DEVELOPING ENGLISH LEARNING MATERIALS FOR PHARMACY: VOCABULARY SKILL

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ABSTRACT
The study is set to develop the vocabulary materials for pharmacy for the student of Pharmacy Department at UIN Alauddin Makassar. The Research and Development model implemented in this study was ADDIE (Analysis, Design, Development, Implementation, Evaluation) model which is a basic framework for materials development. This study involved 84 respondents i.e. 60 students, 20 graduates, 2 lecturer, and 2 experts from pharmacy department at UIN Alauddin Makassar. The research questionnaire was for students, graduates, lecturer, and experts in need analysis the interview guideline for the students. In connecting the data, the researcher used two method, questionnaire and interview. From this study revealed the students’ target needs in material of vocabulary for pharmacy. The Data about the students’ need becomes the basic of the syllabus design. Subsequently, the unit of the materials was developed as an output of this study. For further research, this research can be applied for both teachers and the next researcher. This research can be helpful to be the guideline in further research especially for the developing material. Also, the result of this study can be the primary materials for pharmacy.

Keywords: ELT, Integrated Approach, Pharmacy, vocabulary skill

INTRODUCTION
English for Specific Purpose is a way of teaching/learning English for specialized subjects with some specific vocational and educational purposes in mind. But in fact, General English is used more than English for specific purposes in the Pharmacy Department. As a consequence, most students think that English is very difficult to learn because they learn English in general not in specific. Sometimes the students do not want to learn if the textbooks/module or the lecturer
using English in the class. Another problem is that the Pharmacy students do not interest to learn English because their English material is still General English and also the module made without need analysis and experts collaboration. (Aliyah: 8 January 2019).

Anthony stated that English for Specific Purposes (ESP) has grown to become one of the most prominent areas of EFL teaching today (Laurence Antoni: 2018) In other words, ESP is an approach to language teaching which is aimed to meet the needs of particular learners. In contrast, Dudley-Evans and St John give their modification based on their self-understanding of ESP definition. They make a distinction between the absolute characteristic and variable characteristic in ESP (Dudley and John: 1987).

In ESP course design itself, there are several approaches i.e. Language-centred course design, Skills-centred course design, Learner-centred approach, Learning-centred approach, and Integrated approach (Sitti Nurpahmi, 2014). In the other side, the most important things are the materials. Materials play a crucial role in the learning and teaching process. Good and appropriate materials can lead students to master the course and also make the learning-teaching process more effective. Nowadays, there are a lot of researchers who have tried to develop English material for learning in order to make the learning-teaching process way better such as developing integrated printed materials. According to Tomlinson, materials should be informative (informing the learner about the target language), instructional (guiding the learner in practicing the language), experiential (providing the learner with experience of the language in use), eliciting (encouraging the learner to use the language) and exploratory (helping the learner to make discoveries about the language) (Tomlinson, 2012, p. 143).

Other cognitivist views state that language learning must combine what they learned is, namely knowledge that includes knowledge that is factual, conceptual, procedural, and knowledge has (metacognitive) with his thinking ability gradually starting from the ability to remember, understand, apply, analyse, judge, and build what they learn into one unit or in form / structure the new one. This two-dimensional view of cognitive aspects in learning languages and eyes other lessons become one of the foundations used in the 2013 curriculum (UU No.20 Th.2003).

Moreover, based on the preliminary research by asking the lecturer of pharmacy student, the researcher found that the module uses difficult vocabulary in the unit so that the students did not understand what the aim of the unit is. As a consequence, most of the students were confused and
only several students who could understand with the lesson or what the teacher said during the learning and teaching process. In addition, furthermore the topics still in general purposes, not specific purposes. (Indah Fadhilah Rahman: 20 October 2018).

The student of Pharmacy also said that learning English is very important, the student has to update the International journal because if the student want to get more knowledge, student have to take an international journal. English material that student learn in pharmacy is still generally not specific in student major especially in vocabulary materials. (Evi: 2 January 2019).

