CHAPTER III

RESEARCH METHOD

This chapter discusses several things such as research design and step of applied Research (Developing Research). Those things were very important for researcher in conducting the study and obtaining the empirical the results of the study.

3.1 Research Design

The design of this study is Research and Development (R&D) Study. It is because the study is designed to develop the English vocabulary material which can be applied in real education. The end of the study, the product will be in form of teaching material (.html) file, as media of vocabulary development.

For developing material, the researcher must pass some steps. There a lot of instructional development models. One of them used ADDIE Model adapted from Steven J McGriff.
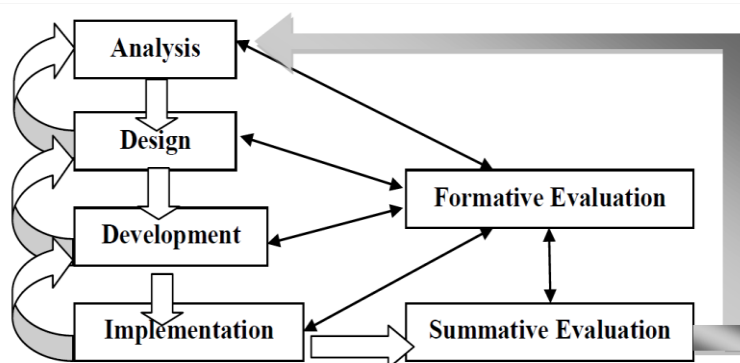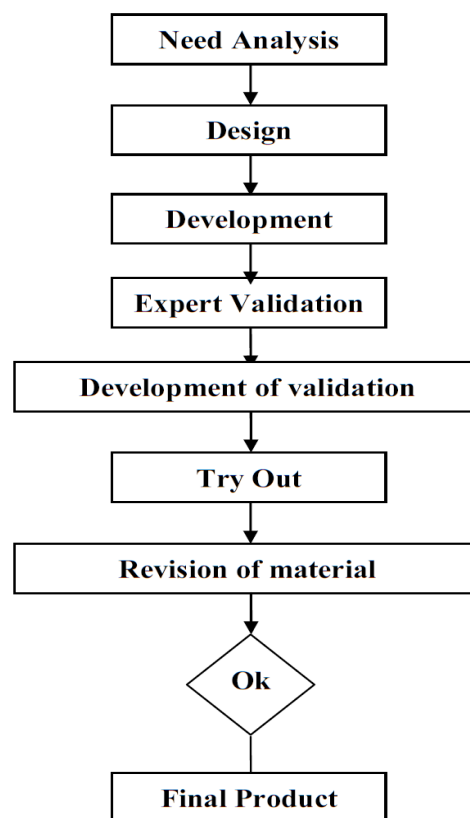

Figure 3.1 Steven J. McGriff's ADDIE Model
(http://www.e-learningguru.com/articles/art2_1.htm)

From the flow steps of Steven J. McGriff's ADDIE model, the researcher modifies the steps to conduct the research with adding an expert validation steps. It is because the researcher is not the expert one so that to measure the validity of the development product, the researcher needs 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 are displayed 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 will be used in this development study; it will be explained in the procedure of developing English vocabulary material for student in eighth grade junior high school.

3.2 Instrument of Data Collection

The researcher uses some instruments in collecting the data. First, interview will do with the English teacher of eighth grade in MTsN Gresik. Second, checklist of courseware will be given to the expert to measure validity of development material. The last, questionnaire will be given to the students before and after they get the material so we can measure the understanding level of students vocabulary ability and their motivation on learning process.

3.3 The Procedure of Developing English Vocabulary Material

3.3.1 Need Analysis

Need analysis is really important to make good material for the students. There is a stage to gather need analysis, that is to know the target need to compose the material which is suitable with the need and aim of the study.

3.3.1.1 Target Needs

The subject of this study is eighth grade of MTsN Gresik.It means that the students are between 12-14 years old. According to Piaget's theory, the students in this group age are in the stage of formal operational or they have been able to think abstractly so that they can solve their problems.

The researcher gives questionnaire to the students to know the target needs in learning vocabulary. Then, the researcher should know the syllabus, coursebook, and the material taught should be matched.

Curriculum in second semester included of three topics, those are celebration, legend, and friendship.

According to the result of questionnaire, the problem found that the students got difficulties in memorizing some vocabularies, although the teacher had taught the previous meeting. The researcher hopes by using J-Cross program the students become more interesting and easy memorizing some words.

