

## CHAPTER IV

### RESEARCH RESULTS AND DISCUSSION

#### A. Research Results

The research results of *The Readability Level of English Reading Texts In The Senior High School Textbook* was in the form of Cloze Test scores, Fry Graphs, and SMOG Formula. There were sixteen texts consisting of five different texts types for the tenth-grade students of senior high school in the first semester. It was published with the revised edition by the Ministry of Education and Culture in 2017. The sixteen texts contained in this textbook had been tested in three schools as the sample of this study. The three schools were 3, 6 and 7 Yogyakarta State Senior High Schools.

The following are the findings and descriptions of the research which were presented in detail in the form of diagrams and tables. These diagrams and tables are the average results of the Cloze Test score, the Fry Graph, and SMOG Formula. Those results and its comparisons are presented in the form of diagrams and tables;

#### 1. Cloze Test

The following are diagrams and tables that describe the results of the text readability test using Cloze Test in detail.

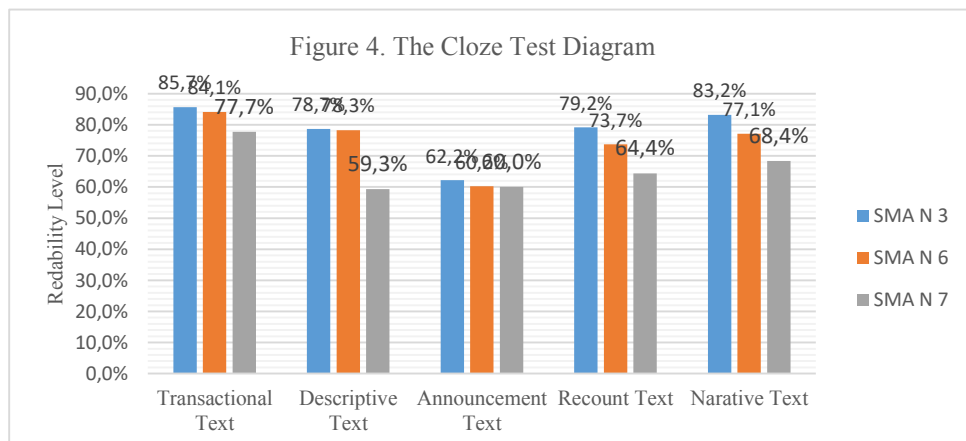


Table 7. The mean score of Transactional Text.

No	Sechool name	The mean score of Transactional Text				Total	Percentage Score
		Text 1 (10)	Text 2 (15)	Text 2 (15)	Text 4 (15)		
1	SMA N 3 Yogya	235/240	258/300	349/405	213/285	1055	85,7%
2	SMA N 6 Yogya	266/290	308/405	372/405	320/405	1266	84,1%
3	SMA N 7 Yogya	239/300	364/450	296/405	338/435	1237	77,7%
	<b>Mean</b>	89,1%	80,5%	83,7%	71,7%	-	82,5%

Table 8. The mean score of Descriptive Text.

No	Sechool name	The mean score of Descriptive Text			Total	Percentage Score
		Text 1 (20)	Text 2 (15)	Text 3 (20)		
1	SMA N 3 Yogya	433/540	175/285	372/420	980	78,7%
2	SMA N 6 Yogya	470/540	218/405	522/600	1210	78,3%
3	SMA N 7 Yogya	248/540	258/435	262/320	768	59,3%
	<b>Mean</b>	71%	51,1%	86,2%	-	72,1%

Table 9. The mean score of the Announcement Text

No	Sechool name	The mean score of the Announcement Text		Total	Percentage Score
		Teks 1 (10)	Teks 2 (5)		
1	SMA N 3 Yogya	130/200	60/105	190	62,2%
2	SMA N 6 Yogya	146/270	98/135	244	60,2%
3	SMA N 7 Yogya	190/300	38/80	228	60,0%
	<b>Mean</b>	60,5%	61,2%	-	60,7%

Table 10. The mean score of Recount text.

No	Sechool name	The mean score of Recount text				Total	Percentage Score
		Teks 1 (20)	Teks 2 (20)	Teks 2 (15)	Teks 4 (25)		
1	SMA N 3 Yogya	398/480	320/400	229/300	523/675	1470	79,2%
2	SMA N 6 Yogya	447/580	385/540	267/405	523/675	1622	73,7%
3	SMA N 7 Yogya	400/600	419/600	329/450	351/675	1499	64,4%
<b>Rerata 3 Sekolah</b>		75,0%	72,9%	71,4%	68,9%	-	71,9%

Table 11. The mean score of Narrative Text.

No	Sechool name	The mean score of Narrative Text.			Total	Percentage Score
		Teks 1 (30)	Teks 2 (30)	Teks 3 (35)		
1	SMA N 3 Yogya	654/720	468/570	564/735	1686	83,2%
2	SMA N 6 Yogya	720/870	613/810	773/1050	2106	77,1%
3	SMA N 7 Yogya	597/900	640/870	357/560	1594	68,4%
<b>Rerata 3 Sekolah</b>		79,1%	76,4%	71,9%		81,7%

Based on figure 3 and tables above, it can be seen that the readability level of the texts shows different results for each text type. Overall the text in this textbook can be categorized as moderate with the average readability score of 76.7%. This categorization is based on the rules of Ear F. Rankin and Joseph W. Culhane as cited in Viny. C (2017), if the percentage of readability is less than (40%) then the text is categorized as frustrated / failed. If the readability percentage score (41-60%) is included in the instructional category. If the readability score is more than (60%) then it is included in the independent free category.

