# CHAPTER III

# RESEARCH METHODOLOGY

## 3.1    Research Design

The design of the study was research and development (R & D) because the researcher developed reading material of teaching reading through flash video animation. Researcher developed flash animation of reading procedure based on the Curriculum 2006, syllabus and needs. It was designed to be interesting material for teaching and learning reading.

For developing the material, the researcher must pass some steps. There were many instructional development models. One of them was using ADDIE Model that stands for Analysis, Design, Development, Implementation, and Evaluation.
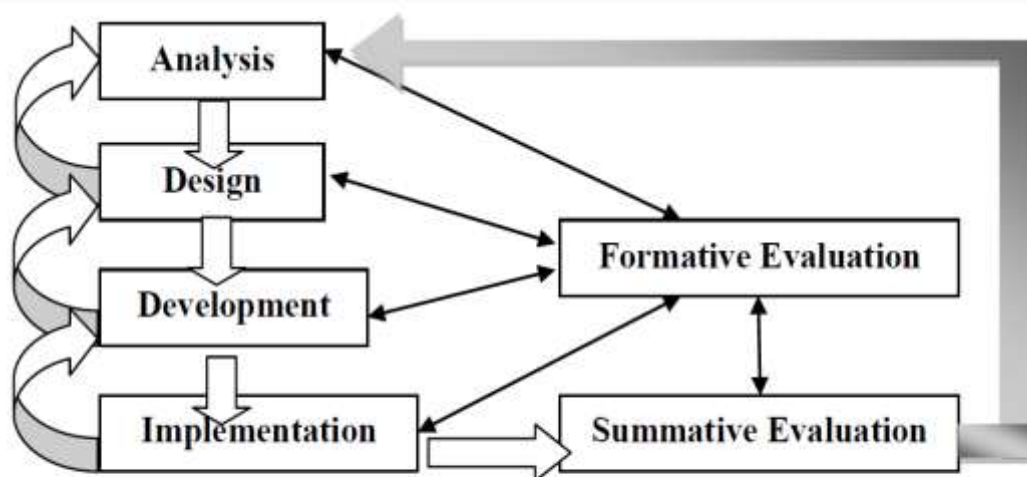


Figure 3.1 Steven J. McGriff's ADDIE Model
(http://www.e-learningguru.com/articles/art2_1.htm)

From the flow steps of Steven J. McGriff's ADDIE model, the researcher modified the steps to conduct the research with adding an expert validation steps. It because the researcher was not the expert so to measure the valid of the development product, the researcher needed an expert validation from the expert researcher and teacher of the study. It is adapted from Dewi Aisyah's ADDIE model, 2011. The modified steps that composed by the researcher displays in this chart:

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┌─────────────────┐
│  Need Analysis  │
└────────┬────────┘
         ↓
┌─────────────────┐
│     Design      │
└────────┬────────┘
         ↓
┌─────────────────┐
│   Development   │
└────────┬────────┘
         ↓
┌─────────────────┐
│ Expert Validation│
└────────┬────────┘
         ↓
┌──────────────────────────┐
│ Development of validation │
└────────────┬─────────────┘
             ↓
┌─────────────────┐
│     Try Out     │
└────────┬────────┘
         ↓
┌────────────────────────┐
│  Revision of material  │
└───────────┬────────────┘
            ↓
          ◇ Ok ◇
            ↓
┌─────────────────┐
│  Final Product  │
└─────────────────┘
```

Modified ADDIE Model

This model of research used in this development study, it explained in the procedure of Developing Reading material for seventh Grade of SMPM 1 Gresik.

**3.2    Try out the Subject**

The try out was conducted by the researcher for students in 7<sup>th</sup> grade especially for VII B in SMPM 1 Gresik. The researcher gave the try out in term of flash animation reading activities. Students did the try out in form of flash animation format. In pre – reading the researcher gave the test of prediction, in main – reading the researcher gave the test to read procedure text. In post – reading the researcher gave comprehension test by asking the students to do some activities of procedure in flash animation. Try out was the term to measure whether this product need more development, addition, deleted or revision to be better.

**3.3    Data Collection**

There were three instruments in this research to measure the valid of the study. There were three part of data collection, first was the previous data before development the material, second was the data while the development conducting and the third was the data after try out the material.

