Development Of PJBL Based Teaching Materials In Bilingual Learning Course For PGSD Students Of Unimed

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Abstract. This aim of this research is to develop teaching material of Billingual Learning Course for PGSD Student of Unimed. This research uses the dick and carrey model on develop the teaching material. The results of this research are: (1) Description of the needs for Bilingual learning materials, (2) Skills needed by students in communicating using English in teaching in elementary schools, (3) PJBL-based Bilingual Learning materials and (4) test results data/expert validation namely; English teaching experts gave a score of 36 with an average score for each questionnaire item = 3.6 and teaching materials experts gave a score of 39 with an average score for each questionnaire item = 3.9. Therefore, it can be concluded that the teaching materials of Bilingual Learning using the PJBL model have fulfilled the theoretical aspects of curriculum development and teaching materials development.

Keywords: PJBL, Billingual Learning, Teaching Material

1 Introduction

In a situation of competition for jobs, English proficiency is now an essential skill that determines one's career development. As regards the quality of university graduates, it is also worth noting that they can speak English. In fact, learning English as a means of communication will actually help to promote other quality aspects such as professionalism, communication skills and self-development. [1]. From this it is clear that English language skills are still an important indicator of the quality of higher education.

Currently, many national and international schools use English as the language of instruction in teaching and learning activities. These schools need teachers who have good teaching skills and are able to use English both orally and in writing in the teaching and learning process. The need for the ability to use English in the teaching and learning process is the basis for the PGSD department at Medan State University produce two courses that focus on developing the English language skills of students. These courses are English courses and Bilingual Learning courses. The English course at the PGSD Department of Unimed focuses on learning English grammar in general, while Bilingual learning courses focuses on

improving students' abilities in implementing the teaching and learning process by using English as the primary language.

On the preliminary study has been visited several international and national elementary schools. The researchers conducted interviews to find out the profile of the teachers who teach in their schools and how the ability of the teachers do the teaching and learning process by using ENglish. executed. The results obtained by the proposing team were very surprising, where on average elementary school teachers who taught in international schools that used English as the language of instruction and national schools that used English and Indonesian (bilingual) were LPTK graduates but did not come from the education department. Elementary School Teacher (PGSD). The proposing team concluded that the average graduate of the PGSD Department, especially those from Medan State University, was not yet capable of carrying out the teaching and learning process using English or mixed languages (bilingual). In the preliminary study, the proposing team also studied the Bilingual Learning course teaching materials that had been used in teaching and learning activities. The results of this study show that existing teaching materials do not address the needs of students and the world of work and do not contain learning models in presenting the material.

Based on the results of the preliminary study described above, the researcher considers it necessary to conduct a study on the development of teaching materials for English Language Courses and Bilingual Learning Courses. A linguistic study that can solve these problems is English for Specific Purposes (ESP). ESP is an approach to teaching English that has different approaches, perceptions, designs, materials, evaluations and objectives [2].

The Project Based Learning (PjBL) is a learning model that involves a project in the learning process. The project method is a way of teaching that provides students with the opportunity to use daily life units as learning material. The aim is to make students interested in learning. The word project itself comes from Latin, namely *projectum*, which means aim, design, plan [3]. Based on the explanation above, the researchers feel it is necessary to make a development in the teaching materials for Bilingual Learning course with PjB.

The aims of this research are; 1) to determine and describe the materials contained in the Bilingual Learning course teaching materials, 2) to find out the perceptions of alumni and students majoring in PGSD regarding the teaching materials for the Bilingual Learning course being developed, 3) to determine the effectiveness of teaching materials of Bilingual Learning course in increasing the teaching ability of PGSD students by using English as the primary language.

2 Method

The development model adopted in this research is the Dick and Carey model. This development model consists of ten steps, namely: (1) Analyzing needs to determine learning objectives; (2) Carrying out learning analysis; (3) Analyzing student characteristics and learning context; (4) Formulate specific/specific learning objectives; (5) Developing assessment instruments; (6) Developing learning strategies; (7) Developing and selecting teaching materials; (8) Designing and developing formative evaluation; (9) Revise learning materials; and (10) Design and develop summative evaluation [4].