The percentage of this score was obtained from the accumulation score from the three schools. It means that in general the text in this textbook can be understood by students and can be taught independently. However, there are some notes for several texts which still need further evaluation since they are in the instructional level in which the reading text can be understood with the teacher's help.

## 2. Fry Graph

The findings using the Fry Graph show that the sixteen texts in this textbook had different reading classes. The following is the description of the Fry Graph presented in the form of the following diagrams and tables:

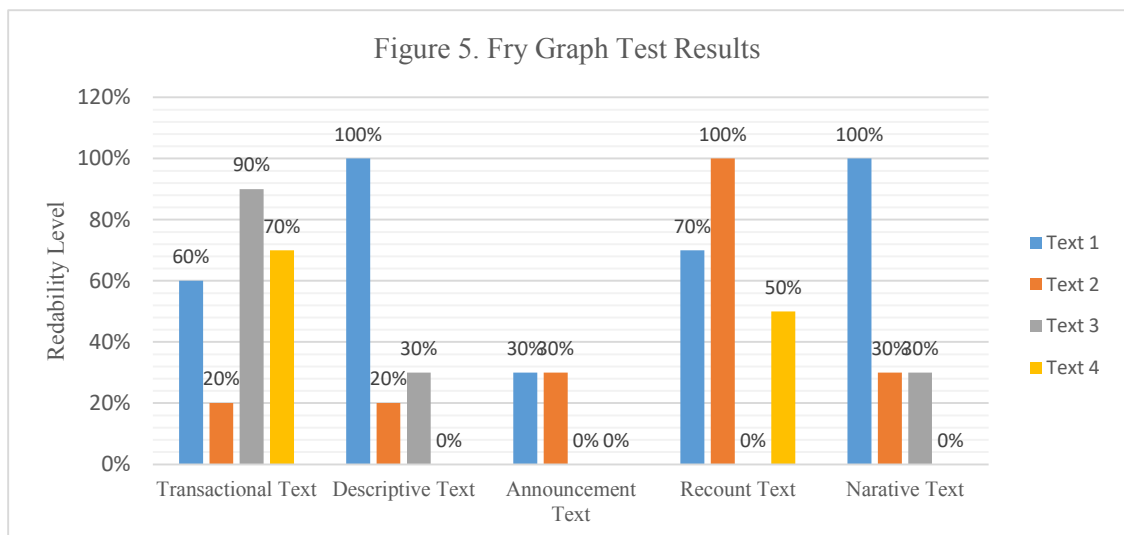


Table 12. Fry Graph Test Results in Transactional Text type

No	Text	Number of sentence	Number of word	Interpretation	Percentage	Note
1	Text 1	10	138	3,4,5	60 %	very easy
2	Text 2	9	156	7,8,9	20 %	Easy
3	Text 3	21	138	0,1,2	90 %	very easy
4	Text 4	14,4	132	2,3,4	70 %	very easy
Mean score					60%	

Table 13. Fry Graph Test Results in Descriptive text type

No	Text	Number of sentence	Number of word	Interpretation	Percentage	Note
1	Text 5	5,58	156	9,10,11	100%	Meet the Grade
2	Text 6	7,8	170	11,12,13	20%	Difficult
3	Text 7	8	140	8,7,8	30 %	Easy
Mean score					50%	

Table 14. Fry Graph Test Results in Announcement text type

No	Text	Number of sentence	Number of word	Interpretation	Percentage	Note
1	Text 8	4,3	167	12,13,14	30%	Difficult
2	Text 9	6	139	6,7,8	30 %	Easy
Mean score					30%	

Table 15. Fry Graph Test Results in Recount text type

No	Text	Number of sentence	Number of word	Interpretation	Percentage	Note
1	Text 10	12	131	2,3,4	70 %	Very easy
2	Text 11	7,5	155	8,9,10	100%	Meet the Grade
3	Text 12	10,5	180	Invalid	-	Invalid
4	Text 13	6	194	15+	50%	Difficult
Mean score					73,3%	

Table 16. Fry Graph Test Results in Narrative text type

No	Text	Number of sentence	Number of word	Interpretation	Percentage	Note
1	Text 14	7	154	8,9,10	100%	Meet the Grade
2	Text 15	10	148	6,7,8	30%	Easy
3	Text 16	8,1	139	6,7,8	30%	Easy
Rerata Skor					53,3%	

Based on Figure 4 and Tables above, it can be seen that the readability level of the text using the Fry Graph showing that only three texts are really suitable for the students. Those were the descriptive text entitled "Tanjung Puting National Park", text 11 of the recount text entitled "Meeting My Idol" and text 14 of Narrative text entitled "Cut Nyak Dhien". Fry Graph test results were obtained by taking 100 words from each text as well as counting the number of sentences in 100 words, and the number of syllables in 100 words. Then, the number of sentences and the number of syllables were plotted into Fry Graph. The meeting point between the number of syllables and the number of sentences in Fry Graph was the most suitable reading level for each text. This level can be reduced by -1 or +1 so that the most appropriate results can be obtained.

Furthermore, the fifteen other texts in the textbook had a different reading level. There were several texts in this textbook lower or higher than the class that should be. Even the results of this test also found that one invalid text fell on the black dot Fry Graph. This text took problems

with word length and sentences number. The longer the word with the high density, the more difficult to measure the readability level of, so it created the invalid data.