The first instrument to gather data before the development were interview sheet, questionnaire for students and the authentic data from teacher (syllabus and books use) to find out the needs. The researcher interviewed the teacher of 7<sup>th</sup> grade to get the valid information about teaching setting of the school and questionnaire for the students to find out the needs. It completed by the authentic data; syllabus and books use to check the information.

The second instrument was checklist that has been given from the expert to measure the valid of development product. It was given when the developing of the material is conducted.

The third instruments to gather the data after development was students' test or try out score and questionnaire sheet. The test has been given for students in VII B at SMPM 1 Gresik. The questionnaire sheet was given to the student after they get the material to measure the interest of the development.

## 3.4    The Procedure of Developing Reading Material

### 3.4.1 Need Analysis

In the first step, the researcher did an analysis by interviewing the teacher and did an authentic data observation to investigate the needs of students in SMPM 1 Gresik. According to the Hutchinson, 1987 state need in the language – center approach is the ability to comprehend and or produced the linguistic features of the target situation. It was the important step before establishing the appropriate material for them to be developed. There were two stages to gather need analysis; the first, to know the target needs and the second, learning needs to make the material suitable with the needs and aim of the study.

#### 3.4.1.1 Target needs

Target needs deal with the necessity, lack and wants (Hutchinson, 1987: 55). The researcher used several questions to know the target need of this school

in studying English as the compulsory subject. The questions were adapted from English for Specific Purpose book by Hutchinson, 1987. The questions were given to the teacher while the researchers doing an interview and the students in a questionnaire form. In addition, the researcher also observed the syllabus, Scaffolding book and LKS Wajar.

The researcher interviewed the teacher who teaches procedure text on 7th grade, Mrs. Maflakhah, S.S. The researcher asked several questions related with teaching method and media used. The material on second semester was being the subject of the questions to be asked to know the suitable material that develops in this study. The activity also be asked to know the previous activity applied to teach reading so the researcher knew the appropriate activities on her development product future. The level of success and the facilities also being the consideration to develop the material which was asked by the researcher to the teacher.

After getting the information from the teacher, the researcher gave the questionnaire on 7B class. There were twenty-two questions, which consist of target need and learning need questions. The questions that dealing with target need asked about the importance of reading, the obstacle while reading, the skill that should behave for reading a text, the activity of reading.

The other important thing while investigating target need was syllabus and books use. The teacher made the syllabus based on characters. Syllabus was one of important things to compose the material. From syllabus, the researcher could see the material taught. The researcher saw the SK, KD and indicators of procedure text from the syllabus to develop the proper material. The teacher used

Scaffolding book and LKS Wajar, from those books the researcher knew the topic and material taught.

### 3.4.1.2 Learning need

Learning need refers to what the learners needs to study, including learner style of study, learner motivation on studying, etc. The researcher also gave several questions for the teacher and learners to investigate the learning need. The questions were adapted from English for Specific Purpose book by Hutchinson, 1987.

According to Midwest Brain and Learning Institute Friday, June 25, 2004, problem identification is determining the area of teaching and learning that you want to explore. The focus should be on an area over which you have some control and you would like to change or improve. Describe the situation you want to change. This step exposes the learning situation and classroom condition which urgently needed to be improved and which material should be developed.

The questions have been given to the teacher while the researcher doing an interview and the students in a questionnaire form. In addition, the researcher also observed the syllabus, Scaffolding book and LKS Wajar.

The researcher interviewed the teacher who teaches procedure text on 7th grade, Mrs. Maflakhah, S.S. The researcher asked several questions related with time allocation, students preferences place to study, students' style of study and the frequently students prefers material and media in teaching.

The researcher gave the questionnaires on 7B class. There are twenty-two questions, which consist of target need and learning need. The questions related to

learning need were the time allocation to read, the media and material they prefer to read, the topic chosen for procedure they preferred, and the models of the activity for reading.

Syllabus has being observed. Syllabus is a teaching tools set; it consists of the material use, resources, time needed, learning experience, etc. The researcher developed the material based on the syllabus and curriculum 2006. The researcher used syllabus which has already used by this school. From syllabus, the researcher could see what material taught. The researcher saw the SK, KD and indicators of procedure text form the syllabus to develop the proper material. The teacher used Scaffolding book and LKS Wajar, form those books the researcher knew the topic and material taught.