The researcher tries to find the vocabulary for each topic by seeing vocabulary based on syllabus, lesson plan, and book. So, the researcher makes lists some vocabularies that possible to be used, be taught, and useful for the students. These are the lists:

List of English Vocabularies at 2nd Semester
8th Grade of MTsN Gresik

No	Topics	Vocabularies based on syllabus	Vocabularies based on lesson plan	Vocabularies from Priyana, Joko. 2008. *Scaffolding*. Jakarta: Depdiknas.
1	Celebration	1. Annual	1. Army	1. Annual
		2. Crowded	2. Boxing day	2. Carve
		3. Custom	3. Candles	3. Decide
		4. Disaster	4. Children's day	4. Devil
		5. Festival	5. Christmas	5. Drunkard
		6. Fireworks	6. Circumcision	6. Festival
		7. Forbidden	7. Day of the dead	7. Folklore
		8. Grant	8. Diwali	8. Forbidden
		9. Happy	9. Dragon	9. Grant
		10. Holly	10. Fasting	10. Immigrant
		11. Merry	11. Halloween	11. Pray
		12. Offering	12. Hanukkah	12. Prosperous

		13. Pray	13. Holy festival	13. Pumpkin
		14. Promise	14. Idul adha	14. Region
		15. Region	15. Jail	15. Reign
		16. Religion	16. Love	16. Sacrifice
		17. Safe	17. Mother's day	17. Trickster
		18. Tradition	18. People	18. Turnip
		19. Wish	19. Prison	19. Worship
		20. Worship	20. Puppet show	20. Forbidden
			21. Santa	21. Tempt
			22. Sekaten	22. Trap
			23. Soldier	23. Devil
			24. Thanks giving	
			25. Vacation	
			26. Valentine's day	
			27. Wedding party	
	Total	20	27	23
2	Legend	1. Afraid	1. Angry	1. Cure
		2. Angry	2. Beautiful	2. Curse
		3. Beautiful	3. Chili	3. Disease
		4. Curse	4. Cinderella	4. Evil
		5. Evil	5. Coast	5. Expect
		6. Fiction	6. Cucumber	6. Famous
		7. Folklore	7. Garlic	7. Fortune-teller
		8. Fortune-teller	8. Giant	8. Giant
		9. Giant	9. Golden	9. Haunt
		10. Handsome	10. Happy	10. Illness
		11. Kind	11. Holiday	11. Insist
		12. King	12. House	12. Jump
		13. Magician	13. Jungle	13. Mad
		14. Miracle	14. La llorona	14. Magician
		15. Poor	15. Little red riding hood	15. Merchant
		16. Prince	16. Malin kundang	16. Miracle
		17. Princess	17. Onion	17. Moral
		18. Queen		18. Noble

		19. Rich	18. Palace	19. Patient
		20. Step mother	19. Pretty	20. Poor
		21. Witch	20. Rescue	21. Prince
			21. Risk	22. Princess
			22. Sad	23. Proof
			23. Sangkuriang	24. Rich
			24. Sea	25. Spirit
			25. Snail	26. Step mother
			26. Snow white	27. Stinky
			27. Stay	28. Terrify
			28. Tired	29. Unfortunately
			29. Weary	30. Witch
			30. Witch	
	Total	21	30	30
3	Friendship	1. Amusing	1. Arrogant	1. Accusation
		2. Closely	2. Bear	2. Aid
		3. Enemy	3. Best	3. Amusing
		4. Fable	4. Clever	4. Attack
		5. Feel	5. Crocodile	5. Beg
		6. Fighting	6. Diligent	6. Bravely
		7. Friend	7. Famous	7. Cage
		8. Gift	8. Fisher	8. Coincidence
		9. Give	9. Friend	9. Discover
		10. Helpful	10. Hence	10. Examine
		11. Important	11. Lion	11. Fable
		12. Indeed	12. Mouse deer	12. Feel
		13. Kind	13. People	13. Fiction
		14. Love	14. Popular	14. Friendship
		15. Meet	15. Pupil	15. Heal
		16. Partner	16. Ring	16. Imprisoned
		17. Profit	17. Shepherd	17. Indeed
		18. Recognize	18. Short	18. Kinship
		19. Response	19. Snake	19. Meet
		20. Share	20. Student	20. Ownership

		21. Sincere	21. Tailor	21.Plain
		22. Value	22. Tall	22.Popularity
				23.Prey
				24.Proverb
				25.Pull
				26.Recognize
				27.Release
				28.Shepherd
				29.Surprise
				30.Thorn
				31.Touching
				32.Value
Total		22	22	32

3.3.1.2 Learning Needs

According to Hutchinson and Waters (1993), analyzing learning need is important for the teacher to get information about the learners in order to facilitate them well and it will stimulate, motivate and arrest learners' attention in the teaching and learning process.