### 3. SMOG Formula

The third was the readability results with the SMOG formula that was not much different from the readability test results using Fry Graph. The following is a description of the readability results of the SMOG Formula:

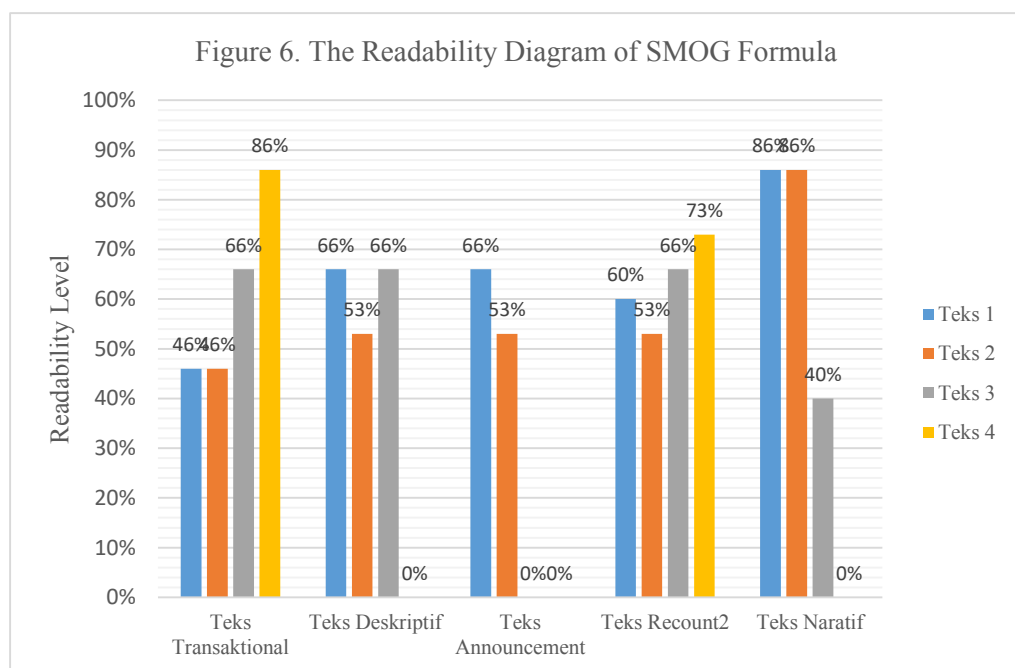


Table 17. Results of SMOG Formula Test for Transactional Text Types

No	Texts	≥ 3 syllables	Age ± 15 years	Percentage of readability
1	Text 1	19,5	7	46%
2	Text 2	17,43	7	46%
3	Text 3	52	10	66%
4	Text 4	95	13	86%
<b>Mean score of readability</b>				<b>61%</b>

Table 18. Results of SMOG Formula Test for Descriptive Text Types

No	Texts	≥ 3 syllables	Age ± 15 years	Percentage of readability
1	Text 5	43,25	10	66%
2	Text 6	29,58	8	53%
3	Text 7	44	10	66%
<b>Mean score of readability</b>				66%

Table 19. Results of SMOG Formula Test for Announcement Text Types

No	Texts	≥ 3 syllables	Age ± 15 years	Percentage of readability
1	Text 8	27	10	66%
2	Text 9	23	8	53%
<b>Mean score of readability</b>				59,5%

Table 20. Results of SMOG Formula Test for Recount Text Types

No	Texts	≥ 3 syllables	Age ± 15 years	Percentage of readability
1	Text 10	32,3	9	60%
2	Text 11	21,07	8	53%
3	Text 12	41,43	10	66%
4	Text 13	94	11	73%
<b>Mean score of readability</b>				59,6%

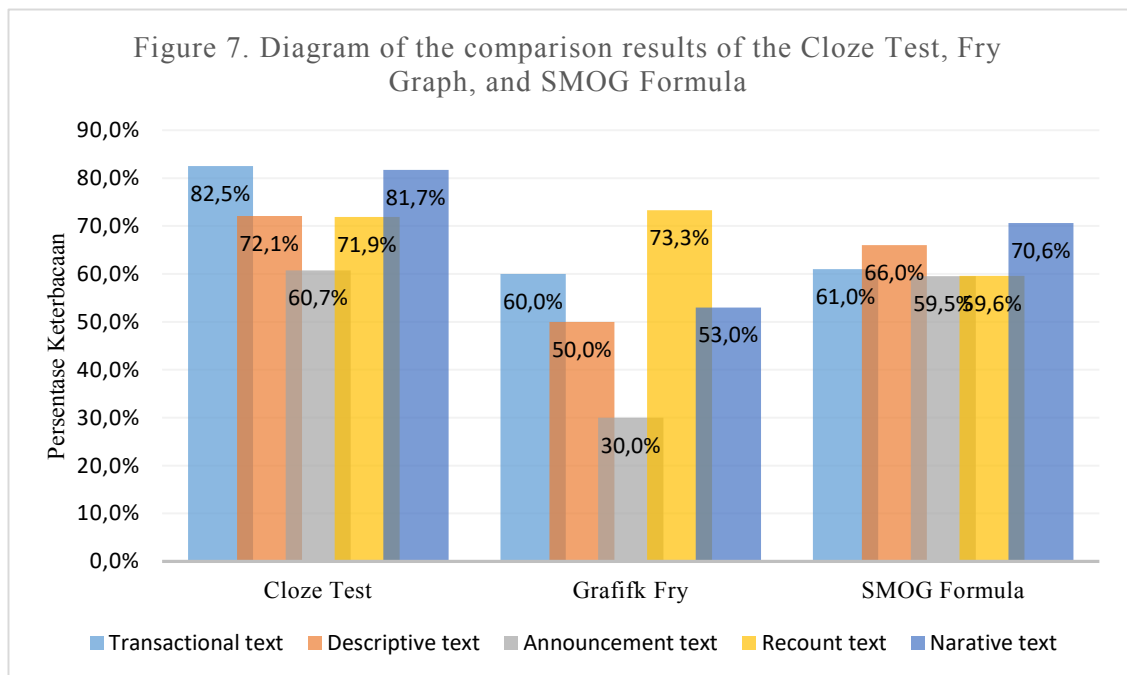
Table 21. Results of SMOG Formula Test for Narrative Text Types