The type of data obtained at the Model Development stage is qualitative data. This qualitative data is in the form of validation data from a team of curriculum and teaching material development experts, and English for Specific Purposes (ESP) program development experts, the results of individual trials and group tests. The data analysis technique used in this research is the interactive qualitative analysis model according to Miles and Huberman's version, which includes the components; (1) data reduction, (2) display or presentation of data, and (3) conclusion or verification [5].

3 Result and Discussion

1) Need Analysis

In accordance with the principles of ESP learning development, in developing teaching materials for Bilingual Learning courses a learning needs analysis must first be carried out [6], the aim of which is to identify and formulate; 1) what skills a teacher must have in teaching in elementary schools that use bilingualism in the learning and teaching process, 2) what materials and topics need to be included in teaching materials based on the experiences of PGSD department alumni who have become teachers in bilingual schools and, 3) what kind of teaching model is used in bilingual elementary schools.

The materials that will be included in the Bilingual Learning teaching materials are as follows:

- a) The Concept of Bilingual Programs.
- b) Learning Management on Bilingual Program of Elementary School Level
- c) Content and Language Integrated Learning pedagogy (CLIL) pedagogy
- d) Introduction and Greetings
- e) Checking attendance, organizing classroom, and ending lesson.
- f) Giving instructions in English
- g) Recalling routines, being good positive approach to discipline
- h) Explaining and demonstrating
- i) Asking for help and giving things out
- j) Setting up pairs and groups, children in pairs and groups\
- k) Teaching Mathematics for Elementary students through English.
- 1) Teaching Science for Elementary students through English.
- m) Conversation

2) Teaching Material design

The development of teaching material consists of four stages, namely: (1) formulating learning objectives (2) developing assessment instruments, (3) developing learning strategies, and (4) selecting materials and developing materials teach. The details of the formulation of specific learning objectives for ESP-based English teaching materials are described as follows:

- a) Students understand what the concept of a bilingual program in education is like.
- Students understand the form of management in the Bilingual program at elementary school level.

- Students understand Content and Language Integrated Learning pedagogy (CLIL) pedagogy in learning using two languages.
- d) Students are able to open the lesson using the Introduction and Greetings pattern.
- e) Students understand and are able to check attendance, organize classroom, and end lesson.
- f) Students are able to give instructions using English.
- g) Students are able to teach and remind students of routine things and are able to teach good and positive discipline to students using two languages.
- h) Students are able to explain and demonstrate using strategies that have an elementary school feel and use English.
- i) Students are able to practice Asking for help and giving things out
- j) Students are able to apply Setting up pairs and groups, children in pairs and groups in learning at elementary school level.
- k) Students are able to understand Teaching Mathematics to Elementary students through English
- Students are able to understand Teaching science to Elementary students through English
- m) Students are able to practice conversations using English regarding nuances of learning in elementary school.

3) Development of Assessment Instruments.

There are 4 types of assessment instruments, namely: Entry Behavior Test, Pretest, Practice Test, and Posttest [7]. The structure of the Pretest and Post Test is similar, namely consisting of 2 sub-tests. The first sub-test is an Objective Test, which consists of questions that must be answered in writing. The Objective Test model used in this first sub-test is questions with short answers, as well as matching questions. Because the development of ESP-based Bilingual learning materials in this research places more emphasis on speaking, listening and writing skills, all Objective Test items in this first sub-test will measure students' knowledge of various linguistic expressions used in teaching elementary school level students. The second sub-test is an oral test (Spoken Test). In this sub-test, students are asked to demonstrate communication skills in groups in teaching using English. This sub-test is divided into two parts. First, role playing. In this section, students are asked to demonstrate communication skills, namely by teaching in front of the class. Second, interview (Interview), In this section, students are asked to demonstrate communication skills in English in the form of expressing personal opinions or opinions based on a predetermined topic.

