### **CHAPTER III**

#### RESEARCH METHODOLOGY

### A. Research Design

The research was conducted by using developmental research which was adapted from Borg and Gall (1985) in fulfilling the students' need in reading comperehension material. The data served in the form of descriptive sentence; not form of number.

This research was conducted by following five phases of R & D, they were:

- 1. Gathering information and data
- 2. Analyzing data
- 3. Designing new multimedia-based reading materials.
- 4. Validating new multimedia-based reading materials.
- 5. Revising new multimedia-based reading materials as suggested by expert.
- 6. Revised-developing multimedia-based reading material (final product).

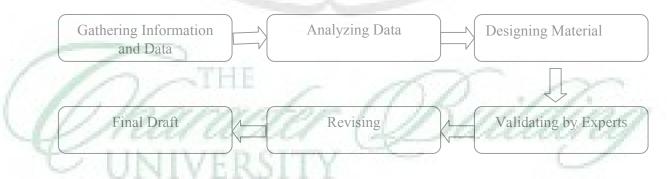


Figure 3.1 Research and development cycle proposed by Borg and Gall (1985)

This model of development was chosen because it has some stages which were clear and appropriate with procedure.

Qualitative data collected to get the research objectives. The sources of qualitative data were syllabus, and existing teaching materials. Besides that, there were teacher's interview, and students' questionnaire. The data collected analyzed descriptively.

### B. Place and Time of Research

This research conducted in SMK SANDHY PUTRA Medan of Multimedia Study Program of which located in Jl. Jamin Ginting Medan and took in even semester.

## C. The Subject of Research

The subject of this research was the students who are in grade XI of SMK SHANDY PUTRA in Multimedia Study Program. This subject was chosen because the researcher finds the reading materials used in the school are not appropriate to the students' need. They use "Buku Bahasa Inggris" published by Pusat Kurikulum dan Perbukuan, Balitbang, Kemendikbud, in 2014 which basically it was implemented for Senior High School students.

# D. The Research Instrument

The instruments that used in this research were Interviews and Questionnaires. The Interviews were administered to the teacher while the questionnaires were administered to the students.

The data that used in this research were:

- Questionnaires: the questionnaires were administered to the students.
   This step conducted for getting the data from the students about their interest with English and also for knowing what were their problems in learning English, especially in reading materials.
- Interviews: semi structured interviews session was held to the teacher.
   The function of interview was to get the data from the teacher about
   English reading materials whether they are suitable or not for the students.

### E. The Source of Data

The data mentioned as following:

- 1. the existing material,
- 2. the students' questionnaires

## F. Technique of Collecting Data

The datas of this study were the students' need analysis and existing materials. The datas analyzed to get the solution of the students' problem and appropriate reading materials based on students' need. Then, the datas were used to develop new reading materials. The datas analyzed through these following steps:

- Analyzing students' need as data of the study taken from questionnaire.
   From the data, the appropriate reading materials to Multimedia students found.
- 2. Matching the existing materials to core and basic competence of syllabus and analyzing the appropriateness to the students' need.
- 3. Developing materials based on needs analysis and syllabus.

## G. Technique of Analyzing Data

To get the data of this research the writer did, as follows:

- 1. The English teacher had been interviewed for knowing the average score of the students, the students' problems in learning English and also the existing syllabus and materials. Right after that the writer gave the questionnaires to the students for knowing their interest in English and their problems in learning English.
- 2. The questionnaires had been administered to the students. In this part there were some questions given that used to know the students' interest and students' problem in learning English.
- 3. The existing syllabus and existing materials had been observed and the existing material had been tested by the students. They were asked to read a text and answer the questions provided by the existing material.

  After they finished, the writer assessed theirs.

## H. Technique of Developing Material

The developing of the materials was staged as follows (*Hutchinson in Brian*, 1987):

- Gathering the information and data about target needs by interviewing the teacher and administered questionnaires to the students of SMK SHANDY PUTRA Medan.
- 2. Analyzing the learning's needs of the students based on the information and the data.
- 3. Designing the multimedia-based reading materials based on the students' needs.
- 4. Evaluating and validating the draft of development. The designed materials had been validated by experts.
- 5. Revising the materials based on the experts' suggestions.
- 6. Revised-Developing multimedia-based reading materials (final product).