No	Texts	≥ 3 syllables	Age ± 15 years	Percentage of readability
1	Text 14	92	13	86%
2	Text 15	100	13	86%
3	Text 16	10,3	6	40%
<b>Mean score of readability</b>				70,6%



Based on Figure 5 and Table result of Formula SMOG, it can be seen that the results of the readability test using the SMOG formula showed that the sixteen texts in this textbook were highly readable or the texts in this textbook were assumed to be able to be read by students easily. These results are slightly different from the results of the Cloze Test and Fry Graph that place some texts in this textbook were still in the low readability level. The results of the SMOG Formula test were obtained by counting the number of sentences whether the short text was less or longer than 30 sentences as well as the number of syllables that were more than 3 syllables. It was then confirmed with the number of syllables in the configuration table of the SMOG Formula. After that, the readability level based on the students' age can be known.

The description of the comparison results on the text readability test using Cloze Test, Fry Graph and SMOG Formula presented below.



Based on figure 6, it can be seen the comparison results of the Cloze Test, Fry Graph, and the SMOG Formula. The Cloze Test and Fry Graph test results showed the same results in several types text. It was

quite different from the results of the SMOG formula test which indicated that almost the same percentage results for the five text types in this textbook. The percentage of readability using the SMOG formula is (63, 14%) or at the instructional level.

The comparison results were obtained from the frequency of the text level divided by the total number of texts and multiplied by 100.

## **B. Discussion**

### **1. The Text Type in The Textbook of X Grade Students of Senior High School in the First Semester.**

Based on the findings, there were sixteen texts contained in the textbook. These sixteen texts were divided into five different text types. The five types of text are as follows;

- 1) Four types of transactional texts entitled *an email from Hannah, a letter from Saidah, Congratulating and Complimenting Others dan 'Dialog: Expressing Intention.*
- 2) Three types of descriptive text entitled *Tanjung Puting National Park, Taj Mahal, Visiting Niagara Falls.*
- 3) Two types of announcement text entitled *An Announcement about Concert Cancellation dan An Announcement about McMaster Mini-Med School.*
- 4) Four types of recount text entitled *Interview with the Wright Brothers, Meeting My Idol, Heroes Days, B.J. Habibie,*
- 5) Three types of narrative text entitled *Cut Nyak Dhien, Issumboshi, The Legend of Malin Kundang.*

The five types of texts have different amounts and portions. The most number of texts is the transactional and recount text types. Both of these texts have a total of four texts in each text. Furthermore, descriptive text and narrative text have three texts in each text types. Then, announcement text is the text with the fewest number. This text only consists of two texts in each type of text.

### **2. The readability level of the Textbook for X Grade Students of Senior High School in the First Semester Using Cloze Test**

Figure 3 and Table 7 are the mean score of the Cloze Test on the transactional text in which there are four types of transactional texts in this textbook. The transactional text 1 consisted of 10 questions, transactional text 2 contained 15 questions, transactional texts 3 included 15 questions and transactional texts 4 had 15 questions.

These four texts had been tested in three different schools with the school qualifications of the best, good, and medium. The three schools were 3, 6 and 7 Yogyakarta State Senior High Schools. The number of respondents in this test was 90 of 223 respondents in State Senior High Schools 3 Yogyakarta, 110 of 254 respondents in State Senior High Schools 6 Yogyakarta, and 116 of 250 respondents in State Senior High School 7 Yogyakarta. The average score of the Cloze Test on the transactional text in 6 Yogyakarta State Senior High Schools was 84, 1%, 81, 7% for 3 Yogyakarta State Senior High Schools and 77, 7% for 7 Yogyakarta State Senior High Schools. The percentage results were obtained from the number of correct answers divided by the total number of items then multiplied by 100 %. According to Earl F Rankin and Joseph W Culhane in Viny, C. (2017), if the Cloze Test score is above 60%, the text can be classified at the independent or free level meaning that the reading material is easy to understand and can be used independently by students. So, these four transactional texts are at a readability level above 60%, so there is no problem with this type of text.

Figure 3 and Table 8 are the mean score of the Cloze Test on the descriptive text consisting of three texts in this textbook. The first

descriptive text contained 20 questions, the second descriptive text was 15 questions, and the third was also 20 questions. These three descriptive texts had been tested to all 229 respondents. The details of the respondents were 73 out of 223 respondents in 3 Yogyakarta State Senior High Schools, 84 of 254 respondents in 6 Yogyakarta State Senior High Schools, and 72 of 250 respondents in 7 Yogyakarta State Senior High Schools.

The results of the Cloze Test score for descriptive text showed varied results from the three different schools 86.7% for State Senior High Schools 6 Yogyakarta, 78.7% for State Senior High Schools 3 Yogyakarta, and (59.3%) in State Senior High Schools 7 Yogyakarta. The Cloze Test score on SMA N 7 was different from the two previous Cloze Test results below 60%. According to Earl F Rankin and Joseph W Culhane in Viny C., (2017), if the results of the Cloze Test score are in the range of 41-60%, the results are in the instructional position. It means this reading material is basically suitable for students but it must be taken into consideration that the students cannot learn independently with this text so it needs help and guidance from the teacher.

