CHAPTER IV

FINDINGS AND DISCUSSION

This chapter presents the research findings and discussion of the study. The researcher describes the result of the data in findings part. While, in the discussion part, the researcher deduces the findings about pre-service teachers' ability in designing instructional media in the microteaching (PPL 1) class in English Teacher Education Department of Sunan Ampel State Islamic University.

A. Research Findings

The research was conducted from May until June 2015 using the data collection technique that has been stated in the research method chapter. The data collected were used to answer the research question of how the pre-service teachers' ability in designing instructional media in microteaching (PPL 1) class is. To show the result of this study, the researcher provided the findings about pre-service teachers' ability in designing instructional media.

1. The findings of pre-service teachers' ability in designing visual instructional media

   In researching pre-service teachers' ability in designing instructional media, the data of how the pre-service teachers' ability in designing visual instructional media in microteaching (PPL 1) class were needed by the researcher. Based on the observation, the visual instructional media found that

were used by the pre-service teachers were PPT slide, carton-made media (map, announcement, and praise expression), and pictures. In data analyzing process, the data of pre-service teachers' ability in designing visual instructional media which were gained from the rubric were tabulated. The scores of the pre-service teachers could be known from the following table.

Table 4.1

The Result of the observation

No	Research Subject	Criteria							∑
		C1	C2	C3	C4	C5	C6	C7	
1	p1	4	4	4	2	4	4	4	26
2	p2	3	2	2	3	3	4	4	21
3	p3	4	4	2	3	4	4	4	25
4	p4	2	2	4	3	3	3	3	20
5	p5	2	2	3	4	4	3	4	22
6	p6	3	2	3	4	4	4	4	24
7	p7	3	3	4	4	3	3	3	23
8	p8	4	4	4	4	4	3	3	26
9	p9	3	3	2	3	4	2	2	19
10	p10	3	3	2	3	3	3	3	20
11	p11	1	2	3	3	3	2	3	17
12	p12	4	4	4	4	4	4	4	28
13	p13	4	4	2	3	4	3	3	23
14	p14	4	4	4	4	4	4	4	28
15	p15	4	4	4	4	4	4	4	28
16	p16	3	2	3	4	4	2	3	21
	∑ FX	51	49	50	55	59	52	55	371
	Mean	3,19	3,06	3,13	3,44	3,69	3,25	3,44	23,19

Notes:

C1: The message of the visual media is clear.

C2: The visual media contain sufficient information.

C3: The visual media are visible to all students.

C4: The visual media contain readable fonts.

C5: The visual media contain limited number of fonts.

C6: The use of colors combination is effective (the colors work together).

C7: The contrast between the lettering and background are clear.

The average of pre-service teachers' score $= \frac{the\ total\ of\ students'\ score}{the\ number\ of\ students}$

= 371 / 16

= 23, 19

Based on the result of the observation, the average of the pre-service teachers' score was 23, 19. Considering the average, so if the score was above 23, 19, it meant that the pre-service teachers had high ability in designing visual instructional media, while if the score was below 23, 19, it meant that the pre-service teachers have low ability in designing visual instructional media. According to the findings then compared with the average score, the result of each individual level could be known. Thus, there were 7 pre-service teachers who were categorized as high, 2 pre-service

teachers who were categorized as average, and 7 pre-service teachers who were categorized as low.

After knowing the average score from the observation, the standard deviation was needed to know, and the result should be analyzed by using T- test formula. Then, the result of the standard deviation was presented below.

Table 4.2

Standard Deviation (SD)

	N	**Mean**	**Standard Deviation**
Pre-service teachers' ability in designing visual instructional media.	16	23. 19	3. 429

After that, the t-value was calculated as following.

μo = 75% of mean

= 75% x 23. 19

= 17. 39

$$t = \frac{\bar{x} - \mu_o}{s/\sqrt{n}}$$

$$= \frac{23.19 - 17.39}{3.429/\sqrt{16}}$$

$$= \frac{5.8}{0.857}$$

$$= 6,767 \approx 7$$

From the result, the result of the t-value was 6, 767 and then it was rounded into 7. After that, the level of confident (α) was decided as 0, 05. According to Sukmadinata, in deciding the level of confident, it depends on the amount of sample. The more sample are used, so the level of confident will be higher, and the less sample are used, so the level of confident will be lower.[42]

α = 0, 05

After deciding the level of confident (α), the degree of freedom (df) was found. From the result, it was known that the df was 15. Setiyadi stated that the df determines that the certain t value, whether it is significant or not, and also the df depends on the amount of sample.[43]

Df = n – 1

=16 – 1

= 15

[42] Sukmadinata, *Metode Penelitian Pendidikan, 262*.
[43] Setiyadi, *Metode Penelitian Untuk Pengajaran Bahasa Asing: Pendekatan Kuantitatif Dan Kualitatif*.

Statistical hypotheses

Ha : μo > 75%

Ho : μo < 75%

Ha accepted if t-value > t-table

Ho accepted if t-value < t-table

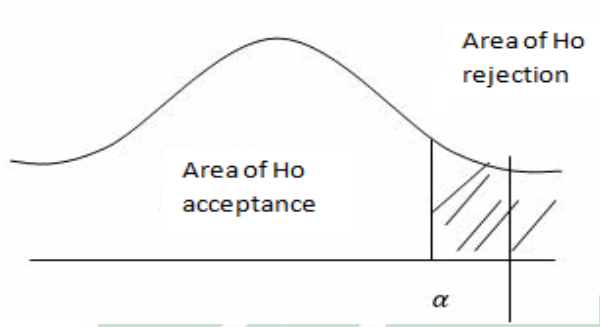
By calculating the t-table from Microsoft Excel, the t-table was got as below.

