was not the ideal ability to go international. This result was also not satisfactory comparing to the ideal target score set by the D3 Nursing Study Program.

Based on the results of interviews, questionnaires, and tests, and curriculum analysis in the D3 nursing study program,

the researchers compiled six units of material, namely: (1) Introduction to Advanced English; (2) Scientific Writing; (3) Presentation; (4) Working Abroad; (5) Job Interview; and (6) Studying Abroad. The entire materials were compiled into a book. This teaching material was used for 14 face-to-face meetings based on the provisions in the study program curriculum. The weight and amount of material were adjusted to be fulfilled during this period. The types of activities and exercises (evaluations) were also adjusted to the students' wants listed in the questionnaire.

After the draft was successfully compiled, the researcher submitted it to the experts to get input and improvement. The results of the first validation were obtained from the Expert I who focuses on providing views on aspects of English in teaching materials. His rating results were very satisfying, which was 67 or an average of 4.6, which meant the average material was very good. According to him the textbook had been made very well, except there were some parts related to grammar that must be corrected.

The results of the second validation were obtained from the Expert II who focused on paying attention to ESP aspects in teaching materials. She gave a rating of 57 or an average of 3.8, which meant that the instructional material developed was good enough. However, she also gave several suggestions, such as making material maps, adding pages, making book titles more specific, transforming content in unit one to be more specific to the needs of students, writing source of photos and making instructions shorter and clearer. After that, many revisions were made to fulfill the good standard of the material development. She also advised to use our own photos instead of taking ones from Google, so we could avoid the copyright issue.

After the revision was completed, the next stage was field testing. In this field test researchers invited 15 international class of nursing diploma students, consisting of 10 females and 5 males, to become research subjects. The subjects were chosen based on the consideration that they were from the international nursing program which has the goal to prepare the students to be able to compete globally. The subjects were in the third semester when the present research was conducted. In addition, an English lecturer was also involved to use the developed teaching materials. The researcher also asked an observer to take note during the learning process. In this stage, not all material was tested considering the limited time available. Researchers only tested the second and third units of the book, which then arranged into four face-to-face meetings, namely: (1) Cover Letter; (2) Writing Resume; (3) Job Interview; (4) Job Interview Practice. The consideration for choosing these topics was based on the consideration that the core objectives of the materials were to prepare for the students to work abroad.

Observation results indicate that there were some areas still needed to be revised. Based on the four times of observation, it was found that some of the materials were still too difficult for students. In some units more examples were needed so the students could get more references for doing the targeted tasks. In addition to observation, at the end of the field test the students

were also given a questionnaire to see their opinions regarding the use of material. Each student was asked to give a rating from one to three with the interpretations: 3 meant useful, 2 meant neutral, and 1 meant useless. The result can be seen in **Figure 1**.

The graph above shows that the average rating given by the students was 2.6 of out 3, which means all units in the product being developed were considered useful by students so there were no topics that need to be eliminated. Field test results showed that the developed teaching materials could be used for teaching purposes aimed at preparing students to work abroad. Somehow, still some points must be corrected.

The next process was conducting the post-test and comparing the results of the pretest and post-test results. Post-test was equivalent to pretest with the same type of test, namely job interview so that it could measure the difference in students' abilities before and after getting *Advanced English for Nursing Students* material. Statistics of pretest is displayed in **Table 1** and post-test data can be seen in **Table 2**.

Comparing two data in **Table 1** and **Table 2**, it is very visible that the differences in students' abilities are very different. The post-test mean score is clearly better than the pretest results (80.67 > 64.73). Furthermore, the t test is conducted to find out how significant the difference between before and after the application of the material. It shows that students who get *Advanced English for Nursing Students* materials had better abilities in job interviews than before learning to use these materials (.00 > .05).

The final product in this research and development is a book entitled *Advanced English for Nursing Students: Help You to Go International*, which was specifically designed to help D3 nursing students to pursue their international career. It consists of six units, namely: (1) Introduction to Advanced English (2) Scientific Writing (3) Presentation (4) Working Abroad (5) Job Interview; and (6) Studying Abroad. The weight of each unit has been adjusted so that all learning objectives can be completed during 14 meetings in accordance with the curriculum requirements in Nursing Diploma Program (D3 Nursing) for 2 credit courses. This book is accompanied with the syllabus and completed with 14 lesson plans. Each lesson plan suggests detail activities of what teachers and students can do in the classroom.

In every unit, teachers and students can find there are a lot of links which can show them helpful videos and examples for doing the tasks, for examples these [HeyRona \(2015\)](#), [Adkins \(2016\)](#), [Niharika \(2014\)](#), etc. The use of these online sources are intended to make the students autonomously access the materials and be able to study at home.

Based on the findings, it is found that the materials meet the students' work-related language need. According to [Widodo and Pusporini \(2010\)](#) skill-based materials are selected based on skills needed by the learners in the future. The consideration to choose this approach is that we need to make effective and efficient learning materials so the students can gain maximum outcomes after attending the 14 meetings of the *Advanced English* class. The previous learning materials focused more

on the language skills, which sometimes unnecessarily related to students' future needs. Therefore, by selecting the materials based on the students' needs, wants, and lacks, the objectives became more suitable with the students' needs in the future.