Table 9 is the mean score of the Cloze Test for the announcement text that consists of two texts in this textbook. The first announcement text contains 10 questions, and the second is 5 questions. Both texts had been tested to all students as the research respondent. The total respondents in this study were 114. These respondents came from 3 different schools. The details of the respondents in this test are as follows; 41 of the 223

respondents from State High School 3, 57 of 254 respondents from 6 State High School, and 46 of 250 respondents from 7 State High School. The mean score of the Cloze Test of these three schools was 60.7% instructional. This text falls into the category of difficult to understand because it requires help from other parties.

Although, basically the announcement text is not a long text compared to other text types. However, the students experience many obstacles to comprehend it. The highest number of errors is at the preposition level. The use of prepositions may look simple for some people but it becomes difficult for students who do not understand too well about the use of the correct preposition, especially the placement of prepositions that fit in its position. Indeed, in general, it belongs to the grammar area but this also affects the readability level of the text. Therefore, if the teacher still uses this text, the students should be guided and given a more detailed explanation of the use of the preposition.

Table 10 refers to the mean score of the Cloze Test for recount text that includes four texts in this textbook. The first text was 20 questions, the second was 20, the third was 15 and the fourth was 25. All four had been tested to all students as the research respondent. The total respondents in this study were 318 respondents. The details of the respondents in this test are as follows; 91 of the 223 respondents from State Senior High School 3 Yogyakarta, 110 of 254 respondents in State Senior High School 6 Yogyakarta, and 117 of 250 respondents from State Senior High School 7 Yogyakarta. The Cloze Test score results for this

recount text from the three schools are similar. The mean score of cloze test for recount text types from these three schools was 71.9% and considered as independent.

Finally, Table 11 contains the mean score of the Cloze Test for the narrative text with three texts in this textbook. The first text consists of 30 questions, the second text consists of 30 questions and the third text consists of 35 questions. These three texts have also been tested for the students who were respondents in this study. The total respondents in this study were 217 respondents. These respondents came from 3 different schools. The details of the respondents in this test are as follows: 56 of 223 respondents in SMA 3, there were 86 out of 254 respondents in Senior High School 6, and 75 out of 250 respondents in Senior High School 7.

The results of the narrative text are quite similar to the results of the recount text because according to the researchers the characteristics of the narrative text are almost the same as the characteristics of the recount text. The average results of the narrative text from these three schools were 81.7%, which is independent. It means the narrative text does not contribute significant problems in the three schools as the research sample. The details of the Cloze Test score in three schools are as follows: State Senior High School 3 Yogyakarta was 83, 2% that categorized as independent, State Senior High School 6 Yogyakarta was 77.1% that also categorized as independent, State Senior High School 7 Yogyakarta was 68.4%, that is also at independent level but its independent level is low. It means there are still some difficulties found in this text type. Teacher

guidance is still needed because the students are not able to learn independently with this text.

**3. The readability level of the Textbook for X Grade Students of Senior High School in the First Semester Using Fry Graph and SMOG Formula**  
**a. Fry Graph**

Based on the research results using readability measurement instruments of the Fry Graph. The sixteen texts in this textbook also had different results. Firstly, the transactional text entitled "An email from Hannah" was in class 4. If it is reduced -1 and added +1, it means that this text is suitable for grades of 3, 4 and 5 but this text is not suitable for class 10. The results of this test were obtained by taking 100 most representative words from the entire text. Then, it was calculated that the number of syllables, the number of sentences in 100 words and plotted it into Fry Graph. The number of syllables of this text was 138, and the number of sentences was 10, while the last word falls on 10 of 17 words in the 11th sentence, so  $10 \div 17$  was equal to 0.58. So, the intersection of the two coordinates as 138 and 10, 5 which categorized in class 4.

According to Dubay (2007), a zone where two coordinates meet will indicate its readability level. It means that the text with the score of 4 is for class 4 and it will be easy to read for class 5 but it must be difficult for class 3. The results of Fry Graph test are not far different from the results of the Cloze Test that have been previously shown and this text can be classified in the high readability category. Although the results of this Fry Graph analysis show a wide readability range.

Secondly, the transactional text entitled "A letter from Saidah" had the number of syllables of the 100 sample words was 156 and the number of sentences per hundreds of words was 9. The second meeting point of the board falls in class 8. If minus -1 was equal to 7 and if added +1 was 9. It means that this text matches for grades 7, 8 and 9. Furthermore, when viewed from the text use, it is lower than the supposed class of 10. It indicates this text is in the low or high readability category for class 10. Thirdly, in the transactional text entitled "Congratulating and Complimenting Others", the syllables of the 100 sample words were 138 while the number of sentences was 21. This text had a large number of sentences because this text type was a dialog text. The meeting points of these two coordinates fell in class 1. The results of this analysis are far different from the use of text in the class of 10 but the results of the Cloze Test also show that this text did not contribute significant obstacles. This means that the number of sentences influences the results of the Fry Graph test.

Fourthly, in the transactional text entitled "Dialogue: Expressing Intention", this text is similar to the third text. The number of syllables of the 100 sample words was 132 and the number of sentences was 14, 4. The intersection of the two coordinates falls in the class of 3. Fifthly, in the descriptive text entitled "Tanjung Puting National Park", of the 100 words taken as samples, the number of syllables was 156. The number of sentences was 5, while the last word fell on the words 10 of 17 words in the 6th sentence, then 10 divided by 17 was equal to



0.58, the number of sentences became 5.58. The meeting point of these two coordinates fell on the class of 10, which means that this text is suitable for the class of 10. Sixth, the descriptive text entitled "Taj Mahal". The number of syllables from 100 words of this text sample was 170 with the number of the sentence of 7. The last word fell on the 18th word from 21 words in the 8th sentence, then, 8 divided by 21 was 0.8, the number of sentences became 7.8. The meeting points of these two coordinates fell in the class of 12. If minus -1 was equal to 11 and if add +1 then the result was 13. This means that this text is suitable for grades 11, 12, and 13. The results of this test indicate that this text is one level higher than the supposed class of 10. Seventh, the descriptive text entitled "Visiting Niagara Falls" with the number of syllables of 100 words in this text sample was 148 and the number of sentences was 8. The two points of the coordinates fell in the class of 7. This class was in two classes below the supposed class of 10.

