CHAPTER III
RESEARCH METHODOLOGY

3.1 Development Model

This research is using research and development (R & D) method with ADDIE approach model. ADDIE stands for Analysis, Design, Development and Implementation, and Evaluation. Research and development method in this research aims to produce the product and test the feasibility of the product.

3.2 Research Subject

The data source in this study involves 10 students of tenth grade MA Ma’arif NU Randegansari. There are 27 students, 14 female and 13 male.

3.3 Instrument of the study

In this study researcher used several instrument to collect the data, these are the instrument:

1. Interview
   The researcher will conduct an interview toward the English teacher of MA Ma’arif NU Randegansari Driyorejo.

2. Questionnaire (before try out)
   The researcher will give questionnaire toward the 27 of tenth grade students of MA Ma’arif NU Randegansari.

3. Questionnaire (after the try out)
   After conducting try out, the researcher will conduct a questionnaire toward 10 of tenth grade students of MA Ma’arif NU Randegansari. The purpose of this questionnaire is to know the students comment about the online book. Moreover, it is also to know they are interest or not with the material, the topic of the story, the exercise and the program.
4. Validity Checklist

The validity checklist will be given to the expert. There will be two expert in this study, the first is media expert that is English Lecture of CALL Muhammadiyah University of Gresik and the second one is material expert that is English teacher in MA Ma’arif NU Randegansari Driyorejo.

3.4 Data Collection Technique

The data in this research are collected through interview, questionnaire, expert judgment and students checklist. The researcher does the interview to support the questionnaire data. Questionnaire sheet will be given to the students to answer the questions related to the target needs and learning needs. The result of the questionnaire data will be calculated by the following formula below:

\[ P(\%) = \frac{f}{N} \times 100 \]

The expert judgment sheet will be given to the experts after implementation to get the suggestion of the appropriateness of material. The formula is to determine the result of checklist. Then the checklist sheet used to know the feedback of students related to the materials that had be giving during try out.

3.5 Development Procedures

The Development procedure for developing the learning media here is using the ADDIE model. The exposure in Chapter II development of learning media of ADDIE is a cycle, so in this study the development flow is limited for one cycle. The steps of developing interactive learning media procedure as follows:

3.5.1 Analysis

Need analysis will give ideas on how to design the language teaching and learning. Before starting to develop reading materials, the researcher will conduct analysis toward 27 students of tenth of grade students of MA Ma’arif
NU Randegansari will be the subject in this study. The analysis is to find out what is expected by the students so that the material will be developed in accordance with their need. The analysis are:

1) Interview the teacher

The researcher will interview the English teacher of MA Ma’arif NU Randegansari to know the curriculum used, obstacles in teaching English, media of learning, the materials used, learning strategy, and the problem that facing by the students.

2) Give questionnaire to the students (before try out)

Next step is the researcher will give questionnaire to the 27 students of tenth of grade students of MA Ma’arif NU Randegansari. The purpose is to get information about target and learning need by their own. The questionnaire is consists of 14 questions that is related with target and learning need. From questionnaire before conducting try out, the researcher can design the course book that appropriateness with the students’ expectation. The question about target need are consists of 7 questions. Then the questions about learning need are consists of 7 questions. The classification of target and learning need are in table below:

<table>
<thead>
<tr>
<th>Need Analysis</th>
<th>Criteria</th>
<th>Number of Questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Need</td>
<td>Goal</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Necessity</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Lacks</td>
<td>3, 4</td>
</tr>
<tr>
<td></td>
<td>Want</td>
<td>5, 6</td>
</tr>
<tr>
<td></td>
<td>Procedures</td>
<td>7</td>
</tr>
<tr>
<td>Learning Need</td>
<td>Input</td>
<td>8, 9, 10</td>
</tr>
<tr>
<td></td>
<td>Setting</td>
<td>11, 12</td>
</tr>
<tr>
<td></td>
<td>Teacher’s role</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Learner’s role</td>
<td>14</td>
</tr>
</tbody>
</table>
The target needs in table above shows there are 5 criteria of target need, the first is goal that has one item in number 1 of questionnaire sheet. The second criteria is necessity that consist one item in number 2. The third criteria is lacks that consists of two items in number 3, 4. The fourth criteria is want that consists of four item in number 5, 6. The fifth criteria is procedures that consists of four item in number 7. The next is about the learning need there are 4 criteria, the first input that consists of six items in number 8,9,10. The second criteria is setting that consist of four items in number 11,12. The third criteria is teacher’s role that consist of one item in number 13. The fourth criteria is learner’s role that consist of one item in number 14.

3.5.2 Design

After the data collected and complete, the researcher will make a draft of syllabus of English learning for 10th grade students of Senior High School. Information which includes standard competencies, core competencies, themes, topics of learning, levels of difficulties, media and learning activities. Here the reseracher using task based steps model that will be applied in each activities combine with material that has been made then input in online book. Final result of this stage is complete syllabus English learning following steps and activity of task based. See Appendix ....

