Students' Synthesis Problems in Writing Their Literature Reviews at The English Education Department of Halu Oleo University

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ABSTRACT

The objectives of this research were to find out: (1) students' synthesis problems in writing their literature reviews at the English Education Department of Halu Oleo University; (2) factors that affect students' synthesis problems; (3) solutions to overcome those problems. This research used qualitative research design and employed content analysis method, since the undergraduated students' theses were qualitatively analyzed to find out their synthesis problems in writing their literature reviews. The researcher used 6 of the undergraduated students' theses, which each both of them came from different research areas, such as teaching, linguistic and literature, and the interview result as the data sources. The instruments of this research were a rubric and an interview guideline. In collecting and analyzing the data, the researcher used a rubric that consisted of 1 to 4 range score and 3 measuring criterias, such as source variety, language focus, and organization, to measure students' level of synthesis and to know in which criteria did students mostly had problem with in synthesizing literature reviews of their theses, and also interview guideline to explore respondents' perspectives on synthesis information. The results of this research revealed that:(1) 5 out of 6 theses got low level of synthesis, whereas, 1 thesis got moderate level of synthesis, and all of those theses got the same problem in source variety criteria; (2) there were several factors that hindered students' ability to write a literature review, especially in synthesizing information; (3) therefore, the researcher offered solution related to how to write a good literature review. To conclude, it was clear that synthesis information should gain more attention in order to produce a good literature review in thesis writing.

Keywords:
Synthesis, Literature Review, Level of Synthesis, Thesis.

1. Introduction

Writing a good literature review is a mandatory in thesis writing among university students. A good literature review should be interpretative rather than descriptive which only needs students to report what the previous researchers have discussed, did, or found. Interpretative literature review means it includes students' voices, in this case is synthesis information, in order to develop a new point of view. Consequently, knowledge about synthesizing theories or information is essential.

According to Hart (2018), a literature review should at least include synthesis and obtain new viewpoint. Furthermore, synthesis information means creating new information by combining several ideas from several sources. It is required in writing a literature review in order to help students in gaining new knowledge and makes them understand more about their research topic since literature review consists of reviews of related literatures of their research topic. Actually, writing is one of the important skills which should be mastered by the students yet difficult to be mastered (Hasnia *et al.*, 2020). However, writing a literature review is also not an easy matter to be done since lots of students still have problem in writing it. The problem is students' lack of synthesis knowledge. Clearly, analyzing as well as synthesizing various information are being college students' difficulties (Howard *et al.*, 2010).

Literature review is part of thesis that included in academic writing and is being the fundamental aspects in academic study (Van de Poel & Gasiorek, 2012). In academic writing, especially in university, synthesis is also considered as one of the main contributions in writing a literature review (Schryen, 2015). McGinley (1992) pointed out that synthesis is really needed in academic writing and it requires students reading as well as writing ability, and students' critical thinking. The idea is in line with Hale *et al.* (1996) who found out that writing in university, in this case is academic writing, is based on how much as well as how often do students read, whether from source texts or students' prior knowledge. It is clear that synthesis in writing a literature review is such a helper for students. In synthesizing information, students are required to read a lot, have a good writing skill as well as critical thinking. In relation to those ideas, Okoli (2015) also pointed out that synthesis information from various sources is being the most important step in writing a literature review and it requires students' critical writing skill (Leki & Carson, 1997). In other words, indeed, writing a literature review is consuming lots of researcher's time since writing requires lots of time and exactness (Mustika *et al.*, 2020).

It should be noted that there is the difference between how a literature review should be written and the fact found when students write a literature review of their thesis. One of the lecturers in English Education Department of Halu Oleo University said that a literature review is body of knowledge, it involves synthesis of information and how the researchers stand themselves, in contrast, the fact found is most of the students at the English Education Department of Halu Oleo University just copy and paste the theories or information found without synthesizing it. In addition to that case, Mateos and Solé (2009) stated that there are only 50% of high school and university students who are able to synthesize correctly. Indeed, without synthesizing the literature review, it can lead students in doing plagiarism that honestly should be avoided and is being the current problem for students, especially students at the English Education Department of Halu Oleo University in writing a literature review of their thesis. Moreover, the researcher assumes that English Education Department of Halu Oleo University students' abilities to synthesize information are still considerably minimal.