Eighth, the announcement text entitled "An Announcement about Concert Cancellation". The number of syllables of 100 words of this text sample was 167 and the number of sentences was 4. The last word fell on the word 7 of 21 then  $7/21 = 0.3$ . The number of sentences became 4.3. The intersection of the Fry Graph was 167 and 4.3 categorized for reading in class 13. This means that the text is three levels higher than the class should be. The results of Fry Graph test are almost the same as the Cloze test results where the level of difficulty is quite high for this type of text.

Ninth, the announcement text entitled "An Announcement about McMaster Mini-Med School" is almost the same as the eighth text. The number of syllables of the 100 sample words was 139 and the number of sentences was 6. The coordinates fell in the 7th reading class. Tenth, recount text entitled "Interview with the Wright Brothers". This text is also a type of dialog text with many sentences in per hundred words. The number of sentences was 12 and the number of syllables was 131. The coordinate point fell on the third word class.

Eleventh, the recount text entitled "My Idol Meeting" had the number of syllables from the 100 words was 155 and the number of sentences was 7. The last word fell on the second word from the fourth word in the eighth sentence, then,  $\frac{2}{4} = 0.5$ , so, the number of sentences became 7.5. The intersection of coordinates in Fry Graph fell in the reading class to  $9 + 1$ , so the reading class can be used for the class of 10. This means that this text is in accordance with the class of 10.

Twelfth, the recount text entitled "Heroes Days" had the number of syllables from 100 words that were taken 180. The number of a sentence per hundred words was 10 and the last word fell on the thirteenth word in the 11th sentence then  $\frac{13}{23} = 0.5$  in which the number of sentences became 10.5. The coordinate point fell in the dark zone Fry Graph. This means that the data was invalid because a large number of syllables and sentences make the high density and produce invalid data that cannot be measured.

Thirteenth, the recount entitled "B.J. Habibie " had the number of syllables of 100 words that were taken 194 with the number of the sentence of 6. The second point of the coordinates fell in the class of the 15th word. This means that this text has a high degree of difficulty. The results of this analysis are similar to the results of the Cloze Test where students experienced significant obstacles for this type of text.

Fourteenth, the narrative text entitled "Cut Nyak Dhien" had the number of syllables of 100 sample words that were taken 154 and the number of sentences was 7. The second point of the coordinates fell in the class of 9. If plus +1, the reading class was in the class of 10. It indicates this text is suitable for 10th grade of high school students.

Fourteenth, the type of narrative text entitled "Cut Nyak Dhien" had the number of syllables of 100 sample words that were taken 154 and the number of sentences was 7. The second point of the coordinates fell in the class of 9. If it added +1, the reading class was in the class of 10. It means this text is suitable for 10th grade of high school students.

Fifteenth, the type of narrative text entitled "Insumboshi". The number of syllables of the 100 sample words that were taken 148 and the number of sentences was 10. The second point of the coordinates fell in the class of 7. It indicates the text is three levels lower than the class it should be.

Finally, the narrative text entitled "The Legend of Malin Kundang" had the number of syllables of the 100 sample words that were taken

139 and the number of sentences was 8. The last word fell on the third word from the fifteenth in the ninth sentence so three divided by sixteen equaled to 0, 1. The number of words became 8, 1. After plotting into Fry Graph two coordinate points fell in the class of 7. This means that this text is suitable for grade 7.

From these sixteen texts, it can be seen that the density level of the sentence length and the number of the sentence in each paragraph unit greatly affects the readability level based on the analysis results of the readability level of the text using Fry Graph.

**b. The Readability Formula of SMOG**

Based on the findings with the readability formula of SMOG, the sixteen texts in this textbook show different results with the Cloze Test and Fry Graph. The results show that the sixteen texts in this textbook can be categorized as high readability or can be read easily by students. The texts are short reading text with the number of sentences no more than 30 sentences. The SMOG results were obtained by counting the number of sentences and converting to Table 1 of SMOG. It was followed by calculating the number of syllables that more than 3 words and the results were converted again to Table 2 of SMOG. Based on the conversion results, it can be seen that the readability level of text according to the students' age.

The lowest readability was in the text of 14, i.e. narrative text entitled "Cut Nyak Dhien", the text of 15 as the non-meaning text entitled "Issumboshi", and the text of 4, a transactional text entitled

"Dialog: Expressing Intention". These three texts are at the age of 13 years. This level is equivalent to the age level for grade 8, junior high school students. It means that the text is two levels lower than 10th-grade students with the age of  $\pm 15$  years.

The highest readability results in the text of 16, i.e. the narrative text entitled "The legend of Maling Kundang" for the 6-year-old students. This level is equivalent to grade 1 elementary school that means the readability results are inappropriate for 10th grade.

Based on the test results using the SMOG readability formula, all texts in this textbook are in the category of high readability or the texts in the textbook are easy for students to understand. Therefore, these texts need to be evaluated. Evaluation of this text can be done by replacing this text with text that is more difficult or in accordance with the age level of students. So that the texts in this textbook do not cause saturation but pose challenges for students to be even more enthusiastic in reading.