4) Design Evalution

Design evaluation of Bilingual Learning teaching materials for students majoring in PGSD of Unimed is divided into two stages, namely; (1) Expert validation test, (2) Small group test. The evaluation results are showns as follows:

a) Expert Validition Result

At this expert validation stage, each expert validates the teaching materials with the scope of evaluation: (1) formulation of learning objectives, (2) description of learning, (3)

teaching materials being developed, and (4) evaluation instruments used. Based on the expert test/validation results data above, it can be concluded that the ESP-based Bilingual Learning teaching materials containing the PJBL model have fulfilled the theoretical aspects of curriculum development and teaching material development, although there are still several things that need to be improved to improve the quality of the teaching material development. Curriculum refers to all the set of activities for learners to achieve their learning objectives. Curriculum development, therefore, is the development of an explicit learning blueprint defined by content and learning standards. The development of a curriculum is essential for the proper delivery of education and training, in which it provides special lesson plans, defines content, goals and teaching modalities. The learning objective and the organization's objectives are a major factor in curriculum development. However, the curriculum can be set up in such a way that it is best suited to learners' needs and an external awarding authority has to review and approve its content. [8].

b) Small group test.

Small group test is carried out by a group of students to evaluate teaching materials that are still in the development process. The individual test involved 20 PGSD students, 4 people each from 5 classes based on the categories of high, medium and low English proficiency. In small group tests, researchers found that the presentation of each unit in bilingual learning teaching materials could not be implemented properly in learning process in the classroom. Several parts in each unit tested still require changes and improvements. The points that need to be evaluated are as follows:

- (a) Material that contains reading skills is difficult material. The length of the reading text, word choice, and sentence construction used tend to be difficult to understand. Students/evaluators with high and medium Placement Test results thought that the reading topic was quite interesting.
- (b) Students with low English language skills need more time to understand the discussion of the material, so they need more examples to help understand the discussion presented, especially regarding teaching mathematics and science for elementary schools.
- (c) The part of the material that contains listening skills should include examples of conversations in MP3 format that can be accessed using internet devices and it is also necessary to increase the number of questions relating to these conversations.

5) Product Revisions.

Revisions are carried out based on the findings obtained through formative evaluation procedures. Revisions are focused on components in teaching materials that have the potential to cause difficulties when implementing learning materials, as well as weaknesses found in the design of learning materials. The revisions carried out are focused on the components of developing teaching materials, which include:

- (a) Change the phrase Communication Settings in sub-test B to Settings, so that it will be easier for students to understand.
- (b) Increase the number of examples in each material and sub-material and also increase the number of questions in each material and sub-material

- (c) Simplifying instructions, by replacing words/phrases that are considered difficult with phrases/words that are better known and understood by students
- (d) Simplifies sentence construction.

The need for decorative elements, in the form of picture and photo illustrations, in teaching materials was highly considered by researchers in the revision of this teaching material, considering that the addition of these decorative elements will influence technical aspects in the process of completing this research. These decorative elements will be added if Bilingual Learning teaching materials are widely implemented.

4 Conclusion

Based on the average answer given by respondents to question number 1, namely regarding students' understanding of the Bilingual Program in Elementary Schools, it is 2.2, namely in the category of lack of understanding. In other words, the average student still does not fully understand the concepts and procedures for bilingual learning at elementary school level. Based on the answers given by respondents, it can be concluded that the average respondent believes that the Bilingual Learning course is a very important course for Medan State University PGSD students to study.

For Reading skills, the average score for the answers of 30 respondents was 2.23, in the less important category. For Speaking skills, the average score for the answers of 30 respondents was 3.90, in the very important category. For listening skills, the average score for respondents' answers was 3.70, in the very important category, and for writing skills, the average score for respondents' answers was 3.03, in the important category. Based on these data, the Bilingual Learning teaching materials in this research are focused on improving speaking skills, listening skills and writing skills.

There were 14 teaching materials that the researchers presented to students during the analysis of teaching material needs. Researchers only took material that students considered most important, namely those with an average value of > 3.51. Of the 14 materials, only 13 will be included in the Bilingual Learning teaching materials based on ESP.

Based on data from English language teaching experts gave a score of 36 with an average score for each assessment questionnaire item = 3.6 and teaching materials experts gave a score of 39 with an average score for each questionnaire item = 3.9. Therefore, ESP-based Bilingual Learning teaching materials containing the PJBL model have fulfilled the theoretical aspects of curriculum and teaching material development.

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