Medical students must learn medical vocabulary since it is necessary in the development of all the skills which are required in their professional setting. Both medical students and practicing doctors get scholarships in hospitals all over the world so they are aware of the importance of learning medical terminology. While working in foreign hospitals they must communicate with both patients and medical staff. Students and doctors must acquire medical vocabulary which will allow them to write in a proper way case histories, give orders to the patients and nurses and discuss problems with patients and hospital staff (Ewa Donesch, 2014:73).

The researcher developed some printed materials about English vocabulary materials for pharmacy students. Through this research, the researcher developed new printed materials which making the pharmacy students interesting to study English. The topics consist of literature and a task. Furthermore in each topic consist of vocabulary which relevant to the topics. Referring to the explanation and being aware of the fact above, the researcher has a high interest to do the research about the development of English materials for the fresh students of pharmacy at UIN Alauddin Makassar.

METHOD

The research design used by the researcher in this research is Research and Development (R&D). R&D is a name of research designs involving the classroom problems, studying recent theories of educational product development, developing the educational products, validating the product to experts, and field testing the product (Latif, 2012).

The researcher used the ADDIE model. The ADDIE model as "a colloquial term used to describe a systematic approach to instructional development, virtually synonymous with instructional systems development" Molenda (2003:34), Addie is a generic instructional design
model that provides an organized process for developing instructional materials (Shelton & Saltsman 2011:566). ADDIE is an acronym which stands for Analysis, Design, Development, Implementation, and Evaluation.

ADDIE model is designed for the learners to achieve the goals and objectives of the course or syllabus. It allows for the evaluation of the materials. It also provides simple procedures to design and develop the tests.

In addition, in Borg and Gallin’s book Educational research an introduction, stated that educational Research and Development (R&D) is a process used to develop and validate educational products. The steps of this process are usually referred to as the R&D cycle, which consists of studying research findings pertinent to the product to be developed, developing the product based on the finding, field testing it in the setting where it will be used eventually, and revising it to correct the deficiencies found in the field testing stage. (Borg and Gall: 1983).

Based on the problems, the researcher focus of this study is to develop English materials for Pharmacy freshman students' on the Pharmacy Department in Health and Science at the State Islamic University of Alauddin Makassar. In this case, there are 40 participants, and the purpose of this research is to find out the need of the students, lecturers, and graduates. Therefore, this research employs multiple data sources by involving students, lecturers, graduates of the Pharmacy Department and experts.

In this research, the researcher used two instruments. There are questionnaire and interview. In the questionnaire, the researcher used close questionnaire and open questionnaire to determine the content of materials each topic to make a syllabus. Open questionnaire and close questionnaire in this research as a function to know the comparison of effectiveness between the previous module and the researcher's product.

The last, the researcher used the result from the questionnaire as a source of data and as a question for the expert through an interview to get the expert evaluation.

The data collection procedures in this research were begun when the researcher make a need analysis, such as design the questionnaire and the interview guidelines. In order to make the questionnaire and interview guidelines appropriate in this research, the researcher validated the data to the expert I and II. Then the researcher distributed the questionnaire and also interview to the subject: the students, lecturer, alumnus, and the expert of the Pharmacy department.
researcher gathers the data from distributed the questionnaire and interviewed the subject, the researcher analyses the data. As a conclusion from this process, it becomes the inventory needs.

The next phase is designing the syllabus based on the inventory need which will become the prototype 1, in order to check as if this prototype appropriate enough, we conduct the self-evaluation and peer evaluation. From this evaluation process, the data become prototype II. Furthermore, the prototype that the researcher has been evaluated before will be hand over to the expert I and expert II in the case to validate the accuracy, reliability, and the students’ acceptability

**FINDING AND DISCUSSION**

**Analysis Phase**

Need analysis possesses a crucial role in the process of designing language course syllabus. In English specific purposes need analysis become the first phase to develop a language course syllabus. The researcher made this research by conducting three systematic process to get the information about the students’ needs based on brown (1995:36) in (kaharuddin 2018) those are making basic decision about the need analysis, gathering information, and using information.

