

CHAPTER III

RESEARCH METHOD

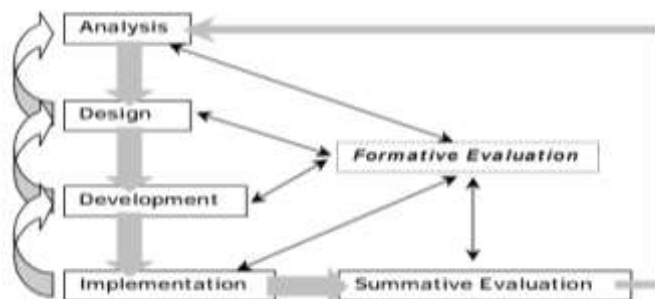
This chapter will describe the research method which is used to conduct this study. It covers the research design, instrument of the study and the procedure of developing content integrated skill for EAP class in UMG.

3.1 Research Design

Researcher want to research about developing the material for Agriculture Department. The material using integrated skill that used inquiry-based learning approach. In developing the material, researcher does need analysis. Need analysis is done by interviewing the Dean of Agriculture Faculty. Interviews conducted around what is taught to the Agriculture Department in the EAP class. The researcher interviewed the English lecturer and the Dean of the Agriculture Department.

In addition to conducting interviews, the researcher also conducted questionnaires to students as a tool to find out what students need in the EAP class. The researcher gave a questioner with some students from Agriculture Department in the morning class. Researchers gave questioners about what they need in teaching and learning process as their support in the work.

There are some instructional design models but researcher choose ADDIE model as instructional design in this research. In ADDIE model there are five steps such as analyze, design, development, implementation, evaluation.



Source: McGriff (2000). *Instructional System Design*.

3.2 Procedure of Developing Material Using inquiry-based learning for Agriculture Department

3.2.1 Analysis

There are several procedure that should be obeyed by the researcher. First, the researcher does need analysis. This is done to find out what is needed by learners so that the media and material will be develops accordance with their need. Based on Hutchinson and Water (1987) needs divided into two majors that are target needs and learning needs.

3.2.1.1 Interview

The researcher interviews the lecturer and Dean of Agriculture Faculty at University of Muhammadiyah Gresik. The researcher does the interview with 2 lecturers from LC (Language Center) who teach EAP class for Agriculture Department and the Dean of Agriculture Faculty. The researcher gives some questions to the lecturer and Dean. The interview are about how the teaching strategy for students of Agriculture Department in EAP class, curriculum used, how to teach learners effectively, the materials in EAP class, the weakness of students in learning process

3.2.1.2 Questionnaires

The researcher gives questionnaires to students of Agriculture Department who join in EAP class. The total of the students are 13 who join with EAP class. The aim of giving questionnaires is to find out the target need and learning need. Researcher gives 18 questions contain about target and learning needs which focus on what materials that students want in learning process, what students' difficulties in learning. Target need in item number 1 – 14 and learning need in item number 15 – 32. The form of questionnaires is multiple select, so students can choose more than one option in questionnaires items and if they have other answer that not any in option they can write their answer. The researcher adapt from the Hutchinson and water (1987) to make the questionnaire. In need analysis questionnaires, target need and learning need must include in questionnaire item (Hutchinson & Waters, 1987)

3.2.2 Design

To make design, researcher analyze from need analysis. In design, the researcher designs the Lesson Plan of Semester (RPS) and validated by experts. The researcher develop the lesson Plan of Semester based on the existing Lesson Plan of Semester (RPS) and create the new Lesson Plan of Semester (RPS). The researcher will analyze finding in need analysis. The researcher will make activity in learning that it will be appropriate with target needs and learning needs to help students learning. The material will be taken from Agriculture material, so it can help students learning in EAP class.

The researcher designs the book for Agriculture Department with integrated skill and adds Inquiry-based Learning as approach. Researcher designs the book with add inquiry activity in each skill.

1. Engagement

In engagement phase, teacher builds the students connection between their prior and present knowledge. Teacher can give short activities or open questioning to interest students to new concept.

2. Exploration

In this phase, teacher becomes facilitator for students. Students may observing, investigating or questioning

3. Explanation

In this phase, student can explain their understanding or idea about the problem that given.

4. Elaboration

In Elaboration phase, student can measure their understanding with their pair or group. Students can do extra investigation or sharing information and idea.

5. Evaluation

Teacher can assess with formal assessment or informal.

3.2.3 Development

In this phase, researcher has some step to develop the material for Agriculture Department in EAP class. The first, researcher analyzes the questionnaire and interview. From the result of analyze, researcher creates Lesson Plan of Semester for EAP class in Agriculture Department at University of Muhammadiyah Gresik.

Researcher makes draft materials for EAP class. Researcher makes draft to know the kind of materials and how many materials that will be in the book. During the process of make the Lesson Plan of Semester (RPS) and draft material, researcher conducts the *Expert Validation*. So, Lesson Plan of Semester and draft material can appropriate with the result of need analisis. Then, researcher develops the book based on the Lesson Plan of Semester (RPS) and draft materials. The process when develop the material become book, researcher conduct validation with the expert. The validation is done by lecturer from Agriculture Department of University of Muhammadiyah Gresik and lecturer from Language Center who teach EAP for Agriculture Department.

3.2.4 Implementation

After make improvement in materials based on the assessment and comment by expert. The researcher implements the materials to the students of Agriculture Department in EAP class. The researcher come to the class and presents the book of EAP using inquiry-based learning in the classroom. The researcher implements the book in 3 meeting and uses 3 chapters.

3.2.5 Evaluation

With evaluation phases we can improve the instructions that have been made before the final product, in addition we can also measure the level of effectiveness of instructions that have been made. The researcher can revise the instruction based on students need, revise the content or exercise. The revisions are needed to improve the product become well. The revision based on expert suggested.

3.3. Final Product

The final product is the final stage to develop the material. After completing the revision, the final product is book of EAP using inquiry-based learning. This book is for students of Agriculture Department in EAP class. The book is integrated skill and using inquiry-based learning as approach. In every chapter includes integrated skill and exercise. The product still needed improvement before the final product is launched.