The previous research has examined students' level of synthesis after being taught about synthesis lesson in writing to find out the most effective way in teaching synthesis skill (Lundstrom *et al.*, 2015), relatively little, if any, research has

been conducted in examining students' synthesis problems in their thesis writing, especially in writing a literature review. Moreover, Lundstrom *et al.* (2015) found that most students only used one source on each paragraph and more inclined to focus on collecting sources rather than use them to create new idea. Different from Lundstrom *et al.* (2015) who found students' problems to synthesize information after teaching synthesis skill, this research exclusively examines students' synthesis problems in writing their literature review. Therefore, based on the background of this research, it is interesting to find out students' synthesis problems in writing their literature reviews at the English Education Department of Halu Oleo University, some factors that affect their synthesis problems, and some probable solutions to overcome those problems.

2. Methods

This research used qualitative research design and employed content analysis method, since the undergraduated students' theses were qualitatively analyzed to find out their synthesis problems in writing their literature reviews. The data sources in this research are document (a literature review of students' thesis) that was written by undergraduated students of English Education Department of Halu Oleo University and the interview result that obtained from students' responses toward several questions in interview guideline. The document consisted of theses from different types of research areas, such as teaching, linguistics, and literature. Each research areas consisted of two representative theses, in other words, there were six theses that analyzed.

In order to answer the first research question, the researcher used content analysis method to describe students' synthesis problems in writing their literature reviews based on synthesis level contained in indicator and scored them by using synthesis rubric which adapted from Lundstrom et al. (2015), Humble Independent School District (2018), Effinger (2013a), Effinger (2013b). To answer the second research question, the researcher conducted the interview to explore respondents' perspectives on synthesis information by adapting an interview guideline from (Bent Bent and Stubbings (2011). Then, to answer the third research question, the researcher used strategies to write a good literature review from Efron and Ravid (2019).

3. Result

Table 1. Students' Level of Synthesis

	Criteria	Remark
First Thesis	Source Variety	Unacceptable
	Language Focus	Unacceptable
	Organization	Needs Improvement
	Level Category	Low
Second Thesis	Source Variety	Unacceptable
	Language Focus	Needs Improvement
	Organization	Needs Improvement
	Level Category	Low

Third Thesis	Source Variety	Unacceptable
	Language Focus	Needs Improvement
	Organization	Unacceptable
	Level Category	Low
Fourth Thesis	Source Variety	Unacceptable
	Language Focus	Needs Improvement
	Organization	Unacceptable
	Level Category	Low
Fifth Thesis	Source Variety	Unacceptable
	Language Focus	Needs Improvement
	Organization	Developing
	Level Category	Moderate
Sixth Thesis	Source Variety	Unacceptable
	Language Focus	Needs Improvement
	Organization	Needs Improvement
	Level Category	Low

Based on the data findings on Table 1 above, it can be seen that the first thesis in teaching gets low level of synthesis. There are 2 unacceptable criterias such as source variety and language focus, and there is 1 criteria which got '*needs improvement*'. The second thesis in teaching also gets low level of synthesis. However, comparing this thesis with the previous thesis, this thesis is better than the previous thesis since there is only 1 unacceptable criteria, which is source variety, whereas, the rest criterias are categorized as 'needs improvement', such as language focus and organization. The third thesis in linguistics gets low level of synthesis. This thesis has 2 unacceptable criterias, such as source variety and organization, meanwhile, the rest criteria is categorized as 'needs improvement', such as language focus. The fourth thesis in linguistics gets low level of synthesis. It is clear that there are 2 criterias which categorized as 'unacceptable', such as source variety and organization. Whereas, the rest criteria, language focus, is categorized as '*needs improvement*'. The fifth thesis in literature gets moderate level of synthesis. As can be seen, each criteria gets different category. Source variety criteria gets '*unacceptable*', language focus criteria gets '*needs improvement*', and organization criteria gets '*developing*'. Lastly, the sixth thesis in literature gets low level of synthesis. It is clear that there are 2 criterias which categorized as '*needs improvement*', such as language focus and organization, whereas, the rest criteria is categorized as '*unacceptable*', such as source variety.

There are several difficulties that mentioned by the students during the interview session. Those difficulties are also being factors that affect their problems in writing a literature review, especially in synthesis information, such as it is difficult to understand the information found, finding out relevant information related to their research topic which makes them have lack of sources, organize the information so that it can be coherent, find out the similarities as well as differences of the information, and combine the information found.