#### **4. The Difference of Readability Levels on Text Types in the English Textbooks of X Grade Students of Senior High School in the First Semester**

Based on the Cloze Test results, it can be seen that several types of text in this textbook have high and low readability level. The text type with a high level of readability is narrative text with the percentage of 82.5% that can be categorized as independent level. It means there are no problems with this type of text and it can be used independently by students. Another 81.7% also belong to the transactional text. It is followed by a

descriptive text with the percentage results of 72.1% that is also in free independent level but in medium level. It means there are still many errors or misunderstandings among students in this text but a whole it does not contain the readability problems. The recount text obtained the readability level of 71.9% that is also in the independent index. Finally, the type of announcement text is at the lowest compared to other types of text. The level of readability of the type of transactional text was 60.7% that can be listed in the instructional readability. It means that there are many errors and misunderstandings among students dealing with this type of text so that it requires teachers' guidance or the teacher can revise this text to enhance its readability level.

However, overall the accumulation of readability levels of the texts in this textbook is at the category of independent or readability scores is (76, 7%). This means that the texts in this textbook do not experience significant readability issues. Although there are some notes for several types of texts that experience low readability. The types of text such as the type of announcement text and recount text.

Furthermore, based on the results of the Fry Graph test the highest level of readability is the narrative text type with a readability percentage of (80%). If this percentage is converted into the Cloze Test readability table then this text is in the independent category. This means that this text has no readability issues. Second, the recount texts with a percentage of readability (73, 3%). This means that this text is at the category of independent level. Third, transactional text, it has a readability level of (60%). This means that this text is in the instructional category that requires assistance in the learning process. Fourth, descriptive text, this text is also included in the instructional category with a readability level of

(50%). The last, the announcement text, it has a readability level of (30%). This means that this text is in the lowest category, frustrated or failed. So this text cannot be used in the learning process and this text must be replaced with another announcement text which has a higher level of readability.

So, based on the result of Fry Graph test, the texts in this textbook are in the instructional category with a readability percentage of (58, 66%). This means that the texts in this textbook can still be used but require assistance in the learning process.

Finally, the level of readability of the text based on the type of text according to the results of the SMOG formula. The text with the highest level of readability is in the type of narrative text with readability level (70, 6%). This means that this text is in the independent category but at a moderate level. This text is in the medium level because this text has not yet reached a readability level of (80%). But overall there is no problem with this text type. Second, the recount texts type with a readability level of (63, 3%). This means that this text is also at a independent level at a low level. In the low category because the score is still around 60%. The third, the descriptive text type with a readability level of (61, 6%). This text is also in the low level independent category. Fourth, the transactional texts with legibility (61, 0%). This text is also at a low level of independent readability at a low level. The last, the announcement text with the smallest reading rate is (59, 5%). This text is at the instructional level.

So, based on the SMOG Formula results, the texts in this textbook are in the low level of independent category with a percentage of (63, 14%). This means that in general these texts do not have a problem even though the level of readability is not yet in the high category.

**5. The Factors Influencing the Readability Level Based on the Results of Cloze Test, Fry Graph, and SMOG Formula in English Textbooks among the Tenth Grade Students of Senior High School in the First Semester**

Based on the research in three different schools categories, it is found several factors that influence the readability level of the text using Cloze Test, Fry Graph and SMOG Formula. These factors include internal and external factors. The internal factors are more on Fry Graph and SMOG Formula since it measures the readability level from the according to the text itself. Meanwhile, the Cloze Test is quite different due to students involvement. The external factors greatly influence the readability level that is measuring with Cloze Test. The internal factors used in this study are the factors that originate in the text itself including the number of paragraphs, sentences, and words.

The following is a detailed description of the number of paragraphs, sentences, and words contained in the textbook;

Table 22. Description of the Number of Paragraphs, Sentences and Words

No	Text type	Text	Paragraphs, Sentences and Words			Readability level		
						Cloze	Graph	SMOG
1	Transaksional	Text 1	4	26	333	Independent	very easy	easy
		Text 2	6	22	230	Independent	moderate	easy
		Text 3	6	70	448	Independent	very easy	moderate
		Text 4	1	38	319	Ind.moderate	very easy	moderate
2	Deskriptif	Text 1	6	24	401	Ind.moderate	meet grade	moderate
		Text 2	3	15	265	Instruksional	difficult	easy
		Text 3	8	28	478	Independen	moderate	moderate
3	Announcement	Text 1	3	7	211	Instruksional	difficult	moderate
		Text 2	4	13	189	Instruksional	moderate	easy
4	Recount	Text 1	2	28	399	Ind.moderate	very easy	easy



		Text 2	3	25	367	Ind.moderate	meet grade	easy
		Text 3	6	17	319	Ind.moderate	Invalid	moderate
		Text 4	8	28	497	Ind.moderate	difficult	moderate
5	Naratif	Text 1	9	33	591	Ind.moderate	meet grade	moderate
		Text 2	11	59	674	Ind.moderate	moderate	moderate
		Text 3	4	24	407	Ind.moderate	moderate	Easy

Based on the sixteen text in the textbook. The sixteenth text has a different number of words, sentences and paragraphs. The difference in the number of words, sentences and paragraphs certainly affects the level of readability. The higher the difference, the more difficult the text to be understood (Pranowo, 2011). Therefore, among words, sentences and paragraphs in a text or discourse have relevance.