The important thing when doing observation and analysis is syllabus. Syllabus is a set of teaching tool; it consists of the material use, resources, time needed, learning experience, etc. The researcher will develop the material based on the syllabus and curriculum 2006. The researcher used syllabus which has been already used by this school.

The material could be useful for the students to master vocabulary. That is why the researcher tries to find the most coming up issue in junior high school by giving questionnaire to the students. From this way the researcher knows that students like to operate computer to play game, and the researcher realizes that computer is the potential media to teach vocabulary. The researcher tries to make some variations that can be done in the classroom. The variation is one of the major factors in teaching learning process that can motivate and interest the students to learn English vocabulary. The teacher usually teaches by using coursebook. One of the variations is by using computer to motivate the students, because they have never learned with this kind of media. It will be new thing for them in learning English.

The researcher chooses J-Cross program as a media to teach English vocabulary because it is simple and free software that is useful to design digital educational materials, especially exercises and tests. It is a media to create digital crossword puzzle. The researcher uses digital crossword puzzle to review vocabulary and lessons for all subjects because digital crossword puzzle to encourage logical thinking and correct spelling. The pedagogical advantages of this combination of tools are clear. Adding a lexical resource to digital crossword computer-based exercise motivates

the student to learn, to try, to make mistakes, to explore and try
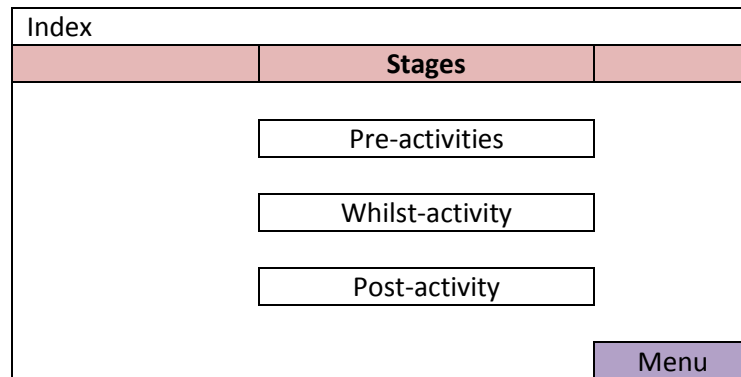
again.

3.3.2 Design Instruction

The design is built based on need analysis of the students. The

researcher will develop the material by using J-Cross program. The

program is in the form of html (a file format of firefox). It is completed by

words, pictures, and sounds. The researcher designs the material

development specially to help the eight grade student in vocabulary

mastery.

Here is the design of material deveopment vocabulary. The

researcher will develop three topics in the second semester, these are

celebration, legend, and friendship. For instance:

1) Main menu: it consists of three topics.
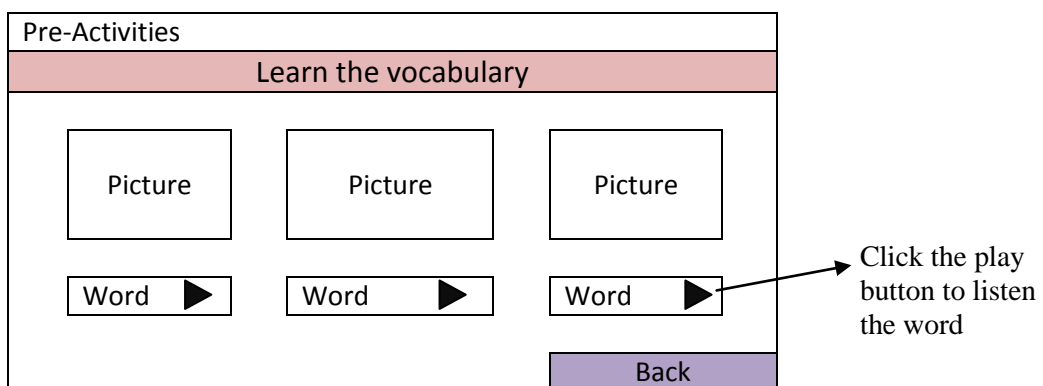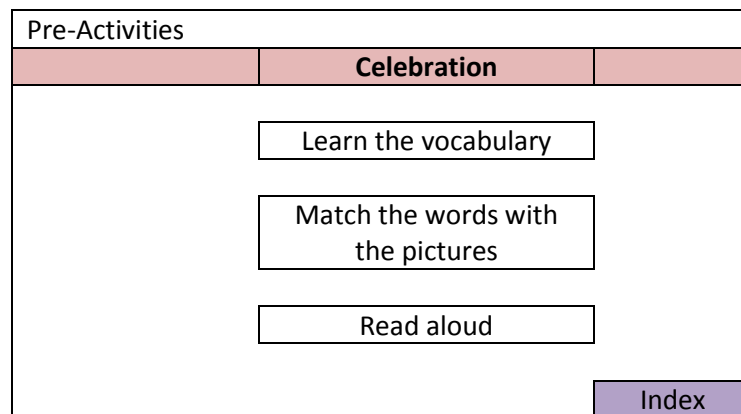
Menu		
	VOCABULARY FUN	
Topics	CELEBRATION	
	LEGEND	
	FRIENDSHIP	
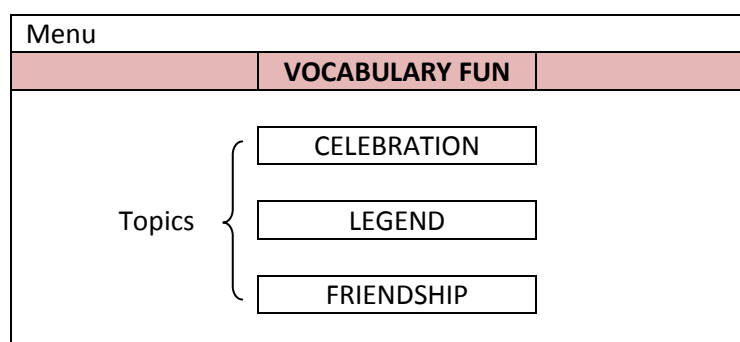
2) Index: Each topic will be divided into three stages. These are pre-

activities, whilst-activities, and post-activities.

```
Index
┌─────────────────────────────────────────────────┐
│ Index                                           │
├──────────────────┬─────────────┬────────────────┤
│                  │   Stages    │                │
├──────────────────┴─────────────┴────────────────┤
│              ┌─────────────────┐                 │
│              │  Pre-activities │                 │
│              └─────────────────┘                 │
│              ┌─────────────────┐                 │
│              │ Whilst-activity │                 │
│              └─────────────────┘                 │
│              ┌─────────────────┐                 │
│              │  Post-activity  │                 │
│              └─────────────────┘                 │
│                                  ┌─────────────┐ │
│                                  │    Menu     │ │
│                                  └─────────────┘ │
└─────────────────────────────────────────────────┘
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3) Pre-activities: it consists of three language skills activities: listening, speaking, and reading. The students learn the vocabulary, match the words with the pictures, and read the text then match the words with its synonyms.

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┌─────────────────────────────────────────────────┐
│ Pre-Activities                                  │
├──────────────────┬─────────────┬────────────────┤
│                  │ Celebration │                │
├──────────────────┴─────────────┴────────────────┤
│              ┌─────────────────────┐             │
│              │ Learn the vocabulary│             │
│              └─────────────────────┘             │
│              ┌─────────────────────┐             │
│              │ Match the words with│             │
│              │     the pictures    │             │
│              └─────────────────────┘             │
│              ┌─────────────────────┐             │
│              │     Read aloud      │             │
│              └─────────────────────┘             │
│                                  ┌─────────────┐ │
│                                  │    Index    │ │
│                                  └─────────────┘ │
└─────────────────────────────────────────────────┘
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┌─────────────────────────────────────────────────┐
│ Pre-Activities                                  │
├─────────────────────────────────────────────────┤
│              Learn the vocabulary               │
├─────────────────────────────────────────────────┤
│  ┌────────┐   ┌────────┐   ┌────────┐           │
│  │Picture │   │Picture │   │Picture │           │
│  └────────┘   └────────┘   └────────┘           │
│                                       Click the play
│  ┌──────┐     ┌──────┐     ┌──────┐   button to listen
│  │Word ▶│     │Word ▶│     │Word ▶│   the word
│  └──────┘     └──────┘     └──────┘           │
│                           ┌─────────────┐       │
│                           │    Back     │       │
│                           └─────────────┘       │
└─────────────────────────────────────────────────┘
```

Pre-Activities	
Match the words with the pictures	

Word	Picture
Word	Picture
	Picture

Back

Pre-Activities
Read Aloud

| Reading text	Princess	:	.... ▽
			King
			Pretty
			Queen

Choose the correct
one its synonym
through arrow down

Back

4) Whilst-activity: it is a main activity. It is in the form of digital crossword puzzle that is completed by some clues in the form of words, pictures, and sounds. The students have learned some vocabularies in pre-activities.