The material was important for the students to master reading procedure. That was why the researcher tries to find the most coming up issue in junior high school by interviewing the students. From those ways, the researcher knew that recently students liked to read with flash animation because it was more attractive and built up their comprehension. Students prefers read the common issue topic of procedure such as how to play a game online, how to operate the new application, some tips to looks beautiful, how to cook a unique menu, how to do an experiment, etc. From those ways the researcher tried to make list of some possible topic to use in teaching procedure and useful for students. Below are the lists:

Lists of English Reading Procedure Topic at 2<sup>nd</sup> Semester

7<sup>th</sup> Grade of Junior High School

| No. | Topic based on the researcher prediction | Procedure text topic from Scaffolding Book for 7<sup>th</sup> grade students | Procedure text topic from LKS Wajar 7<sup>th</sup> grade 2<sup>nd</sup> semester | Topic most frequently students' interest |
|---|---|---|---|---|
| 1. | Cooking on the Cooking Academy Game | - Oreo Milkshake Recipe<br>- Fried egg<br>- Banana milkshake<br>- Curried rice | - Tinny Pizza<br>- Cheese omelet<br>- California raisin pie | Cooking unique recipe |
| 2. | Applicant any application | - Playing a cassette and recording on the tape recorder<br>- Preparing the printer | | - How to apply Facebook on mobile phone<br>- Apply the new application on PC (such as Photo bucket, install game, etc.) |
| 3. | Health and Beauty | | | - Tips to looks beautiful<br>- Tips to keep healthy |

| 4. | Experiment / Natural cycle | | | - Metamorphosis <br> - The sun rises |
|---|---|---|---|---|

### 3.4.2 Design Instruction

After getting the information about need analysis, the researcher tried to design the material suitable with the syllabus, curriculum 2006 and needs. The researcher developed flash animation material to help students read better. It consisted of pre – reading activity, main – reading activity and post – reading activity. The researcher only focused on reading procedure text for 7th grade in junior high school. The reason of using flash animation, as the media of development was flash animation could be used as the best media of teaching. It completed by motion pictures, graphs and color, which help students comprehend the material; it also increased students' motivation. The developer, teacher and students could use flash animation also.

The researcher expected to compose the procedure text material through flash animation for reading, because students needed something new and fresh to learn. Students preferred to study with video material. Flash animation is one of the attractive flash video that helped students read procedure comprehensively. The flash animation completed by the series steps, students may re – play the steps by pressed the previous button when they do not comprehend yet. They could press the next button when they comprehend the paragraph and continued to read the next paragraph.

The material design was an electronic book, there were some buttons and each buttons has their functions. There were the explanation of procedure and the language features use. Therefore, the students learned procedure, the generic structure and the language use before read the text.

After knowing about procedure, students read the text by pressing the button of each text topic. There were next and previous button. The function was to help students comprehend with the text. They pressed the next button if they understand and continued to read the next paragraph or they could re-read the paragraph they do not understand yet by pressing the previous button. The picture on each paragraph or phrases was suitable with the text content.

Vocabulary has an important role so the researcher created the vocabulary list on each topic. It designed likes mini dictionary to help student find out the difficult words related with the topic. There were the pronunciations on how to pronounce the words in British and American style. The sound of the words was from native. The sound was adopted from the Cambridge Advanced Learner's Dictionary 3$^{rd}$ Edition.

On each topic of the text, there were some tasks or activities. Each topic has two activities to measure the understanding after reading the text. The activities were consist of choose the best answer, matching picture with the paragraph, phrases or generic structure and crossword.

The researcher tried to make the material according to the needs by modifying the syllabus and wrote protomateri of reading procedure for junior high school in appendix 6. The researcher used three kinds of approach in protomateri;

there were E-Learning approach, Comprehension – driven approach, and the Reading approach.

According to Wikipedia the free encyclopedia, **E-learning** comprises all forms of electronic supported learning and teaching. The information and communication systems, whether networked learning or not, serve as specific media to implement the learning process. The term still most likely is utilized to reference out-of-classroom and in-classroom educational experiences via technology, even as advances continue concerning devices and curriculum.