Besed on the number of word and paragraph, of the sixteen text types contained in this textbook, narrative text has the most number of words and paragraphs compared to other types of text. A large number of words and paragraphs cause boredom and decrease the students' concentration that can affect the readability level of the text. However, based on the results of the Cloze Test, Fry Graph and the SMOG Formula show that this type of text does not have significant obstacles to the level of text readability. These texts are at the independent level free or at a readability level above 60%. This means that these texts can be studied independently.

This contrasts with the type of announcement text. This text has the fewest number of words and sentences compared to the number of words

and sentences in other texts. But based on the results of the Cloze Test, Fry Graph and SMOG Formula, this text is categorized at the instructional level, difficult and moderate.

Based on the announcement text 1 analysis, this text consists of 3 paragraphs, 7 sentences and 211 words. The Researcher try to take 100 sample words and count the number of words that have three or more syllables, the result is 167. Then, the number of sentences from 100 words is 4.3. After plotted into the graph, the coordinates fall in the 13th reading class. This means that these text is two levels from the class that it should be. Therefore, it can be understood that the most significant effect on the level of readability of the text is the level of density word or the number of difficult words or words that have syllables of three or more in one sentence and paragraph, as well as the length of sentences and the number in one paragraph. The more displayed the sentence with the level of difficult word density, the more difficult the text or discourse can be read and understood by students.

Then, the length and sentence also affect the readability level of the text. The long and complex sentence arrangements are found in several types of text in this textbook. For example, it is found in the following descriptive text. This text has the difficul of readability level based on graph fry result. The following is a sample text that the researcher assessed could represent the entire text

“This is called a park, but unlike any park that you have seen in your city, this is a jungle! It is a real jungle, which is home to the most

interesting animal in the world: orangutans. Though the park is home to many animals, seeing orangutans is usually the visitors' main reason to visit the park. Orangutans, which literally mean the man of the forest, are the largest arboreal animal on the planet. Most of their lives are spent in trees where orangutans travel from branch to branch by climbing or swinging with their long arms."

In this paragraph, some relative pronouns appear such as that, or which. This relative pronoun functions to connect one sentence to another sentence. This sentence is a clause that is linked to the main sentence to become longer than the usual sentence. Furthermore, some complex sentence arrangements such as passive sentences and ellipsis are also found at the end of this paragraph.

"Orangutans, which literally mean the man of the forest, are the largest arboreal animal on the planet. Most of their lives are spent in trees where orangutans travel from branch to branch by climbing or swinging with their long arms".

This sentence is quite complex because it uses passive sentences and ellipsis. The use of passive and ellipsis should be completed with separate understanding. Therefore, it also affects the readability level of the text.

The word difficulties are one of the internal factors that can affect the readability level. It includes the type of words used, word displays, class words and unfamiliar words contained in the text. The words selection that is not suitable for students' reading skills cause also

influence the readability level, especially for unfamiliar words or terms. The difficulty includes the types of verbs, adjectives, adverb and so on. For example, the recount and narrative texts that have past participle sentences, while descriptive with present tense that has no change in the verb structure. The test results show that lower readability is found in the text structure that contains the changes its verb. It indicates the students do not understand well about the verb tense, especially for irregular verbs that influence the readability level.

The existence of unfamiliar terms in the text also influences the readability level, for examples in the recount text entitled 'B.J. Habibie's including Automotive Marque Talbot, thermodynamics, and aerodynamics and others. These are technical terms that a few students can understand it, so it can be a difficulty for students in understanding the text as a whole.

Based on this research, the external factors also influence the readability level of the. Firstly, the education level and the students' background. This is highly correlated with vocabulary mastery. State Senior High School 3 and 6 are the school with the high quality standard in Yogyakarta. The input from both schools have good qualifications and most of the students do not experience significant difficulties in each given text. This is slightly different from State Senior High School 7 Yogyakarta that has medium input. It makes them obtain lower readability level compared to the other two schools. Secondly, the number of given questions for each student was 50 questions for each package, and each package consisted of two to three types of text. It assumed that the number

of given questions for 45 minutes completion affects the readability level of. Lastly, this test was done during the holy month of Ramadan in which the students had fasting that may reduce the students' concentration level as well as their reading performance.

#### **6. The most appropriate Formula with Cloze Test results**

Based on the test results, it was found that the readability test with Fry Graph was the closest to the Cloze Test results compared to SMOG Formula. Fry Graph test results are almost similar to the Cloze Test results. The difference between the two is only the number of percentages for each level of readability text. However, in general, the results of the Cloze Test and Fry Graph are the same. This similarity can be seen from both results that listed the announcement text in the lowest readability level as well as transactional and descriptive text. The closest results that are almost exactly the same is for the narrative and recount text. The mean score of the Cloze Test for the narrative was 81.7% and Fry Graph was 80% respectively. This is also exactly the same in the test results of the recount text. The readability results of recount text using Cloze Test were 71.9% and Fry Graph was 73.3%. This is quite different from the test results of the SMOG Formula which placed all texts in this textbook with an almost similar percentage for its readability level among the five types of text.

#### **C. Research Limitation**

The study on "the readability level of English reading text in the senior high school textbook using cloze test", has several limitations, such as:

1. This study employed three instruments of readability measurement, namely the Cloze Test (involving students), Fry Graph (using graphics) and SMOG Formula (using the readability formula of SMOG). If other readability tools such as Fox Index, checklist readability are used, it is possible to gain different outcomes.
2. The respondents in this study are limited to the scope of Yogyakarta. If the texts on this textbook are tested in other regions or a wider scope, it is possible to obtain different results because this textbook is used throughout Indonesia.
3. These texts were tested at the end of the semester and basically had been studied by previous students so it seems to influence the results of the readability test.