**Making Decision About the Needs Analysis**

There are some decision the researcher should think before designing the syllabus such us: who will be the scorch in this research, the types of information that must be collected, and point of view should be presented.

a. **Target group**

Target group is the people about whom information will be gathered. The researcher made this research that had been holding at pharmacy department of UIN Alauddin Makassar. in the target group, the researcher conduct it in the fresh student of pharmacy consist of 60 respondant.

b. **Audience**

Audience is people who will eventually be required to act upon the analysis. In this research, the researcher conduct 2 lecturer as the audience to get more information about the way they teach the students and also the students level in English.
c. Need Analysts

Need analysis is people who are responsible to carry out the need analysis. In this research, the researcher use two experts such as one expert in pharmacy and one from English. The expert will give information about student reference and also give a consideration in developing the syllabus.

d. Resource group

Resource group is people who serve as sources of information about the target group. In this research, the researcher use 20 alumni as the reference to develop materials based on the experience learning English in pharmacy.

After deciding the people who will involve in the needs analysis, then the researcher design a questionnaire to get the information what the students need in English for pharmacy. The researcher use three main point to get the students needs:

a. Situations needs and language needs

Situations need refers to the students English ability and the language needs refers to the students interest in English skill. By conducting this both of main question, the researcher will be easy to develop syllabus and English material.

b. Objective need and subjective need

Objective need refers to the topic that the students need in learning English and subjective need refers to what is the purposes of learning English. By conducting this question the researcher will be easy in developing topic in each unit of the materials.

c. Linguistic content and learning process

Linguistic content refers to how important the English skills for student of pharmacy and the learning process refers to the way the student learn the English materials.

The next is researcher deciding to design the questionnaire, the researcher validate the questionnaire to the experts before separating to the respondent. After all the questionnaire valid, the researcher come to the pharmacy department and give to the respondent.

**Gathering Information**

In this phase, after collecting all the data and analyze the students’ needs the researcher gathering all the information. The researcher gave a questionnaire to respondent in order to know
what the students need in English materials for Pharmacy Departement. The researcher gives a questionnaire to the respondent which consists of 7 questions, where the results further describes the students need for English materials in their department.

The researcher gets the data from giving questionnaire and interview of the student, lecture, and expert. In this phase the researcher use four main questions:

a. Identify the problem: in this question the researcher ask to the respondent about the problem in learning English especially the weaknesses in English skills. This question given to identify the problems that are being experienced by respondent.

b. English priority: in this question focus on what the student priority in learning English. That questions help the researcher to find the student needs in English skills.

c. English ability: that question deliver to know the students level or ability in English. By knowing the students ability help the researcher to develop materials based on the student level in English.

d. Learning style: by asking the student learning style, the researcher get information and help the researcher to design the materials based on the student learning style.

After considering the types of questions that will be used in a need analysis, a need analyst must determine the most appropriate instruments to gather needs analysis information. Besides, when using any procedures for collecting need analysis information, the needs analysis is required to take into three characteristics of any selected procedures. 

- **Reliability** it means the questionnaire and the information of that is the same object.
- **Validity** it means that the information should be measured and not something different.
- **Usability** refers to interpretation about the scores the result of the questionnaire.

**Using Information**

A need analysis process can generate much valuable information to be utilized within curriculum or syllabus to first of all states goals and objectives, which can also be used as the basis for developing syllabus, materials, and teaching strategies. After conducting the questionnaire and interview, the researcher get the data analysis above:
Data Based on Questionnaire

Table 1. The Result of the Question
How Important are the following English skill for you?

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Vocabulary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>3.53</td>
</tr>
<tr>
<td>Graduates</td>
<td>3.45</td>
</tr>
<tr>
<td>Lecturers</td>
<td>3.50</td>
</tr>
<tr>
<td>Experts</td>
<td>4.00</td>
</tr>
<tr>
<td>Average</td>
<td>3.62</td>
</tr>
</tbody>
</table>

0 – 1.50 = Not important; 1.51 – 2.50 = Less important
2.51 – 3.50 = Important; 3.51 – 4.00 = Very important

The result of table 1 showed that english skill focusing on vocabulary skill average 3.62 it means that this skill is very important. This result become the most basic for the development of the materials.

