CHAPTER IV

RESULTS

In this chapter, researcher describes the discussion about Presentation of Data, Data Analysis, and Revision of the Product

A. Presentation of Data

This part is provides the data collected from try-out. The try-out in this study consists of expert validation and student's evaluation. The presentations of those data are present as follow.

1. The Result from Evaluation

The result of evaluation in this research consists of expert validation and try-out of the product result. The purposes were to know the validity of this media and the quality of the product. And this is the result of evaluation:

a. The Expert Validation Result

To know the validity of this media the researcher conducted validation to some experts. The criteria of media validation for the expert divided into two criteria, those were educational criteria for teaching material expert and design or layout criteria for teaching media exert. The result of this validation was to revise the media before this media is tried-out to the class.

Using the questioner that developed before, the expert of teaching material validated the media that related to educational material criteria. In this questionnaire the expert of teaching material should respond 12

questions. The expert of teaching material is English teacher from MAN 3 Tulungagung.

The data of experts of teaching material validation provided in following table.

Table 4.1. Expert of Teaching Material Validation Result

No	Item	Scale	Category
1	1	4	H
2	2	4	H
3	3	4	H
4	4	4	H
5	5	4	H
6	6	4	H
7	7	4	H
8	8	4	H
9	9	4	H
10	10	4	H
11	11	4	H
12	12	4	H
N		48	
N		60	
H=High L=Low			

After know the score of teaching material validation, to know the validity of this media that related to design and layout criteria, the researcher conducted validation to expert of teaching media also by using questionnaire that developed by the researcher before. In this questionnaire the expert of teaching media should respond 16 questions that related to design and layout criteria of this product. And because this thesis focusing on Media development, There are

$$Percentage = \frac{score\,(n)}{score\,maximal\,(N)} \times 100$$

[Type here]

$$= \frac{48}{60} \times 100$$

2 experts of teaching media design, they are IT teacher from MAN 3 Tulungagung as a user of the media and D1 ITS Prodistik Teacher of MAN 3 Tulungagung.

Table 4.2. Expert of Teaching Media I Validation Result

No	Item	scale	Category
1	1	4	H
2	2	4	H
3	3	4	H
4	4	4	H
5	5	4	H
6	6	5	H
7	7	5	H
8	8	5	H
9	9	4	H
10	10	3	H
11	11	3	H
12	12	4	H
13	13	4	H
14	14	5	H
15	15	4	H
16	16	3	H
N		65	
N		80	
H=High L=Low			

$$\text{Percentage} = \frac{score\,(n)}{score\,maximal\,(N)} \times 100$$

$$= \frac{65}{80} \times 100$$

=81.25%

[Type here]

Table 4.3. Expert of Teaching Media II Validation Result

No	Item	scale	Category
1	1	4	H
2	2	4	H
3	3	4	H
4	4	5	H
5	5	5	H
6	6	4	H
7	7	4	H
8	8	5	H
9	9	4	H
10	10	4	H
11	11	4	H
12	12	4	H
13	13	4	H
14	14	5	H
15	15	5	H
16	16	4	H
N		69	
N		80	
H=High			
L=Low			

$$Percentage = \frac{score\,(n)}{score\,maximal\,(N)} \times 100$$

$$= \frac{69}{80} \times 100$$

$$= 86.25\%$$

b. **The Try-Out of the Product Result**

To know the attractiveness of this media the researcher conducted try-out that related to technical expediency quality criteria. The try-out of the product divided into two try-outs, those are small group try-out and field trial. Both small group and field trial try-out were use questionnaire to collecting the data. In this questionnaire the students should respond 10 questions according to technical quality and expediency criteria.

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Small group try-out there are 10 respondents that gave evaluation related to quality this product. The data of small group evaluation result can be seen in following table.

Table 4.4 Small Group Try-Out Result

No	Item	Scale					Respon-dent	Total score	mean	category
		5	4	3	2	1				
1	1	4	6	0	0	0	10	44	4.4	H
2	2	2	8	0	0	0	10	42	4.2	H
3	3	4	3	3	0	0	10	41	4.1	H
4	4	4	3	3	0	0	10	41	4.1	H
5	5	3	6	1	0	0	10	42	4.2	H
6	6	0	7	2	0	1	10	35	3.5	H
7	7	7	3	0	0	0	10	47	4.7	H
8	8	3	1	5	1	0	10	36	3.6	H
9	9	6	3	1	0	0	10	45	4.5	H
10	10	3	6	1	0	0	10	42	4.2	H
N	415									
N	500									
H=High L=Low										

$$\text{Percentage} = \frac{score\,(n)}{score\,maximal\,(N)} \times 100$$

$$= \frac{415}{500} \times 100$$

$$= 83.00\%$$

In other hand, field trial try-out there are 31 respondents that gave evaluation related to quality expediency this product. The data of field trial evaluation result provide in table below.