The result of need analysis found that the students need to learn English for three general reasons: to master basic English, to study abroad, and to work abroad. The basic English here referred to the ability to use English for daily basis, especially for their job-related topics, for instance to talk with their colleges, patients, or employer. The study abroad skills were interpreted into three skills: the ability to write scientifically, the ability to prepare and meet the demands of standardized International test, and the ability to do a presentation in English. Meanwhile, the works-related skills were translated into three skills too, including the ability to write good cover letter and resume and the ability to prepare for an interview in English. Those skills were divided into six units of the materials. The distribution and the match between each skill needed and the unit of materials are represented in **Figure 2**.

By designing the materials on the basis of the students' need, the students will get more motivation to learn and the materials will be more meaningful for them. According to [Krashen \(1982\)](#), language acquisition will occur when the inputs are meaningful for the students. The implementation of this language principle can be copied to material development by providing extensive experiences of language learning in form of various texts, topics, and themes related to the learners' need [Tomlinson \(2010\)](#). Further, [Tomlinson \(2010\)](#), the materials which are related to learners' need also will bring positive perception for them, which eventually can make them achieve more communicative competence. The result of the questionnaire given in the end of the field test shows the students felt that the materials presented in the *Advanced English for Nursing Students* book were beneficial for them so that they were more engaged during the lessons.

The materials for each unit were adapted from several resources available, including from the internet, textbook, and authentic materials. Almost all units were accompanied with videos, which can be accessed by the students autonomously both in and out of the classroom. Video is considered effective because it increases the learners' motivation and it can be combined with any topics [Bravo et al. \(2011\)](#). Video can enhance students' motivation because it is usually more entertaining than just listening to the lecture. In addition, video brings more visual so the students can listen and see the real example. When they learnt about job interview, most of them felt it was difficult at first. However, after they watch the video they got more examples of how to answer the interview questions. [Rafidiyah and Thania \(2018\)](#) also found that using video can make the students more interested in learning and it can provide lower-anxiety learning environment. Then, the use of authentic materials was commonly in forms of examples. For instance, in the unit 4, the example of the resume is the real resume of the author's friend who works as a nurse. By providing the real example, the students can see and analyze them-



FIGURE 1 | Students' Responses of Material Use

TABLE 1 | Descriptive Statistics of the Pre-Test Result

| | | Min. | Max. | Mean | SD |
|----------------|----|------|------|-------|-------|
| Score Pre-test | 15 | 48 | 75 | 64,73 | 8,362 |
| Valid N | 15 | | | | |

TABLE 2 | Descriptive Statistics of the Post-Test Result

| | | Min. | Max. | Mean | SD |
|-----------------|----|------|------|-------|-------|
| Score Post-Test | 15 | 60 | 95 | 80.67 | 9,612 |
| Valid N | 15 | | | | |

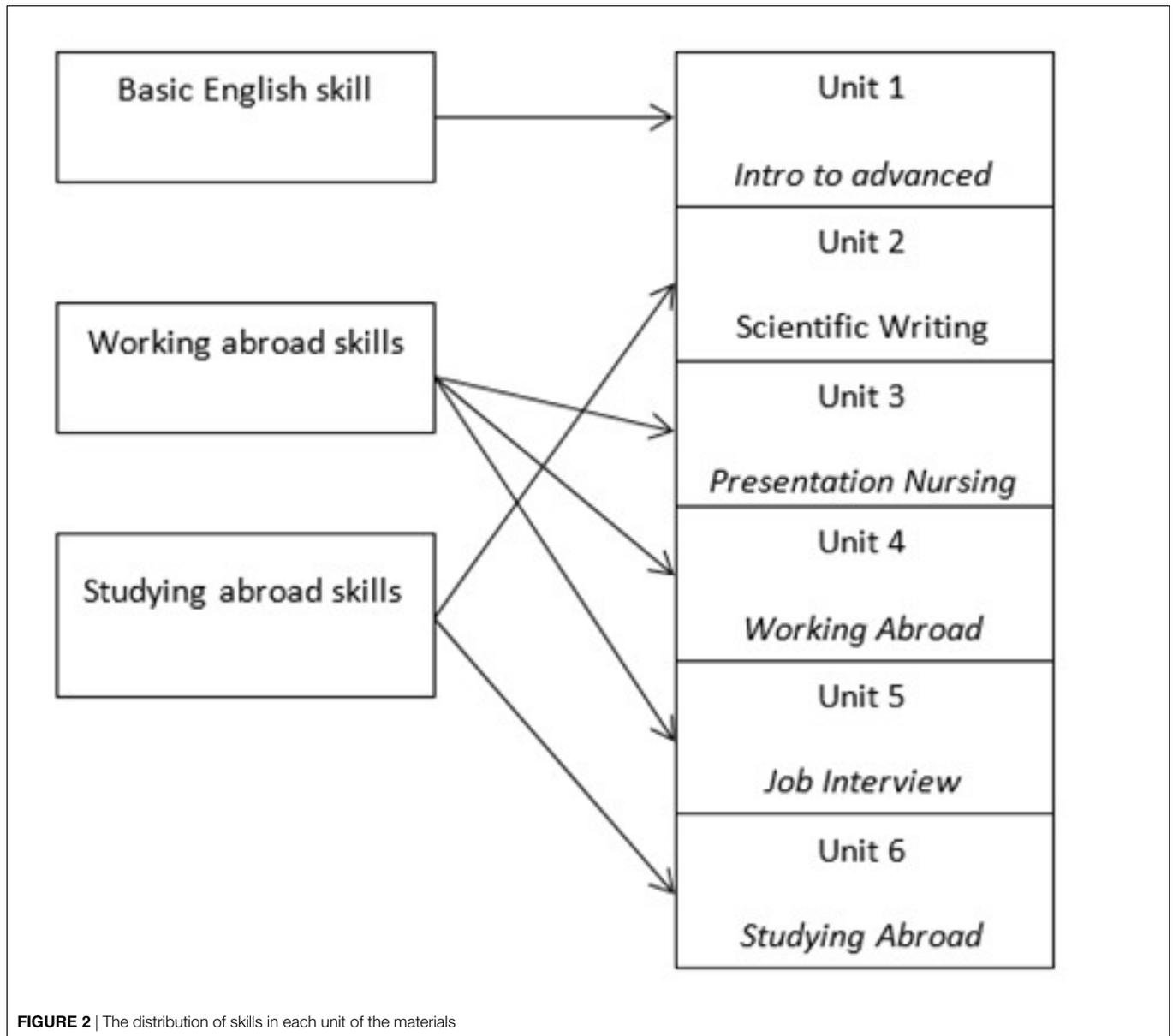
selves the example of good resume for nurse.