Table 2. The Result of the Question
What is your level ability in English?

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Vocabulary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>1.90</td>
</tr>
<tr>
<td>Graduates</td>
<td>2.45</td>
</tr>
<tr>
<td>Lecturers</td>
<td>2.25</td>
</tr>
<tr>
<td>Average</td>
<td>2.20</td>
</tr>
</tbody>
</table>

0 – 1.50 = Not important; 1.51 – 2.50 = Less important
2.51 – 3.50 = Important; 3.51 – 4.00 = Very important
The result of this table shows that the student of pharmacy still lack of vocabulary. The result of this question as the data that the researcher use in developing materials.

Table 3: the student weaknesses in vocabulary

<table>
<thead>
<tr>
<th>Question</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are your weaknesses in English (Vocabulary)</td>
<td></td>
</tr>
<tr>
<td>Do not have a lot of vocabulary</td>
<td>45.1%</td>
</tr>
<tr>
<td>Do not know the classification of English vocabulary words owned</td>
<td>35.3%</td>
</tr>
<tr>
<td>Do not know the types of vocabulary (vocabulary)</td>
<td>9.8%</td>
</tr>
<tr>
<td>Others</td>
<td>9.8%</td>
</tr>
</tbody>
</table>

Based on the data of table above, as many as 45.1% respondent answered they have a weaknesses in *do not have a lot vocabulary*. The conclusion from this question was many students especially in Pharmacy Department that do not have a lot of vocabulary.

**Data Based on Interview**

In this phase, the researcher use semi-structured interviews. Semi-structure interview is asking some question to get deep information and also to get more information based on the nature. Semi-structure set up to get the fact (Madelaine:2015).

The interesting in learning English is very important because it could increase the students’ motivation when they learnt. An example of why learning English is interested because it is challenging to be learnt. This reason is supported by some followed statements:

As followed from Respondent 1 statement.

“I choose very interested because in my opinion, first I like to learn English although I have not mastered it. Second, because English is related to my major; Pharmacy” (Respondent 1: 02/09/2019)

The second came from Respondent 2 by supporting Respondent 1 statement.

“I am interested because at the end of my study I will enter the pharmacist world so I must master English in order to go abroad so that I could interact with new people”. (Respondent 2: 02/09/2019)
Additional statement which interested in learning English is very important to learn English. As followed from Respondent 3 statement.

“I believe with learning English, it will help me a lot for my future job”. (Respondent 3: 02/09/2019)

The importance level of learning English is variated. In pharmacy department for example, most of the student see English is very important because it could help the students whether to increase their knowledge or implement it for their future job. All of these reasons were proved in followed statement:

As followed in Respondent 2 statement.

“It is very important to learn English because there will be some materials or objects that contained English in pharmacy department whether in learning medicine or job environment”. (Respondent 2: 02/09/2019)

Supporting respondent 2 statement, Respondent 1 stated that

“Learning English is very important because we need to learn and understand it for learn some journal that using English which related for my future”. (Respondent 1: 02/09/2019)

The last statement came from Respondent 3, she stated that We should master English if we want to work in pharmacy major, especially in drugs store and hospital. (Respondent 3: 02/09/2019)

**Designing Phase**

After several analysis of students needs and number of activities of planning it comes to designing phase which is based on Richard 2001 in (Kaharuddin:2018). Need analysis, situational analysis, planning learning outcomes (aims and objective), course organization selecting and preparing teaching material. In this stage of ADDIE model, the approach in this phase should be systematic with the process of identification the student need analysis, the development and evaluation of planned strategies which could be attain the target of the project’s goal.