In writing a good literature review there are six steps by Efron and Ravid (2019) that can be followed, such as selecting the topic based on purposes, readers, and constraint, finding out the sources of a literature review based on the suitable keywords, analyzing as well as evaluating the source to determine the importance of

ideas, organizing as well as synthesizing the literature, building the researcher's opinion and obeying writing technique, lastly, writing, revising, and polishing the literature review.

4. Discussion

The researcher has analyzed 6 theses that came from 3 different research areas at the English Education Department of Halu Oleo University and describes the problem in the previous subchapter. According to the data findings, there are 5 theses that categorized as low level of synthesis, on the other hand, 1 thesis from 'literature' research area is categorized as moderate level of synthesis. The finding of this research is almost similar to the previous research by Lundstrom *et al.* (2015) who revealed that overall students, who had been taught about synthesis, got low level of synthesis. For language focus as well as organization criteria, almost all of those six of the undergraduated students' theses are good at those criterias. One of the respondents whom the researcher had interviewed said that there was no difficulties in organizing the paragraph since it had already been taught by the supervisor, however, all of the respondents said that they mostly found the difficulties in vocabulary use. According to their statements, it can be denied that they mostly had problematic word choices as well as repetitive words used in writing their literature reviews.

After interviewing the students of the theses by phone, the researcher has found several difficulties that encountered by the students and those difficulties have also been factors that affecting their level of synthesis. The first factor that affects students' problem in writing a literature review, especially in synthesizing information, is understanding the found information. Mateos and Solé (2009) stated that lots of students, even from higher educational levels, encountered difficulty in understanding the information. Nevertheless, to synthesize information, the students should understand the information first, then they could start to synthesize those several information. The second factor is finding out the information that relevant to their research topic. The students whom the researcher had interviewed said that it is difficult to find out the information related to their research topic and it makes them do not have lots of sources. It can be seen from the problem that mostly occured, which is using only 1 source. The researcher thinks that it is related to each other. Because of the difficulty in finding out the information, the students only use 1 source in several paragraphs and they cannot even synthesize it.

The third factor is organizing the information found to make a coherent literature review. According to Spivey and King (1989), in synthesizing information, the first thing that has to be done by the students is finding out the keywords and deciding how ideas are organized. The fourth and fifth factors are finding out the similarities as well as the differences of the found information and combining the information. Both of those factors are related to each other. The students find out the similarities and differences of the information in order to make them easier in synthesizing those information, since they could position themselves, whether they are between the similarities and differences of those information or they will choose

one of them to stand themselves, and they could also combine those information in a paragraph.

Likewise, combining the information is also the main procedure in synthesizing information. Segev-miller (2004) also agrees that synthesis contains elaboration of integrated information from multiple sources. Despite, combining the information is being most of the students' problem and based on the data findings, the student's weakness is in source variety criteria, since they mostly used 1 source in their literature reviews, conversely, in order to synthesize information, there should be more than 1 source to be combined by the students.

Synthesis information actually has great relationship to a good literature review since it is also being a part of it. In order to overcome difficulties in synthesizing information, knowing how to write a good literature review is being the first thing that has to be done by those who are doing their thesis. Moreover, students should have strategies in order to improve their writing performance, so that, they can produce a good literature review. Moreover, strategy in writing a good literature review from Efron and Ravid (2019), they are six steps that can be followed in writing a good literature review, such as selecting the topic, finding out the sources based on suitable keywords, analyzing and evaluating the source, organizing and synthesizing, building the opinion and obey writing technique, lastly, writing, revising, and polishing the literature review.

5. Conclusion

To conclude, in writing a literature review, students are not only collecting the information from various sources without integrating them, but they should also synthesize those information by combining them in order to create new information. Based on the findings of this research, it is clear that most of 6 of the undergraduated students' theses got low level of synthesis. All of those theses had the same problem in source variety criteria, since all of the students mostly used 1 source in 1 paragraph that could not be said as synthesis information. Those 6 students have encountered several difficulties in synthesizing information that are also being factors which affect them in causing synthesis problems. They are finding out relevant information related to their research topic, understanding the information found, and lack of synthesis information knowledge. Therefore, to overcome those problems, it is important for the students to find out how to write a good literature review and synthesize information correctly, then they could begin to write their literature reviews.

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