The present study showed that skill-based materials were more engaging for the students. In the end of the try out, it can be statistically proved that after the students were taught using the developed materials, their language skills, especially interview skill, were significantly improved. It supports the previous findings [Dedi \(2017\)](#), [Pongsapan et al. \(2016\)](#), [Susandi and Krishnawati \(2016\)](#) that need analysis and materials development are urgent for boosting the learning outcome of English for nursing. [Dedi \(2017\)](#) found that English was very important for nurse. They needed it to pursue their career, to get information, and to get scholarship. His findings were in line with the present findings that to make appropriate syllabus or materials, the topics, language functions, skills, and teaching method should be based on the learners' need. Then, [Susandi and Krishnawati \(2016\)](#) also yielded the same findings. They found that listening and speaking were two salient skills need to be highlighted since nurse needed to communicate with the foreign patients. The present study also considered speaking as one of most important skills and it should be prioritized in every unit. Next, [Pongsapan et al. \(2016\)](#) investigated the same result of analysis that the goals of ESP for nursing was to provide them with language, information, and skills for their study

and career. It strengthened the conclusion that most of nursing students or nurses need English because they want to have future international career or to study abroad. Specific finding from the present study was the students admitted that reading skill was one of their lacks, so it should be embraced in the developed materials. Five out of six units serves reading materials as the input for students. The reading materials were selected based on the appropriateness with the topic of each unit and readability of the text based on the level of the students.

CONCLUSION

Based on the results of the needs analysis, the expertise required by nursing diploma program is the ability to speak and write, the mastery of basic English skills for daily needs, nursing-related English (ESP), work preparation such as interviews, writing CVs and resumes. However, in addition to the work ability, the students also said that they needed related skills in writing academic fields and preparing further study abroad. In addition, reading is also an additional requirement because many of them admitted that they were not really good



at it. Therefore, the researchers wrote six units [Table 1](#), namely: (1) Introduction to Advanced English (2) Scientific Writing (3) Presentation (4) Working Abroad (5) Job Interview and (6) Studying Abroad. These topics were selected based on the result of need analysis.

Based on the expert material test, it was good with a 69/75 rating or an average of 4.6 from Expert I and a rating of 57 or an average of 3.8 from Expert II, which meant that it was quite good. After the revision was carried out based on expert advice, the observations also showed that the material could be used by the instructor for Advanced English courses even though there were several notes related to deficiencies that needed to be corrected. Statistical calculation results showed that there was a significant difference ($.00 < .05$) before and after

the Advanced English for Nursing Students teaching materials were applied. In addition, all students gave a satisfactory rating (average 2.6/3) of each unit presented. It showed that the instructional material developed was useful, usable, and effective to improve the ability of the students in meeting the competition in the international job market.

The present study also has some limitations, such as the subject for need analysis and try out are limited to D3 nursing students at the University of Muhammadiyah Banjarmasin. It is possible that if the subjects are larger and gathered from various universities, the data collected will also be more comprehensive and the materials developed can be used widely for any D3 Nursing students. Therefore, the next researchers are expected to enlarge the number of samples for data collection.

An experimental study also should be conducted so the effectiveness of the materials can be accurately measured.

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