The first thing is choosing or even making the Syllabus design. whereas the process of selecting and organizing the course content will be. Furthermore, the researcher has to know what kind of syllabus that will be suited and appropriate with the students need. According to Richard 2002 in (Kaharuddin 2018). There are 8 kind of syllabus design. Which is functional syllabus, situational syllabus, topical or content-based syllabus, competency-based syllabus, skill-based
syllabus, task-based syllabus, text-based syllabus, and integrated syllabus. As research purpose to develop the English language teaching based on tree skill where is vocabulary, reading and speaking. And supported by the result of need analysis which the inventory needs it show that the skill-based syllabus is appropriate with research purposed.

a) Stating Goals

In this stage begin, after identifying the result of research instrument. The researchers are trying to figure out about what kind of content and the skill that students will needs and at the same time they lack of. In order to specify the particular goal of the result of the research instrument itself that will suitable or they needed.

This lesson prepared for the students to be able to mastering the three skills effectively and confidently in apply the English language. This lesson can increase the student ability in Speaking, Reading, and Vocabulary. After learning this lesson, the students expected to be able:

a. Practice the conversation effectively with their friend.

b. Understand the passage by reading comprehension.

c. Knowing any vocabulary based on pharmacy field.

b) Learning priority

The learning priorities in this syllabus are got from the inventory needs. There are six items, listening, speaking, writing, reading, vocabulary and grammar. As the researchers only focus on three main point which is vocabulary, speaking and reading. The function of the learning priority here is to meet the students need. for example : vocabulary : to know and understand new vocabulary. This related to the students lack of vocabulary in pharmacy terms.

c) Skills

Skill is the main focus of the researcher choosing and the researcher has developed, whereas the skill here, is what the researcher expected that the student could learn from the material that the researcher served.

d) Material

Material is the product of the researcher have designed and developed in appropriated way based on the inventory need. which is consisted of 13 unit and 3 skill in every units.
e) Activity

Activity here means the way the material will be implemented in the class, this also supported how the material will be deliver, in order to meet the learning priority of the students. This is also the implementation of the inventory need. For example learning by video, learning on couple etc.

f) Functions

Function here means that after the students learn the material the researcher bring about. The researcher expected, students will get the output of every skills in the material in every units.

Developing Phase

After designing the syllabus, the next phase is developing materials. Based on the inventory needs and the interview, the researcher has a high interest to develop vocabulary material. Vocabulary has 3.62% in student learning priority and based on the interview, the student refers to learn more about vocabulary especially of vocabulary in pharmacy terms.

Vocabulary is central to English language teaching because without sufficient vocabulary students cannot understand others or express their own ideas. Wilkins (1972) wrote that “... while without grammar very little can be conveyed, without vocabulary nothing can be conveyed” (pp. 111–112). This point reflects by experience with different languages; even without grammar, with some useful words and expressions, I can often manage to communicate. Lewis (1993) went further to argue, “lexis is the core or heart of language” (p. 89). Particularly as students develop greater fluency and expression in English, it is significant for them to acquire more productive vocabulary knowledge and to develop their own personal vocabulary learning strategies.

In language learning, material is anything which is used to help to teach language learning. Material can be found in the form of textbook, a workbook, a cassette, a CD-Room, a video: anything which presents or informs about the language being learned (Tomlinson 1998) cited by Nurpahmi (2014).

In this research, the researcher conduct two phase in the developing materials based on Hutchinson and water (1987) state:
1. Selecting from existing materials
   In this step, the researcher developing materials based on existing materials related to the pharmacy. The researcher adopted material from the pharmacy students’ book and journal pdf. The researcher only takes several words to be the list of vocabulary. The word is refers to the common terms in pharmacy.

2. Write your own material
   Materials that not exist in pharmacy books and journal become the one obstacle in conducting materials. The researcher develop the materials based on the researcher interview and seeking the situation in pharmacy learning and teaching process. In Hutchinson theory it named as developing materials by own.