E learning is essentially the computer and network-enabled transfer of skills and knowledge. E-learning applications and processes include Web-based learning, computer-based learning, virtual education opportunities and digital collaboration. Content is delivered via the Internet, intranet/extranet, audio or video tape, satellite TV, and CD-ROM. It can be self-paced or instructor-led and includes media in the form of text, image, animation, streaming video and audio.

The researcher used computer – based learning with macromedia flash 8 as the media to create the material. E-Learning approach utilized computer to compose and deliver the material. Macromedia flash 8 was the utility to create the development material, which suitable with the needs, curriculum and syllabus. As the research of Ashton, Beevers & Bull (2004) evaluated the pilot e-learning applications to be administered in private schools in Scotland. The application, which depends on the higher education system developed in UK, involves the formal evaluation of basic concepts of e learning and its effects on students. The application was administered on various groups and successful results were

attained in such fields as computer assisted math education or computer programming courses.

The form of the computer – based learning development material was in term of flash animation with reading text, motion images, animation, and audio for pronouncing the vocabulary. The material development consisted of 18 flash animations. There were two materials explained procedure text and the language features use. There were four-procedure text with different topic, the topic were cooking lettuce wraps, beauty pet, how to protect Facebook account and metamorphosis. The texts completed by the text, image animations and next and previous button. There are four materials were the vocabulary list of each topic text. Those were audio – phonetic vocabulary, students could listen to the audio by push flag button. There were two styles of pronunciation, British and American. The rest were the activities of each topic, the activities consisted of multiple choice, matching and cross word.

The second approach was comprehension-driven approach. According to BBM 9 journal, comprehension-driven approach is one way to optimize the learning approach language is to focus the effect of its application to our learners. Language learning that leads to understanding aspects of (Comprehension-driven language learning) is more focused on learning process the message from the source language to target language. Therefore, this approach emphasizes the receptive skills (Ability to accept) that includes listening and reading comprehension, compared with the aspect of productive skills (ability to produce) an emphasis on speaking and writing. Assumption that understanding is more important and very necessary to master than the first production of sound like

speaking and pronunciation is an attempt to focus more on understanding the form

of language learning

linguistics.

Here are some principles based on BBM 9 Journal in the learning that

emphasizes the understanding, among them:

(1). the more the students explore the significance, the more challenging him to

learn.

(2). Language acquisition is a process that continues to grow.

(3). Learners are in need of input comprehension.

(4). Productive skills are considered more difficult than receptive skills.

(5). Learners should not rely on memorizing.

(6). Materials that tend to keep in mind is actually going to give misconceptions,

especially against the competence of the learners.

(7). the human brain is actually the middle of analyzing language unnoticed by us.

(8). Humans learn by building on the language system.

Learning with an emphasis on aspects of this understanding is supported

by Stephen Krashen (1985) and Greg Thomson. They stated that language

learning would be more effective when based on aspects understanding.

The last approach is Reading Approach. This approach is more intended

for academic interest or with another word for a particular purpose. In addition,

The Reading Approach emphasizes the empowerment of learners reading skills.

Besides, to trace the history of how the language is spoken. Grammar is taught as

it relates and necessary to understand the contents of the text being read, in

addition to fluency (Fluency) in the reading to be one important factor being taught.

Pronunciation and speaking abilities, especially in a conversation are not emphasized. In contrast, vocabulary lists and graded according to level of difficulty are given to students for memorized. The goal for students with specific time can have a lot of vocabulary, so that he can easily understand any kind of text.

After deriving the topic on the protomateri, the researcher applied the protomateri and the material on flash animation. This media completed by the great visualization of the object of study and clear text to read. The expected could make students interest with the lesson.

### 3.4.3 Developing Material

The researcher developed the material in form of reading flash video material. The flash video consisted of several parts in term of pre – reading, main – reading, post – reading and vocabulary list. In each part, consisted of different activity according to the topic.

In early teaching before giving the flash animation, the researcher explained the text first and introduces the generic structure of procedure texts. The researcher also gave the language features use of the text.

The flash animation is in format of next and previous movement picture. Each picture described the procedure text in series. It helped students to build their comprehension. When students comprehend the first series or paragraph, the

students could continue to the next page of flash animation. When students did not understand yet about the steps or paragraph the students may re – read the previous page by pressing the previous button and read again. The students could see the difficult words' meaning on vocabulary list and learned how to pronounce British or American style.