3.5.2.1 Draft content of material

According to the result of need analysis and syllabus, the researcher makes course grid for designing chapter. There are 4 chapters in the materials that adopted from the tenth grade English Subject syllabus and from need analysis. The 4 chapters which have been developed by the researcher entitled: Chapter 1 “Self Introduction”, Chapter 2 “Narrative”, Chapter 3 “Recount”, and Chapter 4 “Announcement”. Those chapters that developed by the researcher consists of materials and exercises. The skills is limited to the reading only which following task based steps and combine with task based- reading task. Chapter 1 consist of 7 tasks, in chapter 2
consist of 9 tasks, In chapter 3 consist of 7 tasks and in chapter 4 consist of 7 task. So, the whole tasks in the 4 chapters are 30 tasks within the materials book. Here are the short descriptions of the chapters:

1. Chapter 1

The theme is Self Introduction, it takes from the core competences. The chapter 1 students will be learn about Self Introduction formally and non formally. Students will taught steps on how to Introduce themself and students are able to comprehend about a public figure.

2. Chapter 2

The theme in chapter 2 is “Narrative Text”, it takes from the core competences. The chapter 2 will be learn about what is narrative, generic structure of narrative text, kinds of narrative and the students are able to comprehend about narrative text.

3. Chapter 3

The chapter 3, the theme is “Recount Text”, it takes from the core competences. The chapter 3 will be learn about what is recount and generic structure of recount text. The students are able to comprehend and make a recount text.

4. Chapter 4

The chapter 4, the theme is “Announcement”, it takes from the core competences. The chapter 3 will be learn about what is announcement and generic structure of announcement. The students are able to comprehend and make an announcement.

3.5.3 Development and Implementation

The researcher will complete and develop product according to draft syllabus that has been made in previous stage. Task Based of course is complete with media such as program online and also evaluation to speed up learning process and role of teacher became faster and easier.

3.5.3.1 Expert Validation
It is time for expert to give the validation of the Online Book which the researcher has developed. The purpose of this validation is to get score, comment and suggestion about the Online book. There will be two expert in this study, the first is English teacher in MA Ma’arif NU Randegansari Driyorejo will check the content of the story and the exercise also the language. Second expert is English Lecture will check media is interesting or not.

After Online Book has been checked by the expert, the researcher try to analyze the comment given. Then the researcher try to adjust part of Online Book.

3.5.3.2 Product Revision

The researcher will do revision if there are lack in the Online Book. The revision will depend on suggestion from the expert. Part revision might be attractiveness, concept, mechanics, content or originality.

3.5.4 Evaluation

This stage is tested on interactive learning media product with alpha test and beta test. The alpha test is addressed to the first user. First user on testing this learning media is the teacher.

Next phase is the beta test which addresses to the end user that is student. The researcher will conduct a try out to the 10 students of MA Ma’arif NU Randegansari Driyorejo about four times. Each meeting the researcher will give the same procedure to the students.

3.5.4.1 Questionnaire (after try out)

The last meeting, after conducting the try out, the researcher gives questionnaire to the 10 students of tenth grade MA Ma’arif NU Randegansari to know they are interested or not with the Online Book. The organization checklist of the students such below:
Component aspects According to Badan Standar Nasional Pendidikan (BSNP), the organization of checklist sheet for students consists of 4 indicators. In indicators there are the content of the materials, the language, the lay-out, and the presentation strategy. The questionnaire result can be helpful knowing whether the module is satisfying or not.

The way to measure the appropriateness of the materials, the researcher adapted the component aspects from Badan Standar Nasional Pendidikan (BSNP).

Organization Checklist for Expert Judgment :

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Indicator</th>
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| Students’ response | • Content of materials  
| | • Language  
| | • Lay-out  
| | • Presentation strategy |

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Indicator</th>
</tr>
</thead>
</table>
| Content | • Completeness of materials (Contained in the standards competence)  
| | • The expend of materials  
| | • The depth of materials  
| | • The accuracy of pictures and illustration  
| | • Examples and case  
| | • Encourage curiosity |

| Language | • Suitability of sentence structure  
| | • The effectiveness of sentence  
| | • Ability to motivate learners  
| | • Consistent use of icons  
| | • Conformity the development intellectual learners |

| Presentation | • The coherence concept  
| | • Examples of exercises |
• The wholeness meaning in activities

Graphic
• Color layout elements
• The accurateness and proportionate shape are accordance in reality
• The space between lines

The table above shows there are 4 criteria for the materials assessment that adapted from BSNP. Those criteria are about the content, the language, the presentation, and the graphic.

3.5.5 Final Product

After doing some revision and get validation from the experts, this program can be used as new learning media Online Book which can be used for the teachers of tenth grade senior high school in teaching reading. All of the English teacher can be access the Online Book using correct address.