   In order to create learning opportunities based on students need, the materials must contain three main pedagogical procedures:
   a. Providing Language Skill
      In this procedure, the researchers prepared the learners with English integrated skill namely; speaking, reading, vocabulary which composed English language ability for later English material and worksheet. Afterwards, a set of activities to make the students able to know and to practice the knowledge (skill getting methodology) must be given such as preparing a topic to be read and then answered associated with the pharmacy department, arranging the words to memorizing vocabulary based on the reading context, providing a dialogue script to practice their speaking within specific language grammar rules in pair. These activities may be viewed as skill getting methodology.
   b. Reviewing Learning Outcomes
      This procedure is aimed at reviewing the students achievement in English language competence by giving them an interactive exercise for each unit e.g. “find a couple”. Through this game, the students will have opportunities to express their knowledge of language in a particular topic, ability to know specific vocabulary for pharmacy department.

   Conclusively, the organizational structures of the syllabus framework have been used to develop English materials and worksheets. The English materials and worksheets are planned by
units in which unit represent topics and consists of three pedagogical procedure. This procedure identified as skill setting, skill using and review.

The next phase is conducting the materials based on the topic related to the need analysis. In the topics that the researcher develops, the researcher used one kind of a learning method in each skill like use arrange the word and multiple choice to make sure the student memorize the vocabulary.

**Evaluation Phase**

Before implementing the developed teaching materials in the classroom, it is essential that the teaching materials be review or evaluation. The review was carried out to make sure that the teaching materials have been well developed and ready to use. In this research, the researcher conduct three evaluation, those are self-evaluation, peer evaluation, and expert evaluation.

1. **Self-evaluation**

   Self-evaluation means that the researcher evaluated the material after designing and developing based on the need analysis. The researcher makes sure that the materials based on the need analysis.

2. **Peer evaluation**

   This evaluation phase conducting by the researcher friends who have the same variable and who concern in vocabulary research. Based on Hutchinson and water (1987) peer evaluation conduct to help the researcher in assessment.

   This peer evaluation cinducted for two times. The first evaluation, the evaluator suggested to put any pictures. The second evalution, the evaluator suggest to make sure the exercise based on the students level.

   The results of the evaluation were quoted from the observation sheets that have been given to the peer. The observation sheet consisted at several items such as the content of the materials, activities/tasks/exercise, supplementary materials, and illustrations are already checked with a good mark. After all the items marked and resulted good, the learning materials then claimed valid as reflected to the peer suggestions: The teaching materials have been very well designed due to the followed reasons: The objectives and goals were stated, it has development framework, and it systematically present the idea of integrated skills.
Expert is a person with extensive knowledge or ability based on research, experience, or occupation and in a particular area of study. In this research, the researcher conduct this evaluation of two experts. First expert focus on pharmacy and the second experts focus on the English it-self.

The experts evaluate the material for three times. The first evaluation, the evaluator change the type of materials, from the the list vocabulary only to give parts of speech include to make the student know more about the kind of vocabulary.

The second evaluation, the evaluator suggested to put any meaning in every single word, so that the student can memorize the word based on the meaning. The third eveluation, the evaluator suggested to put any defenition in evary singgle word to complete the vocabulary materials.

The results of the evaluation were quoted from the observation sheets that have been given to the Experts. The observation sheet consisted at several items such as the content of the materials, activities/tasks/exercise, supplementary materials, and illustrations are already checked with a good mark. After all the items marked and resulted good, the learning materials then claimed valid as reflected to the experts suggestions: The teaching materials have been very well designed. The objectives and goals were stated, it has development framework, and it systematically present the idea of integrated skills.

CONCLUSION

Based on the need analysis, the researcher get the student need especially in vocabulary skill. The student known the types of vocabulary such as the parts of speech, this data become the student learning ability. Also, the researcher know the student learning priority in vocabulary such as the student have no a lot of vocabulary. The English materials needed by the students of pharmacy department at UIN Alauddin Makassar consist of thirteen components. The development of English materials for students of Pharmacy department at UIN Alauddin includes goals, materials sequence, English materials and worksheet.

The expert validation for the development of prototype module such as English materials and worksheet have been very well designed due to the following reasons.
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