In the first stage (pre – reading), the researcher showed the cover of flash animation only. In pre – reading students guessed what happen on flash and told what they just looking about before read a whole text on the flash video. It stimulated students to think deeply.

In the second stage (main – reading), the students read the flash animation of procedure text. This stage was the crucial stage where students used their mind to comprehend the text. The students played the flash animation and read the text; the researcher took the score of reading.

The last stage (post – reading), after reading the text, students did some activities related with each topic of procedure. It was to measure students understanding. After doing the activity the score will be appearance.

### 3.4.4 Expert Validation

After the reading material was finish, it should validate to the expert. The Expert would get a checklist of courseware. There were two expert validations, the English teacher of the school and the lecturer of Developing Material in Muhammadiyah University of Gresik. The researcher choosed both of the experts

because the expert have some criteria that suitable to validate the product of development.

The first expert validator was Mrs. Maflakhah, S.S. She is the English teacher in SMPM 1 Gresik. She has been teaching in this school for about twelve years since 2000 until now. She was a teacher in Aliyah Sidomukti Giri before teaching in this school (1995 - 2000). She born on 26 November 1970 and studied D3 English at Satya Widia Surabaya (1990 - 1993). She was a bachelor of English Literature (S.S) at Satya Widia Surabaya (1995 - 1997), and then continued her study to get Akta Mengajar at FKIP Muhammadiyah University of Surabaya (8 month) so she could teach until now in SMPM 1 Gresik.

It can be used as the evidence that the teacher mastered on teaching in SMPM 1 Gresik and expert to validate the product of teaching reading procedure text.

The second expert validator was Mr. Chandra Hadi Asmara, S.Pd, M.Pd. He has the criteria to validate the product because his thesis to pass the master degree was "Developing Phonology Material for 3[rd] Grade Students at Muhammadiyah University of Gresik". He was the lecture of material development subject in Muhammadiyah University of Gresik.

The function of the first expert validation was checking the similarity among the reading video material with the curriculum and syllabus. The function of the second expert validation was checking the instructional of the flash animation video.

The researcher gave the checklist to them. Then they scored it, so the researcher got comment and suggestion to improve the material. The checklist

consisted of some components: attractiveness, concept, mechanic, content and originality.

The attractiveness evaluated the appearance of the presentation including the use of fonts, colors, pictures, effects, sounds, etc. to enhance the presentation. The concept included of the story and the vocabularies given. Mechanic category included the evaluation of spelling and grammatical error. The content was to evaluate whether the product cover topic in depth with details and examples or not and the subject knowledge. The originality category was to evaluate the idea of the product and creativity.

### 3.4.5 Development of Validation

Development of validation is done after the expert validation gave the score and comment suggestion. It was to improve the product to be better. From those score and comment the researcher knew whether the product needs to improve, revise, add, or delete something inside the flash animation.

### 3.4.6 Tryout of Material

Tryout material is important to know the level of success of the product. It would be given for students of SMPM 1 Gresik in the 7th grade. The researcher entered to the classroom as a teacher, and the researcher taught first to explain about procedure text. This test conducted in class and computer laboratory because it needed computer to do the tryout. The tryout was in form of flash

animation activities. After students answering all of the questions on the flash animation activities, the score would appear on the flash screen. It was to know and to check the implementation of the media even it can be used as the media of learning procedure text for junior high school or not. The number of student that researcher used for tryout is 26 students of 7th grade in junior high school.

### 3.4.7 Revision

Revision would be done after try out the reading material for the students in order to make the flash video completely can be used for junior high school. The revision would be considering the expert suggestion to be better.

### 3.4.8 Final Product

The final product of this development was flash animation reading procedure material. After having the revision, the final product is in term of flash video reading material for junior high school. The flash video completed by moving pictures and text that stimulates students to learn English enjoyable and it increased students' motivation.

In each topic derived in term of pre – reading activity, main – reading activity and post – reading activity that is suitable with the syllabus, curriculum 2006 and needs analysis for junior high school. There will be the explanation of procedure text, the generic structure and the language features use in procedure text. The researcher composed four topics on the reading procedure that suitable

with the needs; it completed by the audio of vocabulary list on each topic. The

students did some activities related with the topic and the score directly appeared

on the screen after doing the activity.