Table 4.5 Field Trial Try-Out Result

No	Item	Scale					Respon-dent	Total score	mean	category
		5	4	3	2	1				
1	1	8	19	3	1	0	31	127	4.16667	H
2	2	7	2	1	2	0	31	126	4.0645	H

[Type here]

			1						2	
3	3	11	15	4	0	1	31	128	4.12903	H
4	4	6	14	10	1	0	31	118	3.80645	H
5	5	14	9	7	1	0	31	129	4.16129	H
6	6	3	13	12	2	1	31	108	3.48387	H
7	7	20	10	1	0	0	31	143	4.6129	H
8	8	5	10	15	1	0	31	112	3.6129	H
9	9	14	11	5	1	0	31	131	4.31034	H
10	10	5	23	2	1	0	31	125	40.3226	H
N		1247								
N		1550								
H=High L=Low										

$$Percentage = \frac{score\,(n)}{score\,maximal\,(N)} \times 100$$

B. Data Analysis $= \dfrac{1247}{1550} \times 100$

$= 80.46\%$ This part describes about data analysis from data presentation above. Then the conclusion of this data analysis is useful to revise the product and to know the expediency of the product.

1. **Data Analysis of Evaluation Result**

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This part discuss about data analysis from validation and the try-out of the product. The validation of product result is used to revise the product and the try-out is used to evaluate the expediency and quality of the product.

a. **Data Analysis of Validation Result**

From the presentation data of teaching material expert validation result above, the expert give B (Baik) or 4 Score in 12 points. They are (1)Program memiliki materi konsep.(2) Program sudah sesuaidengan kurikulum yang berlaku. (3) Isi materi mempunyai konsep yang benar dan tepat. (4) Program dapat dijadikan media belajar dan pengalaman sesuai dengan perkembangan kognitif siswa SMA/MA. (5) Program dapat digunakan untuk pembelajaran individu, kelompok kecil, dan kelas. (6) Program relevan dengan materi yang harus dipelajari siswa. (7) Program memiliki contoh soal latihan yang sesuai dengan isi materi. (8) Program memiliki soal latihan yang sesuai dengan isi materi. (9) Program memunyai feedback terhadap input yang diberikan oleh pengguna. (10) Feedback bersifat positif dan pengguna tidak merasa bosan. (11) Feedback relevan terhadap respon siswa. (12) Feedback mendorong siswa untuk memperoleh jawaban yang tepat. and the researcher get the percentage result of educational criteria from expert of teaching material was 80.00%. It means that the teaching material for media is good and suitable for learning activity in classroom. And appropriate with curriculum.

And from the presentation data of teaching media expert validation result above, researcher get the percentage result of design and layout criteria from expert of teaching media I was 81.25%. And from the validation result of teaching media expert II was 86.25%. Then, from the validation result between two of teaching

media experts, the researcher calculate that the mean or average of the percentage result was 83.75%.

According to average of percentage result of teaching media expert above the category of qualitative is very good based on design and layout. So, the researcher can conclude that this teaching media is valid and suitable for classroom activity according to design and layout criteria and ready to implement in the class for more evaluation.

In other side, the two teaching media experts also gave suggestion related to design and layout criteria for this teaching media. The suggestions from them is used to revise this product, the suggestions are:

1. Some button not working, the researcher will repair it.
2. Some link is broken, the researcher will fix it.
3. And change some color and animation.

b. Data Analysis from Try-out Result

Based on the evaluation result above from small group try-out that related to technical quality criteria was 83.00 %. According to the range percentage, we can conclude that this teaching media had very good quality. So, this teaching media is proper and ready to implement in field trial evaluation.

Then, the data from the try-out of large group, in this case field trial try-out, the percentage was 80.46 %. Based on the range of percentage of qualitative

criteria, the researcher can conclude that this teaching media had very good quality and proper for teaching activity.

C. Revision of the Product

Based on the data validation result from the teaching media expert, there are some revisions for this teaching media. The revision of the product is used to make the product better. The components of the product which are revised are: Some button not working. Some link is broken. And change some color and animation. And then, the result of the revision describes below:

1. Some button not working.

    Before the revision, some button in unit activity list is not working, and the researcher has been fix it
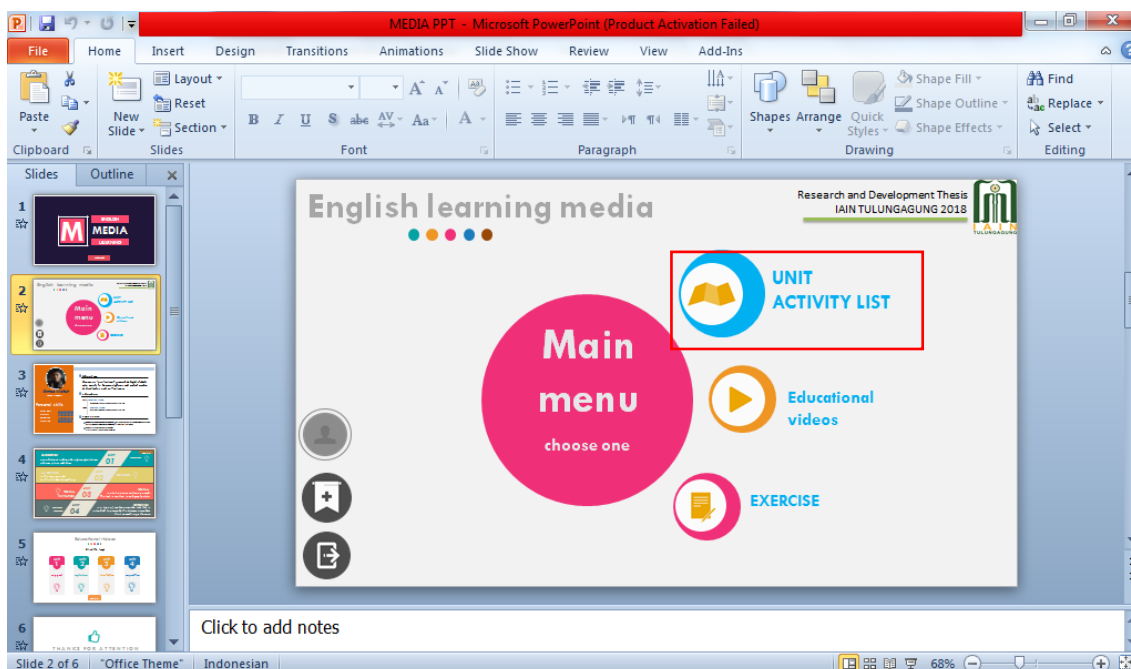
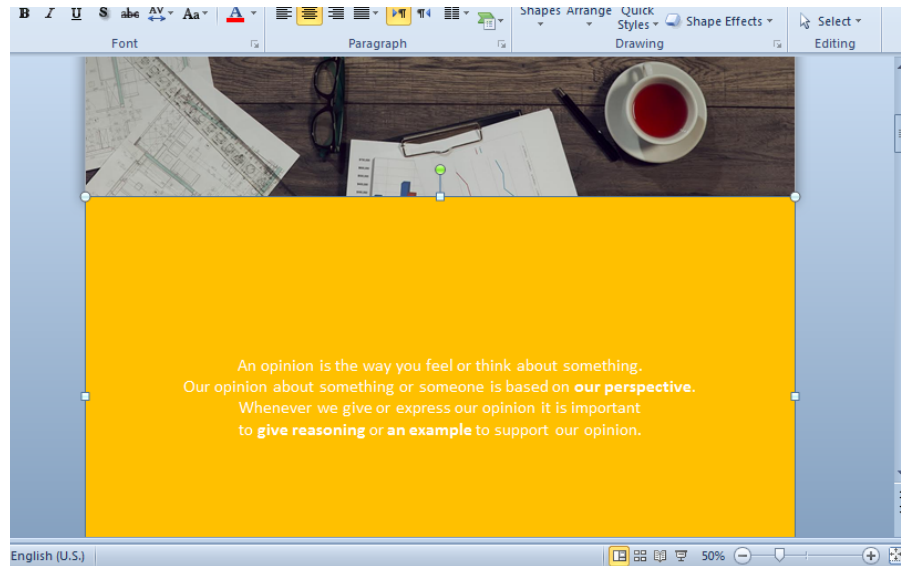**Picture 4.1. The broken button in main menu that not work.**

2. Some link is broken.

[Type here]

Before revised, some link in "selecting unit" is broken because of the error-copying. But this problem already solved by researcher quickly.

3. Change some color and animation.

Before revised, the researcher use striking color background in some slide, and change it for better look.

Picture 4.2. One of striking background Color before Revised.
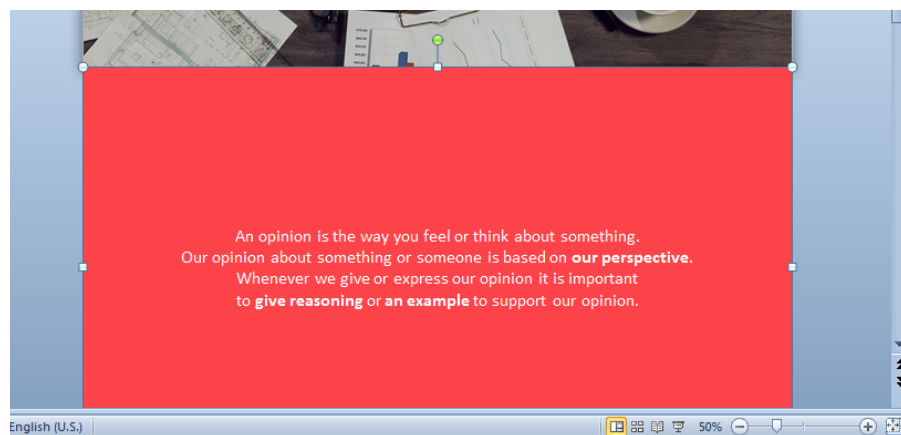
Picture 4.2. The background after Revised.

[Type here]

[Type here]