Whilst-Activity		
	Celebration	

Do a crossword puzzle

Index

Whilst-Activity	
Do a crossword puzzle	
	Back
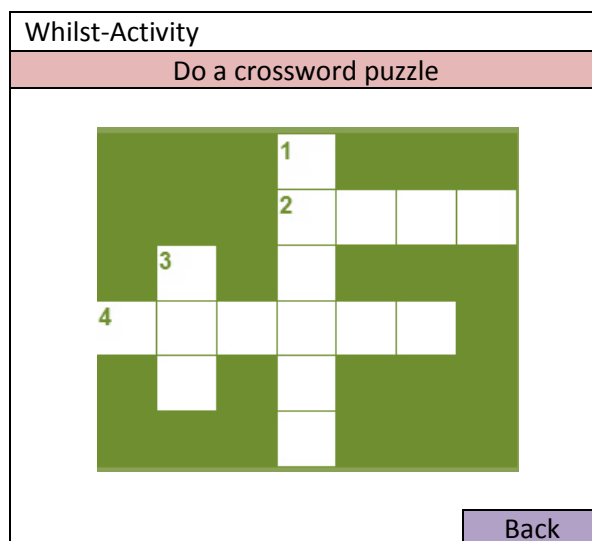
5) Post-activity: it is last activity. The stage is reviewing and clarifying the students's vocabulary by making sentences to develop their vocabulary.

Post-Activity		
	Celebration	
	Make sentence	
		Index
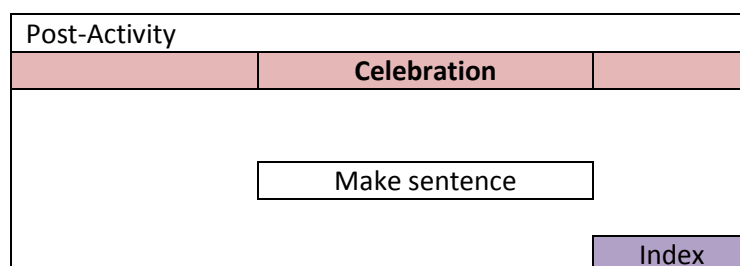
3.3.3 Developing Material

The researcher develops the material in a form of *html* in CD-ROM. This program consists of three stages;

Pre activities, the students would be introduced with several vocabularies which divided into some different topics. In each topics, the students will see some pictures which is completed with the play button to listen the word, match the words with the pictures, read the text, and match the words with its synonym.

Whilst activity, the students are invited to try out their ability in recognizing certain vocabularies which they have learned some vocabularies in pre activities. It is in the form of crossword puzzle which is completed by some clues in the form of words, pictures, and sounds.

Post activity is reviewing and clarifying the students's vocabulary by making sentences to develop their vocabulary.

3.3.4 Expert Validation

After the program is finish, it should be validated to the expert. The experts will get a checklist of courseware. There are two experts validations; the English teacher of the school and the Advisor in University of Muhammadiyah Gresik.

The function of the first expert validation is checking material with the curriculum and syllabus. The function of the second expert validation is checking the instructional of the material.

3.3.5 Development of Validation

When the expert validation is finish, the researcher will see the score, comment, and suggestion. It is to improve the product to be better. From those score and comment the researcher know whether the material needs to improve, revise, add, or delete.

3.3.6   Tryout of Material

After finishing the material development, the researcher will try out the material or program to the eighth grade students of MTsN Gresik. This test is the form of *html*. The researcher takes six students randomly and the teacher helps the researcher to do the try out.

3.3.7   Revision of Material

Revision will be conducted after the researcher tries out the material for the students in order to make the material completely can be used for eighth grade of junior high school. The revision will be considering the expert's suggestion. There were five components which used for the evaluation; attractiveness, concept, mechanics, content, and originality.

3.3.8 Final Product

This is the last step of developing materials. After having the revision, the final product in the form of *html* in CD-ROM is ready to be applied in the clasroom. This program is completed by words, pictures, and sounds which is expected to be able to make the students interested in learning English. The researcher decides three topics in developing material, these are celebration, legend, and friendship. Each topic has several activities such as; introducing the vocabularies by listening,

repeating, matching, reading text, doing crossword puzzle, and writing

simple sentence.