Table 4.3

t-value and t-table

	N	**t-value**	**t-table**
Pre-service teachers' ability in designing visual instructional media	16	7	2.131

Considering the result of t-value and t-table, it can be compared between t-value and t-table in which t-value > t-table or 7 > 2.131, so Ha was accepted and Ho was rejected.



2.131 7

Deducing the result, more than 75% of pre-service teachers in the microteaching (PPL 1) class of English Teacher Education Department of Sunan Ampel State Islamic University had high ability in designing visual instructional media.

B. Discussion

Instructional media has become a compulsory component when the teachers are delivering the lessons to the students. This is because as developed as today's era where the technology has been developing rapidly, so do the teachers that are demanded to create creative and interesting teaching by using any sources, not only using text from the books. As stated in the background of the research that having supply of aids will enable teachers to create variety of the activities during the

teaching process.[44] Moreover, the use of instructional media will increase students' motivation during the lesson.[45]

In this research, the data were taken by using observation technique with the rubric as the assessment tool. Then, according to the result, the average of pre-service teachers' score in designing visual instructional media was 23. 19. In term of individual level, there were 7 pre-service teachers categorized as high, 2 pre-service teachers categorized as average and 7 pre-service teachers categorized as low.

During the observation, the research only focused on the visual instructional media. As stated by Smaldino et al, the visual media can be diagrams on a poster, photographs, graphics, and etc.[46] Thus, the researcher only assessed the visual media that formed as power point slide, carton-made media, and pictures.

In designing visual instructional media, the 7 (seven) criteria of visual instructional media as stated in the second chapter were used. The rubric contained the criteria of the visual instructional media with the scores from 1 to 4. The criteria in designing visual instructional media consist of the clarity of message on the visual instructional media[47], the sufficient information on the visual instructional media, the visibility of the visual instructional media to all students, the readable fonts on the

[44] Eleanor Wall Thonis, *Teaching Reading to Non-English Speakers* (California: Collier-Macmillan, 1970), 206.
[45] Ruis, Muhyidin, and Waluyo, *Instructional Media*. (Jakarta: Ministry of National Education, 2009), 3.
[46] Smaldino et al., *Instructional Technology and Media for Learning*, n.d. 10.
[47] Lucas, *The Art of Public Speaking*. (New York: McGraw-Hill, 2009), 275

visual instructional media, the color combination on the visual instructional media, and the contrast between the lettering and background.

In the first criterion in designing visual instructional media, which is about the clarity of message in designing visual instructional media, most pre-service teachers got score of 4 and only one pre-service teacher got score of 1. In assessing the clarity of message, the researcher considered the use of language which should be simple and clear and to the point.[48] Mostly, the pre-service teachers were able to get score of 4 in the first criterion.

In the second criterion of designing visual instructional media which was about sufficient information of the visual instructional media, the content of the visual instructional media were considered whether there was the information needed or not. If the information needed was available, the researcher also had the indicators that the sufficient information should be clear, understandable and to the point.[49] According to the observation, most pre-service teachers got score of 4 that meant they had high ability in this aspect.

The third criterion was about visibility of the visual instructional media to all students. Here, the visibility of the visual instructional media should big enough adjust with the room, so it could be easily seen by the students. There were 7 pre-service teachers got score of 4, 4 pre-service teachers got score of 3 and 5 pre-service teachers got score of 2.

[48] Ibid.26
[49] Ibid.

In the fourth criterion, the results of pre-service teachers who got score of 4 were 7, score 3 were 7 and score 2 were 2. This aspect was about readable fonts on the visual instructional media. This aspect was considered by the researcher that it should be readable without using decorative fonts, and also the font size should be able to read clearly by the students.

In term of the limited number of type fonts, there were 11 pre-service teachers who applied limited number of type fonts. Good visual instructional media should avoid too much use of variety of fonts, because it could be distracting. Here, the use of different type fonts should be no more than two types of font, the first was for the heading and another for the subtitle or other text.[50]

In the use of colors combination which was in the sixth criterion in designing visual instructional media, the researcher considered good combination of the colors. The use of the colors should be not tough and easily to be differentiated.[51] For example, the use of orange and red colors or blue and purple colors are too close together. In this part, the result was quite similar between the score 3 and 4. There were 7 pre-service teachers got 4 and six pre-service teachers got 3, and the rest got the score of 2.

In the last aspect which was about the contrast between the lettering and background, there were 8 pre-service teachers who got score of 4, 7 pre-service teachers who got score of 3 and 1 pre service teachers who got score of 2. Here, the

[50] Ibid. 277
[51] Ibid. 278

contrast between the lettering and background should be clear, for example dark print on a light background or light print on a dark background.[52] By applying clear contrast, the students will get easy to see everything on the media clearly.

Considering all findings from the observation, the data should be processed until the overall results found. So that, after knowing the result, it would be compared with the hypotheses. The hypotheses in this research were: Ha : μo > 75% and Ho : μo < 75%. Thus, to answer the hypotheses, the result between t-value and t-table were compared. Based on the result, the result of t-value was 7 and t-table was 2. 131, it means that the t-value > t-table, so Ha was accepted.

[52] Ibid.